PROJECT MANUAL February 28, 2021

IFB#RRP03.21 BHA ROOF REPLACEMENT PROJECT HURRICANE ZETA REPAIRS BILOXI HOUSING AUTHORITY

ASA NO.: 2021-23

FOR BILOXI HOUSING AUTHORITY 330 BENACHI AVENUE BILOXI, MS 39530

BID DATE: MARCH 29, 2021 1:30PM local time





Allred Stolarski Architects 711 Church Street Ocean Springs, MS 39564

INDEX TO SPECIFICATIONS

1/3

1/11

1/38

1/8

1/4

1/4

1/2

1/12

02200-1/2

05500-1/4

06100-1/5

07310-1/18 07311-1/9

07521-1/12 07600-1/3 07810-1/2

INVITATION FOR BIDS			
FORM OF PROPOSAL			
DIVISION 0	BIDDING REQUIREMENTS & MODIFICATIONS TO GENERAL CONDITIONS		
GENERAL CONDITIONS OF THE CONTRACT - AIA A201			
STANDARD FORM OF AGREEMENT - AIA A101			
PERFORMANCE BOND - A312			
PAYMENT BOND - AIA A312			
BID BOND - AIA A310			
DIVISION 1	GENERAL REQUIREMENTS		
DIVISION 2 02.200	SITE WORK DEMOLITION OF EXISTING CONSTRUCTION		
DIVISION 5 05.500	METALS METAL FABRICATIONS		
DIVISION 6 06.100	CARPENTRY ROUGH CARPENTRY		
DIVISION 7 07.310 07.311 07.521 07.600 07.810	THERMAL AND MOISTURE PROTECTION ASPHALT SHINGLE ROOFING-BASE BID ASPHALT SHINGLE ROOFING-ALTERNATE STYRENE-BUTADIENE-STYRENE (SBS) MODIFIED BITUMINOUS MEMBRANE ROOFING FLASHING AND SHEET METAL ROOF ACCESSORIES AND MECHANICAL UNITS		

07.920 SEALANTS AND CAULKING 07920-1/4 DIVISION 9 FINISHES 09.900 PAINTING PAINTING SCHEDULE 09900-1/7

BILOXI HOUSING AUTHORITY INVITATION FOR BIDS

IFB#RRP03.21 – BHA ROOF REPLACEMENT PROJECT – HURRICANE ZETA REPAIRS

The Biloxi Housing Authority is hereby soliciting bids for Roof Replacements, including but not limited to: 3-tab shingles, laminated shingles, modified bitumen, and other work as specified and as required to complete the Project as described in the Contract Bid Documents. The scope includes roof replacements at the following BHA properties to be bid as a single project: Bayview Place; Bayview Oaks; Covenant Square Apartments; Fernwood Place; Gulf Shore Villas; McDonnell Avenue Apartments; Oakwood Village; Suncoast Villa; and Seashore Oaks Assisted Living Center.

Sealed bids will be received at the office of the Biloxi Housing Authority at 330 Benachi Blvd, Biloxi, MS 39530 no later than Monday, March 29, 2021 at 1:30pm where at this time and place all bids will be publicly opened and read aloud.

A pre-bid meeting will be held at the project site at 242 McDonnell Avenue in Biloxi, MS, 39531, on Monday, March 15, 2021 at 9:00am to provide a project overview and allow Bidders to ask questions pertaining to the work. This will be the only time the sites will be available for inspection, measurement, and investigation.

Bids may be dropped off in person or mailed so they are received by the Owner prior to the bid deadline date and time to: Tom Noland, Biloxi Housing Authority, 330 Benachi Blvd, Biloxi, MS 39530. The following must appear on the outside of the sealed Bid Envelope or Package: "SEALED BID FOR IFB#RRP03.21 BHA ROOF REPLACEMENT PROJECT – HURRICANE ZETA REPAIRS".

Bid packages may be obtained from Tom Noland by calling 228-374-7771 or by emailing a request to <u>tholand@biloxihousing.org</u>.

No faxed or emailed bids or amendments to bids will be accepted.

No bid received after the deadline time and date will be considered except in accordance with law.

The Award will be made to the lowest responsible Bidder. Any questions or inquiries should be directed to John Faulk at 228-374-7771 Ext#221. The Biloxi Housing Authority is an equal opportunity employer. The Biloxi Housing Authority reserves the right to reject any and all bids.

Helen Werby Executive Director

Advertise Dates: Sunday, February 28, 2021 and Sunday, March 7, 2021

FORM OF PROPOSAL

A. INTRODUCTION	One of this form, which is the Bidder's proposal, is to be
	completed, signed, and delivered to Biloxi Housing
	Authority, 330 Benachi Blvd., Biloxi, Mississippi 39530,
	prior to the bid time specified. Contractors submitting a bid
	must complete this form and include with it the bid bond or
	cashier's check as indicated in order to constitute a
	complete bid proposal.

- B. <u>PROJECT</u> IFB#RRP03.21 BHA Roof Replacement Project - Hurricane Zeta Repairs Biloxi Housing Authority
- C. <u>ARCHITECT</u> Allred Stolarski Architects, PA 711 Church Street Ocean Springs, Mississippi 39564
- D. <u>PROPOSAL</u> IFB#RRP03.21 BHA Roof Replacement Project - Hurricane Zeta Repairs Biloxi Housing Authority

I (or we) do hereby declare that I (or we) have carefully examined the contract documents, including all addenda, prepared by the consultant listed in Item C. of this proposal and I (or we) have a clear understanding of said documents and premises, and hereby propose to provide the necessary tools, machinery, apparatus and other means of construction, and to furnish all labor, materials, and services specified in the contract or called for in the said contract documents, including all taxes necessary, for the Project listed in Item B. above, for the lump sum price of:

BAYVIEW PLACE

Dollars \$_____

COVENANT SQUARE APARTMENTS

	Dollars \$	
FERNWOOD PLACE		
	Dollars \$	
GULF SHORE VILLAS		
	Dollars \$	
McDONNELL AVENUE APARTMENTS		
	Dollars \$	
OAKWOOD VILLAGE		
	Dollars \$	
SUNCOAST VILLA		
	Dollars \$	
SEASHORE OAKS ASSISTED LIVING CENTER		
	Dollars \$	
TOTAL CONSTRUCTION COST		
	Dollars \$	

FORM OF PROPOSAL-2/5

E. <u>ALTERNATES</u>	(See Descriptions in Section Manual).	01.900 ALTERNATES in the Project
ALTERNATE NO. 1:	(Additive Alternate – Bayview	Oaks)
Add the sum of:		
	Dol	lars \$
ALTERNATE NO. 1	Caler	ndar Days
ALTERNATE NO. 2:	(Additive Alternate –Laminate	d shingle roof)
Add the sum of:		
	Dol	lars \$
F. <u>CONTRACT TIME</u>	If the undersigned is not within Sixty (60) days of the agree to execute a contri- contract documents. The completion of all work us number of calendar days	tified of the acceptance of the bid he time set for openings of bids, they ract for the work as described in the The undersigned also guarantees under this contract on or before the s indicated below:
BAYVIEW PLACE		Calendar Days
COVENANT SQUAR	RE APARTMENTS	Calendar Days
FERNWOOD PLAC	E	Calendar Days
GULF SHORE VILLA	AS	Calendar Days
McDONNELL AVEN	UE APARTMENTS	Calendar Days
OAKWOOD VILLAG	E	Calendar Days
SUNCOAST VILLAG	ĴΕ	Calendar Days
SEASHORE OAKS	ASSISTED LIVING CENTER	Calendar Days
TOTAL NUMBER OF DAYS		Calendar Days
NOTE: TI	ime of Completion is of the essence	and may be considered in the award of this

FORM OF PROPOSAL-3/5

contract.

- G. In submitting this bid, it is understood that the right is reserved by the Owner to award any and all bids and it is agreed that this bid may not be withdrawn during the period of days provided in the Contract Documents.
- H. <u>DAMAGES</u> The undersigned agrees that the Owner may retain from this contract the sum indicated below from the amount of compensation to be paid him for each day after the above mentioned completion time, Sundays and Holidays included, that the work remains incomplete. This amount is agreed upon as the proper measure of the Liquidated Damage that the Owner will sustain per day, by failure of the undersigned to complete the contract, at the stipulated time, and is not to be construed, in any sense, as a penalty.

LIQUIDATION DAMAGES PER DIEM: \$150.00 per day

- I. <u>BOND</u> The undersigned agrees, if awarded the contract, to execute and deliver to the Owner at the time the contract documents are executed, a performance bond and a materials and labor bond in a form acceptable to the Owner, and in an amount equal to the contract sum. Failure to submit this bond at the time of the contract, or contracts, will cause forfeiture of bid security as liquidated damages.
- J. <u>BID SECURITY</u> The bid security attached in the sum of five percent (5%) of the Base Bid, in the amount of:

Dollars \$_____

The Bid Security is to become the property of the Owner, as set forth in DIVISION 0, Section 00.118. Attached to this Proposal is the Bid Bond, executed as required.

K. <u>DOCUMENTS</u> Each bidder by submittal of his bid represents and warrants that he has satisfied himself as to the requirements and provisions of the contract, or contracts, for this project and the documents included in this contract or contracts.

L. <u>ADDENDUM</u> I/We acknowledge receipt of the following addenda:

No	No
No	No
No	No

*IMPORTANT: Non-resident (out of state) bidders shall attach to their bids a copy of their resident state's current law pertaining to such state's treatment of non-resident contractors. See DIVISION 0, Paragraph 00.102, NON-RESIDENT (OUT OF STATE) BIDDER REQUIREMENTS.

M. <u>SIGNATURES</u>

Respectfully submitted,

Signature of Bidder

Name of Bidder

Address

Current Certificate of Responsibility Number

Classification of Work Permitted Under Certificate of Responsibility

Title

NOTE: If bidder is a corporation, write state of incorporation under signature, and if a partnership, give full name of all partners. Stamp or emboss corporate seal on this Proposal.

DIVISION 0 BIDDING REQUIREMENTS AND MODIFICATIONS TO GENERAL CONDITIONS

00.100 INSTRUCTIONS TO BIDDERS

- .101 PREPARATION OF BIDS
 - A. Prices quoted shall include all items of cost, expense, taxes, fees and charges incurred, or arising out of, the performance of the work to be performed under the Contract. Bids shall be signed in ink. Any bid received on other than the required form will be considered informal and may be rejected. Erasures or other changes in bid must be explained or noted over the initials of the bidder. Bids containing any conditions, omissions, unexplained erasures and alterations, or irregularities of any kind may be rejected as informal. The prices should be expressed in words and figures or they may be deemed informal and may be rejected. In case of discrepancy between the prices written in the bid and those given in the figures, the price in writing will be considered as the bid. Failure to submit all requested information will make a bid irregular and subject to rejection. Bids shall be signed with the legal name of the corporation followed by the name of the state of incorporation and the legal signature of an officer authorized to bind the corporation to a contract.

.102 NON-RESIDENT (OUT OF STATE) BIDDER REQUIREMENTS

A. In the letting of public contracts preference shall be given to resident contractors, and a non-resident bidder domiciled in the state, city, county, parish, province, nation or political subdivision having laws granting preference to local contractors shall be awarded Mississippi public contracts only on the same basis as the non-resident bidder's state, city, county, parish, province, nation or political subdivision awards contracts to Mississippi contractors bidding under similar circumstances. Resident contractors actually domiciled in Mississippi, be they corporate, individuals, or partnerships, are to be granted preference over non-residents in awarding of contracts in the same manner and to the same extent as provided by the laws of the state, city, county, parish, province, nation or political subdivision of domicile of the non-resident. When a non-resident contractor submits a bid for a public project, he shall attach thereto a copy of his resident state's current law pertaining to such state's treatment of non-resident contractors.

.103 SUBMITTAL OF BIDS

A. Sealed proposals will be received at the time, date and place stated in the Advertisement for bids. Proposals shall be made on an unaltered Proposal Form furnished by the Architect, or copied from the project specification. Fill in all blank spaces and submit one copy. Proposals shall be signed with name typed below signature and if a partnership, give full name of all partners. Where bidder is a corporation, proposals must be signed with the legal signatures of an officer authorized to bind the corporation to a contract. Submit proposal in an opaque, sealed envelope addressed to the Owner and plainly mark on the outside of the envelope the project name, and the name and address of the bidder, Certificate of Responsibility number. No bidder shall modify, withdraw or cancel his bid or any part thereof for sixty (60) days after the time agreed upon for the receipt of bids. A Bid Bond must be completed and signed by each bidder and submitted with the bid. Submit bids by mail or in person prior to the time for receiving bids set forth in the Advertisement for Bids. Mailed bids shall be to the Biloxi Housing Authority, 330 Benachi Avenue, Biloxi, MS 39530. It is the Contractor's (Bidder's) responsibility to assure the delivery and receipt, of the sealed bid, prior to the stated bid date and time.

.104 DOCUMENTS

- A. Documents include the Bidding Requirements; General, Supplementary Conditions, Technical Sections, Drawings plus Addenda which may be issued by the Architect during the bidding period. Bidding Documents may be viewed and/or obtained under the terms and conditions set forth in the Advertisement for Bids.
- B. Specifications are to supplement the Drawings, the two cooperate; and, therefore, it will not necessarily be the province of these specifications to mention any portion of the construction which the drawings explain, and such portions as are only indicated on the Drawings; and, should items be required by these Specifications which are not indicated on the Drawings but are necessary to complete the entire Contract, as shown and intended, these items shall be furnished as though indicated. The decision of the Architect as to the proper interpretation of the Drawings and these Specifications shall be final.

.105 EXAMINATION OF DOCUMENTS AND SITE

A. Bidders shall carefully examine the Bidding Documents and the construction site to obtain first-hand knowledge of the scope and the conditions of the Work. Each Contractor, Subcontractor, and Subsubcontractor, by submitting a proposal to perform any portion of the Work, represents and warrants that he has examined the Drawings, Specifications (Project Manual) and the site of the Work, and from his own investigation, has satisfied himself as to the scope, accessibility, nature and location of the Work; the character of the equipment and other facilities needed for the performance of the Work; the character and extent of the work to be performed; the local conditions; labor availability, practices and jurisdictions and other circumstances that may affect the performance of the Work. No additional compensation will be allowed by

the Owner for the failure of such Contractor, Subcontractor, or Subsubcontractor to inform himself as to conditions affecting the Work.

.106 INTERPRETATION OF DOCUMENTS

A. If any person contemplating submitting a bid for the proposed Contract is in doubt as to the meaning of any part of the Drawings, Specifications (Project Manual), or other proposed Contract Documents, he may submit to the Architect, not later than ten (10) working days prior to the date set for opening bids, a written request for an interpretation or clarification. Bidders should act promptly and allow sufficient time for a reply to reach them before preparing their bids. Any interpretation or clarification will be in the form of an Addendum duly issued. No alleged verbal interpretation or rulings will be held binding upon the Owner.

.107 SUBSTITUTIONS

A. Conditions governing the submission of substitutions for specific materials, products, equipment and processes are in the General Conditions, Supplementary Conditions, and Division 1 Section "Product Requirements".

.108 ADDENDA

A. Interpretations, clarifications, additions, deletions, and modifications to the Documents during the Bidding period will be issued in the form of Addenda and a copy of such Addenda will be mailed or delivered to each person who has been issued a set of the Bidding Documents. Addenda will be a part of the Bidding Documents and the Contract Documents, and receipt of them shall be acknowledged in the Form of Proposal.

.109 COMPLETION TIME

A. The Time of Completion is indicated on the Form of Proposal.

.110 CERTIFICATE OF RESPONSIBILITY

A. All bids submitted in excess of \$50,000.00 by a prime or subcontractor to do any erection, building, construction, repair, maintenance or related work, must comply with Section 31-3-21, Mississippi Code of 1972, by securing a Certificate of Responsibility from the State Board of Public Contractors. Where applicable, the foregoing certificate number must be indicated on the exterior of the sealed bid envelope before it can be opened.

.111 MODIFICATION AND WITHDRAWAL OF BIDS

A. Prior to the time set for bid opening, bids may be withdrawn or modified. Bids may be modified only on the official bid form and must be signed by a person legally empowered to bind the bidder.

.112 DISQUALIFICATION

A. The Owner reserves the right to disqualify proposals, before or after the opening, upon evidence of collusion with intent to defraud or other illegal practices relating to this proposal upon the part of the Bidder.

.113 SUBMISSION OF POST-BID INFORMATION

- A. Upon notification of acceptance the selected bidder shall within fifteen (15) days, submit the following:
 - 1. A Schedule of Values for each major item of Work included in the Bid.
 - 2. A designation of the portions of the Work proposed to be performed by the Bidder with his own force.
 - 3. A list of names of the subcontractors or other persons or organizations, including those who are to furnish materials and equipment fabricated to a special design proposed for such portions of the Work as may be designated in the Bidding Documents or as may be requested by the Architect/Engineer. The Bidder will be required to establish to the satisfaction of the Owner and the Architect the reliability and responsibility of the proposed Subcontractors and suppliers to furnish and perform the Work.

.114 AWARD

- A. The Owner reserves the right to accept any or to reject any and all bids without compensation to bidders and to waive irregularities and informalities. The Architect, in making his recommendation, will consider the following elements:
 - 1. Whether the bidder is a contractor with experience in the type of work involved.
 - 2. Whether the bidder has adequate plant, equipment and personnel to perform the work properly and expeditiously.
 - 3. Whether the bidder has a suitable financial status and reputation for meeting obligations incident to work of the kind specified.
 - 4. Whether the bid price is reasonable and equitable in relation to the Owner's needs and the extent of the work involved. The successful bidder will be required to enter into a contract with the Owner within seven (7) days of notice by the Owner that his bid has been accepted. Failure to enter into contract within the established time limit without proper justification shall be considered grounds for forfeiture of the bid bond.

.115 LIQUIDATED DAMAGES

A. The successful bidder by entering into contract for the construction of the project described in this specification hereby agrees to be subject to the assessment of Liquidated Damages in the amount set forth in the Form of Proposal PER DIEM that the project remains unacceptable for substantial completion.

.116 FORM OF CONTRACT

- A. The contract for the construction of the project shall be AIA Document A101.
- .117 BONDS
 - A. A Performance Bond and Labor and Material Payment Bond will be required by the Owner. Refer to the supplementary conditions for additional information.

.118 BID SECURITY

A. Each bid must be accompanied by Cashier's or Certified Check of the bidder, or a bid bond accompanied with the form of bid bond attached herein, duly executed by the bidder as principal and having as surety thereon a surety company approved by the Owner in the amount of 5% of the Base Bid. Such checks or bid bonds will be returned to all except the three lowest bidders within three (3) days after the opening of bids, and the remaining checks or bid bonds will be returned promptly after the Owner has made an award of contract, or if no award has been made within forty-five (45) days after the date of the opening of bids, upon demand of the bidder at any time thereafter, so long as he has not been notified of the acceptance of his bid.

00.200 MODIFICATIONS TO GENERAL CONDITIONS

PART 1 GENERAL

1.01 DESCRIPTION

A. Document: The following supplements modify, change, delete from, or add to the General Conditions of the Contract, AIA Document A201-2007. When any Article of the General Conditions is modified, or deleted, by these Supplementary Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph, or Clause will remain in effect.

Article 1 GENERAL PROVISIONS

1.1 BASIC DEFINITIONS

1.1.1 **The Contract Documents**: Delete the last sentence of this Subparagraph and substitute the following sentence:

The Contract Documents include the Advertisement for Bids. Instructions to Bidders. Proposal Form, sample forms and all portions of addenda issued prior to execution of the Contract.

Article 3 CONTRACTOR

3.18 INDEMNIFICATION

3.18.3 Add a new Subparagraph as follows:

The Contractor agrees to defend, hold harmless and indemnify the Owner and the Architect against all claims or demands caused by the Contractor's acts or omissions.

Article 7 CHANGES IN WORK

7.2 CHANGE ORDERS

7.2.2 Add a new Subparagraph as follows:

The maximum cost includes in a Change Order for profit and overhead is limited to twenty percent (20%) of the total of the actual cost for materials, labor and subcontracts. Profit and overhead include: all taxes, fees, permits, insurance, bond, job superintendent, job and home office expense. All subcontractors shall acquiesce to the same requirements when participating in a Change Order.

Article 8 TIME

8.1 **DEFINITIONS**

8.1.3 Change this Subparagraphs to read as follows:

The date of Substantial Completion is the date certified by the Architect and approved by the Owner in accordance with Paragraph 9.8 entitled "Substantial Completion."

8.3 DELAYS AND EXTENSIONS OF TIME

8.3.1 Change this Subparagraph to read as follows:

If the Contractor is delayed at any time in the commencement or progress of the Work by any act of neglect of the Owner or the Architect, or by any employees of either, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or any causes beyond the Contractor's control, or by any other causes which the Architect

DIVISION 0-6/11

determines may justify the delay, then the Contract Time may be extended by Change Order for such reasonable time as the Architect may determine, subject to the Owner's approval. Any claim for loss or any delay occasioned by any separate Contractor, or Subcontractor, shall be settled between the Contractor and such other separate Contractor, or Subcontractors.

Article 9 PAYMENTS AND COMPLETION

9.3 APPLICATIONS FOR PAYMENT

9.3.1 Add a new sentence to the end of this Subparagraph:

The form of Application for Payment will be AIA Document G702. Application and Certification for Payment, supported by AIA Document G703, Continuation Sheet, or a computer generated form containing similar data.

9.3.1.3 Add a new Clause to Subparagraph 9.3.1 as follows:

The Owner will retain, until the Work is one hundred percent (100%) complete, five percent (5%) of the amount due the Contractor on account of progress payments. No reduction in retainage will be made until final payment is made, except that when the initial contract award is in an amount equal to or greater than \$100,000.00, then whenever such Work is fifty percent(50%) complete and on schedule and satisfactory, in the opinion of the Professional with concurrence of the Owner and if requested by the contractor to the Architect in writing, fifty percent (50%) of the retainage will be returned to the Contractor and Two and one-half percent (2-1/2%) will be retained in all subsequent progress payments.

9.3.1.4 Add a new Clause to Subparagraph 9.3.1 as follows:

The Contractor must submit each month with this Application for Payment a separate letter stating that he is requesting an extension of time or that he had no need for an extension for that period of time. No payment on a monthly application will be made until the letter is received. Complete justification such as weather reports or other pertinent correspondence must be included for each day's request for extension. A Contractor's letter, or statement, will not be considered as adequate justification. The receipt of this request and data by the Owner will not be considered as Owner approval in any way.

9.3.2.1 Add a new Clause to Subparagraph 9.3.2 as follows: Payment on materials stored at some location other than the building site, any be approved by the Architect and the Owner after the contractor has submitted the following items:

- .1 An acceptable Lease Agreement between the General Contractor and the owner of the land, or building, where the materials are stored covering the specific area where the materials are located.
- .2 Consent of Surety, or other acceptable Bond, to cover the materials stored off-site.
- .3 All Perils Insurance coverage for the full value of the materials stored offsite.
- .4 A Bill of Sale from the Manufacturer to the General Contractor for the stored materials.
- .5 A complete list and inventory of materials manufactured, stored and delivered to the storage site and of materials removed from the storage site and delivered to the job site.
- .6 A review by the Architect of the materials stored off-site prior to release of payment.
- .7 Guarantee no storage costs, additional delivery fees, or subsequent costs to the Owner.

9.6 **PROGRESS PAYMENTS**

9.6.8 Add a new Subparagraph as follows: The amount retained by the contractor from each payment to each Subcontractor and material supplier will not exceed the percentage retained by the Owner from the contractor.

9.7 FAILURE OF PAYMENT

9.7 Change this Subparagraph to read as follows:

The Contractor and the Owner shall be subject to the remedies as prescribed in Section 31-5-25 of the <u>Mississippi Code 1972</u>, <u>Annotated</u>.

9.8 SUBSTANTIAL COMPLETION

9.8.4 Add a new sentence at the end of this Subparagraph:

Substantial Completion shall not be established and final until the Owner approves the Architect's *Certificate of Substantial Completion*.

Article 10 PROTECTION OF PERSONS AND PROPERTY

10.2 SAFETY OF PERSONS AND PROPERTY

The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the contract Documents)

to property referred to in Clauses 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-Subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible for Clauses 10.2.1.2 and 10.2.1.3, except damage or loss attributable to acts or omissions of the Owner or Architect and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Paragraph 3.18.

10.3 HAZARDOUS MATERIALS

- 10.3.2 Delete this Subparagraph in its entirety.
- 10.3.3 Delete this Subparagraph in its entirety.

Article 11 INSURANCE AND BONDS

11.1 CONTRACTOR'S LIABILITY INSURANCE

11.1.2.1 Add a new Subparagraph as follows:

The Contractor's limits of liability shall be written for not less than the following:

Commercial General Liability	
(Including XC)	
General Aggregate \$1,000,000.00 Aggregate	
Products & Completed Operations	\$1,000,000.00 Aggregate
Personal & Advertising Injury	\$500,000.00 Per Occurrence
Bodily Injury & Property Damage	\$500,000.00 Per Occurrence
Fire Damage Liability	\$50,000.00 Per Occurrence
Medical Expense \$5,000.00 Per Person	

.2 OWNERS & CONTRACTORS PROTECTIVE LIABILITY: Bodily Injury & Property Damage\$1,000,000.00 Aggregate Bodily Injury & Property Damage\$500,000.00 Per Occurrence

3	AUTOMOBILE LIAI	BILITY:
	(Owned, Non-	owned & Hired Vehicles)
	Contractor Insuran	ce Option Number 1:
	Bodily Injury & Prop	perty Damage\$500,000.00 Per Occurrence
(Combined Single Limit)		ngle Limit)
Contractor Insurance Option Number 2:		ce Option Number 2:
	Bodily Injury	\$250,000.00 Per Person
	Bodily Injury	\$500,000.00 Per Accident
	Property Damage	\$100,000.00 Per Occurrence

- .4 EXCESS LIABILITY: (Umbrella on projects over \$500,000) Bodily Injury & Property Damage\$1,000,000.00 Aggregate (Combined Single Limit)
- .5 WORKER'S COMPENSATION: (As required by Statute) EMPLOYERS' LIABILITY: Accident \$100,000.00 Per Occurrence Disease \$500,000.00 Policy Limit Disease \$100,000.00 Per Employee
- .6 PROPERTY INSURANCE: Builder's Risk \$1,000,000.00 or Installation Floater \$1,000,000.00
- 11.1.5 Add a new Subparagraph as follows:

Furnish one (1) copy of the Standard Construction Contract Certificate of Insurance Form for each copy of the Standard Form of Agreement Between Owner and Contractor specifically setting for the evidence of all coverage required by Subparagraphs 11.1.1, 11.1.2, and 11.1.3. Furnish to the Owner copies of any endorsements that are subsequently issued amending limits of coverage.

11.1.6 Add a new Subparagraph as follows:

If the coverages are provided on a claims-made basis, the policy date or retroactive date shall predate the Contract; the termination date, or the policy, or applicable extended reporting period shall be no earlier than the termination date of coverages required to be maintained after final payment.

11.3 PROPERTY INSURANCE

11.3.1 Change the first line in this Subparagraph to read as follows:

The Contractor shall purchase . . .

- 11.3.1.2 Delete this Clause under subparagraph 11.3.1 in its entirety.
- 11.3.1.3 Change the following Clause in this Subparagraph to read as follows:

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

11.3.2 Delete this Subparagraph in its entirety.

- 11.3.3 Delete this Subparagraph in its entirety.
- 11.3.4 Delete this Subparagraph in its entirety.
- 11.3.5 Delete this Subparagraph in its entirety.
- 11.3.6 Delete this Subparagraph in its entirety.
- 11.3.10 Change this Subparagraph to read as follows:

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 (5) days after occurrence of loss.

<u>Article 15</u> CLAIMS AND DISPUTES

15.1.5.2 Add the following to this subparagraph:

The Contractor shall figure, and include in the contract time, the following number of rain days for each month listed below in his project schedule. These are based on a seven-year average from data obtained from NOAA. January-4 days; February-3 days; March-3 days; April-2 days; May-3 days; June-3 days; July-4 days; August-2 days; September-3 days; October-2 days; November-3 days; December-2 days.

Request for rain days shall not be made unless the number of days when the rain precipitation amounting to 1/10" or more per month exceeds the number days listed above.

For an extension of time for rain days to be considered, the Contractor must document that he had work exposed to the elements, and work delayed, due to inclement weather conditions; and that such delay directly affected completion of the Work as reflected on the CPM. In addition, the Contractor shall provide the Professional with independent verification of the quality of days when rainfall exceeded 1/10" during each billing period.

END OF DIVISION



General Conditions of the Contract for Construction

for the following PROJECT:

(Name and location or address)

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

THE OWNER: *(Name, legal status and address)*

THE ARCHITECT: (*Name, legal status and address*)

TABLE OF ARTICLES

- 1 GENERAL PROVISIONS
- 2 OWNER
- 3 CONTRACTOR
- 4 ARCHITECT
- 5 SUBCONTRACTORS
- 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS
- 7 CHANGES IN THE WORK
- 8 TIME
- 9 PAYMENTS AND COMPLETION
- 10 PROTECTION OF PERSONS AND PROPERTY
- 11 INSURANCE AND BONDS
- 12 UNCOVERING AND CORRECTION OF WORK
- 13 MISCELLANEOUS PROVISIONS
- 14 TERMINATION OR SUSPENSION OF THE CONTRACT
- 15 CLAIMS AND DISPUTES

1

INDEX

(Topics and numbers in bold are Section headings.)

Acceptance of Nonconforming Work 9.6.6, 9.9.3, 12.3 Acceptance of Work 9.6.6, 9.8.2, 9.9.3, 9.10.1, 9.10.3, 12.3 Access to Work 3.16, 6.2.1, 12.1 Accident Prevention 10 Acts and Omissions 3.2, 3.3.2, 3.12.8, 3.18, 4.2.3, 8.3.1, 9.5.1, 10.2.5, 10.2.8, 13.4.2, 13.7, 14.1, 15.2 Addenda 1.1.1. 3.11 Additional Costs. Claims for 3.7.4, 3.7.5, 6.1.1, 7.3.7.5, 10.3, 15.1.4 Additional Inspections and Testing 9.4.2, 9.8.3, 12.2.1, 13.5 Additional Insured 11.1.4 Additional Time, Claims for 3.2.4, 3.7.4, 3.7.5, 3.10.2, 8.3.2, 15.1.5 Administration of the Contract 3.1.3, 4.2, 9.4, 9.5 Advertisement or Invitation to Bid 111 Aesthetic Effect 4.2.13 Allowances 3.8, 7.3.8 All-risk Insurance 11.3.1, 11.3.1.1 **Applications for Payment** 4.2.5, 7.3.9, 9.2, 9.3, 9.4, 9.5.1, 9.6.3, 9.7, 9.10. 11.1.3 Approvals 2.1.1, 2.2.2, 2.4, 3.1.3, 3.10.2, 3.12.8, 3.12.9, 3.12.10, 4.2.7. 9.3.2. 13.5.1 Arbitration 8.3.1. 11.3.10, 13.1. 15.3.2, 15.4 ARCHITECT 4 Architect, Definition of 4.1.1 Architect. Extent of Authority 2.4. 3.12.7. 4.1. 4.2. 5.2. 6.3. 7.1.2, 7.3.7. 7.4, 9.2. 9.3.1, 9.4, 9.5, 9.6.3, 9.8, 9.10.1, 9.10.3, 12.1, 12.2.1, 13.5.1, 13.5.2, 14.2.2, 14.2.4, 15.1.3, 15.2.1 Architect, Limitations of Authority and Responsibility 2.1.1, 3.12.4, 3.12.8, 3.12.10, 4.1.2, 4.2.1, 4.2.2, 4.2.3, 4.2.6, 4.2.7, 4.2.10, 4.2.12, 4.2.13, 5.2.1, 7.4, 9.4.2. 9.5.3. 9.6.4. 15.1.3. 15.2 Architect's Additional Services and Expenses 2.4. 11.3.1.1. 12.2.1. 13.5.2, 13.5.3, 14.2.4

Architect's Administration of the Contract 3.1.3, 4.2, 3.7.4, 15.2, 9.4.1, 9.5 Architect's Approvals 2.4. 3.1.3, 3.5. 3.10.2, 4.2.7 Architect's Authority to Reject Work 3.5, 4.2.6, 12.1.2, 12.2.1 Architect's Copyright 1.1.7.1.5 Architect's Decisions 3.7.4, 4.2.6, 4.2.7, 4.2.11, 4.2.12, 4.2.13, 4.2.14, 6.3, 7.3.7, 7.3.9, 8.1.3, 8.3.1, 9.2, 9.4.1, 9.5, 9.8.4, 9.9.1, 13.5.2, 15.2, 15.3 Architect's Inspections 3.7.4, 4.2.2, 4.2.9, 9.4.2, 9.8.3, 9.9.2, 9.10.1, 13.5 Architect's Instructions 3.2.4. 3.3.1. 4.2.6. 4.2.7. 13.5.2 Architect's Interpretations 4.2.11, 4.2.12 Architect's Project Representative 4.2.10 Architect's Relationship with Contractor 1.1.2, 1.5, 3.1.3, 3.2.2, 3.2.3, 3.2.4, 3.3.1, 3.4.2, 3.5, 3.7.4, 3.7.5, 3.9.2, 3.9.3, 3.10, 3.11, 3.12, 3.16, 3.18, 4.1.2, 4.1.3, 4.2, 5.2, 6.2.2, 7, 8.3.1, 9.2, 9.3, 9.4, 9.5, 9.7. 9.8. 9.9. 10.2.6. 10.3. 11.3.7. 12. 13.4.2. 13.5. 15.2 Architect's Relationship with Subcontractors 1.1.2, 4.2.3, 4.2.4, 4.2.6, 9.6.3, 9.6.4, 11.3.7 Architect's Representations 9.4.2. 9.5.1. 9.10.1 Architect's Site Visits 3.7.4, 4.2.2, 4.2.9, 9.4.2, 9.5.1, 9.9.2, 9.10.1, 13.5 Asbestos 10.3.1 Attorneys' Fees 3.18.1. 9.10.2. 10.3.3 Award of Separate Contracts 6.1.1.6.1.2 Award of Subcontracts and Other Contracts for Portions of the Work 5.2 **Basic Definitions** 1.1 **Bidding Requirements** 1.1.1, 5.2.1, 11.4.1 **Binding Dispute Resolution** 9.7, 11.3.9, 11.3.10, 13.1, 15.2.5, 15.2.6.1, 15.3.1, 15.3.2. 15.4.1 **Boiler and Machinery Insurance** 11.3.2 Bonds. Lien 7.3.7.4, 9.10.2, 9.10.3 Bonds, Performance, and Payment 7.3.7.4, 9.6.7, 9.10.3, 11.3.9, 11.4 **Building** Permit 3.7.1 Capitalization 1.3

AlA Document A201[™] – 2007. Copyright © 1911, 1915, 1918, 1925, 1937, 1951, 1958, 1961, 1963, 1966, 1970, 1976, 1987, 1997 and 2007 by The American Institute of Architects. All rights reserved. WARNING: This AIA[®] Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA[®] Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. Purchasers are not permitted to reproduce this document. To report copyright violations of AIA Contract Documents, e-mail The American Institute of Architects' legal counsel, copyright@aia.org.

Certificate of Substantial Completion 9.8.3. 9.8.4. 9.8.5 **Certificates for Payment** 4.2.1, 4.2.5, 4.2.9, 9.3.3, 9.4, 9.5, 9.6.1, 9.6.6, 9.7, 9.10.1. 9.10.3. 14.1.1.3. 14.2.4. 15.1.3 Certificates of Inspection. Testing or Approval 13.5.4 Certificates of Insurance 9.10.2, 11.1.3 **Change Orders** 1.1.1, 2.4, 3.4.2, 3.7.4, 3.8.2.3, 3.11, 3.12.8, 4.2.8, 5.2.3, 7.1.2, 7.1.3, 7.2, 7.3.2, 7.3.6, 7.3.9, 7.3.10, 8.3.1, 9.3.1.1, 9.10.3, 10.3.2, 11.3.1.2, 11.3.4, 11.3.9, 12.1.2, 15.1.3 Change Orders. Definition of 7.2.1 CHANGES IN THE WORK 2.2.1, 3.11, 4.2.8, 7, 7.2.1, 7.3.1, 7.4, 8.3.1, 9.3.1.1, 11.3.9 Claims, Definition of 15.1.1 CLAIMS AND DISPUTES 3.2.4, 6.1.1, 6.3, 7.3.9, 9.3.3, 9.10.4, 10.3.3, 15, 15.4 Claims and Timely Assertion of Claims 15.4.1 **Claims for Additional Cost** 3.2.4, 3.7.4, 6.1.1, 7.3.9, 10.3.2, 15.1.4 **Claims for Additional Time** 3.2.4, 3.7.4, 6.1.1, 8.3.2, 10.3.2, 15.1.5 Concealed or Unknown Conditions, Claims for 3.7.4 Claims for Damages 3.2.4, 3.18, 6.1.1, 8.3.3, 9.5.1, 9.6.7, 10.3.3, 11.1.1, 11.3.5. 11.3.7, 14.1.3, 14.2.4, 15.1.6 Claims Subject to Arbitration 15.3.1, 15.4.1 Cleaning Up 3.15.6.3 Commencement of the Work. Conditions Relating to 2.2.1. 3.2.2. 3.4.1. 3.7.1. 3.10.1. 3.12.6. 5.2.1. 5.2.3. 6.2.2. 8.1.2. 8.2.2. 8.3.1. 11.1. 11.3.1. 11.3.6. 11.4.1. 15.1.4 Commencement of the Work. Definition of 8.1.2 **Communications Facilitating Contract** Administration 3.9.1. 4.2.4 Completion. Conditions Relating to 3.4.1. 3.11. 3.15. 4.2.2. 4.2.9. 8.2. 9.4.2, 9.8. 9.9.1, 9.10, 12.2, 13.7, 14.1.2 COMPLETION, PAYMENTS AND 9 Completion, Substantial 4.2.9, 8.1.1, 8.1.3, 8.2.3, 9.4.2, 9.8, 9.9.1, 9.10.3, 12.2.13.7

Compliance with Laws 1.6, 3.2.3, 3.6, 3.7, 3.12.10, 3.13, 4.1.1, 9.6.4, 10.2.2. 11.1. 11.3. 13.1. 13.4. 13.5.1. 13.5.2. 13.6. 14.1.1. 14.2.1.3, 15.2.8, 15.4.2, 15.4.3 Concealed or Unknown Conditions 3.7.4, 4.2.8, 8.3.1, 10.3 Conditions of the Contract 1.1.1. 6.1.1. 6.1.4 Consent, Written 3.4.2, 3.7.4, 3.12.8, 3.14.2, 4.1.2, 9.3.2, 9.8.5, 9.9.1, 9.10.2, 9.10.3, 11.3.1, 13.2, 13.4.2, 15.4.4.2 Consolidation or Joinder 15.4.4 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS 1.1.4.6 Construction Change Directive. Definition of 7.3.1 **Construction Change Directives** 1.1.1. 3.4.2. 3.12.8. 4.2.8. 7.1.1. 7.1.2. 7.1.3. 7.3. 9.3.1.1 Construction Schedules. Contractor's 3.10, 3.12.1, 3.12.2, 6.1.3, 15.1.5.2 **Contingent Assignment of Subcontracts** 5.4, 14.2.2.2 **Continuing Contract Performance** 15.1.3 Contract, Definition of 1.1.2 CONTRACT, TERMINATION OR SUSPENSION OF THE 5.4.1.1. 11.3.9. 14 Contract Administration 3.1.3. 4. 9.4. 9.5 Contract Award and Execution. Conditions Relating to 3.7.1, 3.10, 5.2, 6.1, 11.1.3, 11.3.6, 11.4.1 Contract Documents, Copies Furnished and Use of 1.5.2. 2.2.5. 5.3 Contract Documents. Definition of 1.1.1 **Contract Sum** 3.7.4, 3.8, 5.2.3, 7.2, 7.3, 7.4, **9.1**, 9.4.2, 9.5.1.4, 9.6.7. 9.7. 10.3.2. 11.3.1. 14.2.4. 14.3.2. 15.1.4. 15.2.5 Contract Sum. Definition of 9.1 Contract Time 3.7.4, 3.7.5, 3.10.2, 5.2.3, 7.2.1.3, 7.3.1, 7.3.5, 7.4, 8.1.1. 8.2.1. 8.3.1. 9.5.1. 9.7. 10.3.2. 12.1.1. 14.3.2. 15.1.5.1. 15.2.5 Contract Time. Definition of 8.1.1 CONTRACTOR 3 Contractor. Definition of 3.1.6.1.2 **Contractor's Construction Schedules** 3.10. 3.12.1. 3.12.2. 6.1.3. 15.1.5.2

AlA Document A201[™] – 2007. Copyright © 1911. 1915. 1918. 1925. 1937. 1951. 1958. 1961. 1963. 1966. 1970. 1976. 1987. 1997 and 2007 by The American Institute of Architects. All rights reserved. WARNING: This AlA⁵ Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AlA⁵ Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. Purchasers are not permitted to reproduce this document. To report copyright violations of AlA Contract Documents, e-mail The American Institute of Architects' legal coursel, copyright@aia.org.

Contractor's Employees 3.3.2. 3.4.3. 3.8.1. 3.9. 3.18.2. 4.2.3. 4.2.6. 10.2. 10.3. 11.1.1. 11.3.7. 14.1. 14.2.1.1 Contractor's Liability Insurance 11.1 Contractor's Relationship with Separate Contractors and Owner's Forces 3.12.5, 3.14.2, 4.2.4, 6, 11.3.7, 12.1.2, 12.2.4 Contractor's Relationship with Subcontractors 1.2.2. 3.3.2. 3.18.1. 3.18.2. 5, 9.6.2. 9.6.7. 9.10.2. 11.3.1.2. 11.3.7. 11.3.8 Contractor's Relationship with the Architect 1.1.2, 1.5, 3.1.3, 3.2.2, 3.2.3, 3.2.4, 3.3.1, 3.4.2, 3.5, 3.7.4. 3.10, 3.11, 3.12, 3.16, 3.18, 4.1.3, 4.2, 5.2, 6.2.2. 7. 8.3.1. 9.2. 9.3, 9.4. 9.5, 9.7, 9.8, 9.9, 10.2.6. 10.3. 11.3.7. 12. 13.5. 15.1.2. 15.2.1 Contractor's Representations 3.2.1, 3.2.2, 3.5, 3.12.6, 6.2.2, 8.2.1, 9.3.3, 9.8.2 Contractor's Responsibility for Those Performing the Work 3.3.2. 3.18. 5.3. 6.1.3. 6.2. 9.5.1. 10.2.8 Contractor's Review of Contract Documents 3.2 Contractor's Right to Stop the Work 9.7 Contractor's Right to Terminate the Contract 14.1.15.1.6 Contractor's Submittals 3.10, 3.11, 3.12.4, 4.2.7, 5.2.1, 5.2.3, 9.2, 9.3, 9.8.2, 9.8.3, 9.9.1, 9.10.2, 9.10.3, 11.1.3, 11.4.2 Contractor's Superintendent 3.9.10.2.6 Contractor's Supervision and Construction Procedures 1.2.2. 3.3. 3.4, 3.12.10, 4.2.2, 4.2.7, 6.1.3, 6.2.4. 7.1.3, 7.3.5, 7.3.7, 8.2, 10, 12, 14, 15, 1.3 Contractual Liability Insurance 11.1.1.8, 11.2 Coordination and Correlation 1.2, 3.2.1, 3.3.1, 3.10, 3.12.6, 6.1.3, 6.2.1 Copies Furnished of Drawings and Specifications 1.5, 2.2.5, 3.11 Copyrights 1.5. 3.17 **Correction of Work** 2.3, 2.4, 3.7.3, 9.4.2, 9.8.2, 9.8.3, 9.9.1, 12.1.2, 12.2 Correlation and Intent of the Contract Documents 1.2 Cost. Definition of 7.3.7 Costs 2.4. 3.2.4. 3.7.3. 3.8.2. 3.15.2. 5.4.2. 6.1.1. 6.2.3. 7.3.3.3, 7.3.7, 7.3.8, 7.3.9, 9.10.2, 10.3.2, 10.3.6, 11.3, 12.1.2, 12.2.1, 12.2.4, 13.5, 14 **Cutting and Patching** 3.14. 6.2.5

Damage to Construction of Owner or Separate Contractors 3.14.2, 6.2.4, 10.2.1.2, 10.2.5, 10.4, 11.1.1, 11.3, 12.2.4 Damage to the Work 3.14.2, 9.9.1, 10.2.1.2, 10.2.5, 10.4, 11.3.1, 12.2.4 Damages. Claims for 3.2.4. 3.18. 6.1.1. 8.3.3. 9.5.1. 9.6.7. 10.3.3. 11.1.1. 11.3.5. 11.3.7. 14.1.3. 14.2.4. 15.1.6 Damages for Delay 6.1.1. 8.3.3. 9.5.1.6. 9.7. 10.3.2 Date of Commencement of the Work. Definition of 8.1.2 Date of Substantial Completion. Definition of 8.1.3 Day. Definition of 8.1.4 Decisions of the Architect 3.7.4, 4.2.6, 4.2.7, 4.2.11, 4.2.12, 4.2.13, 15.2, 6.3, 7.3.7. 7.3.9. 8.1.3. 8.3.1. 9.2. 9.4. 9.5.1. 9.8.4. 9.9.1. 13.5.2, 14.2.2, 14.2.4, 15.1, 15.2 Decisions to Withhold Certification 9.4.1. 9.5. 9.7. 14.1.1.3 Defective or Nonconforming Work. Acceptance. Rejection and Correction of 2.3. 2.4. 3.5. 4.2.6. 6.2.5. 9.5.1. 9.5.2. 9.6.6. 9.8.2. 9.9.3. 9.10.4, 12.2.1 Definitions 1.1, 2.1.1, 3.1.1, 3.5, 3.12.1, 3.12.2, 3.12.3, 4.1.1, 15.1.1. 5.1. 6.1.2. 7.2.1. 7.3.1. 8.1. 9.1. 9.8.1 Delays and Extensions of Time 3.2. 3.7.4. 5.2.3. 7.2.1. 7.3.1. 7.4. 8.3. 9.5.1. 9.7. 10.3.2, 10.4, 14.3.2, 15.1.5, 15.2.5 Disputes 6.3. 7.3.9. 15.1. 15.2 Documents and Samples at the Site 3.11 Drawings. Definition of 1.1.5Drawings and Specifications. Use and Ownership of 3.11 Effective Date of Insurance 8.2.2. 11.1.2 Emergencies 10.4. 14.1.1.2. 15.1.4 Employees. Contractor's 3.3.2. 3.4.3. 3.8.1. 3.9. 3.18.2. 4.2.3. 4.2.6. 10.2. 10.3.3. 11.1.1. 11.3.7. 14.1. 14.2.1.1 Equipment, Labor, Materials or 1.1.3, 1.1.6, 3.4, 3.5, 3.8.2, 3.8.3, 3.12, 3.13, 3.15,1, 4.2.6, 4.2.7, 5.2.1, 6.2.1, 7.3.7, 9.3.2, 9.3.3, 9.5.1.3, 9.10.2. 10.2.1. 10.2.4. 14.2.1.1. 14.2.1.2 Execution and Progress of the Work 1.1.3, 1.2.1, 1.2.2, 2.2.3, 2.2.5, 3.1, 3.3.1, 3.4.1, 3.7.1. 3.10.1, 3.12, 3.14, 4.2, 6.2.2, 7.1.3, 7.3.5, 8.2, 9.5.1, 9.9.1. 10.2. 10.3. 12.2. 14.2. 14.3.1. 15.1.3

AlA Document A201[™] – 2007. Copyright © 1911. 1915. 1918. 1925. 1937. 1951. 1958. 1961. 1963. 1966. 1970. 1976. 1987. 1997 and 2007 by The American Institute of Architects. All rights reserved. WARNING: This AIA[®] Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA[®] Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. Purchasers are not permitted to reproduce this document. To report copyright violations of AIA Contract Documents, e-mail The American Institute of Architects' legal counsel, copyright@aia.org.

Extensions of Time 3.2.4. 3.7.4. 5.2.3. 7.2.1. 7.3. 7.4. 9.5.1. 9.7. 10.3.2. 10.4. 14.3. 15.1.5. 15.2.5 Failure of Payment 9.5.1.3. 9.7. 9.10.2. 13.6. 14.1.1.3. 14.2.1.2 Faulty Work (See Defective or Nonconforming Work) **Final Completion and Final Payment** 4.2.1. 4.2.9. 9.8.2. 9.10. 11.1.2. 11.1.3. 11.3.1. 11.3.5. 12.3. 14.2.4. 14.4.3 Financial Arrangements. Owner's 2.2.1. 13.2.2. 14.1.1.4 Fire and Extended Coverage Insurance 11.3.1.1 GENERAL PROVISIONS 1 Governing Law 13.1 Guarantees (See Warranty) **Hazardous** Materials 10.2.4. 10.3 Identification of Subcontractors and Suppliers 5.2.1 Indemnification 3.17. 3.18. 9.10.2. 10.3.3. 10.3.5. 10.3.6. 11.3.1.2. 11.3.7 Information and Services Required of the Owner 2.1.2. 2.2. 3.2.2. 3.12.4. 3.12.10, 6.1.3. 6.1.4. 6.2.5. 9.6.1. 9.6.4. 9.9.2. 9.10.3. 10.3.3. 11.2. 11.4. 13.5.1. 13.5.2. 14.1.1.4. 14.1.4. 15.1.3 Initial Decision 15.2 Initial Decision Maker. Definition of 1.1.8 Initial Decision Maker. Decisions 14.2.2. 14.2.4, 15.2.1, 15.2.2, 15.2.3, 15.2.4, 15.2.5 Initial Decision Maker. Extent of Authority 14.2.2. 14.2.4, 15.1.3, 15.2.1, 15.2.2, 15.2.3, 15.2.4, 15.2.5 Injury or Damage to Person or Property 10.2.8. 10.4 Inspections 3.1.3. 3.3.3. 3.7.1. 4.2.2. 4.2.6. 4.2.9. 9.4.2. 9.8.3. 9.9.2. 9.10.1. 12.2.1. 13.5 Instructions to Bidders 1.1.1 Instructions to the Contractor 3.2.4. 3.3.1. 3.8.1. 5.2.1. 7. 8.2.2. 12. 13.5.2 Instruments of Service. Definition of 1.1.7 Insurance 3.18.1. 6.1.1. 7.3.7. 9.3.2. 9.8.4. 9.9.1. 9.10.2. 11 Insurance, Boiler and Machinery 11.3.2 Insurance, Contractor's Liability 11.1 Insurance, Effective Date of 8.2.2. 11.1.2

Insurance, Loss of Use 11.3.3 Insurance, Owner's Liability 11.2 Insurance, Property 10.2.5.11.3 Insurance, Stored Materials 9.3.2 INSURANCE AND BONDS 11 Insurance Companies. Consent to Partial Occupancy 9.9.1 Intent of the Contract Documents 1.2.1, 4.2.7, 4.2.12, 4.2.13, 7.4 Interest 13.6 Interpretation 1.2.3. 1.4. 4.1.1. 5.1. 6.1.2. 15.1.1 Interpretations. Written 4.2.11. 4.2.12. 15.1.4 Judgment on Final Award 15.4.2 Labor and Materials, Equipment 1.1.3. 1.1.6. 3.4. 3.5. 3.8.2. 3.8.3. 3.12. 3.13. 3.15.1. 4.2.6. 4.2.7. 5.2.1. 6.2.1. 7.3.7. 9.3.2. 9.3.3. 9.5.1.3. 9.10.2. 10.2.1. 10.2.4. 14.2.1.1. 14.2.1.2 Labor Disputes 8.3.1 Laws and Regulations 1.5. 3.2.3. 3.6. 3.7. 3.12.10, 3.13. 4,1.1. 9.6.4. 9.9.1. 10.2.2. 11.1.1. 11.3. 13.1. 13.4. 13.5.1. 13.5.2. 13.6. 14. 15.2.8. 15.4 Liens 2.1.2. 9.3.3. 9.10.2. 9.10.4. 15.2.8 Limitations. Statutes of 12.2.5. 13.7. 15.4.1.1 Limitations of Liability 2.3, 3.2.2, 3.5, 3.12.10, 3.17, 3.18.1, 4.2.6, 4.2.7, 4.2.12, 6.2.2, 9.4.2, 9.6.4, 9.6.7, 10.2.5, 10.3.3. 11.1.2, 11.2, 11.3.7, 12.2.5, 13.4.2 Limitations of Time 2.1.2. 2.2. 2.4. 3.2.2. 3.10. 3.11. 3.12.5. 3.15.1. 4.2.7. 5.2. 5.3. 5.4.1. 6.2.4. 7.3. 7.4. 8.2. 9.2. 9.3.1. 9.3.3. 9.4.1. 9.5. 9.6. 9.7. 9.8. 9.9. 9.10. 11.1.3. 11.3.1.5. 11.3.6, 11.3.10, 12.2, 13.5, 13.7, 14, 15 Loss of Use Insurance 11.3.3 Material Suppliers 1.5. 3.12.1. 4.2.4. 4.2.6. 5.2.1. 9.3. 9.4.2. 9.6. 9.10.5 Materials, Hazardous 10.2.4. 10.3 Materials. Labor. Equipment and 1.1.3, 1.1.6, 1.5.1, 3.4.1, 3.5, 3.8.2, 3.8.3, 3.12, 3.13, 3.15.1, 4.2.6, 4.2.7, 5.2.1, 6.2.1, 7.3.7, 9.3.2, 9.3.3. 9.5.1.3. 9.10.2. 10.2.1.2. 10.2.4. 14.2.1.1. 14.2.1.2 Means. Methods. Techniques. Sequences and Procedures of Construction 3.3.1. 3.12.10. 4.2.2. 4.2.7. 9.4.2

5

AlA Document A201[™] – 2007. Copyright © 1911. 1915. 1918. 1925. 1937. 1951. 1958. 1961. 1963. 1966. 1970. 1976. 1987. 1997 and 2007 by The American Institute of Architects. All rights reserved. WARNING: This AlA[™] Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AlA[™] Document, or any portion of it, may result in severe civil and criminal penalties. and will be prosecuted to the maximum extent possible under the law. Purchasers are not permitted to reproduce this document. To report copyright violations of AlA Contract Documents. e-mail The American Institute of Architects' legal counsel. copyright@aia.org.

Mechanic's Lien 2.1.2. 15.2.8 Mediation 8.3.1, 10.3.5, 10.3.6, 15.2.1, 15.2.5, 15.2.6, 15.3, 15.4.1 Minor Changes in the Work 1.1.1. 3.12.8. 4.2.8. 7.1. 7.4 MISCELLANEOUS PROVISIONS 13 Modifications. Definition of 1.1.1 Modifications to the Contract 1.1.1. 1.1.2. 3.11. 4.1.2. 4.2.1. 5.2.3. 7. 8.3.1. 9.7. 10.3.2.11.3.1 Mutual Responsibility 6.2 Nonconforming Work, Acceptance of 9.6.6. 9.9.3. 12.3 Nonconforming Work. Rejection and Correction of 2.3, 2.4, 3.5, 4.2.6, 6.2.4, 9.5.1, 9.8.2, 9.9.3, 9.10.4. 12.2.1 Notice 2.2.1. 2.3. 2.4. 3.2.4. 3.3.1. 3.7.2. 3.12.9. 5.2.1. 9.7. 9.10, 10.2.2, 11.1.3, 12.2.2.1, 13.3, 13.5.1, 13.5.2, 14.1, 14.2, 15.2.8, 15.4.1 Notice, Written 2.3, 2.4, 3.3.1, 3.9.2, 3.12.9, 3.12.10, 5.2.1, 9.7, 9.10, 10.2.2. 10.3. 11.1.3. 11.3.6. 12.2.2.1. 13.3. 14. 15.2.8. 15.4.1 Notice of Claims 3.7.4, 10.2.8, 15.1.2, 15.4 Notice of Testing and Inspections 13.5.1. 13.5.2 Observations, Contractor's 3.2. 3.7.4 Occupancy 2.2.2, 9.6.6, 9.8, 11.3.1.5 Orders. Written 1.1.1, 2.3, 3.9.2, 7, 8.2.2, 11.3.9, 12.1, 12.2.2.1, 13.5.2. 14.3.1 OWNER 2 Owner. Definition of 2.1.1 Owner, Information and Services Required of the 2.1.2. 2.2. 3.2.2. 3.12.10, 6.1.3, 6.1.4, 6.2.5, 9.3.2, 9.6.1. 9.6.4. 9.9.2. 9.10.3, 10.3.3, 11.2, 11.3, 13.5.1, 13.5.2. 14.1.1.4. 14.1.4. 15.1.3 Owner's Authority 1.5. 2.1.1. 2.3. 2.4. 3.4.2. 3.8.1. 3.12.10. 3.14.2. 4.1.2. 4.1.3, 4.2.4, 4.2.9, 5.2.1, 5.2.4, 5.4.1, 6.1, 6.3, 7.2.1. 7.3.1, 8.2.2, 8.3.1, 9.3.1, 9.3.2, 9.5.1, 9.6.4, 9.9.1, 9.10.2, 10.3.2, 11.1.3. 11.3.3, 11.3.10, 12.2.2, 12.3, 13.2.2. 14.3. 14.4. 15.2.7 Owner's Financial Capability 2.2.1. 13.2.2. 14.1.1.4 **Owner's Liability Insurance** 11.2

Init.

1

Owner's Right to Clean Up 6.3 Owner's Right to Perform Construction and to Award Separate Contracts 6.1 Owner's Right to Stop the Work 2.3 Owner's Right to Suspend the Work 14.3 Owner's Right to Terminate the Contract 14.2 Ownership and Use of Drawings, Specifications and Other Instruments of Service 1.1.1. 1.1.6. 1.1.7. 1.5. 2.2.5. 3.2.2. 3.11. 3.17. 4.2.12. 5.3 Partial Occupancy or Use 9.6.6. 9.9. 11.3.1.5 Patching, Cutting and 3.14. 6.2.5 Patents 3.17 Payment, Applications for 4.2.5. 7.3.9. 9.2. 9.3. 9.4. 9.5. 9.6.3. 9.7. 9.8.5. 9.10.1. 14.2.3, 14.2.4, 14.4.3 Payment, Certificates for 4.2.5, 4.2.9, 9.3.3, 9.4, 9.5, 9.6.1, 9.6.6, 9.7, 9.10.1. 9.10.3. 13.7. 14.1.1.3. 14.2.4 Payment, Failure of 9.5.1.3. 9.7. 9.10.2. 13.6. 14.1.1.3. 14.2.1.2 Payment, Final 4.2.1. 4.2.9. 9.8.2, 9.10, 11.1.2, 11.1.3, 11.4.1, 12.3, 13.7. 14.2.4. 14.4.3 Payment Bond, Performance Bond and 7.3.7.4. 9.6.7. 9.10.3. 11.4 Payments, Progress 9.3. 9.6, 9.8.5, 9.10.3, 13.6, 14.2.3, 15.1.3 PAYMENTS AND COMPLETION Payments to Subcontractors 5.4.2. 9.5.1.3. 9.6.2. 9.6.3. 9.6.4. 9.6.7. 14.2.1.2 PCB 10.3.1 Performance Bond and Payment Bond 7.3.7.4. 9.6.7. 9.10.3. 11.4 Permits. Fees, Notices and Compliance with Laws 2.2.2, 3.7, 3.13, 7.3.7.4, 10.2.2 PERSONS AND PROPERTY, PROTECTION OF 10 Polychlorinated Biphenyl 10.3.1 Product Data. Definition of 3.12.2 Product Data and Samples, Shop Drawings 3.11. 3.12. 4.2.7

Owner's Relationship with Subcontractors

1.1.2. 5.2. 5.3. 5.4. 9.6.4. 9.10.2. 14.2.2

2.4. 14.2.2

Owner's Right to Carry Out the Work

AlA Document A201TM – 2007. Copyright © 1911. 1915. 1918. 1925. 1937. 1951. 1958. 1961. 1963. 1966. 1970. 1976. 1987. 1997 and 2007 by The American Institute of Architects. All rights reserved. WARNING: This AIA[®] Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA[®] Document, or any portion of it, may result in severe civil and criminal penalties. and will be prosecuted to the maximum extent possible under the law. Purchasers are not permitted to reproduce this document. To report copyright violations of AIA Contract Documents, e-mail The American Institute of Architects' legal counsel. copyright@aia.org.

Progress and Completion 4.2.2, 8.2, 9.8, 9.9.1, 14.1.4, 15.1.3 **Progress Payments** 9.3, 9.6, 9.8.5, 9.10.3, 13.6, 14.2.3, 15.1.3 Project. Definition of 1.1.4 Project Representatives 4.2.10 **Property Insurance** 10.2.5. 11.3 PROTECTION OF PERSONS AND PROPERTY 10 Regulations and Laws 1.5, 3.2.3, 3.6, 3.7, 3.12.10, 3.13, 4.1.1, 9.6.4, 9.9.1. 10.2.2, 11.1, 11.4, 13.1, 13.4, 13.5.1, 13.5.2, 13.6, 14, 15.2.8. 15.4 Rejection of Work 3.5.4.2.6, 12.2.1 Releases and Waivers of Liens 9.10.2 Representations 3.2.1, 3.5, 3.12.6, 6.2.2, 8.2.1, 9.3.3, 9.4.2, 9.5.1, 9.8.2. 9.10.1 Representatives 2.1.1. 3.1.1. 3.9, 4.1.1. 4.2.1. 4.2.2. 4.2.10, 5.1.1. 5.1.2. 13.2.1 Responsibility for Those Performing the Work 3.3.2, 3.18, 4.2.3, 5.3, 6.1.3, 6.2, 6.3, 9.5.1, 10 Retainage 9.3.1, 9.6.2, 9.8.5, 9.9.1, 9.10.2, 9.10.3 **Review of Contract Documents and Field** Conditions by Contractor 3.2. 3.12.7. 6.1.3 Review of Contractor's Submittals by Owner and Architect 3.10.1, 3.10.2, 3.11, 3.12, 4.2, 5.2, 6.1.3, 9.2, 9.8.2 Review of Shop Drawings, Product Data and Samples by Contractor 3.12 **Rights and Remedies** 1.1.2, 2.3, 2.4, 3.5, 3.7.4, 3.15.2, 4.2.6, 5.3, 5.4, 6.1. 6.3, 7.3.1, 8.3, 9.5.1, 9.7, 10.2.5, 10.3, 12.2.2, 12.2.4. 13.4. 14. 15.4 Royalties, Patents and Copyrights 3.17 Rules and Notices for Arbitration 15.4.1 Safety of Persons and Property 10.2. 10.4 Safety Precautions and Programs 3.3.1, 4.2.2, 4.2.7, 5.3, 10.1, 10.2, 10.4 Samples. Definition of 3.12.3 Samples, Shop Drawings, Product Data and 3.11. 3.12. 4.2.7 Samples at the Site, Documents and 3.11

Schedule of Values 9.2.9.3.1 Schedules. Construction 3.10. 3.12.1. 3.12.2. 6.1.3. 15.1.5.2 Separate Contracts and Contractors 1.1.4. 3.12.5, 3.14.2, 4.2.4, 4.2.7, 6, 8.3.1, 12.1.2 Shop Drawings. Definition of 3.12.1 Shop Drawings. Product Data and Samples 3.11. 3.12. 4.2.7 Site. Use of 3.13. 6.1.1. 6.2.1 Site Inspections 3.2.2. 3.3.3, 3.7.1, 3.7.4, 4.2, 9.4.2, 9.10.1, 13.5 Site Visits, Architect's 3.7.4, 4.2.2, 4.2.9, 9.4.2, 9.5.1, 9.9.2, 9.10.1, 13.5 Special Inspections and Testing 4.2.6, 12.2.1, 13.5 Specifications. Definition of 1.1.6 Specifications 1.1.1. 1.1.6, 1.2.2, 1.5, 3.11, 3.12.10, 3.17, 4.2.14 Statute of Limitations 13.7.15.4.1.1 Stopping the Work 2.3. 9.7. 10.3. 14.1 Stored Materials 6.2.1. 9.3.2. 10.2.1.2. 10.2.4 Subcontractor. Definition of 5.1.1 **SUBCONTRACTORS** 5 Subcontractors. Work by 1.2.2. 3.3.2, 3.12.1. 4.2.3. 5.2.3. 5.3. 5.4. 9.3.1.2. 9.6.7 Subcontractual Relations 5.3, 5.4, 9.3.1.2, 9.6, 9.10, 10.2.1, 14.1, 14.2.1 Submittals 3.10, 3.11, 3.12, 4.2.7, 5.2.1, 5.2.3, 7.3.7, 9.2, 9.3. 9.8. 9.9.1. 9.10.2. 9.10.3. 11.1.3 Submittal Schedule 3.10.2. 3.12.5. 4.2.7 Subrogation, Waivers of 6.1.1. 11.3.7 Substantial Completion 4.2.9. 8.1.1. 8.1.3. 8.2.3. 9.4.2. 9.8. 9.9.1. 9.10.3. 12.2.13.7 Substantial Completion. Definition of 9.8.1 Substitution of Subcontractors 5.2.3. 5.2.4 Substitution of Architect 4.1.3 Substitutions of Materials 3.4.2. 3.5. 7.3.8 Sub-subcontractor. Definition of 5.1.2

AlA Document A201[™] – 2007. Copyright © 1911. 1915. 1918. 1925. 1937. 1951. 1958. 1961. 1963. 1966. 1970. 1976. 1987. 1997 and 2007 by The American Institute of Architects. All rights reserved. WARNING: This AlA[§] Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AlA[§] Document, or any portion of it, may result in severe civil and criminal penalties. and will be prosecuted to the maximum extent possible under the law. Purchasers are not permitted to reproduce this document. To report copyright violations of AlA Contract Documents, e-mail The American Institute of Architects' legal counsel. copyright@ala.org.

Subsurface Conditions 3.7.4 Successors and Assigns 13.2 Superintendent 3.9. 10.2.6 Supervision and Construction Procedures 1.2.2. 3.3. 3.4. 3.12.10, 4.2.2. 4.2.7. 6.1.3. 6.2.4. 7.1.3. 7.3.7. 8.2. 8.3.1. 9.4.2. 10. 12. 14. 15.1.3 Surety 5.4.1.2. 9.8.5. 9.10.2. 9.10.3. 14.2.2. 15.2.7 Surety. Consent of 9.10.2. 9.10.3 Surveys 2.2.3 Suspension by the Owner for Convenience 14.3 Suspension of the Work 5.4.2. 14.3 Suspension or Termination of the Contract 5.4.1.1.14 Taxes 3.6. 3.8.2.1. 7.3.7.4 Termination by the Contractor 14.1. 15.1.6 Termination by the Owner for Cause 5.4.1.1. 14.2, 15.1.6 Termination by the Owner for Convenience 14.4 Termination of the Architect 413 Termination of the Contractor 14.2.2 TERMINATION OR SUSPENSION OF THE CONTRACT 14 **Tests and Inspections** 3.1.3, 3.3.3, 4.2.2, 4.2.6, 4.2.9, 9.4.2, 9.8.3, 9.9.2, 9.10.1, 10.3.2, 11.4.1, 12.2.1, 13.5 TIME 8 Time, Delays and Extensions of 3.2.4. 3.7.4, 5.2.3, 7.2.1, 7.3.1, 7.4, 8.3, 9.5.1, 9.7. 10.3.2. 10.4. 14.3.2. 15.1.5. 15.2.5 **Time Limits** 2.1.2. 2.2. 2.4. 3.2.2. 3.10. 3.11, 3.12.5, 3.15.1, 4.2, 5.2. 5.3. 5.4. 6.2.4. 7.3. 7.4. 8.2. 9.2. 9.3.1. 9.3.3. 9.4.1. 9.5. 9.6. 9.7. 9.8. 9.9. 9.10. 11.1.3. 12.2. 13.5. 13.7.14.15.1.2.15.4

Time Limits on Claims 3.7.4. 10.2.8. 13.7. 15.1.2 Title to Work 9.3.2. 9.3.3 Transmission of Data in Digital Form 1.6 UNCOVERING AND CORRECTION OF WORK 12 **Uncovering of Work** 12.1 Unforeseen Conditions, Concealed or Unknown 3.7.4. 8.3.1. 10.3 Unit Prices 7.3.3.2.7.3.4 Use of Documents 1.1.1. 1.5. 2.2.5. 3.12.6. 5.3 Use of Site 3.13. 6.1.1. 6.2.1 Values, Schedule of 9.2.9.3.1 Waiver of Claims by the Architect 13.4.2 Waiver of Claims by the Contractor 9.10.5. 13.4.2. 15.1.6 Waiver of Claims by the Owner 9.9.3. 9.10.3. 9.10.4. 12.2.2.1. 13.4.2. 14.2.4. 15.1.6 Waiver of Consequential Damages 14.2.4. 15.1.6 Waiver of Liens 9.10.2. 9.10.4 Waivers of Subrogation 6.1.1. 11.3.7 Warranty 3.5. 4.2.9. 9.3.3. 9.8.4. 9.9.1. 9.10.4. 12.2.2. 13.7 Weather Delays 15.1.5.2 Work. Definition of 1.1.3 Written Consent 1.5.2. 3.4.2. 3.7.4. 3.12.8. 3.14.2. 4.1.2. 9.3.2. 9.8.5. 9.9.1, 9.10.2, 9.10.3, 11.4.1, 13.2, 13.4.2, 15.4.4.2 Written Interpretations 4.2.11. 4.2.12 Written Notice 2.3. 2.4. 3.3.1. 3.9. 3.12.9. 3.12.10. 5.2.1. 8.2.2. 9.7. 9.10, 10.2.2, 10.3, 11.1.3, 12.2.2, 12.2.4, 13.3, 14, 15.4.1 Written Orders 1.1.1. 2.3. 3.9. 7. 8.2.2. 12.1. 12.2. 13.5.2. 14.3.1. 15.1.2

ARTICLE 1 GENERAL PROVISIONS

§ 1.1 Basic Definitions

§ 1.1.1 The Contract Documents

The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of 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 the advertisement or invitation to bid. Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, 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 Contractor and the Architect or the Architect's consultants, (2) between the Owner and a Subcontractor or a Sub-subcontractor. (3) between the Owner and the Architect or the Architect's consultants or (4) between any persons or entities other than the Owner and the 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 and 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 Instruments of Service

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.1.8 Initial Decision Maker

The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2 and certify termination of the Agreement under Section 14.2.2.

§ 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

§ 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 that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§ 1.3 Capitalization

Terms capitalized in these General Conditions include those that 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

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 Ownership and Use of Drawings, Specifications and Other Instruments of Service

§ 1.5.1 The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and will retain all common law, statutory and other reserved rights, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers shall not own or claim a copyright in the Instruments of Service. 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' reserved rights.

§ 1.5.2 The Contractor. Subcontractors. Sub-subcontractors and material or equipment suppliers are authorized to use and reproduce the Instruments of Service provided to them solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers may not use the Instruments of Service 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.

§ 1.6 Transmission of Data in Digital Form

If the parties intend to transmit Instruments of Service or any other information or documentation in digital form, they shall endeavor to establish necessary protocols governing such transmissions, unless otherwise already provided in the Agreement or the Contract Documents.

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 Prior to commencement of the Work, the Contractor may request in writing that the Owner provide reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. Thereafter, the Contractor may only request such evidence if (1) the Owner fails to make payments to the Contractor as the Contract Documents require: (2) a change in the Work materially changes the Contract Sum: or (3) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due. The Owner shall furnish such evidence as a condition precedent to commencement or continuation of the Work or the portion of the Work affected by a material change. After the Owner furnishes the evidence, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

§ 2.2.2 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, 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 The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

§ 2.2.5 Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

§ 2.3 Owner's Right to Stop the Work

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly 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

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-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, 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

Init.

1

§ 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 Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. 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 or entities other than the Contractor.

§ 3.2 Review of Contract Documents and Field Conditions by Contractor

§ 3.2.1 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.

§ 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various 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 coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information in such form as the Architect may require. 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.

§ 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws. statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Architect any nonconformity discovered by or made known to the Contractor as a request for information in such form as the Architect may require.

§ 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3. the Contractor shall make Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

§ 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. 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 sequences or procedures without acceptance of changes proposed by the Contractor, the Owner shall be solely responsible for any loss or damage arising solely from those Owner-required means, methods, techniques, sequences or procedures.

§ 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

Init.

1

§ 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 Except in the case of minor changes in the Work authorized by the Architect in accordance with Sections 3.12.8 or 7.4. the Contractor may make substitutions only with the consent of the Owner, after evaluation by the Architect and in accordance with a Change Order or Construction Change Directive.

§ 3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.
§ 3.5 Warranty

The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work 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

The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor that 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, Notices and Compliance with Laws

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as well as for other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

§ 3.7.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

§ 3.7.3 If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 3.7.4 Concealed or Unknown Conditions

If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that 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, the Contractor shall promptly provide notice to the Owner and the Architect 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 the Architect determines that 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 contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner and Contractor in writing, stating the reasons. If either party disputes the Architect's determination or recommendation, that party may proceed as provided in Article 15.

§ 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

§ 3.8 Allowances

Init.

§ 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; and
- .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 with reasonable promptness.

§ 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.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner through the Architect the name and qualifications of a proposed superintendent. The Architect may reply within 14 days to the Contractor in writing stating (1) whether the Owner or the Architect has reasonable objection to the proposed superintendent or (2) that the Architect requires additional time to review. Failure of the Architect to reply within the 14 day period shall constitute notice of no reasonable objection.

§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

§ 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 a submittal schedule, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, and shall submit the schedule(s) for the Architect's approval. The Architect's approval shall not unreasonably be delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of 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

The Contractor shall maintain at the site for the Owner one copy of the Drawings. Specifications, Addenda. Change Orders and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and one 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 as a record of the Work as constructed.

§ 3.12 Shop Drawings, Product Data and Samples

Init.

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

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

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

§ 3.12.4 Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. Their purpose is to demonstrate the way by which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. 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 that 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 in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, 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.

§ 3.12.6 By submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents to the Owner and Architect that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so and (3) 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 that 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 and approvals performed or provided 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 and design criteria specified in the Contract Documents.

§ 3.13 Use of Site

The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

AIA Document A201[™] – 2007. Copyright © 1911. 1915. 1918. 1925. 1937. 1951. 1958. 1961. 1963. 1966. 1970. 1976. 1987. 1997 and 2007 by The American Institute of Architects. All rights reserved. WARNING: This AIA[®] Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA[®] Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. Purchasers are not permitted to reproduce this document. To report copyright violations of AIA Contract Documents. e-mail The American Institute of Architects' legal coursel. copyright@aia.org.

§ 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. All areas requiring cutting, fitting and patching shall be restored to the condition existing prior to the cutting, fitting and patching, unless otherwise required by the Contract Documents.

§ 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 waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials from and about the Project.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and Owner shall be entitled to reimbursement from the Contractor.

§ 3.16 Access to Work

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

§ 3.17 Royalties, Patents and Copyrights

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 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 that 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 ARCHITECT

§ 4.1 General

Init.

§ 4.1.1 The Owner shall retain an architect lawfully licensed to practice architecture or an entity lawfully practicing architecture in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 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 successor architect as to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Architect.

§ 4.2 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 during construction until the date the Architect issues the final Certificate for Payment. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

§ 4.2.2 The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed 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 not have control over, charge of, or responsibility 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 On the basis of the site visits, the Architect will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and report to the Owner (1) known deviations from the Contract Documents and from the most recent construction schedule submitted by the Contractor, and (2) defects and deficiencies observed in the Work. 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 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 has 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 in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness 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. The Architect will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.9 The Architect will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion: issue Certificates of Substantial Completion pursuant to Section 9.8; 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 pursuant to Section 9.10; and issue a final Certificate for Payment pursuant to Section 9.10.

§ 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.

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

§ 4.2.14 The Architect will review and respond to requests for information about the Contract Documents. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

ARTICLE 5 SUBCONTRACTORS

§ 5.1 Definitions

Init.

1

§ 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 may reply within 14 days to the Contractor in writing stating (1) whether the Owner or the Architect has reasonable objection to any such proposed person or entity or (2) that the Architect requires additional time for review. Failure of the Owner or Architect to reply within the 14-day period 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 substitute a Subcontractor, person or entity previously selected if the Owner or Architect makes reasonable objection to such substitution.

§ 5.3 Subcontractual Relations

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 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 that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Subcontractors.

§ 5.4 Contingent Assignment of Subcontracts

Init.

§ 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 that 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.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

§ 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.

§ 5.4.3 Upon such assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor contractor or other entity. If the Owner assigns the subcontract to a successor contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor contractor's obligations under the subcontract.

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 Article 15.

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

§ 6.2.4 The Contractor shall promptly remedy damage the Contractor wrongfully causes 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

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

Init.

1

§ 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 The 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.

§ 7.3 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 7.3.7.

§ 7.3.4 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.

§ 7.3.5 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.

§ 7.3.6 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement 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.

§ 7.3.7 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Architect shall determine the method and the adjustment 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, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. 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 7.3.7 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.

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

§ 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Architect determines, in the Architect's professional judgment, to be reasonably justified. The Architect's interim 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 15.

§ 7.3.10 When the Owner and Contractor agree with a 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 the Architect will prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

§ 7.4 Minor Changes in the Work

The Architect has 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 will be effected by written order signed by the Architect and shall be binding on the Owner and Contractor.

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.

§ 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 that 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 Article 15.

§ 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

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

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit to the Architect, before the first Application for Payment, a schedule of values allocating the entire Contract Sum to the various portions of the Work and 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 prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work. 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 shall reflect retainage if provided for in the Contract Documents.

§ 9.3.1.1 As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that 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 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay 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, to the best of the Architect's knowledge, information and belief, the Work has progressed to the point indicated and that 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

23

Init.

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 a separate 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 repeated 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.

§ 9.5.3 If the Architect withholds certification for payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or material or equipment suppliers to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Architect will reflect such payment on the next Certificate for Payment.

§ 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 pay each Subcontractor no later than seven days after receipt of payment from the Owner the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the 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 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and material and equipment suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors to ascertain whether they have been properly paid. 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 Contractor payments to material and equipment 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

Init.

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 binding dispute resolution, 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 that 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 11.3.1.5 and authorized by public authorities having jurisdiction over the Project. 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

Init.

§ 9.10.1 Upon receipt of the Contractor's 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 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 Kontractor 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

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

Init.

1

§ 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 comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and 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 permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

§ 10.2.8 Injury or Damage to Person or Property

If either party 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.

§ 10.3 Hazardous Materials

Init.

1

§ 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and 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 Upon receipt of the Contractor's written notice, 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 cause it to be 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 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. By Change Order, 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.

§ 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), except to the extent that such damage, loss or expense is due to the fault or negligence of the party seeking indemnity.

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

§ 10.3.5 The Contractor shall indemnify the Owner for the cost and expense the Owner incurs (1) for remediation of a material or substance the Contractor brings to the site and negligently handles. or (2) where the Contractor fails to perform its obligations under Section 10.3.1. except to the extent that the cost and expense are due to the Owner's fault or negligence.

§ 10.3.6 If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency 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.

§ 10.4 Emergencies

Init

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 Article 15 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 and completed 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 that are applicable to the Work to be performed;
- .2 Claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees:
- .3 Claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees:
- .4 Claims for damages insured by usual personal injury liability coverage:
- .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 the date of commencement of the Work until the date of final payment and termination of any coverage required to be maintained after final payment, and, with respect to the Contractor's completed operations coverage, until the expiration of the period for correction of Work or for such other period for maintenance of completed operations coverage as specified in the Contract Documents.

§ 11.1.3 Certificates of insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the Work and thereafter upon renewal or replacement of each required policy of insurance. 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. An additional certificate evidencing continuation of liability coverage, including coverage for completed operations, shall

be submitted with the final Application for Payment as required by Section 9.10.2 and thereafter upon renewal or replacement of such coverage until the expiration of the time required by Section 11.1.2. 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.

§ 11.1.4 The Contractor shall cause the commercial liability coverage required by the Contract Documents to include (1) the Owner, the Architect and the Architect's consultants as additional insureds for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's completed operations.

§ 11.2 Owner's Liability Insurance

The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance.

§ 11.3 Property Insurance

§ 11.3.1 Unless otherwise provided, the Owner shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance 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 11.3 to be covered, whichever is later. This insurance shall include interests of the Owner, the Contractor, Subcontractors and Subsubcontractors in the Project.

§ 11.3.1.1 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.

§ 11.3.1.2 If the Owner does not intend to purchase such property insurance required by the Contract and with all of the coverages in the amount described above, the Owner shall so inform the Contractor in writing prior to commencement of the Work. The Contractor may then effect insurance that 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.

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

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

§ 11.3.1.5 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.

§ 11.3.2 Boiler and Machinery Insurance

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

§ 11.3.3 Loss of Use Insurance

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

§ 11.3.4 If the Contractor requests in writing that insurance for risks other than those described herein or 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.

§ 11.3.5 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 11.3.7 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.

§ 11.3.6 Before an exposure to loss may occur, the Owner shall file with the Contractor a copy of each policy that includes insurance coverages required by this Section 11.3. 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.

§ 11.3.7 Waivers of Subrogation

Init.

1

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

§ 11.3.8 A loss insured under the 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 11.3.10. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-contractors in similar manner.

§ 11.3.9 If required in writing by a party in interest, the Owner as fiduciary shall, upon occurrence of an insured loss, give bond for proper performance of the Owner's duties. The cost of required bonds shall be charged against proceeds received as fiduciary. The Owner shall deposit in a separate account proceeds so received, which the Owner shall distribute in accordance with such agreement as the parties in interest may reach, or as determined in accordance with the method of binding dispute resolution selected in the Agreement between the Owner and Contractor. 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.

§ 11.3.10 The Owner as fiduciary shall have power to adjust and settle a loss with insurers unless one of the parties in interest shall object in writing within five days after occurrence of loss to the Owner's exercise of this power: if such objection is made, the dispute shall be resolved in the manner selected by the Owner and Contractor as the method of binding dispute resolution in the Agreement. If the Owner and Contractor have selected arbitration as the method of binding dispute resolution, the Owner as fiduciary shall make settlement with insurers or, in the case of a dispute over distribution of insurance proceeds, in accordance with the directions of the arbitrators.

§ 11.4 Performance Bond and Payment Bond

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

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

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 requested 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 that 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, such costs and the cost of 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

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, the cost of uncovering and replacement, 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 and 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. 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 completion of that portion 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 that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.4 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 that 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 the Contractor has 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

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

ARTICLE 13 MISCELLANEOUS PROVISIONS

§ 13.1 Governing Law

The Contract shall be governed by the law of the place where the Project is located except that, if the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4.

§ 13.2 Successors and Assigns

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns and legal representatives 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 a lender providing construction financing for the Project, if the lender assumes 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

Written notice shall be deemed to have been duly served if delivered in person to the individual, to 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 or by courier service providing proof of delivery 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

Init.

§ 13.5.1 Tests, inspections and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of public authorities. 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 (1) tests, inspections or approvals that do not become requirements until after bids are received or negotiations concluded, and (2) tests, inspections or approvals where building codes or applicable laws or regulations prohibit the Owner from delegating their cost to the Contractor.

§ 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

Init.

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 Time Limits on Claims

The Owner and Contractor shall commence all claims and causes of action, whether in contract, tort, breach of warranty or otherwise, against the other arising out of or related to the Contract in accordance with the requirements of the final dispute resolution method selected in the Agreement within the time period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all claims and causes of action not commenced in accordance with this Section 13.7.

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 that requires all Work to be stopped:
- .2 An act of government, such as a declaration of national emergency that 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. Subsubcontractor 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, including reasonable overhead and profit, costs incurred by reason of such termination, 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 repeatedly 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 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 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; 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 Initial Decision Maker 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 Exclude the Contractor from the site and take possession 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 written 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 Initial Decision Maker, 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.

ARTICLE 15 CLAIMS AND DISPUTES § 15.1 Claims

§ 15.1.1 Definition

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, 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. The responsibility to substantiate Claims shall rest with the party making the Claim.

§ 15.1.2 Notice of Claims

Claims by either the Owner or Contractor must be initiated by written notice to the other party and to the Initial Decision Maker with a copy sent to the Architect, if the Architect is not serving as the Initial Decision Maker. 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.

§ 15.1.3 Continuing Contract Performance

Pending final resolution of a Claim. except as otherwise agreed in writing or as provided in Section 9.7 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. The Architect will prepare Change Orders and issue Certificates for Payment in accordance with the decisions of the Initial Decision Maker.

§ 15.1.4 Claims for Additional Cost

If the Contractor wishes to make a 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 10.4.

§ 15.1.5 Claims for Additional Time

§ 15.1.5.1 If the Contractor wishes to make a 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.

§ 15.1.5.2 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.

§ 15.1.6 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 15.1.6 shall be deemed to preclude an award of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

§ 15.2 Initial Decision

Init.

§ 15.2.1 Claims, excluding those arising under Sections 10.3, 10.4, 11.3.9, and 11.3.10, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim arising prior to the date final payment is due, unless 30 days have passed after the Claim has been referred to the Initial Decision Maker with no decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 15.2.2 The Initial Decision Maker will review Claims and within ten days of the receipt of a 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 Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

§ 15.2.3 In evaluating Claims, the Initial Decision Maker 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 Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

§ 15.2.4 If the Initial Decision Maker 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 (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing: (2) state the reasons therefor: and (3) notify the parties and the Architect, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties but subject to mediation and, if the parties fail to resolve their dispute through mediation, to binding dispute resolution.

§ 15.2.6 Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1.

§ 15.2.6.1 Either party may, within 30 days from the date of an initial decision, demand in writing that the other party file for mediation within 60 days of the initial decision. If such a demand is made and the party receiving the demand fails to file for mediation within the time required, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.

§ 15.2.7 In the event of a Claim against the Contractor, 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 Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

§ 15.2.8 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.

§ 15.3 Mediation

§ 15.3.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.6 shall be subject to mediation as a condition precedent to binding dispute resolution.

§ 15.3.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution 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. If an arbitration is stayed pursuant to this Section 15.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

§ 15.3.3 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.

AlA Document A201^M – 2007. Copyright © 1911, 1915, 1918, 1925, 1937, 1951, 1958, 1961, 1963, 1966, 1970, 1976, 1987, 1997 and 2007 by The American Institute of Architects. All rights reserved, WARNING: This AIA[®] Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA[®] Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. Purchasers are not permitted to reproduce this document. To report copyright violations of AIA Contract Documents, e-mail The American Institute of Architects' legal counsel, copyright@aia.org.

§ 15.4 Arbitration

§ 15.4.1 If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. A demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. 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.

§ 15.4.1.1 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation. but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.

§ 15.4.2 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.

§ 15.4.3 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.

§ 15.4.4 Consolidation or Joinder

Init.

§ 15.4.4.1 Either party, at its sole discretion, may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation, (2) the arbitrations to be consolidated substantially involve common questions of law or fact, and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

§ 15.4.4.2 Either party, at its sole discretion, may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.

§ 15.4.4.3 The Owner and Contractor grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as the Owner and Contractor under this Agreement.

▲IA Document A101[™] – 2007

Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum

AGREEMENT made as of the in the year

day of

(In words, indicate day, month and year.)

BETWEEN the Owner: (*Name, legal status, address and other information*)

and the Contractor: (Name, legal status, address and other information)

for the following Project: (Name, location and detailed description)

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

AIA Document A201[™]–2007, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

The Architect: (Name, legal status, address and other information)

The Owner and Contractor agree as follows.

Init.

TABLE OF ARTICLES

- 1 THE CONTRACT DOCUMENTS
- 2 THE WORK OF THIS CONTRACT
- 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION
- 4 CONTRACT SUM
- 5 PAYMENTS
- 6 DISPUTE RESOLUTION
- 7 TERMINATION OR SUSPENSION
- 8 MISCELLANEOUS PROVISIONS
- 9 ENUMERATION OF CONTRACT DOCUMENTS
- 10 INSURANCE AND BONDS

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

ARTICLE 2 THE WORK OF THIS CONTRACT

Init.

1

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be the date of this Agreement unless a different date is stated below or provision is made for the date to be fixed in a notice to proceed issued by the Owner. (Insert the date of commencement if it differs from the date of this Agreement or, if applicable, state that the date will be fixed in a notice to proceed.)

If, prior to the commencement of the Work, the Owner requires time to file mortgages and other security interests, the Owner's time requirement shall be as follows:

§ 3.2 The Contract Time shall be measured from the date of commencement.

§ 3.3 The Contractor shall achieve Substantial Completion of the entire Work not later than

() days from the date of commencement, or as follows:

(Insert number of calendar days. Alternatively, a calendar date may be used when coordinated with the date of commencement. If appropriate, insert requirements for earlier Substantial Completion of certain portions of the Work.)

Portion of Work

Substantial Completion Date

, subject to adjustments of this Contract Time as provided in the Contract Documents. (Insert provisions, if any, for liquidated damages relating to failure to achieve Substantial Completion on time or for bonus payments for early completion of the Work.)

ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be

(\$

), subject to additions and deductions as provided in the Contract Documents.

§ 4.2 The Contract Sum is based upon the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner:

(State the numbers or other identification of accepted alternates. If the bidding or proposal documents permit the Owner to accept other alternates subsequent to the execution of this Agreement, attach a schedule of such other alternates showing the amount for each and the date when that amount expires.)

§ 4.3 Unit prices, if any:

(Identify and state the unit price; state quantity limitations, if any, to which the unit price will be applicable.)

Item

Units and Limitations

Price per Unit (\$0.00)

§ 4.4 Allowances included in the Contract Sum, if any: *(Identify allowance and state exclusions, if any, from the allowance price.)*

ltem

Price

1

AlA Document A101[™] – 2007. Copyright © 1915, 1918, 1925, 1937, 1951, 1958, 1961, 1963, 1967, 1974, 1977, 1980, 1987, 1991, 1997 and 2007 by The American Institute of Architects. All rights reserved. WARNING: This AIA[®] Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA[®] Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. Purchasers are permitted to reproduce ten (10) copies of this document when completed. To report copyright violations of AIA Contract Documents, e-mail The American Institute of Architects' legal counsel, copyright@aia.org.

ARTICLE 5 PAYMENTS

Init.

1

§ 5.1 Progress Payments

§ 5.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

§ 5.1.3 Provided that an Application for Payment is received by the Architect not later than the day of a month, the Owner shall make payment of the certified amount to the Contractor not later than the day of the month. If an Application for Payment is received by the Architect after the application date fixed above, payment shall be made by the Owner not later than () days after the Architect receives the Application for Payment. (Federal, state or local laws may require payment within a certain period of time.)

§ 5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be 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.

§ 5.1.5 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.6 Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

.1 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Contract Sum allocated to that portion of the Work in the schedule of values, less retainage of

percent (%). Pending final determination of cost to the Owner of changes in the Work, amounts not in dispute shall be included as provided in Section 7.3.9 of AIA Document A201TM–2007, General Conditions of the Contract for Construction;

- .2 Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage of percent (%);
- .3 Subtract the aggregate of previous payments made by the Owner; and
- .4 Subtract amounts, if any, for which the Architect has withheld or nullified a Certificate for Payment as provided in Section 9.5 of AIA Document A201–2007.

§ 5.1.7 The progress payment amount determined in accordance with Section 5.1.6 shall be further modified under the following circumstances:

- .1 Add, upon Substantial Completion of the Work, a sum sufficient to increase the total payments to the full amount of the Contract Sum, less such amounts as the Architect shall determine for incomplete Work, retainage applicable to such work and unsettled claims; and (Section 9.8.5 of AIA Document A201–2007 requires release of applicable retainage upon Substantial Completion of Work with consent of surety, if any.)
- .2 Add, if final completion of the Work is thereafter materially delayed through no fault of the Contractor, any additional amounts payable in accordance with Section 9.10.3 of AIA Document A201–2007.

§ 5.1.8 Reduction or limitation of retainage, if any, shall be as follows:

(If it is intended, prior to Substantial Completion of the entire Work, to reduce or limit the retainage resulting from the percentages inserted in Sections 5.1.6.1 and 5.1.6.2 above, and this is not explained elsewhere in the Contract Documents, insert here provisions for such reduction or limitation.)

§ 5.1.9 Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.2 Final Payment

§ 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

- .1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Section 12.2.2 of AIA Document A201–2007, and to satisfy other requirements, if any, which extend beyond final payment; and
- .2 a final Certificate for Payment has been issued by the Architect.

§ 5.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect's final Certificate for Payment, or as follows:

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 Initial Decision Maker

The Architect will serve as Initial Decision Maker pursuant to Section 15.2 of AIA Document A201–2007, unless the parties appoint below another individual, not a party to this Agreement, to serve as Initial Decision Maker. (If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

§ 6.2 Binding Dispute Resolution

For any Claim subject to, but not resolved by, mediation pursuant to Section 15.3 of AIA Document A201–2007, the method of binding dispute resolution shall be as follows:

(Check the appropriate box. If the Owner and Contractor do not select a method of binding dispute resolution below, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.)

Arbitration pursuant to Section 15.4 of AIA Document A201–2007



Other: (Specify)

ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201-2007.

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2007.

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2007 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.2 Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located. (Insert rate of interest agreed upon, if any.)

§ 8.3 The Owner's representative: (*Name, address and other information*)

§ 8.4 The Contractor's representative: (*Name, address and other information*)

§ 8.5 Neither the Owner's nor the Contractor's representative shall be changed without ten days written notice to the other party.

§ 8.6 Other provisions:

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 The Contract Documents, except for Modifications issued after execution of this Agreement, are enumerated in the sections below.

§ 9.1.1 The Agreement is this executed AIA Document A101–2007, Standard Form of Agreement Between Owner and Contractor.

§ 9.1.2 The General Conditions are AIA Document A201-2007, General Conditions of the Contract for Construction.

§ 9.1.3 The Supplementary and other Conditions of the Contract:

Document

Title

Date

Pages

§ 9.1.4 The Specifications:

(Either list the Specifications here or refer to an exhibit attached to this Agreement.)

Section	Title	Date	Page	
1.5 The Drawings: her list the Drawing	rs here or refer to an exhibit attach	ned to this Agreement.)		
		Date		

§ 9.1.6 The Addenda, if any:

Number

Init.

1

Portions of Addenda relating to bidding requirements are not part of the Contract Documents unless the bidding

Date

§ 9.1.7 Additional documents, if any, forming part of the Contract Documents:

requirements are also enumerated in this Article 9.

.1 AIA Document E201[™]–2007, Digital Data Protocol Exhibit, if completed by the parties, or the following:

Pages

.2 Other documents, if any, listed below: (List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201–2007 provides that bidding requirements such as advertisement or invitation to bid, Instructions to Bidders, sample forms and the Contractor's bid are not part of the Contract Documents unless enumerated in this Agreement. They should be listed here only if intended to be part of the Contract Documents.)

ARTICLE 10 INSURANCE AND BONDS

The Contractor shall purchase and maintain insurance and provide bonds as set forth in Article 11 of AIA Document A201-2007.

(State bonding requirements, if any, and limits of liability for insurance required in Article 11 of AIA Document A201–2007.)

Type of Insurance or Bond

Limit of Liability or Bond Amount (\$0.00)

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

OWNER (Signature)

1

CONTRACTOR (Signature)

(Printed name and title)

(Printed name and title)

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

AIA Document A101 TM - 2007. Copyright © 1915, 1918, 1925, 1937, 1951, 1958, 1961, 1963, 1967, 1974, 1977, 1980, 1987, 1991, 1997 and 2007 by The Init. American Institute of Architects. All rights reserved. WARNING: This AIA® Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA® Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. Purchasers are permitted to reproduce ten (10) copies of this document when completed. To report copyright violations of AIA Contract Documents, e-mail The American Institute of Architects' legal counsel, copyright@aia.org.

▲IA® Document A312[™] – 2010

Performance Bond

CONTRACTOR: (*Name, legal status and address*)

SURETY: (Name, legal status and principal place of business)

OWNER: *(Name, legal status and address)*

CONSTRUCTION CONTRACT Date: Amount: \$ Description: (Name and location)

BOND Date: (Not earlier than Construction Contract Date)

Amount: \$ Modifications t	o this Bond:	None		See Section 16
CONTRACTOR Company:	AS PRINCIPAL (Corporate Seal)	SURE Comp	TY any:	(Corporate Seal)
Signature:		Signat	ture:	

 Name and
 Name and

 Title:
 Title:

 (Any additional signatures appear on the last page of this Performance Bond.)

(FOR INFORMATION ONLY — Name, address and telephone) AGENT or BROKER: (Architect, Engineer or other party:) ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

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

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

Init. 1

§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

§ 2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Section 3.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after

- .1 the Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Section 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;
- .2 the Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
- .3 the Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

§ 4 Failure on the part of the Owner to comply with the notice requirement in Section 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

§ 5 When the Owner has satisfied the conditions of Section 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

§ 5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

§ 5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

§ 5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Section 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

§ 5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

- .1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
- .2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

§ 6 If the Surety does not proceed as provided in Section 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Section 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

Init. 1

AIA Document A312TM – 2010 Performance Bond. The American Institute of Architects. All rights reserved. WARNING: This AIA[®] Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA® Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. This document was produced by AIA software at 09:25:48 on 07/28/2016 under Order No.0847530795_1 which expires on 05/23/2017, and is not for resale. (1214920310)User Notes:
§ 7 If the Surety elects to act under Section 5.1, 5.2 or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication, for

- the responsibilities of the Contractor for correction of defective work and completion of the .1 Construction Contract;
- .2 additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Section 5; and
- .3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

§ 8 If the Surety elects to act under Section 5.1, 5.3 or 5.4, the Surety's liability is limited to the amount of this Bond.

§ 9 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors and assigns.

§ 10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 11 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 12 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

§ 13 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 14 Definitions

§ 14.1 Balance of the Contract Price. The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

§ 14.2 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

§ 14.3 Contractor Default. Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

§ 14.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 14.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.

AIA Document A312TM – 2010 Performance Bond. The American Institute of Architects. All rights reserved. WARNING: This AIA[®] Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA® Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. This document was produced by AIA software at 09:25:48 on 07/28/2016 under Order No.0847530795_1 which expires on 05/23/2017, and is not for resale. (1214920310)User Notes:

§ 15 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 16 Modifications to this bond are as follows:

(Space is provided below for additional states of the second states of t	tional signatures of a	dded parties, other t	han those appearing on the cover page.)
CONTRACTOR AS PRINCIPAL		SURETY	
Company:	(Corporate Seal)	Company:	(Corporate Seal)

Signature: Name and Title: Address:

Signature: Name and Title: Address:

AlA Document A312[™] – 2010 Performance Bond. The American Institute of Architects. All rights reserved. WARNING: This AlA[®] Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AlA[®] Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. This document was produced by AlA software at 09:25:48 on 07/28/2016 under Order No.0847530795_1 which expires on 05/23/2017, and is not for resale. (1214920310) (1214920310) **User Notes:**

AIA° Document A312[™] – 2010

Payment Bond

CONTRACTOR: (Name, legal status and address) SURETY: (Name, legal status and principal place of business)

OWNER: (Name, legal status and address)

CONSTRUCTION CONTRACT Date: Amount: \$ Description: (Name and location)

BOND

Date: (Not earlier than Construction Contract Date)

Amount: \$ Modifications t	o this Bond:	None	See Section 18
CONTRACTOR Company:	AS PRINCIPAL (Corporate Seal)	SURETY Company:	(Corporate Seal)
Signature:		Signature:	

Name and Name and Title: Title: (Any additional signatures appear on the last page of this Payment Bond.)

(FOR INFORMATION ONLY - Name, address and telephone) AGENT or BROKER: **OWNER'S REPRESENTATIVE:** (Architect, Engineer or other party:) added information needed for its completion. The author may also have revised the text of the original AIA standard form. An Additions and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates

ADDITIONS AND DELETIONS:

The author of this document has

necessary information and where the author has added to or deleted from the original AIA text. This document has important legal

where the author has added

consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

§ 2 If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Section 13) of claims, demands, liens or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety.

§ 4 When the Owner has satisfied the conditions in Section 3, the Surety shall promptly and at the Surety's expense defend, indemnify and hold harmless the Owner against a duly tendered claim, demand, lien or suit.

§ 5 The Surety's obligations to a Claimant under this Bond shall arise after the following:

§ 5.1 Claimants, who do not have a direct contract with the Contractor,

- .1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
- .2 have sent a Claim to the Surety (at the address described in Section 13).

§ 5.2 Claimants, who are employed by or have a direct contract with the Contractor, have sent a Claim to the Surety (at the address described in Section 13).

§ 6 If a notice of non-payment required by Section 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Section 5.1.1.

§ 7 When a Claimant has satisfied the conditions of Sections 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

§ 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

§ 7.2 Pay or arrange for payment of any undisputed amounts.

§ 7.3 The Surety's failure to discharge its obligations under Section 7.1 or Section 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Section 7.1 or Section 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

§ 8 The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Section 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

§ 9 Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

AIA Document A312TM – 2010 Payment Bond. The American Institute of Architects. All rights reserved. WARNING: This AIA[®] Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA[®] Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. This document was produced by AIA software at 09:24:40 on 07/28/2016 under Order No.0847530795_1 which expires on 05/23/2017, and is not for resale. (1210788718)

§ 10 The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to, or give notice on behalf of, Claimants or otherwise have any obligations to Claimants under this Bond.

§ 11 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 12 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Section 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 13 Notice and Claims to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

§ 14 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 15 Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

§ 16 Definitions

§ 16.1 Claim. A written statement by the Claimant including at a minimum:

- .1 the name of the Claimant;
- .2 the name of the person for whom the labor was done, or materials or equipment furnished;
- .3 a copy of the agreement or purchase order pursuant to which labor, materials or equipment was furnished for use in the performance of the Construction Contract;
- .4 a brief description of the labor, materials or equipment furnished;
- the date on which the Claimant last performed labor or last furnished materials or equipment for use .5 in the performance of the Construction Contract;
- the total amount earned by the Claimant for labor, materials or equipment furnished as of the date of .6 the Claim;
- .7 the total amount of previous payments received by the Claimant; and
- .8 the total amount due and unpaid to the Claimant for labor, materials or equipment furnished as of the date of the Claim.

§ 16.2 Claimant. An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

§ 16.3 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

AIA Document A312™ - 2010 Payment Bond. The American Institute of Architects. All rights reserved. WARNING: This AIA[®] Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA® Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. This document was produced by AIA software at 09:24:40 on 07/28/2016 under Order No.0847530795_1 which expires on 05/23/2017, and is not for resale. (1210788718) User Notes:

§ 16.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 16.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.

§ 17 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 18 Modifications to this bond are as follows:

(Space is provided below for ad	lditional signatures of add	led parties, other th	han those appearing on the cover page.)
CONTRACTOR AS PRINCIPAL		SURETY	
Company:	(Corporate Seal)	Company:	(Corporate Seal)

Signature: Name and Title: Address:

Signature: Name and Title: Address:

Init.

4

AIA Document A312TM - 2010 Payment Bond. The American Institute of Architects. All rights reserved. WARNING: This AIA® Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA® Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. This document was produced by AIA software at 09:24:40 on 07/28/2016 under Order No.0847530795_1 which expires on 05/23/2017, and is not for resale. **User Notes:**

MAIA° Document A310[™] – 2010

Bid Bond

CONTRACTOR: (*Name*, *legal status and address*)

SURETY: (Name, legal status and principal place of business)

OWNER: (*Name*, *legal status and address*)

BOND AMOUNT: \$

PROJECT: (Name, location or address, and Project number, if any)

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond. ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An Additions and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

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

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

1

1

Init.

AlA Document A310[™] – 2010. Copyright © 1963, 1970 and 2010 by The American Institute of Architects. All rights reserved. WARNING: This AIA[®] Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA[®] Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. This document was produced by AIA software at 09:23:11 on 07/28/2016 under Order No.0847530795_1 which expires on 05/23/2017, and is not for resale. User Notes: (1147358545)

Signed and sealed this day of ,

(Witness)

(Contractor as Principal)

(Seal)

(Title)

(Surety)

(Seal)

2

(Witness)

(Title)

Init. 1 AIA Document A310TM – 2010. Copyright © 1963, 1970 and 2010 by The American Institute of Architects. All rights reserved. WARNING: This AIA® Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA® Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. This document was produced by AIA software at 09:23:11 on 07/28/2016 under Order No.0847530795_1 which expires on 05/23/2017, and is not for resale. User Notes:

DIVISION 1 GENERAL REQUIREMENTS

01.000 <u>REQUIREMENTS</u>

.001 EXTENT

- A. Requirements of GENERAL CONDITIONS, DIVISION 0, BIDDING REQUIREMENTS AND MODIFICATIONS TO GENERAL CONDITIONS, and ADDENDA, if issued, shall apply to work under all Divisions of the Contract.
- B. Separation of these Specifications into Divisions and Sections is for convenience only and is not intended to establish limits of work.
- C. Contractor shall inform themselves fully of the conditions relating to the construction of the project. Failure to do so will not relieve the Contractor of his obligation to furnish all material and labor necessary to carry out the provisions of this contract, as indicated by these Specifications and Drawings.

01.010 <u>SUMMARY OF THE WORK</u>

.011 WORK UNDER THIS CONTRACT

A. Description of Project - Work consists of IFB#RRP03.21 BHA Roof Replacement Project - Hurricane Zeta Repairs, as shown on the Drawings and in accordance with these Specifications.

.012 ACCESS

A. All Contractors and sub-contractors shall use the ingress and egress roads designated for movement of materials, workmen, etc.

.015 SECURITY

A. The Contractor shall be responsible for the security of the buildings while under his care, custody and control.

.020 OWNER

- A. Wherever the term "Owner" is used in the Specifications, it refers to the Biloxi Housing Authority (BHA).
- B. All papers required to be delivered to the Owner shall, unless otherwise directed in writing, be delivered to the Architect.

.030 COMMENCEMENT

A. The Contractor is required to begin work under this Contract within 10 days after date of written Notice to Proceed issued by the Architect, and to complete work within the time stipulated in the proposal form. Beginning of work shall mean actual physical work on the site.

.040 BENEFICIAL OCCUPANCY BY OWNER

A. If the Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion thereof, such occupancy shall be considered beneficial occupancy and shall <u>not</u> constitute Substantial Completion. Consent of the Contractor to such occupancy or use shall not be unreasonably withheld.

01.200 PROJECT MEETINGS

.201 EXTENT

A. Preconstruction Conference - Contractor shall arrange for a Conference on the job site, between representatives of the Owner, the Architect, the Sub-Contractors, the Superintendent for the project prior to any construction work. Purpose of conference shall be to establish the order of communications, Construction sequence, time schedule, and the limits of use of the areas surrounding the project.

01.300 <u>SUBMITTALS</u>

01.310 CONSTRUCTION SCHEDULE

.311 EXTENT

- A. Contractor shall prepare and submit to the Architect for approval a Construction Schedule based on the Construction Sequence established during the above Conference.
 - 1. Submit Schedule electronically via PDF.

01.340 SHOP DRAWINGS AND SAMPLES

.341 EXTENT

- A. Shop Drawings and Samples shall be submitted as per Article 4, paragraph 4.13, SHOP DRAWINGS AND SAMPLES of the General Conditions.
- B. Shop drawings, erection and setting drawings shall be submitted as PDF files digitally. Reviewed files shall be returned to Contractor stamped and/or corrections noted. Contractor shall be responsible for making the required number of copies for his use and the use of his supplier or subcontractors. Drawings not approved will be returned for corrections and be resubmitted in a like manner.

01.350 <u>LAYOUT</u>

.351 EXTENT

A. Before commencing any work, the Contractor shall verify all dimensions as indicated on the Drawings. He shall report errors or inconsistencies in them to the Architect before commencing work.

01.360 <u>SCHEDULE OF VALUES</u>

.361 EXTENT

A. Before beginning work, the Contractor shall submit a Breakdown of Cost covering in detail all phases of the work. The breakdown must be approved by the architect and the engineers.

01.400 <u>QUALITY CONTROL</u>

.401 EXTENT

- A. Manufacturer's Directions
 - 1. All manufactured articles, materials and equipment shall be applied, installed, connected, erected, used cleaned and conditioned as directed by the manufacturer, unless herein specified to the contrary.
 - 2. Furnish copies of all printed directions to the Architect.

01.500 TEMPORARY FACILITIES AND CONTROLS

.510 TEMPORARY TOILETS

A. The General Contractor shall provide and maintain sanitary temporary toilets for all employees, subject to any and all Sanitary Codes having jurisdiction. The temporary toilets shall be enclosed and weatherproof and kept in sanitary condition at all times. They must be located at points approved by the Owner.

.512 TEMPORARY UTILITIES

A. The Contractor must make arrangements to provide his own water and power. Temporary services shall be removed at completion of the project. Permanent utilities shall not be used during this Project except with the written permission of the Owner.

.513 DRINKING WATER

A. The General Contractor shall furnish and provide drinking water facilities for all workmen on the job. This shall include icing when required, paper cups, etc., all maintained in a sanitary condition.

.514 SPECIAL CONTROLS A. Workmen who may, because of improper conduct, become

objectionable, will be promptly removed by the Contractor at the request of the Owner or the Architect.

- B. Dress of workmen shall at all times be complete with shirts and pants while on job.
- C. No burning of trash or rubbish shall be allowed on site.

.515 BARRIERS AND SECURITY

- A. Protective devices such as signs, lights and signals shall be utilized night and day for safety of public and workmen.
- B. The Owner will not be responsible for the protection and/or safety of the Contractor's work, materials and/or equipment.
- C. Contractor may provide security guards at his own discretion.

.516 CONSTRUCTION AIDS

A. Scaffolding shall be provided by Contractor for the work, both interior and exterior, for construction of walls, ceilings, etc. Build or furnish and maintain scaffolding in accordance with all laws and regulations in effect.

.517 TEMPORARY FIELD OFFICES

- A. The Contractor shall furnish field offices as required for his own use. Field offices shall be weatherproof, lighted and powered; heated and cooled; and be sized adequately for desks, layout and storage areas.
- B. Locations of all field offices and sheds shall be approved by the Architect.

.518 VEHICULAR REQUIREMENTS

- A. The Contractor is responsible for employees under his employment. Ensure that employees are familiar with and obey traffic, safety, and security regulations.
- B. Motor Vehicle Operation Ingress and egress of personnel will be subject to the security regulations of the Project Site.
- C. All personnel must be made aware of the speed limits.
- D. Parking is in designated areas to be determined at the pre-construction conference only.

.519 NO TOBACCO POLICY

- A. All tobacco products are prohibited within or outside of all buildings and/or on BHA property.
- B. Any worker found to possess tobacco on BHA property shall immediately be removed from the project.

.520 NO MUSIC POLICY

A. No audible music is allowed within or outside any buildings under construction or on BHA property.

.521 PROJECT SIGN

A. The general contractor shall erect on adequate supports and maintain one (1) neatly constructed and painted 3/4" thick plywood sign approximately 8'x8'. The architect will provide graphics, colors, lettering, layout and location of the sign.

01.600 MATERIAL AND EQUIPMENT

.601 EXTENT

A. Where a specific material is specified by name. The materials mentioned by name shall form the basis of the Contract. No substitutions under such clauses shall be made without authority in writing from the Architect.

.602 ASBESTOS CONTAINING MATERIALS

- A. There shall be <u>NO</u> asbestos containing materials used in the construction of this Project. In the event a material which is specified contains asbestos, the Contractor shall recommend a non-asbestos substitute to the Architect for approval. Substitution of material shall be at no additional cost to the Owner.
- B. The Contractor shall provide written certification to the Owner that no asbestos containing material was used during the construction of this Project.

.603 STARTING OF SYSTEMS

- A. Coordinate Schedule for start-up of various equipment and systems.
- B. Notify Professional and Owner seven (7) days prior to start-up of each system.
- C. Verify each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, or other conditions which may cause damage.
- D. Verify that tests, meter readings and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- E. Verify wiring and support components for equipment are complete and tested.
- F. Execute start-up under supervision of responsible Contractors' personnel in accordance with manufacturers' instructions.
- G. When specified in individual specification Sections, require Manufacturer to provide authorized representative to be present at site to inspect, check and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
- H. Submit a written report that equipment or system has been properly installed and is functioning correctly.

.604 DEMONSTRATION AND INSTRUCTION

- A. Demonstrate operation and maintenance of Products to Owner's personnel prior to date of Substantial Completion. Video this demonstration and give video to Owner.
- B. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owner's personnel in detail to explain all aspects of operation and maintenance.
- C. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at agreed-upon times, at designated location. Video this demonstration and give video to Owner.
- D. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.

01.605 PRODUCT REQUIREMENTS

.606 SUMMARY

A. To set forth the procedure and conditions for substitutions and to give the product options available to the contractor.

.607 CONTRACTOR'S OPTIONS

- A. For products specified only by reference standards, select any product meeting standards, by any reputable manufacturer.
- B. For products specified by naming several products or manufacturers, select any product and manufacturer named.
 - 1. Where more than one manufacturer's product is specified for one use, the Drawings have been prepared for the one listed first; and building adjustments may be necessary to accommodate the others. The Contractor will be responsible for any changes in the building construction required because of product selection, and shall make any such changes to the satisfaction of the Architect.
- C. For product specified by naming one or more products, but indicating the option of selecting equivalent products by stating "or approved equal / equal as approved", or "or equal" after specified product, Contractor must submit request, as required for substitution, for any product not specifically named.
- D. For items followed by "or approved equal" or "equal as approved":
 - 1. Submit request for approval to Architect at least 10 days prior to bid date. Use only those approved in writing prior to bid date. If request is received after the time allowed by above, the request will be denied without further investigation.
 - 2. Submit three (3) copies of requests for prior approval. Include in request the following:
 - a. Substitution request form (included at end of Section).

- b. Itemized side by side comparison of proposed substitution with product specified. This should be in tabular form with key points of each product compared.
- c. Manufacturer's literature: Product description, performance and test data and required standards. Safety Data Sheets where required.
- d. Samples upon request.
- e. If any of the above items are not submitted, the product WILL NOT be considered as an equal product and automatically rejected.
- f. The Contractor shall bid the product originally specified should the request for substitution be rejected for any reason. The decision of the Architect is final.
- E. For items followed by words "or equal" or "equal to":
 - 1. Unless otherwise specified in other Specification Sections, submit substitutions to Architect for approval <u>not more than 30 days after</u> <u>date of Agreement.</u>
 - 2. Submit three (3) copies of requests for substitution. Include in request:
 - a. Substitution request form (included at end of Section)
 - b. Complete data substantiating compliance of proposed substitutions with Contract Documents.
 - c. Itemized comparison of proposed substitution with product or method specified. This should be in tabular form with key points of each product compared.
 - d. Accurate cost data on proposed substitution in comparison with product or method specified.
 - e. For Products:
 - 1) Manufacturer's literature: Product description, performance and test data and required standards. Safety Data Sheets where required.
 - 2) Samples.
 - f. For Construction Methods:
 - 1) Detailed description of proposed method.
 - 2) Drawings illustrating methods.
- F. In making request for substitution, bidder / contractor represents:
 - 1. He has personally investigated proposed product or method and determined that it is equal or superior in all respects to that specified and that no product involved contains ingredients regulated by the EPA or which are carcinogenic or toxic.
 - 2. He will provide the same guarantee for substitution as for product or method specified.
 - 3. He will coordinate installation of accepted substitution into work, making those changes required for work to be complete in all respects.

- 4. <u>He waives all claims for additional costs related to substitution which consequently become apparent.</u>
- 5. Cost data is complete and includes all related costs under his contract.
- G. Substitutions will not be considered if:
 - 1. They are indicated or implied on shop drawings, or product data submittals without formal request submitted in accordance with this Section.
 - 2. Acceptance will require substantial revision of contract documents.
 - 3. In the Architect's judgment, the product or material is not equal.
 - 4. Architect is the final judge of equality of all substitutions.
- H. Form: Submit Substitution Requests on Architect's form located herein.
- 01.608 CONFLICTS
 - A. If there is a conflict between the Drawings and Specifications, and no clarification has been issued, the bidder shall bid the more stringent product or application.

SUBSTITUTION REQUEST (SUBMIT THE FOLLOWING ALONG WITH DETAIL SIDE BY SIDE COMPARISON OF PROPOSED PRODUCT/MATERIAL VS. SPECIFIED)

To: Allred Stolarski Architects 711 Church Street Ocean Springs, MS 39564 Project Name: 2021-23 IFB#RRP03.21 **BHA Roof Replacement Project-Hurricane Zeta Repairs** Biloxi Housing Authority

Specification Section Number and paragraph:

Proposed Substitution:_____

Manufacturer's Name: ______ Product Description:

REASON FOR REQUEST (Select 1 of the following):

□ Pre-Bid Substitution (Prior Approval): Included detailed analysis comparing proposed substitution against specified product, including redlined specification section showing differences.

□ Specified product is unavailable.

□ Cost savings to Owner. Indicate comparative cost analysis as attachment.

□ Other, Explain.

REFERENCES:

Attach list of at least 3 projects where proposed substitution has been used within past 12 months include name, address, and telephone number of Owner and Architect.

Attachment included

□ Attachment not included, Explain

CONTRACTOR'S / BIDDER'S REPRESENTATION:

The only response to this Request for Substitution will be by Addendum (if prior to award) or Supplemental Instruction (if after award, unless Change Order is necessary to reduce Contract Amount).

THE UNDERSIGNED CERTIFIES:

The substitution does not require modifications to design, changes to Drawings, or revisions to the specifications. The exact same warranty(s) will be furnished for proposed substitution as for specified product.

Proposed substitution will have no adverse effect on other trades and will not affect or delay the construction schedule.

Proposed substitution does not affect dimensions and/or functional clearances indicated in the drawings or specifications.

Undersigned accepts responsibility for coordination of proposed substitution and accepts all additional costs resulting from the incorporation of proposed substitution into the Project per Section 01.605 – Product Requirements.

SUBMITTED BY: (included name, address, telephone, and contract person of manufacturer/supplier)

Signature and date:_____

FOR ARCHITECTS USE ONLY:

Substitution approved as noted - Make submittals in accordance with Specification Section 01.300 - Submittals. Substitution Not Accepted - Use specified materials.

Substitution Request Incomplete; Not accepted- Use specified materials.

Substitution Request received too late - Use specified materials.

Reviewed by/date:

01.700 PROJECT CLOSEOUT

.710 CLEANING UP

- A. Clean up shall be performed continuously during working days to keep building and premises free from accumulation of waste materials and rubbish.
- B. At completion of the work, remove all waste, rubbish and unused surplus materials from and about the building and site, as well as tools, construction equipment and leave building broom clean.
- C. Also see specific cleaning requirements hereinafter required in these Specifications.
- D. Just prior to final inspection, remove all dust, dirt and stains from finished surfaces and leave the work ready for occupancy.

.715 GUARANTEES, BONDS AND AFFIDAVITS

- A. Submitted by the Contractor to the Architect for transmittal to the Owner and shall be, but not limited to, the following:
 - 1. Certification that all work, including that of sub-contractors, has been completed in accordance with requirements of the Contract Documents.
 - 2. Guarantee of Work: Written sworn statement that all work is guaranteed against defects in materials and workmanship for one (1) year form the date of the Owner's acceptance of the project, except where specified for longer periods.
 - a. All guarantees and warranties shall be obtained in the Owner's name.
 - b. Within the Guaranty period, if repairs or changes are required in connection with guaranteed work which, in the opinion of the Owner, are rendered necessary as a result of the use of materials, equipment or workmanship which are inferior, defective or not in accordance with the terms of the Contract, the Contractor shall promptly, upon notice from and without expense to the Owner, place in satisfactory condition building, site or contents thereof. The Contractor shall make good any work, materials, equipment or contents of said buildings or site which may be disturbed by fulfilling any such Guaranty.
 - c. If, after notice, the Contractor fails to proceed promptly to comply with the terms of the Guaranty, the Owner may have the defects corrected and the Contractor and his Sureties shall be liable for all expenses incurred.
 - 3. Copies of warranties, guarantees and bonds required by these Specifications.
 - 4. Written certification that no asbestos containing material was used during the Construction of this.

- 5. Contractor's Affidavit of Payment of Debts and Claims, using AIA Document G706 current edition.
- 6. Release of Liens and Certification that All Bills Have Been paid, using AIA Document G706A, current edition. Release shall state that the Owner is released from any and all claims and/or damages.
- 7. Consent for Final Payment from the Contractor's Surety Company, using AIA Document G707, current edition.

.730 PROJECT RECORD DRAWINGS

A. Contractor shall furnish two complete sets of final project "as-built" record drawings (recorded on to CD-ROM disks) to Architect prior to final payment. The actual final location of all piping, drains, cleanouts, appurtenances and equipment shall be indicated in a contrasting color thereon by Contractor.

.731 OPERATION AND MAINTENANCE DATA

A. Includes spare parts list, required by these Specifications, submitted by the Contractor to the Architect for transmittal to the Owner, prior to final payment.

.740 FINAL INSPECTION

A. After receipt of written notice that the work is ready for final inspection and acceptance and receipt of the final application for payment, the Architect will make such inspection and furnish the Contractor with a check list of any items found incomplete or not in conformance with the Contract Documents. The Contractor shall remedy such defects within 30 days of his receipt of the list and the Architect will make (1) subsequent inspection of the work. Should correction not be made within the allotted 30 days and should additional inspections of the work be required due to failure of the Contractor to remedy defects listed, the Contractor shall pay to the Owner the sum of \$100.00 for each subsequent trip. When the Architect finds the work acceptable under the Contract Documents and the Contract fully performed, he will issue the final Certificate for Payment stating that to the best of his knowledge, information and belief, and on the basis of his observations, the work has been completed in accordance with the terms and conditions of the Contract Documents, and that the entire balance found to be due to the Contractor, and noted in said final Certificate, is due and payable.

01.800 <u>TIME FOR SUBSTANTIAL COMPLETION, LIQUIDATED DAMAGES,</u> <u>ALLOWANCES</u>

.801 TIME FOR SUBSTANTIAL COMPLETION

A. The Contractor shall complete all work under the contract agreement, including all alternate proposals which are made a part of the contract

agreement, on or before the Contract Times indicated on the Form of Proposal.

- .802 LIQUIDATED DAMAGES
 - A. The Contractor shall substantially complete all work under the Contract Agreement, including all Alternate Proposals which are made a part of the Contract Agreement, within the time period stipulated on the Form of Bid Proposal. If all work required by this contract agreement is not substantially completed within these specified times for substantial completion, the Contractor shall pay to the Owner, or shall agree to the Owner's withholding from monies due them, liquidated damages in the amount of One Hundred Fifty and 00/100 (\$150.00) Dollars per day for each consecutive calendar day following the specified substantial completion dates that the work remains incomplete, Saturdays, Sundays, and holidays included.
 - B. The intent of this requirement is not to penalize the Contractor, but it is to offset damages which the Owner will experience if the project is not completed on the specified date.

01.900 <u>ALTERNATES</u>

- .901 A. <u>ALTERNATE #1</u>: An Additive Alternate for all labor, materials, and equipment necessary to reroof buildings at Bayview Oaks, complete as indicated on the drawings and in accordance with the specifications.
- .902 A. <u>ALTERNATE #2:</u> An Additive Alternate for all labor, materials, and equipment necessary to install a laminated shingle roof in lieu of the base bid 3-tab shingle roof, complete as indicated on the drawings and in accordance with the specifications.

END OF DIVISION

SECTION 02.200 DEMOLITION OF EXISTING CONSTRUCTION

PART 1 GENERAL

- 1.01 EXISTING CONDITIONS
 - A. Contractors shall visit the building to determine the existing conditions and review the items of work required to establish the planned and specified work.
- PART 2 PRODUCTS
- 2.01 MATERIALS
 - A. Not applicable.
- PART 3 EXECUTION
 - 3.01 DEMOLITION
 - A. Existing roofing system shall be removed completely to the deck.
 - B. Roofing debris shall not be dropped to the ground, unless using an OSHA approved enclosed chute, with chute hopper for loading, and a substantial gate at the discharge end. A competent employee shall be assigned to control the operation of the gate, and the backing and loading of trucks or roll-offs dumpsters.
 - C. Contractor shall haul all debris from the site before any significant accumulation appears. Debris shall be wetted, if necessary, to prevent raising dust.
 - D. Contractor shall be responsible for the removal of all materials required for the proper completion of the Work, and for proper repairs to any surfaces damaged by anchorages, etc.
 - E. The Contractor shall be solely responsible for the safety of personnel and existing structure, and shall conform to all applicable Federal, State, and local codes.

3.02 PROTECTION OF MATERIALS AND EXISTING BUILDING

- A. Protect the work and all materials whether incorporated in the building or not. Cover openings to fully protect building interior from weather.
- B. Wherever materials are hoisted to roof or carried into building, the building must be covered with a heavy layer of building paper and the floors and steps over which the material is carried must be well covered to protect the work against stains from dripping materials.
- C. Protect all existing work, including all mechanical and electrical, when working at, over, or in the area of existing construction. Where existing work is damaged because of new construction, the area so damaged shall be restored to its original condition at no additional expense to the Owner, using new materials of like nature.

DEMOLITION OF EXISTING CONSTRUCTION 02200-1/2

D. The Contractor shall provide protection for all work where necessary and he will be responsible for all damage done to any adjacent properties during the construction. The above protections shall be maintained while the work is being done and in no case shall dirt, grit, etc., be round into the floor finishes or coverings.

3.03 SALVAGED MATERIALS AND EQUIPMENT

A. All existing equipment and materials shall remain the property of the Owner. Care must be taken to avoid damage to existing equipment and materials being relocated or stored. Items that are damaged shall be repaired and brought to their original state.

END OF SECTION

SECTION 05.500 METAL FABRICATIONS

- PART 1 GENERAL
- 1.01 RELATED DOCUMENTS: Drawings and General Provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to work of this and all sections.
- 1.02 DESCRIPTION OF WORK
 - A. Definition: Metal fabrications include items made from iron and steel shapes, plates, bars, strips, tubes, pipes and castings.
- 1.03 QUALITY ASSURANCE
 - A. Field Measurements: Take field measurements prior to preparation of shop drawings and fabrications where possible. Do not delay job progress; allow for trimming and fitting where taking field measurements before fabrication might delay work.
 - B. Shop Assembly: Preassemble items in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitation. Clearly mark units for reassembly and coordinated installation.

1.04 SUBMITTALS

- A. Shop Drawings: Submit shop drawings for fabrication and erection of miscellaneous metal fabrications. Include plans, elevations and details of sections and connections. Show anchorage and accessory items. Provide templates for anchor and bolt installation by others.
- PART 2 PRODUCTS

2.01 MATERIALS

- A. Metals
 - 1. Metal surfaces, General: For Fabrication of miscellaneous metal work which will be exposed to view, use only materials which are smooth and free of surface blemishes including pitting, seam marks, roller marks, rolled trade names and roughness.
 - 2. Steel Plates, Shapes and Bars: ASTM A36
 - 3. Steel Pipe: ASTM A53; black finish; standard weight (Schedule 40), unless otherwise indicated.
- B. Paint
 - 1. Metal Primer Paint
 - Red lead mixed pigment, alkyd varnish, linseed oil paint, FS TT-P-86, Type II; or red lead iron oxide, raw linseed oil, alkyd paint, Steel Structures Painting Council (SSPC) Paint 2-64.

METAL FABRICATIONS 05500-1/4 b. Primer selected must be compatible with finish coats of paint. Coordinate selection of metal primer with finish paint requirements specified in Division 9.

2.02 FABRICATION, GENERAL

- A. Workmanship: Use materials of size and thickness shown or, if not shown, of required size and thickness to produce strength and durability in finished product. Work to dimensions shown or accepted on shop drawings, using proven details of fabrication and support. Use type of materials shown or specified for various components of work.
- B. Form exposed work true to line and level with accurate angles and surfaces and straight sharp edges. Ease exposed edges to a radius of approximately 1/32" unless otherwise shown. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work.
- C. Weld corners and seams continuously, complying with AWS recommendations. At exposed connections, grind exposed welds smooth and flush to match and blend with adjoining surfaces.
- D. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners, wherever possible. Use exposed fasteners of type shown or, if not shown, Phillips flat-head (countersunk) screws or bolts.
- E. Provide for anchorage of type shown, coordinated with supporting structure. Fabricate and space anchoring devices to provide adequate support for intended use.
- F. Cut, reinforce, drill and tap miscellaneous metal work as indicated to receive finish hardware and similar items.
- G. Fabricate joints which will be exposed to weather in a manner to exclude water or provide weep holes where water may accumulate.
- H. Shop Painting
 - 1. Shop paint miscellaneous metal work, except members or portions of members to be embedded in concrete or masonry, surfaces and edges to be field welded, and galvanized surfaces, unless otherwise specified.
 - 2. Remove scale, rust and other deleterious materials before applying shop coat. Clean off heavy rust and loose mill scale in accordance with SSPC SP-2 "Hand Tool Cleaning", or SSPC SP-3 "Power Tool Cleaning", or SSPC SP-7 "Brush-Off Blast Cleaning".
 - 3. Remove oil, grease and similar contaminants in accordance with SSPC SP-1 "Solvent Cleaning".
 - 4. Immediately after surface preparation, brush or spray on primer in accordance with manufacturer's instructions, and at a rate to provide uniform dry film thickness of not less than 2.0 mils for each coat. Use painting methods which will result in full coverage of joints, corners, edges and exposed surfaces.

METAL FABRICATIONS 05500-2/4 5. Apply one shop coat to fabricated metal items, except apply 2 coats of paint to surfaces inaccessible after assembly or erection. Change color of second coat to distinguish it from the first.

2.03 MISCELLANEOUS METAL FABRICATIONS

- A. Rough Hardware
 - 1. Furnish bent or otherwise custom fabricated bolts, plates, anchors, hangers, dowels and other miscellaneous steel and iron shapes as required for framing and supporting woodwork, and for anchoring or securing woodwork to concrete or other structures.
 - 2. Manufacture or fabricate items of sizes, shapes and dimensions required.
 - 3. Use galvanized steel hardware for galvanized steel members.

PART 3 EXECUTION

3.01 PREPARATION: Coordinate and furnish anchorages, setting drawings, diagrams, templates, instructions and directions for installation of anchorages, which are to be embedded in concrete or masonry construction. Coordinate delivery of such items to project site.

3.02 INSTALLATION

A. General

- 1. Installation of all metal fabrications and associated materials, shall be in strict accordance with the manufacturer's written recommendations.
- 2. Fastening to In-Place Construction: Provide anchorage devices and fasteners where necessary for securing miscellaneous metal fabrications to in-place construction; including, threaded fasteners for concrete and masonry inserts, toggle bolts, through-bolts, lag bolts, wood screws and other connectors as required.
- 3. Cutting, Fitting and Placement: Perform cutting, drilling and fitting required for installation of miscellaneous metal fabrications. Set work accurately in location, alignment and elevation, plumb, level, true and free of rack, measured from established lines and levels. Provide temporary bracing or anchors in formwork for item which are to be built into concrete, masonry or similar construction.
- 4. Fit exposed connections accurately together to form tight hairline joints. Weld connections which are not to be left as exposed joints, but cannot be shop welded because of shipping size limitations. Grind exposed joints smooth and touch-up shop paint. Do not weld, cut or abrade the surfaces of exterior units which have been hot-dip galvanized after fabrication and are intended for bolted or screwed field connections.

METAL FABRICATIONS 05500-3/4 5. Field Welding: Comply with AWS Code for procedures of manual shielded metal-arc welding, appearance and quality of welds made, and the methods used in correcting welding work.

3.03 ADJUST AND CLEAN

A. Touch-up Paint: Immediately after erection, clean ground field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with same material as used for shop painting. Apply by brush or spray to provide a minimum dry film thickness of 2.0 mils.

END OF SECTION

SECTION 06.100 ROUGH CARPENTRY

PART 1 GENERAL

1.01 DESCRIPTION

- A. Refer to Conditions of the Contract and Division 1 General Requirements of the Specifications, which are made a part of this Section by reference.
- B. This work includes rough carpentry work for the buildings and other related items necessary to complete project indicated by Contract unless specifically excluded. Materials and installation requirements for other work, commonly assigned to the carpentry trade, are specified in other sections of these Specifications. The Contractor is responsible for the proper assignment of such other work to the carpentry trade.

1.02 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Codes and Standards
 - 1. In addition to complying with the pertinent Codes and Regulations of Governmental Agencies having jurisdiction, unless otherwise specifically directed or permitted by the Architect, comply with:
 - a. American Plywood Association. APA, DFPA
 - b. American Society for Testing and Materials. ASTM
 - c. Southern Pine Inspection Bureau. SPIC
 - d. Commercial Standards. CS
 - e. International Building Code. IBC
 - f. American Wood Preservers Institutes. AWPI
 - g. American Wood Preservers Association (AWPA) and the American Wood Preservers Bureau (AWPB) Standards for Preservative Treatment and Fire-Retardant Treatment (when called for).

1.03 PRODUCT HANDLING

- A. Protection
 - 1. Deliver the materials to the job site and store, in a safe area, out of the way of traffic, and stored up off the ground surface.
 - 2. Identify framing lumber as to grade and store each grade separately from other grades.
 - 3. Protect metals with adequate waterproof outer wrapping.
 - 4. Use extreme care in off-loading of lumber to prevent damage, splitting, and breaking of materials.

ROUGH CARPENTRY 06100-1/5 1.04 SUBMITTAL

A. Submit certification from the treating plant stating that the chemicals and process used, net amount of salts retained and the moisture content after drying following treatment are in conformance with applicable standards.

PART 2 PRODUCTS

2.01 GRADE STAMPS

- A. Identify framing lumber by the grade stamp of agency certified by National Forest Products Association, or such other grade stamp as is approved in advance by the Architect.
- B. Identify plywood as to species, grade and glue type by the stamp of the American Plywood Association.
- C. Identify other materials of this Section by the appropriate stamp of the agency approved in advance by the Architect.
- D. Omit marking from surfaces to be exposed with transparent finish or without finish; clarify this with Architect.

2.02 MATERIALS

- A. Provide materials in the quantities needed for the Work shown on the Drawings, and meeting or exceeding the following standards of quality:
 1. Lumber
 - a. Nominal sizes are indicated, except as shown by detailed dimension.
 - b. Provide actual sizes as required by PS20, graded in accordance with established grading rules for moisture content specified for each use.
 - c. Provide dressed lumber, S4S, unless otherwise shown or specified.
 - d. Provide kiln-dried lumber with 15% max. moisture content at time of dressing.
 - e. Southern Yellow Pine of following grades:
 - 1) Structural Light Framing: Stress Group 1500 F,#2 Dense KD Grade.
 - 2. Wood Treatment (if required)
 - a. Comply with applicable standards for the American Wood Preservers Association (AWPA) and the American Wood Preservers Bureau (AWPB). Each piece shall bear the quality mark of an independent agency or inspection service certified by these organizations to inspect treated materials.
 - b. Preservative Treated (PT) Wood: shall be "Celcure" pressure treated in accordance with AWPB Standard LP2 and LP22 (pressure treated with water-borne preservative); retention in lbs/cu.ft: above ground .25 lbs; concrete masonry, steel

ROUGH CARPENTRY 06100-2/5 contact .60 lbs; ground contact .80 lbs (FDN rated). After treatment, re-kiln dry to a maximum moisture content of 15%. Where possible, all special cuts and holes should be fabricated before treatment. If cut after treatment, coat surfaces with liberal brushed solution of copper naphthenate containing a minimum of 2 percent metallic copper in solution in accordance with AWPA Standard M4.

- The following is a further elaboration on requirements for 1) "PT" wood: all lumber and plywood shall be DIXIE-CCA treated by Hoover Treated Wood Products, (800) TEC-WOOD, Pine Bluff, AR (501-247-3511), (or equal which includes Wolmanized Material by Koppers; Celcure Wood Preserving Corp. of Louisiana) pressure impregnated in accordance with the Specification TT-W-571 and in accordance with the recommended practices of the American Wood Preservers Association (AWPA) and shall carry the American Wood Preservers Bureau (AWPB) LP Quality Control Mark including compliance with the appropriate AWPB Quality Control Standard. After treatment, treated lumber shall be kiln dried to a 19% moisture content. All material 3" nominal and greater shall be surface dried to remove excess water added during the treatment.
 - a) For Above Ground Use: All DIXIE CCA treated lumber and plywood shall be treated to a net retention of .60 lbs. CCA per cubic foot of wood and shall bear the American Wood Preservers Bureau Quality Mark, LP-2. "Above Ground Contact Use" (mark back of plywood panels).
 - b) For Ground Contact, Including Wood Plates and Blocking to Concrete Slabs and Steel or Masonry, Even if Above Ground: All DIXIE CCA treated lumber and plywood shall be treated to a minimum net retention of .80 lbs. CCA per cubic foot of wood and each piece shall bear the American wood Preservers Bureau Quality Mark, LP-22 "Ground Contact Use" (mark back of plywood panels).

NOTE: When DIXIE CCA pressure treated wood is used outdoors, use hot dipped galvanized nails and fasteners to help prevent rust stains.

- 3. Miscellaneous
 - a. Fasteners and Anchorages: Provide size and type to suit application or as indicated, complying with applicable standards; hot dipped galvanized at exterior and high humidity locations and at preservative treated wood.

ROUGH CARPENTRY 06100-3/5

- 1) Nails and Staples: Fed Specs FF-N-1; use common except as noted otherwise.
- 2) Wood Screws: Fed Spec FF-S-111.
- 3) Bolts and Studs: Fed Spec FF-B-575.
- 4) Nuts: Fed spec FF-N-836.
- 5) Washers: Fed Spec FF-W-92.
- 6) Lag Screws/Bolts: Fed Spec FF-B-561.
- 7) Machine Bolts: ASTM A307.
- 8) Special Anchors: Toggle bolts, expansion shields and lab bolts, power activated types-size and type to suit application. "Tapcon" masonry anchors by Buildex, Division of III Tool Works, Inc., are acceptable if installed per manufacturer recommendations.
- b. Construction Adhesive: "Liquid Nails" by SCM Corp., MACCO Adhesives, or equal.

PART 3 EXECUTION

3.01 SURFACE CONDITIONS

A. Examine the areas and conditions under which work of the Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.02 DELIVERIES

- A. Stockpile materials sufficiently in advance of need to assure their availability in a timely manner for this work.
- B. Make as many trips to the job site as are needed to deliver materials of this Section in a timely manner to ensure orderly progress of the Work.

3.03 COMPLIANCE

- A. Do not permit materials not complying with the provisions of this Section to be brought onto or to be stored at the job site.
- B. Promptly remove non-complying materials from the job site and replace with materials meeting the requirements of this Section.

3.04 WORKMANSHIP

- A. Produce joints which are tight, true and well nailed with members assembled in accordance with the Drawings and with pertinent codes and regulations.
- B. Selection of Lumber Pieces
 - 1. Carefully select the members.
 - 2. Select individual pieces so that knots and obvious defects will not interfere with placing bolts or proper nailing, and will allow making of proper connections.

ROUGH CARPENTRY 06100-4/5

- 3. Cut out and discard defects which render a piece unable to serve its intended function.
- 4. Lumber may be rejected by the Architect, whether or not it has been installed, for excessive warp, twist, bow, crook, mildew, fungus, mold, as well as for improper cutting and fitting.
- C. Do not shim any framing component.

3.05 BLOCKING AND BRIDGING

A. Nailing

- 1. Use only common wire nails or spikes sized to suit conditions, except where otherwise specifically noted on the Drawings.
- 2. Provide penetration into the piece receiving the point of not less than 1/2 length of the nail or spike, provided however, that 16# nails may be used to connect two pieces of 2" (nominal) thickness.
- 3. Nail without splitting wood.
- 4. Pre-bore as required.
- 5. Remove split members and replace with members complying with the specified requirements.
- B. Bolting
 - 1. Drill holes 1/16" larger in diameter than the bolts being used.
 - 2. Drill straight and true from one side only.
 - 3. Do not bear bolt threads on wood, but use washers under head and nut where both bear on wood, and use washers under all nuts.
- C. Screws
 - 1. For lag screws and wood screws, prepare holes the same diameter as root of threads, enlarging holes to shank diameter for length of shank.
 - 2. Fasten preservative treated interior partition wood plates to concrete slabs using power driver "Ramset" anchors to suit conditions at 24" o.c. maximum spacing (at least 2 anchors in each plate run).
 - 3. Fasten preservative treated wood plates to steel beams and at other similar conditions using power driven "Ramset" anchors to suit conditions at 24" o.c. maximum spacing (at least 2 anchors in each plate run).

END OF SECTION

ROUGH CARPENTRY 06100-5/5

SECTION 07.310 ASPHALT SHINGLE ROOFING-BASE BID

PART 1 GENERAL

- 1.01 SECTION INCLUDES
 - A. Asphalt roofing shingles (3-Tab).
 - B. Leak barrier and roof deck protection.
 - C. Metal flashing associated with shingle roofing.
 - D. Attic ventilation.

1.02 RELATED SECTIONS

- A. Section 06.100 Rough Carpentry: Framing, wood decking, and roof sheathing.
- B. Section 07.600 Flashing and Sheet Metal: Sheet metal flashing not associated with shingle roofing; gutters and downspouts.

1.03 REFERENCES

- A. American Society for Testing and Materials (ASTM) Annual Book of ASTM Standards
 - 1. ASTM A 653/A 653M Standard Specification for Steel Sheet, Zinc Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - 2. ASTM B 209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
 - 3. ASTM B 370 Standard Specification for Copper Sheet and Strip for Building Construction.
 - 4. ASTM D 3018 Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules.
 - 5. ASTM D 3161 Standard Test Method for Wind-Resistance of Asphalt Shingles (Fan-Induced Method).
 - 6. ASTM D 3462 Standard Specification for Asphalt Shingles Made From Glass Felt and Surfaced with Mineral Granules.
 - 7. ASTM D 4586 Standard Specification for Asphalt Roof Cement, Asbestos-Free.
 - 8. ASTM D 7158 Standard Test Method for Wind-Resistance of Sealed Asphalt Shingles (Uplift Force/Uplift Resistance Method).
 - 9. AC438-1011-R1 New Acceptance Criteria for Alternative Asphalt Roofing Shingles
 - 10. ASTM E 903 Standard Test Method for Solar Absorptance, Reflectance, and Transmission of Materials Using Integrating Spheres.
- B. Underwriters Laboratories (UL) Roofing Systems and Materials Guide (TFWZ.R21)
 - 1. UL 790 Tests for Fire Resistance of Roof Covering Materials.

ASPHALT SHINGLE ROOFING-BASE BID 07310-1/12

- 2. UL 997 Wind Resistance of Prepared Roof Covering Materials.
- 3. UL 2218 Impact Resistance of Prepared Roof Covering Materials.
- C. Asphalt Roofing Manufacturers Association (ARMA)
- D. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA) Architectural Sheet Metal Manual.
- E. National Roofing Contractors Association (NRCA)
- F. American Society of Civil Engineers (ASCE).
 - 1. ASCE 7 Minimum Design Loads for Buildings and Other Structures.

1.04 DEFINITIONS

A. Roofing Terminology: Refer to ASTM D1079 and the glossary of the National Roofing Contractors Association (NRCA) Roofing and Waterproofing Manual for definitions of roofing terms related to this section.

1.05 SUBMITTALS

A. Submit copies of product data sheets, detail drawings and samples for each type of roofing product.

1.06 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Provide all primary roofing products, including shingles, underlayment, leak barrier, and ventilation, by a single manufacturer.
- B. Installer Qualifications: Installer must be approved for installation of all roofing products to be installed under this section.

1.07 REGULATORY REQUIREMENTS

- A. Provide a roofing system achieving an Underwriters Laboratories (UL) Class A fire classification.
- B. Install all roofing products in accordance with all federal, state and local building codes.
- C. All work shall be performed in a manner consistent with current OSHA guidelines.

1.08 PREINSTALLATION MEETING

- A. General: a pre-installation meeting is strongly required for each work site.
- B. Timing: The meeting shall take place at the start of the roofing installation, no more than 2 weeks into the roofing project.
- C. Attendees: Meeting to be called for by manufacturer's certified contractor. Meeting's mandatory attendees shall include the certified contractor and the manufacturer's representative. Non-mandatory attendees shall include the owner's representative, architect or engineer's representative, and the general contractor's representative.

ASPHALT SHINGLE ROOFING-BASE BID 07310-2/12 D. Topics: Certified contractor and manufacturer's representative shall review all pertinent requirements for the project, including but not limited to, scheduling, weather considerations, project duration, and requirements for the specified warranty.

1.09 DELIVERY, STORAGE, AND HANDLING

- A. Store all products in manufacturer's unopened, labeled packaging until they are ready for installation.
- B. Store products in a covered, ventilated area, at temperature not more than 110 degrees F (43 degrees C); do not store near steam pipes, radiators, or in direct sunlight.
- C. Store bundles on a flat, properly drained surface. Maximum stacking height shall not exceed GAF®'s recommendations. Store all rolls on end.
- D. Store and dispose of solvent-based materials in accordance with all federal, state and local regulations.

1.10 WEATHER CONDITIONS

A. Proceed with work only when existing and forecasted weather conditions will permit work to be performed in accordance with GAF®'s recommendations.

1.11 WARRANTY

- A. Provide to the owner a GAF[®] WeatherStopper[®] Silver Pledge Ltd Warranty covering:
 - 1. Roofs installed by a Certified GAF[®] Master Elite[™] Contractor only.
 - 2. Manufacturing defects: 100% coverage for materials and labor for:
 - a. Single family detached homes owned by individuals the first
 50 years non-prorated, then 20% thereafter for all GAF lifetime shingles.

- 20 years non-prorated, then 20% thereafter for GAF Marquis Weathermax and GAF Royal Sovereign Shingles.

- b. Any other type of owner or building 40 years with the first 20 years non- prorated. (excludes Marquis WeatherMax and Royal Sovereign)
- 3. Workmanship errors: 100% coverage for workmanship errors for:
 - a. Single family detached homes owned by individuals the first 10 years for after installation. (20 years for Marquis WeatherMax and Royal Sovereign)
 - b. Any other type of owner or building 10 years.
- 4. Roof system NOT installed over an existing roof; all existing roof materials must be removed to the deck.
- 5. Warranted against algae discoloration for 10 years
- 6. Full roof installations (Roofs installed on portions of buildings do not qualify) using the following GAF® products.

ASPHALT SHINGLE ROOFING-BASE BID 07310-3/12

- a. If a new nail base insulated deck system is being installed, you must install GAF Cornell Ventilated Nail Base Roof Insulation (covered only by a separate ThermaCal[®] Nail Base Roof Insulation Panels Ltd. Warranty).
- b. You must use GAF® Roof Deck Protection.
- c. You must use eligible GAF® Leak Barrier in valleys and around dormers, sidewalls, firewalls, chimneys, plumbing vents, and skylights. In the North, leak barriers must be used at all eaves at least 24 inch inside warm wall.
- d. You must use GAF® pre-cut starter strip products (only those with factory applied adhesive) at the eaves. Note: To obtain bonus wind coverage, you must use GAF® precut starter strip products (with factory applied adhesive) at the eaves and rakes and you must install each shingle using 6 nails. For Miami Dade County Florida, no adhesive on rakes. You must cement the starter strip in and nail along the rake.
- e. You must use eligible COBRA® ventilation with adequate intake ventilation. Master Flow® exhaust ventilation products can be substituted only if COBRA® ridge ventilation cannot be installed due to a structure's architecture. In any event, adequate ventilation should meet the following requirements:
 - Minimum net free ventilation area of 1 sq ft per 150 sq ft of ceiling area is required. When intake vents are located at the eaves and exhaust vents are located near the roof's peak (in a properly balanced system) for maximum air flow, ventilation may be reduced to 1 sq ft per 300 sq ft. If these standards are not met, GAF® cannot be responsible for damage caused by inadequate ventilation.
- f. You must use GAF® Ridge Cap Shingles or shingles that correspond to the shingle product you are installing.
- g. You must use eligible GAF® Roofing Shingles.
- h. New metal flashings must be installed. Metal drip edge must be used at eaves and is recommended at rake edges.
- 7. In addition to the requirements listed above, your installer must register and pay for this warranty. On projects that total more than 250 squares, the permanent Golden Pledge® Ltd Warranty will be issued only if the project passes GAF®'s final inspection. GAF® reserves the right to withhold the warranty if the roof has not been installed according to GAF®'s written application instructions. GAF® also strongly recommends that your Master Elite® Contractor schedule a start-up and at least one interim inspection on projects of 250 squares or more by contacting GAF® at least three weeks prior to the start of roof work.
PART 2 PRODUCTS

2.01 MANUFACTURER

- A. Basis of Design manufacturer is GAF. For convenience, all product names in this section will refer to products by GAF. Provided all other project requirements are met, products by the following manufacturer's shall be considered equal.
 - 1. As approved by the Architect.

2.02 SHINGLES

- A. Granule surfaced self-sealing asphalt shingle with a strong fiberglass reinforced Micro Weave core and StainGuard protection, which prevents pronounced discoloration from blue-green algae through formulation/unique blends of granules. Traditional 3-tab styling with a 5 in. or 5 5/8 in. exposure. UL 790 Class A rated with UL 997 Wind Resistance Label; ASTM D 7158, Class H; ASTM D 3161, Type 1; ASTM D 3018, Type 1; ASTM D 3462; AC438 compliant; Dade County Approved, Florida Building Code Approved, Texas Dept of Insurance Approved, ICC Report Approval.
 - 1. Line: Royal Sovereign
 - 2. Color: As selected by Architect from manufacturers' full range.
 - a. A maximum of one (1) color of shingle may be selected for each work site.

2.03 HIP AND RIDGE SHINGLES

- A. Distinctive self-sealing hip and ridge cap shingle complementing the color of selected roof shingle. Each bundle covers approx. 25 lineal feet (7.62mm) with a 6 2/3 inch (169mm) exposure. Seal-A-Ridge® Ridge Cap Shingles by GAF®.
 - 1. Sized as required to coordinate with the ridge vent.
 - 2. Color shall match field shingles.

2.04 STARTER STRIP

A. Self-sealing starter shingle designed for premium roof shingles. Each bundle covers approx. 100 lineal feet (30.48m) for English and metric shingles or 50 lineal feet (15.24m) for oversized shingles. WeatherBlocker[™] Eave/Rake Starter Strip by GAF[®].

2.05 LEAK BARRIER

Self-adhering, self-sealing, bituminous leak barrier surfaced with fine, skid-resistant granules. Approved by UL, Dade County, ICC, State of Florida and Texas Department of Insurance. Each roll contains approx. 150 sq ft (13.9 sq.m.), 36" X 50' (0.9m x 20.3m) or 200 sq ft (18.6 sq.m.), 36" X 66.7' (0.9m x 20.3m). WeatherWatch® Leak Barrier, by GAF®.

ASPHALT SHINGLE ROOFING-BASE BID 07310-5/12

2.06 SHINGLE UNDERLAYMENT

A. Synthetic, non-asphaltic, non-woven, anti-skid back coated, polypropylene constructed non breathable underlayment. Meets or exceeds ASTM D226 and D4869 approved by UL, Florida Building Code, ICC and CSA A220.1. Each roll contains approximately 10 squares (1000 gross sq. ft.) of material and is 48 in. x 250 ft. (14.6 m x 76.2 m), Tiger-Paw[™] Roof Deck Protection by GAF[®].

2.07 ROOFING CEMENT

A. Asphalt Plastic Roofing Cement meeting the requirements of ASTM D 4586, Type I or II.

2.08 ROOF ACCESSORIES

- A. Exterior acrylic rust resistant aerosol roof accessory paint. Each 6 oz can is available in boxes of 6 and in a wide variety of colors to compliment the roof. Shingle-Match[™] Roof Accessory Paint by GAF[®].
- B. UV stable solid molded PVC compression collar, Kynar PVDF coated 24 gauge galvanized flange, Ultimate Pipe Flashing by Lifetime Tool.

2.09 ATTIC VENTILATION

- A. Ridge Vents
 - Rigid plastic ridge ventilator designed to allow the passage of hot air out of attics. For use in conjunction with eave/ soffit intake ventilation products. Provides 18.0 sq inches (38102 sq.mm/m) in Net Free Ventilation Area per lineal foot. Each package contains 40 lineal feet (12.19m) of vent. Cobra[®] Rigid Vent 3[™] ridge vent (includes 3" (76mm) galvanized ring shank nails), by GAF[®]
- B. Roof Louvers
 - Rooftop mounted, slant-back designed, high-impact resin exhaust ventilator designed to evacuate hot air from attics. Each vent provides 65 sq in NFVA. MasterFlow[™] IR65 Passive Roof Louver, by GAF[®].
 - 2. New turtle vents shall match existing in size, finish, and exhaust capacity.
- 2.10 NAILS
 - A. Standard round wire, zinc-coated steel or aluminum; 10 to 12 gauge, smooth, barbed or deformed shank, with heads 3/8 inch (9mm) to 7/16 inch (11mm) in diameter. Length must be sufficient to penetrate into solid wood at least 3/4 inch (19mm) or through plywood or oriented strand board by at least 1/8 inch (3.18mm).
- 2.11 METAL FLASHING A. See Section 0.7600 - Flashing and Sheet Metal

PART 3 EXECUTION

3.01 EXAMINATION

- A. Do not begin installation until the roof deck has been properly prepared.
- B. If roof deck preparation is the responsibility of another installer, notify the architect or building owner of unsatisfactory preparation before proceeding.

3.02 PREPARATION

- A. Remove all existing roofing down to the roof deck.
- B. Verify that the deck is dry, sound, clean and smooth. It shall be free of any depressions, waves, and projections.
- C. Cover with sheet metal, all holes over 1 inch (25mm) in diameter, cracks over 1/2 inch (12mm) in width, loose knots and excessively resinous areas.
- D. Replace damaged deck with new materials.
- E. Clean deck surfaces thoroughly prior to installation of eaves protection membrane and underlayment.

3.03 PREPARATION OF SUBSTRATE

- A. Clean deck surfaces thoroughly prior to installation of eaves protection membrane and underlayment.
- B. At areas that receive eaves protection membrane, fill knotholes and cracks with latex filler.
- C. Install crickets on the upslope side of all chimneys in the north, any chimney wider than 24" (610mm), and on all roofs steeper than 6/12.

3.04 PREPARATION

- A. Verify that the deck is structurally sound and free of deteriorated decking. All deteriorated decking shall be removed and replaced with new materials.
- B. Verify that the existing shingles are dry, sound, clean and smooth. All curled, buckled or loose tabs shall be nailed down or removed.
- C. Clean shingle surfaces thoroughly prior to installation of eaves protection membrane and underlayment.

3.05 SUBSTRATE INSTALLATION

A. The structural roof deck shown in the plans shall be smooth and level and free of water or debris before the nail base insulation is installed. Apply vapor retarder if required.

NOTE: GAF recommends that the designer carefully considers the need for a vapor/air retarder.

- B. Installation shall follow the GAF written installation instructions.
- C. Fasten with ThermaCal[®] Fasteners to the supporting roof deck shown in the plans.

ASPHALT SHINGLE ROOFING-BASE BID 07310-7/12 D. Protect nail base insulation work from exposure to moisture damage and deterioration, primarily by prompt installation of the roofing, sheet metal and waterproofing work.

3.06 INSTALLATION OF UNDERLAYMENTS

- A. General
 - 1. Install using methods recommended by GAF®, in accordance with local building codes. When local codes and application instructions are in conflict, the more stringent requirements shall take precedence.
- B. Eaves
 - Install eaves edge metal flashing tight with fascia boards; lap joints 2 inches (51mm) and seal with plastic cement or high quality urethane sealant; nail at the top of the flange.
 - 2. In the north, and on all roofs between 2/12 and 4/12 (low slopes) install GAF® leak barrier up the slope from eaves edge a full 36 inches (914mm) or to at least 24 inches (610 mm) beyond the interior "warm wall". Lap ends 6 inches (152mm) and bond.
- C. Valleys
 - 1. Install eaves protection membrane at least 36 (914mm) inches wide and centered on the valley. Lap ends 6 inches (152mm) and seal.
 - 2. Where valleys are indicated to be "open valleys", install metal flashing over GAF® leak barrier before GAF® roof deck protection is installed; DO NOT nail through the flashing. Secure the flashing by nailing at 18 inches (457 mm) on center just beyond edge of flashing so that nail heads hold down the edge.
- D. Hips and Ridges:
 - 1. Install GAF® leak barrier along entire lengths. If ridge vents are to be installed, position the GAF® leak barrier so that the ridge slots will not be covered.
- E. Roof Deck Protection:
 - 1. Install one layer of GAF® roof deck protection over the entire area not protected by GAF® leak barrier at the eaves or valley. Install sheets horizontally so water sheds and nail in place.
 - 2. On roofs sloped at more than 4:12, lap horizontal edges at least 2 inches (51mm) and at least 2 inches (51mm) over eaves protection membrane.
 - 3. On roofs sloped between 2:12 and 4:12, lap horizontal edges at least 19 inches (482 mm) and at least 19 inches (482mm) over eaves protection membrane.
 - 4. Lap ends at least 4 inches (102 mm). Stagger end laps of each layer at least 36 inches (914 mm).
 - 5. Lap GAF® roof deck protection over GAF® leak barrier in valley at least 6 inches (152mm).

ASPHALT SHINGLE ROOFING-BASE BID 07310-8/12

- F. Deck-Armor[™] Application
 - 1. Deck-Armor shall be installed over a clean, dry deck.
 - 2. Install Weather Watch[®] or StormGuard[®] Leak Barrier at eaves, valleys, rakes, skylights, dormers and other vulnerable leak areas.
 - 3. Lay Deck-Armor[™] over deck and overlap 3" (76mm) at side laps and 6" (152mm) at end laps.
 - 4. For exposure to rain or snow, overlap 12" (305mm) at end laps.
 - 5. For side and end laps: fasten Deck-Armor 12" (305mm) o.c. (6" (152mm) o.c. for high wind areas).
 - 6. For middle of the roll: fasten Deck-Armor 24" (610mm) o.c. (12" (305mm) o.c. for high wind areas).
 - 7. For exposure to rail or snow, completely cover all side laps, end laps and fasteners with tape.
 - 8. For long term exposure see complete Deck-Armor installation instructions for side lap detail.
 - 9. If roof may be exposed to high winds, apply tape over all fasteners at the center of the roll to prevent rain or snow from entering at the fasteners.
 - 10. For slopes less that 2:12, a double application of Deck-Armor[™] is required. See complete Deck-Armor installation instructions for more information.
- G. Penetrations
 - 1. Vent pipes: Install a 24 inch (610 mm) square piece of eaves protection membrane lapping over roof deck underlayment; seal tightly to pipe.
 - Vertical walls: Install eaves protection membrane extending at least 6 inches (152mm) up the wall and 12 inches (305mm) on to the roof surface. Lap the membrane over the roof deck underlayment.
 - 3. Chimneys: Install eaves protection membrane around entire chimney extending at least 6 inches (152mm) up the wall and 12 inches (305mm) on to the roof surface. Lap the membrane over the roof deck underlayment.
 - 4. Rake Edges: Install metal edge flashing over eaves protection membrane and roof deck underlayment; set tight to rake boards; lap joints at least 2 inches (51mm) and seal with plastic cement; secure with nails.

3.07 INSTALLATION OF STARTER SHINGLES

- A. General
 - 1. Install in accordance with GAF®'s instructions and local building codes. When local codes and application instructions are in conflict, the more stringent requirements shall take precedence.
 - 2. Refer to application instructions for the selected starter strip shingles.

ASPHALT SHINGLE ROOFING-BASE BID 07310-9/12

- B. Placement and Nailing
 - 1. For maximum wind resistance along rakes & eaves, install any GAF® starter strip containing sealant or cement shingles to underlayment and each other in a 4" (102mm) width of asphalt plastic roof cement.
 - 2. Place starter strip shingles 1/4" 3/4" (6 19mm) over eave and rake edges to provide drip edge.
 - 3. Nail approximately 1-1/2" 3" (38 76mm) above the butt edge of the shingle.
 - 4. Rake starter course should overlap eave edge starter strip at least 3" (76mm).

3.08 INSTALLATION OF SHINGLES

- A. General
 - 1. Install in accordance with GAF®'s instructions and local building codes. When local codes and application instructions are in conflict, the more stringent requirements shall take precedence.
 - 2. Minimize breakage of shingles by avoiding dropping bundles on edge, by separating shingles carefully (not by "breaking" over ridge or bundles), and by taking extra precautions in temperatures below 40 degrees F (4 degrees C).
 - 3. Handle carefully in hot weather to avoid scuffing the surfacing, or damaging the shingle edges.
- B. Placement and Nailing
 - 1. Secure with 4, 5, or 6 nails per shingle per GAF®'s application instructions or local codes.
 - 2. Placement of nails varies based on the type of shingle specified. Consult the application instructions for the specified shingle for details.
 - 3. Nails must be driven flush with the shingle surface. Do not overdrive or under drive the nails.
 - 4. Shingle offset varies based on the type of shingle specified. Consult the application instructions for the specified shingle for details.
- C. Placement and Nailing
 - 1. Beginning with the starter strip, trim shingles so that they "nest" within the shingle located beneath it. This procedure will yield a first course that is typically 3 inch (76mm) to 4 inch (102mm) rather than a fully exposed shingle.
 - 2. Laterally, offset the new shingles from the existing keyways, to avoid waves or depressions caused by excessive dips in the roofing materials.
 - 3. Using the bottom of the tab on existing shingles, align subsequent courses.
 - 4. *Note: DO NOT install standard sized shingles (5inch exposure) over metric (5 5/8 inch exposure) shingles, as it will overexpose the

ASPHALT SHINGLE ROOFING-BASE BID 07310-10/12 shingles and reveal the nails. Use standard alignment methods to assure proper shingle placement.

- 5. Secure with 4, 5, or 6 nails per shingle per GAF®'s instructions or local codes.
- 6. Placement of nails varies based on the type of shingle specified. Consult the application instructions for the specified shingle for details.
- 7. Nails must be driven flush with the shingle surface. Do not overdrive or under drive the nails.
- 8. Shingle offset varies based on the type of shingle specified. Consult the application instructions for the specified shingle for details.
- D. Valleys
 - 1. Install valleys using the "open valley" method:
 - a. Snap diverging chalk lines on the metal flashing, starting at 3 inches (76mm) each side of top of valley, spreading at 1/8 inch per foot (9mm per meter) to the eaves.
 - b. Run shingles to chalk line.
 - c. Trim last shingle in each course to match the chalk line; do not trim shingles to less than 12 inches (305mm) wide.
 - d. Apply a 2 inch (51mm) wide strip of plastic cement under ends of shingles, sealing them to the metal flashing.
 - 2. Install valleys using the "closed cut valley" method:
 - a. Run the first course of shingles from the higher roof slope across the valley at least 12 inches (305mm).
 - b. Run succeeding courses of shingles from the lower roof slope across the valley at least 12 inches (305mm) and nail not closer than 6 inches (152mm) to center of valley.
 - c. Run shingles from the upper roof slope into the valley and trim 2 inches (51mm) from the center line.
 - 3. Install valleys using "woven valley" method:
 - a. Run shingles from both roof slopes at least 12 inches (305mm) across center of valley, lapping alternate sides in a woven pattern.
 - b. DO NOT nail less than 6 inches (152mm) from the valley center line.
- E. Penetrations
 - 1. All Penetrations are to be flashed according to GAF®, ARMA and NRCA application instructions and construction details.

3.09 INSTALLATION OF ATTIC VENTILATION

- A. General
 - 1. Ventilation must meet or exceed current F.H.A., H.U.D. and local code requirements.

- B. Roof and Gable Louvers:
 - 1. Cut vent hole through sheathing as specified by the manufacturer for the type of vent to be installed.
 - 2. Install a 24 inches (610mm) square of leak barrier, centered around the hole for roof louvers
 - 3. Install according to manufacturer's instructions for flashing vent penetrations
 - 4. Install eave vents in sufficient quantity to equal or exceed the exhaust vent area, calculated as specified by manufacturer.
- C. Hip Vents and Rooftop Vents
 - 1. Install according to manufacturer's instructions.
 - 2. Install vents in sufficient quantity to equal or exceed the exhaust vent area, calculated as specified by manufacturer.

3.10 PROTECTION

- A. Protect installed products from foot traffic until completion of the project.
- B. Any roof areas that are not completed by the end of the workday are to be protected from moisture and contaminants.

END OF SECTION

SECTION 07.311 ASPHALT SHINGLE ROOFING-ALTERNATE

PART 1 GENERAL

- 1.01 SECTION INCLUDES
 - A. Asphalt roofing shingles (Laminated Shingles).
 - B. Leak barrier and roof deck protection.
 - C. Metal flashing associated with shingle roofing.
 - D. Attic ventilation.

1.02 RELATED SECTIONS

- A. Section 06.100 Rough Carpentry: Framing, wood decking, and roof sheathing.
- B. Section 07.600 Flashing and Sheet Metal: Additional sheet metal flashing not associated with shingle roofing; gutters and downspouts.

1.03 REFERENCES

- A. American Society for Testing and Materials (ASTM) Annual Book of ASTM Standards
 - 1. ASTM A 653/A 653M Standard Specification for Steel Sheet, Zinc Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - 2. ASTM B 209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
 - 3. ASTM B 370 Standard Specification for Copper Sheet and Strip for Building Construction.
 - 4. ASTM D 3018 Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules.
 - 5. ASTM D 3161 Standard Test Method for Wind-Resistance of Asphalt Shingles (Fan- Induced Method).
 - 6. ASTM D 3462 Standard Specification for Asphalt Shingles Made From Glass Felt and Surfaced with Mineral Granules.
 - 7. ASTM D 4586 Standard Specification for Asphalt Roof Cement, Asbestos-Free.
 - 8. ASTM D 7158 Standard Test Method for Wind-Resistance of Sealed Asphalt Shingles (Uplift Force/Uplift Resistance Method).
- B. Underwriters Laboratories (UL) Roofing Systems and Materials Guide (TFWZ.R21)
 - 1. UL 790 Tests for Fire Resistance of Roof Covering Materials.
 - 2. UL 997 Wind Resistance of Prepared Roof Covering Materials.
 - 3. UL 2218 Impact Resistance of Prepared Roof Coverings Materials.
- C. Asphalt Roofing Manufacturers Association (ARMA)
- D. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA) Architectural Sheet Metal Manual.

ASPHALT SHINGLE ROOFING-ALTERNATE 07311-1/9

- E. National Roofing Contractors Association (NRCA)
- F. American Society of Civil Engineers (ASCE).
 - 1. ASCE 7 Minimum Design Loads for Buildings and Other Structures.

1.04 DEFINITIONS

A. Roofing Terminology: Refer to ASTM D1079 and the glossary of the National Roofing Contractors Association (NRCA) Roofing and Waterproofing Manual for definitions of roofing terms related to this section.

1.05 SUBMITTALS

A. Submit copies of product data sheets, detail drawings and samples for each type of roofing product.

1.06 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Provide all primary roofing products, including shingles, underlayment, leak barrier, and ventilation, by a single manufacturer.
- B. Installer Qualifications: Installer must be approved for installation of all roofing products to be installed under this section.

1.07 REGULATORY REQUIREMENTS

- A. Provide a roofing system achieving an Underwriters Laboratories (UL) Class A fire classification.
- B. Install all roofing products in accordance with all federal, state and local building codes.
- C. All work shall be performed in a manner consistent with current OSHA guidelines.

1.08 PREINSTALLATION MEETING

- A. General: A pre-installation meeting is strongly Required for each work site.
- B. Timing: The meeting shall take place at the start of the roofing installation, no more than 2 weeks into the roofing project.
- C. Attendees: Meeting to be called for by manufacturer's certified contractor. Meeting's mandatory attendees shall include the certified contractor and the manufacturer's representative. Non-mandatory attendees shall include the owner's representative, architect or engineer's representative, and the general contractor's representative.
- D. Topics: Certified contractor and manufacturer's representative shall review all pertinent requirements for the project, including but not limited to, scheduling, weather considerations, project duration, and requirements for the specified warranty.

ASPHALT SHINGLE ROOFING-ALTERNATE 07311-2/9

1.09 DELIVERY, STORAGE, AND HANDLING

- A. Store all products in manufacturer's unopened, labeled packaging until they are ready for installation.
- B. Store products in a covered, ventilated area, at temperature not more than 110 degrees F (43 degrees C); do not store near steam pipes, radiators, or in direct sunlight.
- C. Store bundles on a flat surface. Maximum stacking height shall not exceed manufacturer's recommendations. Store all rolls on end.
- D. Store and dispose of solvent-based materials in accordance with all federal, state and local regulations.

1.10 WEATHER CONDITIONS

A. Proceed with work only when existing and forecasted weather conditions will permit work to be performed in accordance with GAF's recommendations

1.11 WARRANTY

- A. Provide to the owner a GAF[®] Weather Stopper[®] Silver Pledge[™] Ltd Warranty:
 - 1. Eligibility requirements: Roofs installed by a GAF® Certified GAF® Master Elite[™] Roofing Contractor only. Requires at least 4 qualifying accessory products in addition to GAF shingles.
 - 2. Manufacturing defects:
 - a Commercial or Multi-Residential Building:
 - GAF Designer, LayerLock-labeled, and Timberline® Roofing Shingles: 40 years with a 20-year Smart Choice® Protection Period (non-prorated). GAF Accessories installed with lifetime shingles are also covered with a 40year limited warranty with a 20-year Smart Choice® Protection Period (non- prorated).
 - 3. Workmanship:
 - a. Ten (10) years
 - 4. Wind Warranty Coverage:
 - a. LayerLock-labeled Shingles:
 - WindProven[™] Limited Wind Warranty 15-year limited warranty with no maximum wind speed. Requires installation of 4 nails per shingle.
 - 5. Algae Warranty Coverage:
 - a. StainGuard Plus™ labeled Shingles:
 - 1) 25 year limited warranty with 10-year Smart Choice® Protection Period (non- prorated).
 - b. StainGuard® labeled Shingles:
 - 1) 10 year limited warranty with 1-year Smart Choice® Protection Period (non- prorated).

ASPHALT SHINGLE ROOFING-ALTERNATE 07311-3/9

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Basis of Design manufacturer is GAF. For convenience, all product names in this section will refer to products by GAF. Provided all other project requirements are met, products by the following manufacturer's shall be considered equal.
 - 1. As approved by the Architect.

2.02 SHINGLES

- A. Self-sealing, granule surfaced, asphalt shingle with a strong fiberglass reinforced Micro Weave® core and StainGuard® protection, which prevents pronounced discoloration from blue-green algae through formulation/unique blends of granules. Architectural laminate styling provides a wood shake appearance with a 5 5/8 inch exposure. New StrikeZone[™] Nailing Area with proprietary LayerLock[™] Technology provides up to 30% faster nailing and up to 600% larger nailing target. Features GAF®'s patented High Definition® color blends and enhanced shadow effect. UL 790 Class A rated with UL 997 Wind Resistance Label; ASTM D 7158; ASTM D 3161, Class F; ASTM D 3018, Type 1; ASTM D 3462; AC438; CSA A123.5; Dade County Approved, Florida Building Code Approved, Texas Dept of Insurance Approved, ICC Report Approval ESR-1475 and ESR-3267.
 - 1. Line: Timberline[®] HDZ[™] Lifetime High Definition Shingles
 - 2. Color: As selected by the architect from the Manufacturer's full line.
 - a. A maximum of one (1) color of shingle may be selected for each work site.

2.03 HIP AND RIDGE SHINGLES

- A. High profile self-sealing hip and ridge cap shingle matching the color of selected roof shingle. Each bundle covers approx. 20 lineal feet (6.10m). Timbertex® Premium Ridge Cap Shingles, by GAF.
 - 1. Sized as required to coordinate with the ridge vent.
 - 2. Color shall match field shingles.

2.04 STARTER STRIP

A. Self-sealing starter shingle designed for premium roof shingles. Each bundle covers approx. 100 lineal feet (30.48m) for English and metric shingles or 50 lineal feet (15.24m) for oversized shingles. WeatherBlocker[™] Eave/Rake Starter Strip by GAF[®].

2.05 LEAK BARRIER

A. Self-adhering, self-sealing, bituminous leak barrier surfaced with fine, skid-resistant granules. Approved by UL, Dade County, ICC, State of Florida and Texas Department of Insurance. Each roll contains approx.

ASPHALT SHINGLE ROOFING-ALTERNATE 07311-4/9 150 sq ft (13.9 sq.m.), 36" X 50' (0.9m x 20.3m) or 200 sq ft (18.6 sq.m.), 36" X 66.7' (0.9m x 20.3m). WeatherWatch® Leak Barrier, by GAF®.

2.06 SHINGLE UNDERLAYMENT

A. Synthetic, non-asphaltic, non-woven, anti-skid back coated, polypropylene constructed non breathable underlayment. Meets or exceeds ASTM D226 and D4869 approved by UL, Florida Building Code, ICC and CSA A220.1. Each roll contains approximately 10 squares (1000 gross sq. ft.) of material and is 48 in. x 250 ft. (14.6 m x 76.2 m), Tiger-Paw[™] Roof Deck Protection by GAF[®].

2.07 ROOFING CEMENT

- A. Asphalt Plastic Roofing Cement meeting the requirements of ASTM D 4586, Type I or II.
- B. Roof Cement: ASTM D 4586, Matrix[™] 203 Plastic Roof Cement.
- C. Roof Cement: ASTM D 4586. Matrix[™] 204 Wet/Dry Roof Cement.

2.08 ROOF ACCESSORIES

- A. Exterior acrylic rust resistant aerosol roof accessory paint. Each 6 oz can is available in boxes of 6 and in a wide variety of colors to compliment the roof. Shingle-Match[™] Roof Accessory Paint by GAF.
- B. UV stable solid molded PVC compression collar, Kynar PVDF coated 24 gauge galvanized flange, Ultimate Pipe Flashing by Lifetime Tool.

2.09 ATTIC VENTILATION

- A. Ridge Vents
 - Rigid plastic ridge ventilator designed to allow the passage of hot air out of attics. For use in conjunction with eave/ soffit intake ventilation products. Provides 18.0 sq inches (38102 sq.mm/m) in Net Free Ventilation Area per lineal foot. Each package contains 40 lineal feet (12.19m) of vent. Cobra[®] Rigid Vent 3[™] ridge vent (includes 3" (76mm) galvanized ring shank nails), by GAF[®]
- B. Roof Louvers
 - Rooftop mounted, slant-back designed, high-impact resin exhaust ventilator designed to evacuate hot air from attics. Each vent provides 65 sq in NFVA. MasterFlow[™] IR65 Passive Roof Louver, by GAF[®].
 - 2. New turtle vents shall match existing in size, finish, and exhaust capacity.

2.10 NAILS

A. Standard round wire, zinc-coated steel or aluminum; 10 to 12 gauge, smooth, barbed or deformed shank, with heads 3/8 inch (9mm) to 7/16 inch (11mm) in diameter. Length must be sufficient to penetrate into

ASPHALT SHINGLE ROOFING-ALTERNATE 07311-5/9 solid wood at least 3/4 inch (19mm) or through plywood or oriented strand board by at least 1/8 inch (3.18mm).

2.11 METAL FLASHING A. See Section 07.600 - Flashing and Sheet Metal

PART 3 EXECUTION

3.01 EXAMINATION

- A. Do not begin installation until the roof deck has been properly prepared.
- B. If roof deck preparation is the responsibility of another installer, notify the architect or building owner of unsatisfactory preparation before proceeding.

3.02 PREPARATION

- A. Remove all existing roofing down to the roof deck.
- B. Verify that the deck is dry, sound, clean and smooth. It shall be free of any depressions, waves, and projections. Cover with sheet metal, all holes over 1 inch (25mm) in diameter, cracks over 1/2 inch (12mm) in width, loose knots and excessively resinous areas.
- C. Replace damaged deck with new materials.
- D. Clean deck surfaces thoroughly prior to installation of eaves protection membrane and underlayment.

3.03 INSTALLATION OF UNDERLAYMENTS

- A. General
 - 1. Install using methods recommended by GAF, in accordance with local building codes. When local codes and application instructions are in conflict, the more stringent requirements shall take precedence.
- B. Eaves
 - Install eaves edge metal flashing tight with fascia boards; lap joints 2 inches (51mm) and seal with plastic cement or high quality urethane sealant; nail at the top of the flange.
 - In the north, and on all roofs between 2/12 and 4/12 (low slopes) install GAF leak barrier up the slope from eaves edge a full 36 inches (914mm) or to at least 24 inches (610 mm) beyond the interior "warm wall". Lap ends 6 inches (152mm) and bond.
- C. Hips and Ridges
 - 1. Install GAF leak barrier along entire lengths. If ridge vents are to be installed, position the GAF leak barrier so that the ridge slots will not be covered.

- D. Roof Deck
 - 1. Install one layer of GAF roof deck protection over the entire area not protected by GAF leak barrier at the eaves or valley. Install sheets horizontally so water sheds and nail in place.
 - 2. On roofs sloped at 4:12 or greater, lap horizontal edges at least 2 inches (51mm) and at least 2 inches (51mm) over eaves protection membrane.
 - 3. On roofs sloped between 2:12 to less than 4:12, lap horizontal edges at least 19 inches (482 mm) and at least 19 inches (482mm) over eaves protection membrane.
 - 4. Lap ends at least 4 inches (102 mm). Stagger end laps of each layer at least 36 inches (914 mm).
 - 5. Lap GAF roof deck protection over GAF leak barrier in valley at least 6 inches (152mm).
- E. Deck-Armor[™] Application
 - 1. Deck-Armor shall be installed over a clean, dry deck.
 - 2. Install Weather Watch[®] or StormGuard[®] Leak Barrier at eaves, valleys, rakes, skylights, dormers and other vulnerable leak areas.
 - 3. Lay Deck-Armor[™] over deck and overlap 3" (76mm) at side laps and 6" (152mm) at end laps.
 - 4. For exposure to rain or snow, overlap 12" (305mm) at end laps.
 - 5. For side and end laps: fasten Deck-Armor 12" (305mm) o.c. (6" (152mm) o.c. for high wind areas).
 - 6. For middle of the roll: fasten Deck-Armor 24" (610mm) o.c. (12" (305mm) o.c. for high wind areas).
 - 7. For exposure to rain or snow, completely cover all side laps, end laps and fasteners with tape.
 - 8. For long term exposure see complete Deck-Armor installation instructions for side lap detail.
 - 9. If roof may be exposed to high winds, apply tape over all fasteners at the center of the roll to prevent rain or snow from entering at the fasteners.
 - 10. For slopes between 2:12 to less than 4:12, a double application of Deck-Armor is required. See complete Deck-Armor installation instructions for more information.
- F. Penetrations
 - 1. Vent pipes: Install a 24 inch (610 mm) square piece of eaves protection membrane lapping over roof deck underlayment; seal tightly to pipe.
 - 2. Vertical walls: Install eaves protection membrane extending at least 6 inches (152mm) up the wall and 12 inches (305mm) on to the roof surface. Lap the membrane over the roof deck underlayment.
 - 3. Chimneys: Install eaves protection membrane around entire chimney extending at least 6 inches (152mm) up the wall and 12

ASPHALT SHINGLE ROOFING-ALTERNATE 07311-7/9 inches (305mm) on to the roof surface. Lap the membrane over the roof deck underlayment.

4. Rake Edges: Install metal edge flashing over eaves protection membrane and roof deck underlayment; set tight to rake boards; lap joints at least 2 inches (51mm) and seal with plastic cement; secure with nails.

3.04 INSTALLATION OF SHINGLES

- A. General
 - 1. Install in accordance with GAF's instructions and local building codes. When local codes and application instructions are in conflict, the more stringent requirements shall take precedence.
 - 2. Minimize breakage of shingles by avoiding dropping bundles on edge, by separating shingles carefully (not by "breaking" over ridge or bundles), and by taking extra precautions in temperatures below 40 degrees F (4 degrees C).
 - 3. Handle carefully in hot weather to avoid scuffing the surfacing, or damaging the shingle edges.
- B. Placement and Nailing
 - 1. Beginning with the starter strip, trim shingles so that they "nest" within the shingle located beneath it. This procedure will yield a first course that is typically 3" (76mm) to 4" (102mm) rather than a fully exposed shingle.
 - 2. For maximum wind resistance along rakes, install any GAF starter strip containing sealant or cement shingles to underlayment and each other in a 4" (102mm) width of asphalt plastic roof cement.
 - 3. Laterally, offset the new shingles from the existing keyways, to avoid waves or depressions caused by excessive dips in the roofing materials.
 - 4. Using the bottom of the tab on existing shingles, align subsequent courses.
 - 5. *Note: DO NOT install standard sized shingles (5" exposure) over metric (5 5/8" exposure) shingles, as it will overexpose the shingles and reveal the nails. Use standard alignment methods to assure proper shingle placement.
 - 6. Secure with 4, 5, or 6 nails per shingle per GAF's instructions or local codes.
 - 7. Placement of nails varies based on the type of shingle specified. Consult the application instructions for the specified shingle for details.
 - 8. Nails must be driven flush with the shingle surface. Do not overdrive or under drive the nails.
 - 9. Shingle offset varies based on the type of shingle specified. Consult the application instructions for the specified shingle for details.

ASPHALT SHINGLE ROOFING-ALTERNATE 07311-8/9

- C. Penetrations
 - 1. All Penetrations are to be flashed according to GAF, ARMA and NRCA application instructions and construction details.

3.05 INSTALLATION OF ATTIC VENTILATION

- A. General
 - 1. Ventilation must meet or exceed current F.H.A., H.U.D. and local code requirements.
- B. Ridge / Soffit ventilation
 - 1. Install ridge vent along the entire length of ridges:
 - 2. Cut continuous vent slots through the sheathing, stopping 6 inches (152mm) from each end of the ridge.
 - 3. On roofs without ridge board, make a slot 1 inch (25mm) wide, on either side of the peak (2" (51mm) overall).
 - 4. On roofs with ridge board, make two slots 1-3/4 inches (44.5mm) wide, one on each side of the peak (3 ¹/₂" (89mm) overall).
 - 5. Install ridge vent material along the full length of the ridge, including uncut areas.
 - 6. Butt ends of ridge vent material and join using roofing cement.
 - 7. Install eaves vents in sufficient quantity to equal or exceed the ridge vent area.
- 3.07 PROTECTION
 - A. Protect installed products from foot traffic until completion of the project.
 - B. Any roof areas that are not completed by the end of the workday are to be protected from moisture and contaminants.

END OF SECTION

SECTION 07.521 STYRENE-BUTADIENE-STYRENE (SBS) MODIFIED BITUMINOUS MEMBRANE ROOFING

PART 1 GENERAL

- 1.01 SUMMARY
 - A. The extent of the roofing systems is indicated on the drawings and by provisions of this section
 - B. The types of work specified in this section include the following:
 - 1. SBS-modified bituminous membrane roofing.
 - 2. Cover board.
 - 3. Roof insulation.
 - 4. Vapor retarder.
 - 5. Roof Drains
 - 6. Pitch Pans
 - C. Related sections include the following:
 - 1. Division 1
 - 2. Section 07.600 FLASHING AND SHEET METAL

1.02 REFERENCES

- A. Roofing Terminology: Refer to the following publications for definitions of roofing work related terms in this Section:
 - 1. ASTM D 1079 "Standard Terminology Relating to Roofing and Waterproofing."
 - 2. Glossary of NRCA's "The NRCA Roofing and Waterproofing Manual."
 - 3. Roof Consultants Institute "Glossary of Building Envelope Terms."
- B. Sheet Metal Terminology and Techniques: SMACNA "Architectural Sheet Metal Manual."
- C. Hot Roofing Asphalt: Roofing asphalt heated to temperature recommended by roofing manufacturer to flux modified roofing membrane, measured at the mop cart or mechanical spreader immediately before application.
- 1.03 DESIGN Criteria
 - A. General: Installed roofing membrane system shall remain watertight; and resist specified wind uplift pressures, thermally induced movement, and exposure to weather without failure.
 - B. Material Compatibility: Roofing materials shall be compatible with one another under conditions of service and application required, as demonstrated by roofing system manufacturer based on testing and field experience.

- C. Installer shall comply with current code requirements based on authority having jurisdiction.
- D. Wind Uplift Performance: Roofing system shall meet the intent of systems that have been successfully tested by a qualified testing and inspecting agency to resist wind uplift pressure calculated in accordance with ASCE 7.
- E. FMG Listing: Roofing membrane, base flashings, and component materials shall comply with requirements in FMG 4450 and FMG 4470 as part of a roofing system and that are listed in FMG's "RoofNav" for Class 1 or noncombustible construction, as applicable. Identify materials with FMG markings.
 - 1. Roofing system shall comply with RoofNav #: 223709-48671-0
 - 2. Fire/Windstorm Classification: Class NC A-600
 - 3. Hail Resistance: SH.
- F. Fire-Test-Response Characteristics: Provide roofing materials with the fire-test-response characteristics indicated as determined by testing identical products per test method below by UL, FMG, or another testing and inspecting agency acceptable to authorities having jurisdiction. Materials shall be identified with appropriate markings of applicable testing and inspecting agency.
 - 1. Exterior Fire-Test Exposure: Class A; ASTM E 108, for application and roof slopes indicated.
- G. IMPACT RESISTANCE:
 - 1. Performance testing for impact resistance shall be in accordance with FM 4450, FM 4470, ASTM D3746 or CGSB 37-GP 56M to meet the specified impact resistance requirements.
 - a. Meets requirements for FM-SH (Severe Hail), ASTM D3746, or CGSB 37-GP 56M.
- H. COOL ROOF RATING COUNCIL (CRRC):
 - 1. The cap sheet shall be granule-surfaced. Cap sheet shall be listed by the Cool Roof Rating Council (CRRC) with the following minimum published values:
 - a. Solar Reflectance: Initial: 0.63
 - b. Thermal Emittance: Initial: 0.91
 - c. Solar Reflectance Index (SRI): Initial: 77
- 1.04 SUBMITTALS
 - A. Product Data: Manufacturer's data sheets for each product to be provided.
 - B. Detail Drawings: Provide roofing system plans, elevations, sections, details, and details of attachment to other Work, including:
 - 1. Base flashings and membrane terminations.
 - 2. Tapered insulation, including slopes.
 - 3. Crickets, saddles, and tapered edge strips, including slopes.
 - 4. Insulation fastening and adhesive patterns.

- C. Verification Samples: Provide for each product specified.
- D. Installer Certificates: Signed by roofing system manufacturer certifying that Installer is approved, authorized, or licensed by manufacturer to install roofing system.
- E. Maintenance Data: Refer to Johns Manville's latest published documents on www.JM.com.
- F. Guarantees: Provide manufacturer's current guarantee specimen.
- G. Prior to roofing system installation, roofing sub-contractor shall provide a copy of the Guarantee Application Confirmation document issued by Johns Manville Roofing Systems indicating that the project has been reviewed for eligibility to receive the specified guarantee and registered.

5 QUALITY ASSURANCE

- A. Installer Qualifications: Qualified firm that is approved, authorized, or licensed by roofing system manufacturer to install manufacturer's product and that is eligible to receive the specified manufacturer's guarantee.
- B. Manufacturer Qualifications: Qualified manufacturer that has UL listing for roofing system identical to that used for this Project.
- C. Testing Agency Qualifications: An independent testing agency with the experience and capability to conduct the testing indicated, as documented according to ASTM E 329.
- D. Test Reports:
 - 1. Roof drain and leader test or submit plumber's verification.
- E. Source Limitations: Obtain all components from the single source roofing manufacturer guaranteeing the roofing system. All products used in the system shall be labeled by the single source roofing manufacturer issuing the guarantee.
- F. Provide evidence of CERTA training for any installer of torch-applied modified bitumen membrane. Copies of certifications are required prior to award and shall be maintained on the jobsite for inspection at any time.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver roofing materials in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, and directions for storage.
- B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer.
- C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.

1.05

D. Handle and store roofing materials and place equipment in a manner to avoid permanent deflection of deck.

1.07 PROJECT CONDITIONS

A. Weather Limitations: Proceed with installation only when current and forecasted weather conditions permit roofing system to be installed in accordance with manufacturer's written instructions and guarantee requirements.

1.08 GUARANTEE

- A. Provide manufacturer's system guarantee equal to Johns Manville's Peak Advantage No Dollar Limit Roofing System Guarantee.
 - 1. Single-source special guarantee includes roofing plies, base flashings, liquid applied flashing, roofing membrane accessories, roofing membrane, roof insulation, fasteners, cover board, substrate board, vapor retarder, walkway products, manufacturer's expansion joints, manufacturer's edge metal products, and other single-source components of roofing system marketed by the manufacturer.
 - 2. Guarantee Period: 20 years from date of Substantial Completion.
 - 3. Contractor is required to list "Allred Stolarski Architects" as the Specifier/Consultant of record in the appropriate fields ("Specifier Account") when applying for the manufacturer's warranty.
- B. Installer's Guarantee: Submit roofing Installer's guarantee, signed by Installer, covering Work of this Section, including all components of roofing system, for the following guarantee period:
 - 1. Guarantee Period: Two years from date of Substantial Completion.
- C. Existing Guarantees: Guarantees on existing building elements should not be affected by scope of work.
 - 1. Installer is responsible for coordinating with building owner's representative to verify compliance.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Basis of Design manufacturer is Johns Manville. Provided all other project requirements are met, products and systems by the following manufacturer's shall be considered equal:
 - 1. Soprema
 - 2. Firestone
 - 3. Approved Equal

2.02 BASE PLY AND CAP-SHEET MATERIALS

- A. Roofing Membrane Sheet: ASTM D 6164, Grade S, Type I, polyesterreinforced SBS-modified asphalt sheet; smooth surfaced; suitable for application method specified. Basis of design: DynaBase PR
- B. Roofing Membrane Cap Sheet: ASTM D 6163, Grade G, Type I, glassfiber-reinforced, SBS-modified asphalt sheet; granular surfaced; suitable for application method specified. Basis of design: DynaGlas FR

2.03 FLASHING SHEET MATERIALS

- A. Backer Sheet: ASTM D 6164, Grade S, Type I, polyester-reinforced, SBS-modified asphalt sheet; smooth surfaced; suitable for application method specified. Basis of design: DynaBase PR
- B. Flashing Sheet: ASTM D 6221, Grade G, Type I, composite polyesterand glass-fiber-reinforced SBS-modified asphalt sheet; granular surfaced; suitable for application method specified. Basis of design: DynaFlex
- C. Liquid Applied Flashing: A liquid and fabric reinforced flashing system created with a stitch bonded polyester scrim and a two-component, moisture cured, elastomeric, liquid applied flashing material, consisting of an asphalt extended urethane base material and an activator. Basis of design: PermaFlash System

2.04 AUXILIARY ROOFING MATERIALS

- A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with built-up roofing.
- B. Roofing Asphalt: ASTM D 312-15, Type IV.
- C. Asphalt Primer: ASTM D 41. Basis of design: Asphalt Primer
- D. Cold-Applied Flashing Adhesive: Roofing system manufacturer's asphalt-based, one-part, asphalt-based, trowel-grade mastic, cold-applied adhesive specially formulated for compatibility and use with flashing applications. Basis of design: MBR Utility Cement
- E. Mastic Sealant: As required by Johns Manville.
- F. Fasteners: Factory-coated steel fasteners and metal or plastic plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening roofing membrane components to substrate, tested by manufacturer for required pullout strength, and provided by the roofing system manufacturer. Basis of design: UltraFast Fasteners and Plates
- G. Metal Termination Bars: Manufacturer's standard predrilled stainlesssteel or aluminum bars, with anchors. Basis of design: JM Termination Systems
- H. Roofing Granules: Ceramic-coated roofing granules matching specified cap sheet, provided by roofing system manufacturer. Roofing Granules
- I. Miscellaneous Accessories: Provide miscellaneous accessories recommended by roofing system manufacturer.

- 2.05 WALKWAYS
 - A. Walkway Pads: Mineral-granule-surfaced, reinforced modified asphalt composition, slip-resisting pads, manufactured as a traffic pad for foot traffic provided by roofing system manufacturer, with a pad size of 32-inch x 32-inch. Basis of design: DynaTred Walkway
- 2.06 COVER BOARD
 - A. Perlite Board: ASTM C 728, Type 1; composed of expanded perlite, cellulosic fibers, binders and waterproofing agents with top surface seal-coated. Basis of design: 1/2" RetroFit Board
- 2.07 ROOF INSULATION
 - A. General: Provide preformed roof insulation boards that comply with requirements and referenced standards, selected from manufacturer's standard sizes and of thicknesses indicated.
 - B. Polyisocyanurate Board Insulation: ASTM C 1289, Type II, Class 1, Grade 2 (20 psi), Basis of design: ENRGY 3
 - 1. Provide insulation package with minimum R Value: minimum required by applicable code.
 - 2. Provide insulation package in multiple layers.
 - 3. Minimum Long-Term Thermal Resistance (LTTR): 5.7 per inch.
 - a. Determined in accordance with CAN/ULC S770 at 75°F (24°C)

2.08 TAPERED INSULATION

A. Tapered Insulation: ASTM C 1289, Type II, Class 1, Grade 2 (20 psi), provide factory-tapered insulation boards fabricated to slope of 1/8 inch per 12 inches, unless otherwise indicated. Basis of design: Tapered ENRGY 3

2.09 INSULATION ACCESSORIES

- A. General: Roof insulation accessories recommended by insulation manufacturer for intended use and compatible with membrane roofing.
- B. Provide factory preformed saddles, crickets, tapered edge strips, and other insulation shapes where indicated for sloping to drain. Fabricate to slopes indicated. Basis of design: DiamondBack Pre-Cut Crickets, DiamondBack Pre-Cut Miters, or Tapered Fesco Edge Strip
- C. Fasteners: Factory-coated steel fasteners and metal or plastic plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening roof insulation to substrate, and furnished by roofing system manufacturer. Basis of design: UltraFast Fasteners and Plates
- D. Insulation Cant Strips: ASTM C 728, perlite insulation board. Basis of design: FesCant Plus
- E. Wood Nailer Strips: Comply with requirements in Division 06 Section "Miscellaneous Rough Carpentry."

- 2.10 VAPOR RETARDER
 - A. Glass-Fiber Felts: ASTM D 2178, Type IV, asphalt-impregnated, glass-fiber felt. Basis of design: GlasPly IV.
 - B. Asphalt Primer: ASTM D 41. Basis of design: Asphalt Primer

2.11 EDGE METAL COMPONENTS

- A. Coping System: Per Section 07.600
- 2.12 RETROFIT ROOF DRAINS
 - A. Roof Drains for general use shall be equal Series 21000, Leveleze, large sump with cast iron domes by Josam Company (219) 872-5531. Drains shall be complete with deck clamp assembly and drain receiver. Drains shall be configured for existing roof decks and shall be sized to fit existing drain piping.
- 2.13 PITCH PANS
 - Where projections, other than plumbing vents, penetrate roofs (such as pipe railings, smoke stacks, etc.) pitch pans of 22 gauge stainless steel, 3" high (measured from top of cover board), and 6" flanges shall be installed.
- PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine substrates, areas, and conditions for compliance with the requirements affecting performance of roofing system.
 - 1. General:
 - a. Verify that roof openings and penetrations are in place and set and braced and that roof drains are securely clamped in place.
 - b. Verify that wood cants, blocking, curbs, and nailers are securely anchored to roof deck at penetrations and terminations and that nailers match thicknesses of insulation.
 - 2. Concrete Decks:
 - a. Verify that concrete curing compounds that will impair adhesion of roofing components to roof deck have been removed.
 - b. Verify that concrete substrate is visibly dry and free of moisture.
 - 3. Ensure general rigidity and proper slope for drainage.
 - 4. Verify that deck is securely fastened with no projecting fasteners and with no adjacent units more than 1/16 inch (1.6 mm) out of plane relative to adjoining deck.
- B. Unacceptable panels should be brought to the attention of the General Contractor and Project Owner's Representative and shall be corrected prior to installation of roofing system.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Clean and remove from substrate sharp projections, dust, debris, moisture, and other substances detrimental to roofing installation in accordance with roofing system manufacturer's written instructions.
- B. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction.
- C. If applicable, prime surface of deck with asphalt primer at a rate recommended by roofing manufacturer and allow primer to dry.
- D. Proceed with each step of installation only after unsatisfactory conditions have been corrected.

3.03 RE-ROOF PREPARATION

- A. Remove all roofing membrane, surfacing, coverboards, insulation, fasteners, asphalt, pitch, adhesives, etc.
 - 1. Remove an area no larger than can be re-roofed in one day.
- B. Tear out all base flashings, counterflashings, pitch pans, pipe flashings, vents and like components necessary for application of new membrane.
- C. Remove abandoned equipment curbs, skylights, smoke hatches, and penetrations.
 - 1. Install decking to match existing as directed by Owner's Representative.
- D. Raise (disconnect by licensed craftsmen, if necessary) all HVAC units and other equipment supported by curbs to conform with the following:
 - 1. Modify curbs as required to provide a minimum 8" base flashing height measured from the surface of the new membrane to the top of the flashing membrane.
 - 2. Secure of flashing and install new metal counterflashing prior to reinstallation of unit.
 - 3. Perimeter nailers shall be elevated to match elevation of new roof insulation.
- E. Immediately remove all debris from roof surface. Demolished roof system may not be stored on the roof surface.

3.04 VAPOR-RETARDER INSTALLATION

- A. Install 2 glass-fiber felt plies lapping each sheet 19 inches (483 mm) over preceding sheet. Embed each sheet in a solid mopping of hot roofing asphalt per manufacturer's written instructions.
- B. Laps: Accurately align roofing membrane sheets, without stretching, and maintain uniform side and end laps. Stagger end laps. Completely bond and seal laps, leaving no voids.
 - 1. Repair tears and voids in laps and lapped seams not completely sealed.

C. Completely seal vapor retarder at terminations, obstructions, and penetrations to prevent air movement into membrane roofing system.

3.05 INSULATION INSTALLATION

- A. Coordinate installation of roof system components so insulation and cover board are not exposed to precipitation or left exposed at the end of the workday.
- B. Comply with roofing system manufacturer's written instructions for installation of roof insulation and cover board.
- C. Install tapered insulation under area of roofing to conform to slopes indicated.
- D. Install insulation boards with long joints in a continuous straight line. Joints should be staggered between rows, abutting edges and ends per manufacturer's written instructions. Fill gaps exceeding 1/4 inch (6 mm) with like material.
- E. Install 2 or more layers with joints of each succeeding layer staggered from joints of previous layer a minimum of 6 inches (150 mm) in each direction.
- F. Trim surface of insulation boards where necessary at roof drains so completed surface is flush and does not restrict flow of water.
- G. Install tapered edge strips at perimeter edges of roof that do not terminate at vertical surfaces.
- H. Adhered Insulation: Adhere each layer of insulation to substrate as follows:
 - 1. Install each layer in a solid mopping of hot roofing asphalt according to roofing system manufacturer's instruction.
 - 2. Install each layer to resist uplift pressure at corners, perimeter, and field of roof.

3.06 COVER BOARD INSTALLATION

- A. Coordinate installing membrane roofing system components so cover board is not exposed to precipitation or left exposed at the end of the workday.
- B. Comply with membrane roofing system manufacturer's written instructions for installing roof cover board.
- C. Install cover board with long joints in a continuous straight line. Joints should be staggered between rows, abutting edges and ends per manufacturer's written instructions. Fill gaps exceeding 1/4 inch (6 mm) with cover board.
 - 1. Cut and fit cover board within 1/4 inch (6 mm) of nailers, projections, and penetrations.
- D. Trim surface of cover board where necessary at roof drains so completed surface is flush and does not restrict flow of water.
 - 1. Install tapered edge strips at perimeter edges of roof that do not terminate at vertical surfaces.

- E. Adhered Cover Board: Adhere cover board to substrate as follows:
 - 1. Install in a solid mopping of hot roofing asphalt according to roofing system manufacturer's instruction.
 - 2. Install to resist uplift pressure at corners, perimeter, and field of roof.

ROOFING MEMBRANE INSTALLATION, GENERAL 3.07

- A. Install roofing membrane in accordance with roofing system manufacturer's written instructions, applicable recommendations of the roofing manufacturer and requirements in this Section.
- B. Cooperate with testing and inspecting agencies engaged or required to perform services for installing roofing system.
- C. Where roof slope exceeds 1/2 inch per 12 inches (1:24), contact the membrane manufacturer for installation instructions regarding installation direction and backnailing
- D. Coordinate installing roofing system so insulation and other components of the roofing membrane system not permanently exposed are not subjected to precipitation or left uncovered at the end of the workday or when rain is imminent.
 - 1. Provide tie-offs at end of each day's work to cover exposed roofing membrane sheets and insulation.
 - 2. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system.
 - 3. Remove and discard temporary seals before beginning work on adjoining roofing.
- Asphalt Heating: Heat roofing asphalt to temperature recommended by E. roofing manufacturer to flux modified membrane. Do not exceed roofing asphalt manufacturer's recommended temperature limits during roofing asphalt heating. Discard roofing asphalt maintained at a temperature exceeding finished blowing temperature for more than 4 hours.
- F. Substrate-Joint Penetrations: Prevent roofing asphalt from penetrating substrate joints, entering building, or damaging roofing system components or adjacent building construction.

SBS-MODIFIED BITUMINOUS MEMBRANE INSTALLATION

- A. Install one modified bituminous roofing membrane sheet, and cap sheet according to roofing manufacturer's written instructions, starting at low point of roofing system. Extend roofing membrane sheets over and terminate beyond cants, with the following installation method:
 - 1. Unroll roofing membrane sheets and allow them to relax for minimum time period required by manufacturer.
 - 2. Adhere modified bituminous roofing membrane sheet to substrate in a solid mopping of hot roofing asphalt applied at temperatures recommended by roofing system manufacturer.

3.08

- B. Laps: Accurately align roofing membrane sheets, without stretching, and maintain uniform side and end laps. Stagger end laps. Completely bond and seal laps, leaving no voids.
 - 1. Repair tears and voids in laps and lapped seams not completely sealed.
 - 2. As required, apply roofing granules to cover exuded bead at laps while bead is hot.
- C. Install roofing membrane sheets so side and end laps shed water.

3.09 FLASHING AND STRIPPING INSTALLATION

- A. Install base flashing over cant strips and other sloping and vertical surfaces, at roof edges, and at penetrations through roof, and secure to substrates according to roofing system manufacturer's written instructions and as follows:
 - 1. Prime substrates with asphalt primer if required by roofing system manufacturer.
 - 2. Backer Sheet Application: Install backer sheet and adhere to substrate in a solid mopping of hot roofing asphalt.
 - 3. Flashing Sheet Application: Adhere flashing sheet to substrate in a solid mopping of hot roofing asphalt. Apply hot roofing asphalt to back of flashing sheet if recommended by roofing system manufacturer.
- B. Extend base flashing up walls or parapets a minimum of 8 inches (200 mm) above roofing membrane and 4 inches (100 mm) onto field of roofing membrane.
- C. Mechanically fasten top of base flashing securely at terminations and perimeter of roofing.
 - Seal top termination of base flashing with a strip of glass-fiber fabric set in MBR Flashing cement.
- D. Roof Drains: Flash drain using liquid applied flashing (PermaFlash) system. Clamp roofing membrane, flashing, and stripping into roof-drain clamping ring.
 - 1. Install stripping according to roofing system manufacturer's written instructions.
- E. Flash all penetrations using liquid applied flashing (PermaFlash) system.
- 3.10 PITCH POCKETS
 - A. Installation:
 - 1. Install pitch pockets or as detailed at roof penetrations in accord with roofing manufacturer's approved details and recommendations.
 - For pitch pockets, prime both sides of metal flanges to be used in conjunction with roofing. Set flanges in plastics cement on top of built-up roofing membrane and nail 4" o.c. to wood nailers or insulation. Top fill pitch pockets with mixture of 1 part dry powdered

Portland cement and 2 parts Bitumen. Crown upward to create drainage over edges of pocket. Strip cover metal flanges with modified bitumen cap sheet.

3.11 ROOF DRAINS

A. Installation shall be in strict compliance with the roof drain manufacturer's installation instructions. Installation shall also be in compliance with the roofing manufacturer.

3.12 WALKWAY INSTALLATION

- A. Walkway Pads: Install walkway pads using units of size indicated or, if not indicated, of manufacturer's standard size according to walkway pad manufacturer's written instructions.
 - 1. Sweep away loose aggregate surfacing and set walkway pads in additional cold applied adhesive.

3.13 FIELD QUALITY CONTROL

- A. Final Roof Inspection: Arrange for roofing system manufacturer's technical representative to inspect roofing installation on completion and submit report to Architect.
 - 1. Notify Architect or Owner 48 hours in advance of date and time of inspection.
- B. Repair or remove and replace components of roofing system where test results or inspections indicate that they do not comply with specified requirements.
- C. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

3.14 PROTECTION AND CLEANING

- A. Protect roofing system from damage and wear during remainder of construction period.
- B. Correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION

SECTION 07.600 FLASHING AND SHEET METAL

PART 1 GENERAL

1.01 RELATED DOCUMENTS: Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 1 Specifications sections, apply to work of this and all sections.

1.02 DESCRIPTION OF WORK

A. This work includes metal roof flashing, coping, gutters, leaderheads, downspouts, gravel guard/fascia, wall flashing and trim and other related items necessary to complete project indicated by drawings.

1.03 WARRANTY

A. All work in the section of the specifications which is installed in conjunction with the fluid applied roofing system (i.e., gravel guards, flashing, etc.) shall be included in the warranty described in roofing Sections.

PART 2 PRODUCTS

2.01 MATERIALS

- A. All edge metals and associated counter-flashings must be prefabricated and purchased from the SBS/ Fluid Applied Roofing Manufacturer.
- B. Shop broke metal or contractor provided material will not be accepted.

2.02 ROOF FLASHING

A. Modified Bitumen Roof:

1. Metal flashing shall be as required, by the roof manufacturer, to be included in the modified roof 20-year NDL Warranty.

- 2. Metal for roof flashing shall be .040 and .050 prefinished aluminum.
- B. Shingle Roofs:
 - 1. Misc. flashings: .24 gauge hot-dip galvanized steel sheet, complying with ASTM A 653/A 653M, G90/Z275.
 - 2. Edge metal or other visible conditions: 0.032-inch (0.8mm) aluminum sheet, prefinished, complying with ASTM B 209.
- C. Counter Flashing shall be equal to Type MA Masonry Springlok flashing system as manufactured by Fry Reglet Corporation. Reglet and flashing shall be type 304 stainless steel (.020").

2.03 GUTTERS & DOWNSPOUTS

A. Metal for gutters and downspouts shall be .040 aluminum with .050 aluminum anchors. Spacing of anchors shall not exceed 4'-0" on center, and shall be within 2'-0" of each end of the downspouts.

1. Size and shape of gutters and downspouts shall be as indicated on the drawings.

2. If size and shape are not indicated on the drawings, size and shape shall match existing.

2.04 ALUMINUM FINISHES

- A. All exposed aluminum flashing, fascia and edge strips, etc. shall be fabricated from prefinished aluminum equal to Una-Clad Aluminum, coated on one side with Glidden Nesbelar premium fluoropolymer coating system (containing a minimum of 70% Kynar 500 resin), the reverse side shall have wash coat, as manufactured by Copper Sales, Inc.
- B. Unexposed aluminum flashing may be mill finished aluminum.

2.05 MISCELLANEOUS MATERIALS AND ACCESSORIES

- A. Fasteners: Same metal as flashing/sheet metal or, other noncorrosive metal as recommended by sheet manufacturer.
- B. Metal Accessories: Provide sheet metal clips, straps, anchoring devices and similar accessory units as required for installation of work, matching or compatible with material being installed, noncorrosive, size and gauge required for performance.

PART 3 EXECUTION

3.01 INSTALLATION REQUIREMENTS

- A. General: Except as otherwise indicated, comply with manufacturer's installation instructions and recommendations, and with SMACNA "Architectural Sheet Metal Manual". Anchor units of work securely in place by methods indicated, providing for thermal expansion of metal units; conceal fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints and seams which will be permanently watertight and weatherproof.
- B. Bed flanges of work in a thick coat of bituminous roofing cement where required for waterproof performance. Nail to wood substrate at maximum spacing.
- C. Prime flanges at membrane roofing with bituminous paint before installation of stripping.

3.02 FABRICATED UNITS

A. General Metal Fabrication: Shop-fabricate work to greatest extent possible. Comply with details shown, and with applicable requirements

FLASHING AND SHEET METAL 07600-2/3 of SMACNA "Architectural Sheet Metal Manual" and other recognized industry practices. Fabricate for waterproof and weather-resistant performance; with expansion provisions for running work, sufficient to permanently prevent leakage, damage or deterioration of the work. Form work to fit substrates. Comply with material manufacturer's instructions and recommendations. Form exposed sheet metal work without excessive oil-canning, buckling and tool marks, true to line and levels as indicated, with exposed edges folded back to form hems.

- B. Seams: Fabricate non-moving seams in sheet metal with flat-lock seams. Form aluminum seams with epoxy seam sealer and rivet.
- C. Expansion Provisions: Where moveable, non-expansion type joints are required for proper performance of work, form metal to provide for proper installation of elastomeric sealant in compliance with industry standards.
- D. Separations: Provide for separation of metal from noncompatible metal or corrosive substrates by coating concealed surfaces at locations of contact, with bituminous coating or other permanent separation as recommended by manufacturer/fabricator.
- E. Flashing: Form to size and shape shown with exposed edges hemmed. Make counter flashing 2-piece type consisting of in-wall receiver and removable cap flashing insert. Cap flashing insert shall be secured with thumb nail notches or by other approved method which permits replacement without damage to receiver.

3.03 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces, removing substances which might cause corrosion of metal or adversely affect painted finish.
- B. Protection: Installer shall advise Contractor of required procedures for surveillance and protection of flashings and sheet metal work during construction, to ensure that work will be without damage or deterioration, other than natural weathering, at time of substantial completion.

END OF SECTION

SECTION 07.810 ROOF ACCESSORIES AND MECHANICAL UNITS

PART 1 GENERAL

1.01 RELATED DOCUMENTS: Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this and all sections.

1.02 DESCRIPTION OF WORK

A. This work includes furnishing and installing roof hatch, safety post, retrofit roof drains, exhaust fans, gravity ventilators and related items.

1.03 SUBMITTALS

A. The contractor shall submit manufacturer's literature and cut sheets, for roof drains, exhaust fans, gravity ventilators, to the architect for review prior to ordering materials.

1.04 WARRANTY

A. All work installed in conjunction with the modified bitumen membrane roofing system (i.e., roof drains, etc.) shall be included in the warranty described in Section 07.521.

PART 2 PRODUCTS

2.01 RETRO-FIT ROOF DRAINS

A. Retro-Fit Roof Drains for shall be equal RD2150 Replacement Roof Drain by Zurn, 16 gage Type 304 stainless steel body and neoprene gasket, complete with Dura-Coated cast iron clamp collar and dome with stainless steel hardware. Drains shall be configured for existing roof decks and shall be sized to fit existing drain piping.

2.02 GRAVITY VENTILATORS

A. Gravity roof ventilators shall be equal to Model FGI Fabra Hood Relief Gravity ventilator by Greenheck, or Model GI by Loren Cook. Sizes shall match existing openings, or curbs shall be adjusted as required. Submit manufacturer's literature to the architect for review and approval.

2.03 EXHAUST FANS

A. Roof exhaust fans shall be equal to Model G-123-VG Direct Drive Centrifugal Exhaust Fan by Greenheck. Sizes shall match existing openings, or curbs shall be adjusted as required. Submit manufacturer's literature to the architect for review and approval.

PART 3 EXECUTION

3.01 RETRO-FIT ROOF DRAINS

A. Installation shall be in strict compliance with the roof drain manufacturer's installation instructions. Installation shall also be in compliance with the roof manufacturer.

3.02 GRAVITY VENTILATORS

A. Gravity roof ventilators shall be installed in strict accordance with the manufacturer's written recommendations. Install new treated wood curbs and flashings.

3.03 EXHAUST FANS

A. Exhaust fans shall be installed in strict accordance with the manufacturer's written recommendations. Properly reinstall electrical connections. Verify that fans are operating properly. Install new treated wood curbs and flashings.

END OF SECTION
SECTION 07.920 SEALANTS AND CAULKING

PART 1 GENERAL

- 1.01 SECTION INCLUDES
 - A. Provisions of general, supplementary conditions, and Division 1 apply to all work in this Section.
 - B. Furnish labor, materials, equipment, and supervision to install all sealant as specified or shown in drawings.

1.02 REFERENCES

A. American Society for Testing and Materials (ASTM):

- 1. ASTM C920: Elastomeric Joint Sealants.
- 2. ASTM C1253: Standard Test Method for Non-Gassing Backer Rod.
- 3. ASTM C1330: Specification for Cylindrical Sealant Backing for Use with Cold Liquid Applied Sealants.
- 4. ASTM D1565: Flexible Cellular Materials Vinyl Chloride Polymers and Copolymers (Open-Cell Foam).
- B. Federal Specifications
 - 1. TT-S-00230C (COM-NBS) Interim Federal Specification for Sealing Compound: Elastomeric Type, Single Component (for Caulking, Sealing, and Glazing in Buildings and Other Structures)
- C. U.S. Department of Agriculture (USDA)

1.03 SUBMITTALS

- A. Manufacturer's Technical Data Guides, and application instructions.
- B. Submit laboratory tests or data that validate product compliance with compliance criteria specified.

1.04 QUALITY ASSURANCE

- A. Manufacturer qualifications: Company regularly engaged in manufacturing and marketing of products specified in this section.
- B. Contractor qualifications: Qualified to perform work specified by reason of experience or training provided by product manufacturer.
- C. Mockup: Provide mockup to include sealant joints in conjunction with flashings and curtain walls.
 - 1. Construct mockup with specified sealant and with other components noted.
 - 2. Locate where directed by Architect.
 - 3. Mockup may remain as part of Work if acceptable to Architect.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver products in original factory packaging bearing identification of product, manufacturer, batch number, and expiration date as applicable. Provide Material Safety Data Sheets for each product.

SEALANTS AND CAULKING 07920-1/4

- B. Store product in location protected from freezing, damage, construction activity, precipitation and direct sunlight in strict accordance with manufacturer's recommendations.
- C. Condition products to approximately 60 to 70 degrees F (16 to 21 degrees C) for use in accordance with manufacturer's recommendations.
- D. Handle all products with appropriate precautions and care as stated on Material Safety Data Sheet.
- 1.06 PROJECT CONDITIONS
 - A. Do not use products under conditions of precipitation or freezing weather. Use appropriate measures for protection and supplementary heating to ensure proper drying and curing conditions in accordance with manufacturer's recommendations if application during inclement weather occurs.
 - B. Ensure substrate is dry.
 - C. Protect all adjacent work from contamination due to mixing, handling, and application of sealants.

1.07 WARRANTY

- A. Provide manufacturer's standard five-year material warranty.
- B. Warranty: include coverage for replacement of sealant materials that fail to achieve water tight seal, exhibit loss of adhesion or cohesion, or do not cure.
- C. Warranty exclusions: warranty does not apply where failure results from structural cracks or defects, faulty construction, faulty materials (other than sealant), misuse of structure, settlement, or accident, fire or other casualty or physical damage.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. For purpose of defining quality of materials in this Section shall be BASF Corporation, Construction Systems.
- B. Substitutions
 - 1. Alternates to acceptable manufacturer will be considered only on basis of written requests.

2.02 MATERIALS

- A. Exterior Vertical Sealant: equal to MasterSeal NP-1 by BASF.
- B. Exterior Horizontal Sealant: equal to self-leveling MasterSeal SL-1 by BASF.

2.03 ACCESSORIES

- A. REDUCER 990: non-corrosive, non-staining joint cleaner.
- B. SOFT BACKER-ROD:
 - 1. Provide non-gassing, reticulated closed-cell polyethylene rod designed for use with cold applied joint sealants for vertical applications passing ASTM C1330.
 - 2. Provide backer rod of size required for joint design.
- C. SONNEBORN® CLOSED-CELL BACKER-ROD:
 - 1. Provide closed-cell polyethylene rod designed for use with cold applied joint sealants for on grade or below grade applications, passing ASTM C1330.
 - 2. Provide backer rod of size required for joint design.
- D. EXPANSION-JOINT FILLER:
 - 1. Provide closed-cell polyethylene joint filler designed for use with cold applied joint sealants.
 - 2. Provide joint filler of size required for joint design.
- E. Bond breaker: pressure sensitive tape recommended by sealant manufacturer to suit application.
- 2.04 COLOR
 - A. Color of sealants will be selected by Architect from manufacturer's standard color range.
- PART 3 EXECUTION

3.01 EXAMINATION

- A. Inspect all areas involved in work to establish extent of work, access and need for protection of surrounding construction, windows and shrubbery.
- B. Protect all surroundings from primers and elastomeric sealant to include, but not be limited to, windows, roofs, walkways, drives, and landscaping.

3.02 SITE VERIFICATIONS OF CONDITIONS

A. Conduct pre-application inspection of site verification with an authorized BASF representative.

3.03 PREPARATION

- A. Remove loose materials and foreign matter which impair adhesion of sealant.
- B. Clean and prime joints in accordance with manufacturer's instructions.
- C. Where possibility of primer or sealant staining of adjacent areas or materials exists, mask joints prior to application. Do not remove masking tape before joints have been tooled and initial cure of sealant

SEALANTS AND CAULKING 07920-3/4 has taken place. Work stained due to failure of proper masking precautions will not be accepted.

3.04 APPLICATION

- A. Back-up Material
 - 1. Install appropriate size backer rod of size larger than joint according to manufacturer's recommendations.
- B. Bond breaker: Install bond-breaker strip in joint to be sealed on top of back-up material to prevent adhesion of sealant to back-up material per manufacturer's recommendations.
- C. Sealant Application
 - 1. Apply materials in accordance with manufacturer's recommendations; install beads of proper width and depth; tool as recommended by manufacturer; immediately remove surplus sealant.

3.05 CLEANING

- A. Remove uncured sealant with Reducer 990 or xylene. Remove cured sealant by razor, scraping, or mechanically.
- B. Remove all debris related to application of sealants from job site in accordance with all applicable regulations for hazardous waste disposal.

END OF SECTION

SECTION 09.900 PAINTING

PART 1 GENERAL

1.01 SUMMARY

- A. Extent of painting work is shown on drawings, and as herein specified.
- B. The work includes cleaning, prepping, priming and painting all new and existing exterior exposed items and surfaces throughout project.
 - 1. Surface preparation, priming and coats of paint specified are in addition to shop-priming and surface treatment specified under other sections of work.
 - 2. Field painting of exposed bare and covered pipes and conduit, steel and iron work and primed metal surfaces, is included.
- C. "Paint" as used herein means all coating systems materials, including primers, emulsions, enamels, stains, varnishes, sealers and fillers, and other applied materials whether used as prime, intermediate or finish coats.
- D. Following categories of work are not included as part of field-applied finish work, or are included in other sections of these specifications.
 - 1. Shop Priming
 - a. Unless otherwise specified, shop priming of ferrous metal items is included under various sections for structural steel, steel joists, metal fabrications, hollow metal work, and similar items. Also, for factory built mechanical and electrical equipment or accessories.
 - 2. Pre-finished Items
 - a. Unless otherwise indicated, do not include painting when factory-finishing or installer finishing is specified for such items as (but not limited to) pre-finished columns, railings and decking.
 - 3. Concealed Surfaces
 - a. Unless otherwise indicated, painting is not required on surfaces such as walls or ceilings in concealed areas and generally inaccessible areas, furred areas, pipe spaces, and duct shafts.
 - 4. Finished Metal Surfaces
 - a. Metal surfaces of anodized aluminum, stainless steel, chromium plate, bronze and similar finished materials will not require finish painting, unless otherwise indicated.
 - 5. Operating Parts and Labels
 - a. Moving parts of operating units, mechanical and electrical parts, such as valve and damper operators, linkages, sinkages, sensing devices, motor and fan shafts will not require finish painting, unless otherwise indicated. Do not paint over any code-required labels, such as Underwriters' Laboratories and Factory Mutual, or any equipment identification, performance rating, name or nomenclature plates.

PAINTING 09900-1/7 6. Do not paint exterior concrete floors.

1.02 SUBMITTALS

- A. Product Data
 - 1. Provide manufacturer's printed product data on all coatings specified, including preparation and application instructions.
- B. Selection Samples
 - 1. Provide two sets of samples not less than one by two inches in size illustrating range of colors and textures available for each finishing product specified.
- C. Verification Samples
 - 1. Provide two samples of not less than six inches square illustrating selected color and texture for each finishing product specified.
- D. Coatings Maintenance Manual
 - 1. Coating Maintenance Manual: Upon conclusion of the project, the Contractor or paint manufacturer/supplier shall furnish a coating maintenance manual, such as Sherwin-Williams "Custodian Project Color and Product Information" report or equal. Manual shall include an Area Summary with finish schedule, Area Detail designating where each product/color/finish was used, product data pages, Material Safety Data Sheets, care and cleaning instructions, touch-up procedures, and color samples of each color and finish used.

1.03 QUALITY ASSURANCE

- A. Job Sample
 - 1. Prior to start of painting, paint full size field sample of each individual color scheduled on each respective substrate. Paint sample at site, where directed, of workmanship to be expected in the completed work. Obtain Architect's acceptance of the sample before start of work. If sample is accepted, the sample may become part of the finished project.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to job site in original, new and unopened packages and containers bearing manufacturer's name and label and following minimum information:
 - 1. Name or title of materials
 - 2. Manufacturer's name
 - 3. Thinning instructions
 - 4. Application instructions
 - 5. Color name and number
- B. Store paint products in covered, ventilated area at minimum ambient temperature of 45 degrees F and maximum ambient temperature of 90 degrees F.

PAINTING 09900-2/7

1.05 PROJECT CONDITIONS

- A. Apply water-base paints only when temperature of surfaces to be painted and surrounding air temperatures are between 50 degrees F. (10 Celsius) and 90 degrees F. (32 Celsius), unless otherwise permitted by paint manufacturer's printed instructions.
- B. Apply solvent-thinned paints only when temperature of surfaces to be painted and surrounding air temperatures are between 45 degrees F. (7 Celsius) and 95 degrees F. (35 Celsius), unless otherwise permitted by paint manufacturer's printed instructions.
- C. Do not apply paint in snow, rain, fog or mist; or when relative humidity exceeds 85%; or to damp or wet surfaces, unless otherwise permitted by paint manufacturer's printed instructions.
- D. Painting may be continued during inclement weather if areas and surfaces to be painted are enclosed and heated within temperature limits specified by paint manufacturer during application and drying periods.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Acceptable Manufacturers
 - 1. Sherwin-Williams Company
 - 2. Benjamin Moore
 - 3. Glidden Professional
- B. Unless otherwise specified for an individual product or material, supply all products specified in this section from the same manufacturer.

2.02 MATERIALS

A. Paints and Coatings-General

- 1. Acceptable products: Indicated in the Paint Schedule.
- 2. Unless otherwise indicated, provide factory-mixed coatings. When required, mix coatings to correct consistency in accordance with manufacturer's instructions before application. Do not dilute or thin coatings, except as instructed.
- 3. Do not add additives, except as instructed or recommended by coating manufacturer.
- 4. For opaque finishes, tint each coat, including primer coat and intermediate coats, one-half shade lighter than succeeding coat, with final finish coat as base color.
- 5. Supply each coating material in quantity required for this section from a single production run.
- B. Coating Application Accessories:
 - 1. Specified in this section or in coating manufacturers application instructions, including but not limited to thinners, sealers, primers,

PAINTING 09900-3/7 cleaning agents, etching agents, cleaning cloths, sanding materials, and cleanup materials.

- 2.03 FINISHES
 - A. Colors will be selected by Architect. Allow up to 3 different colors per building.
 - B. Paint Coordination
 - 1. Provide finish coats which are compatible with prime paints used. Review other sections of these specifications in which prime paints are to be provided to ensure compatibility of total coatings system for various substrates. Upon request from other trades, furnish information on characteristics of finish materials proposed for use, to ensure compatible prime coats are used. Provide barrier coats over incompatible primers and incompatible existing coats, or remove and reprime as required. Notify Architect in writing of any anticipated problems using specified coating systems with substrates involved.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that site environmental conditions are appropriate for application of coatings specified.
- B. Immediately prior to coating application, ensure that surfaces to receive coatings are dry.
- C. Ensure that moisture-retaining substrates to receive coatings have moisture content within tolerances allowed by coating manufacturer, using moisture measurement techniques recommended by coating manufacturer.
- D. Immediately prior to coating application, examine surfaces to receive coatings for surface imperfections and for contaminants which could impair performance or appearance of coatings, including but not limited to, loose primer, rust, scale, oil grease, mildew, algae, or fungus, stains or marks, cracks, indentations, or abrasions.
- E. Correct the above conditions and any other conditions which could impair performance or appearance of coatings in accordance with specified surface preparation procedures before proceeding with coating application.

3.02 PREPARATION

- A. Do not start work until surfaces to be finished are in proper condition to produce finished surfaces of uniform, satisfactory appearance.
- B. Stains and Marks: Remove completely, if possible, using materials and methods recommended by coating manufacturer; seal with shellac or other coating acceptable to paint manufacturer stains and marks that might bleed through paint finishes which cannot be completely removed.

- C. Remove or protect hardware, electrical plates, mechanical grilles and louvers, lighting fixture trim, and other items not indicated to receive coatings which are adjacent to surfaces to receive coatings.
- D. Remove dirt, mold and mildew from all existing surfaces by scrubbing with solution of trisodium phosphate and bleach. Rinse with clean water and allow substrate to thoroughly dry.
- E. For specific substrate preparation, see "Surface Preparation" at end of Section.

3.03 APPLICATION

A. General

- 1. Apply paint in accordance with manufacturer's directions. Use applicators and techniques best suited to substrate and type of material being applied. Do not use spray method unless specifically approved by the Owner due to possible damage to adjacent property.
- 2. Apply additional coats when undercoats, stains or other conditions show through final coat of paint, until paint film is of uniform finish, color and appearance. Give special attention to ensure that surfaces, including edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
- 3. Paint surfaces behind movable equipment same as similar exposed surfaces.
- 4. Finish exterior doors on tops, bottoms and side edges same as exterior faces, unless otherwise indicated.
- 5. Omit first coat (primer) on metal surfaces which have been shopprimed and touch-up painted, unless otherwise indicated. Spot prime any damaged areas.
- B. Scheduling Painting
 - 1. Apply first coat material to surfaces that have been properly cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
 - 2. Allow sufficient time between successive coatings to permit proper drying. Do not recoat until paint has dried to where it feels firm, does not deform, or feel sticky under moderate thumb pressure, and application of another coat of paint does not cause lifting or loss of adhesion of the undercoat.
- C. Minimum Coating Thickness
 - 1. Apply materials at not less than manufacturer's recommended spreading rate, to provide a dry film thickness per coat as indicated, or if not indicated, as recommended by coating manufacturer.
- D. Mechanical and Electrical Work
 - 1. Painting of mechanical and electrical work is limited to those items exposed on the exterior of the buildings.

PAINTING 09900-5/7

- 2. Mechanical items to be painted include, but are not limited to, the following (where present):
 - a. Piping and supports, louvers, etc.
- 3. Electrical items to be painted include, but are not limited to, the following (where present):
 - a. Conduit, boxes and fittings, exposed panelboard surfaces, including covers.
- E. Prime Coats
 - 1. Apply prime coat to material which is required to be painted or finished, and which has not been prime coated by others.
 - 2. Recoat primed and sealed surfaces where there is evidence of suction spots or unsealed areas in first coat, to assure a finish coat with no burn-through or other defects due to insufficient sealing.
- F. Pigmented (Opaque) Finishes
 - 1. Completely cover to provide an opaque, smooth surface of uniform finish, color, appearance and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.
- 3.04 CLEAN-UP
 - A. During progress of work, remove from site discarded paint materials, rubbish cans and rags at end of each work day.
 - B. Upon completion of painting work, clean window glass and other paintspattered surfaces. Remove spattered paint by proper method of washing and scraping, using care not to scratch or otherwise damage finished surfaces.

3.05 PROTECTION

- A. Protect all existing property, whether to be painted or not, against damage by painting and finishing work. Correct any damage by cleaning, repairing, or replacing, and repainting, as acceptable to Owner.
- B. Provide "Wet Paint" signs as required to protect newly painted finishes. Remove temporary protective wrappings provided by others for protection of their work after completion of painting operations.
- C. At the completion of work of other trades, touch-up and restore all damaged or defaced painted surfaces.

3.06 SURFACE PREPARATION

- A. Exterior Metal Galvanized
 - 1. Solvent clean per SSPC-SP1 or clean with Devprep 88 Heavy Duty Cleaner followed by thorough water rinsing. If the surface has been treated with chromates or silicates, first clean by the method chosen and apply a test patch of the coating system specified. Allow product(s) to cure at least one week before testing adhesion per

ASTM D3359 (tape Adhesion). If adhesion is poor, brush blast prior to painting.

- B. Concrete Masonry Units and Exposed Concrete Chainwalls
 - 1. All surfaces must be sound, clean, dry, free of oil, grease, efflorescence, loose aggregate and other foreign matter. Remove surface debris by washing surface with a diluted solution of muriatic acid and water. Follow acid manufacturer's application and safety instructions. Rinse thoroughly and allow to dry.
- C. All existing siding, trim, soffits, etc. are to be cleaned with one part bleach and three parts water in order to remove surface dirt, mold and mildew. Allow to stand on surface for 10 minutes, then rinse thoroughly. Repeat as necessary. Allow surface to dry for 48 hours prior to painting.
- 3.02 SCHEDULE
 - A. See following page.

END OF SECTION

	Layer	Coats	Benjamin Moore	Sherman-Williams	Glidden Professional
Exterior Metal	Cleaner		M83 I/M Oil & Grease Emulsifier	180-3105 Proclean Degreaser	88 Devprep Heavy Duty Cleaner
	Primer	1	M33 Polyamide Epoxy Metal Primer	B67 Recoatable Epoxy Primer	526 Devfloor High Solids Epoxy Primer
	Finish	2	CM74 Aliphatic Acrylic Urethane Gloss Or Equal	B65-300 Hi-Solids Polyurethane	389 Devthane Aliphatic Urethane Gloss Or Equal
Interior Metal (N/A)	Primer	1		B66-310 Pro-Cryl Universal Water Based Primer	
	Finish	2		B34W-200 Pro Mar 200 Alkyd Semigloss	
Interior Concrete Masonry Units (N/A)	Primer	1	285 Moorcraft Supercraft Block Filler	B25W25 PrepRite Block Filler	3010 Ultra-Hide Int/Ext Vinyl-Acrylic Block Filler
	Finish	2	276 Moorcraft S/S Latex Semigloss Enamel	B31W-2600 ProMar 200 0 VOC Latex Semigloss	1416 Ultra-Hide Latex Semi-Gloss Wall & Trim Enamel
Interior Gypsum Board Walls, Ceilings, Furr- Downs (N/A)	Primer	1	284 Moorcraft S/H Latex Primer Undercoater	B28W2600 Pro Mar 200 0 VOC Primer B20-2600 Pro Mar 200 0 VOC Latex	1030 Ultra-Hide PVA Int General Purpose Wall Primer 1412 Ultra-Hide Latex Eggshell Wall
	Finish	2	274 Moorcraft S/S Latex Eggshell Enamel	Eggshell	& Trim Enamel
Exterior Fiber Cement Board-Siding, Soffit, Trim	Primer	1	66 Moore's Acrylic Masonry Sealer	A24W8300 Series Loxon Concrete & Masonry Primer	2010 Ultra-Hide Durus Exterior Acrylic Primecoat
	Finish	2	180 Moorcraft S/S Acrylic Exterior Flat Finish	A-100 Exterior Latex Flat Acrylic A6 Series	2210 Ultra-Hide Exterior Acrylic Flat Finish
Interior Wood -Hardwood (N/A)	Primer	1	234 Benwood Interior Penetrating Stain	A49-200 Woodclassics Stain	1700 Woodpride Interior Wood Finishing Stain
	Finish	2	423 Benwood Stays Clear Acrylic Poly- urethane Low Lustre	A68 Woodclassics Waterborne Poly- urethane	1802 Woodpride Interior Waterborne Satin Varnish
Interior Wood -Softwood (N/A)	Primer	1	C245 Moorcraft S/S Alkyd Undercoater & Primer Sealer	B28W8111 Premium Wall & Wood Primer	1120 Ultra-Hide Oil/Alkyd Interior Wood Undercoater
	Finish	2	C271 Moorcraft S/S Alkyd Semigloss Enamel	B34W-200 Promar 200 Alkyd Semigloss	1516 Ultra-Hide Alkyd Semigloss Wall & Trim Enamel