



South Putnam Community School Corporation - South Putnam HS & Central ES Elementary School Roof Replacement

April 15, 2024

ADDENDUM NO. 1

This addendum is issued as a supplement to the plans and specifications and shall be considered an integral part of the same.

Item: 1.01

Location: Replace Specification Manual

Description: Alternate bid form revised to include 3 lines for Alternate 13 for each base bid. Section 01 12 00 Contract Summary, start date was changed to May 28. Section 01 23 00 Alternates revised Alternate 13 to 13a, 13b and 13c.

Item: 1.02

Location: Add Site Logistics Plan

Description: Site logistics with locations for contractor parking, staging, etc.

Item: 1.03

Description: Add SPCSC SP HS & CES Roof Replacement Prebid Meeting Notes and Sign in Sheet.


Project Manual

South Putnam Roof Replacements

South Putnam Community School
Corporation
Greencastle, Indiana



Project No. 222152.05
Divisions 00 - 22
March 22, 2024



DOCUMENT 00 01 10 - TABLE OF CONTENTS

Book 1 of 1

INTRODUCTORY INFORMATION

DIVISION 00: PROCUREMENT AND CONTRACTING REQUIREMENT

00 01 01	Project Title Page
00 01 10	Table of Contents
00 11 13	Advertisement for Bids
00 11 16	Invitation to Bid
00 21 13	Instructions to Bidders
00 22 13	Supplementary Instructions to Bidders
00 26 00	Procurement Substitution Request
00 26 00.01	Procurement Substitution Request Form
	Bidders Checklist
00 41 13	Bid Form
	Alternate Bid Form
	Indiana Contractor Qualification Certification
	Background Check & Drug Testing Certificate of Compliance
	Iran Investment Certification
	Long Lead Times
00 60 00	Project Forms

DIVISION 01: GENERAL REQUIREMENTS

01 12 00	Contract Summary
01 23 00	Alternates
01 33 00	Submittal Procedures
01 40 00	Quality Requirements
01 60 00	Product Requirements
01 73 29	Cutting and Patching

SPECIFICATIONS

DIVISION 02: EXISTING CONDITIONS

02 41 19	Selective Demolition
----------	----------------------

DIVISION 05: METALS

05 01 30	Maintenance of Steel Roof Decking
----------	-----------------------------------

DIVISION 06: WOOD, PLASTICS, AND COMPOSITES

06 10 63	Exterior Rough Carpentry
----------	--------------------------

DIVISION 07: THERMAL AND MOISTURE PROTECTION

07 53 23	Thermoset Single-ply Membrane Roofing – Alternate
07 54 00	Thermoplastic Single-ply Membrane Roofing – Base Bid
07 62 00	Sheet Metal Flashing and Trim
07 71 19	Manufactured Gravel Stops and Fasciae
07 72 00	Roof Accessories
07 92 00	Joint Sealants

DIVISION 22: PLUMBING

22 14 26	Roof Drains
----------	-------------

SCHEDULE OF DRAWINGS

G-001	Title Sheet
G-002	General Notes
G-003	Partial Site Plan
G-004	Wind Calculation
A-101	South Putnam HS RF01 Partial Roof Plan – Base Bid 1
A-102	South Putnam HS RF02/RF03 Partial Roof Plan – Base Bid 2
A-103	Central ES Roof Plan – Base Bid 3
A-501-517	Roof Details

END OF TABLE OF CONTENTS

PROJECT TITLE PAGE

South Putnam Roof Replacements

South Putnam Community School Corporation
Greencastle, Indiana

Project No. 222152.05

Architects/Engineers

Fanning/Howey Associates, Inc.
350 E. New York St.
Suite 300
Indianapolis, IN 46204
Phone No. 317/848-0966

Roof Consultants

Technical Assurance
160 West Carmel Dr.
Suite 244
Carmel, IN 46032

Construction Manager

Michael Kinder and Sons
6055 Innovation Blvd.
Fort Wayne, Indiana 46818

END OF PROJECT TITLE PAGE

SOUTH PUTNAM HIGH SCHOOL ATHLETIC LIGHTING AND P.A. REPLACEMENT

NOTICE TO BIDDERS

Notice is hereby given that the South Putnam Community School Corporation and Michael Kinder & Sons, Inc. (CMA) have entered into a contract pursuant to which Michael Kinder & Sons, Inc. will be providing all of the Construction Manager as advisor services in connection with the South Putnam High School and Central Elementary School Roof Replacement Project. Accordingly, Michael Kinder and Sons, Inc. will be receiving sealed bids from qualified contractors, as determined by Michael Kinder and Sons, Inc. in its sole and complete discretion, for the work and supply of materials for the South Putnam High School and Central Elementary School Roof Replacement Project.

South Putnam High School and Central Elementary School Roof Replacement Project contractors bid will be accepted at the South Putnam Community School Corporation, 3999 South US Hwy 231, Greencastle, IN 46135 until 2:00 p.m. (local time) on April 25, 2024. Bids received prior to 2:00 p.m. (local time) on April 25, 2024 must be mailed and/or delivered to the South Putnam Community School Corporation administration office for and on behalf of Michael Kinder and Sons, Inc. Bids will be opened and read aloud immediately after 2:00 p.m.

Bid Package is as follows:

- Bid Package 07a – South Putnam High School and Central Elementary School Roof Replacement Project

A Pre-Bid Conference will be held on April 11, 2024, at 11:00 a.m. local time, at South Putnam Middle School/High School, 1780 East U.S. Hwy 40, Greencastle, IN 46135.

All bidding and construction shall be in accordance with construction documents prepared by Fanning Howey all of the terms and conditions of which are incorporated herein by reference. Bidders desiring digital access to construction and bidding documents shall email Larry Easterday of Michael Kinder and Sons, Inc. at leasterday@kindewrandsons.com to receive digital access at no costs. Bidders desiring printed documents shall pay for their own cost of printing, shipping, and handling.

Each bid shall include with such bid, a certified check or bid bond made payable to South Putnam Community School Corporation for an amount not less than five percent (5%) of the maximum bid. Should a successful bidder withdraw its bid or fail to execute a satisfactory contract with South Putnam Community School Corporation, South Putnam Community School Corporation may then declare the bid deposit or bid bond to be forfeited as liquidated damages.

Each successful bidder shall enter into a contract with South Putnam Community School Corporation.

Each successful bidder will be required to furnish Performance & Payment Bonds which cover faithful performance of the contract and the payment of all obligations arising thereunder. Said bonds shall remain in full force and effect for one year from the substantial completion of the Work. The bonds will be made out to South Putnam Community School Corporation.

The contract will be awarded to the lowest responsive and responsible bidder complying with the conditions for bidding, provided the bid is reasonable and it is to the best interest of South Putnam Community School Corporation.

Bids may be hand delivered and/or delivered by delivery service at the location listed above. Bids not reaching said location by 2:00 p.m. (local time), on April 25, 2024 will be returned unopened to the original bidder.

South Putnam Community School Corporation reserves the right to reject any and all bids or waive any or all informalities, irregularities and/or inconsistencies in, or with respect to, any or all bids.

END OF NOTICE TO BIDDERS

SOUTH PUTNAM HIGH SCHOOL & CENTRAL ELEMENTARY SCHOOL
ROOF REPLACEMENT PROJECT

SECTION 00 11 16 - INVITATION TO BID

PART 1 - GENERAL

1.1 PROJECT INFORMATION

- A. Notice to Bidders: Qualified bidders are invited to submit bids for Project as described in this Document according to the Instructions to Bidders.
- B. Project Identification: SOUTH PUTNAM HIGH SCHOOL & CENTRAL ELEMENTARY SCHOOL ROOF REPLACEMENT PROJECT.
- C. Project Location: South Putnam High School and Central Elementary School, 1780 East U.S. Hwy 40, Greencastle, IN 46135
- D. Owner: South Putnam Community School Corporation
 - 1. Owner's Representative: Corey Smith, Superintendent.
- E. Architect: Fanning Howey Associates, David Roan.
- F. Construction Manager: Michael Kinder and Sons, Inc. Doug Kinder, Larry Easterday, Heath Troyer
- G. Project Description: Project consists of replacing roofing and all required support work as denoted on the contract documents.
- H. Construction Contract: Bids will be received for the following Work:
 - 1. South Putnam High School & Central Elementary School Roof Replacement, one bid package for all roofing replacement scope of work.

1.2 BID SUBMITTAL AND OPENING

- A. Owner will receive sealed bids(original + one copy) until the bid time and date at the location indicated below. Owner will consider bids prepared in compliance with the Instructions to Bidders issued by Owner, and delivered as follows:
 - 1. Bid Date: April 25, 2024
 - 2. Bid Time: 2:00 p.m., local time.
 - 3. Location: South Putnam Community School Corporation Administration Office, 3999 South US Hwy 231, Greencastle, IN 46135
- B. Bids will be thereafter publicly opened and read aloud.

SOUTH PUTNAM HIGH SCHOOL & CENTRAL ELEMENTARY SCHOOL
ROOF REPLACEMENT PROJECT

1.3 BID SECURITY

- A. Bid security shall be submitted with each bid in the amount of 5 percent of the bid amount. No bids may be withdrawn for a period of 60 days after opening of bids. Owner reserves the right to reject any and all bids and to waive informalities and irregularities.

1.4 PREBID CONFERENCE

- A. A prebid conference for all bidders will be held at South Putnam High School on April 11, 2024, starting at 11:00 a.m.. Prospective bidders are requested to attend. Bidders will be allowed to walk through as necessary. Hard hat and high vis outwear are required.

1.5 DOCUMENTS

- A. Online Procurement of Contract Documents will be provided to **prospective prime bidders only**. Only electronic sets of documents will be issued. Contact the Construction Manager representative, Larry Easterday, via email, leasterday@kinderandsons.com to request documents.
- B. Documents will also be available through Eastern Engineering, Construct Connect, Builders Exchange and The Dodge Room.
- C. Bidders desiring printed documents shall pay for their own cost of printing, shipping and handling.

1.6 TIME OF COMPLETION

- A. Bidders shall begin the Work on receipt of the Notice to Proceed and shall complete the Work within the Contract Time.

1.7 BIDDER'S QUALIFICATIONS

- A. Bidders must be properly licensed under the laws governing their respective trades and be able to obtain insurance and bonds required for the Work. A Performance Bond, a separate Labor and Material Payment Bond, and Insurance in a form acceptable to Owner will be required of the successful Bidder.

END OF SECTION 00 11 16

SECTION 00 21 13 - INSTRUCTIONS TO BIDDERS

PART 1 -

1.1 INSTRUCTIONS TO BIDDERS

- A. AIA Document A701, "Instructions to Bidders," is hereby incorporated into the Procurement and Contracting Requirements by reference.

- 1. An electronic sample copy of AIA Document A701, "Instructions to Bidders," is available upon request to Michael Kinder and Sons, Inc.

END OF SECTION 00 21 13

DOCUMENT 002213 - SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

1.1 INSTRUCTIONS TO BIDDERS

- A. Instructions to Bidders for Project consist of the following:
 - 1. AIA Document A701, "Instructions to Bidders
 - 2. The following Supplementary Instructions to Bidders that modify and add to the requirements of the Instructions to Bidders.

1.2 SUPPLEMENTARY INSTRUCTIONS TO BIDDERS, GENERAL

- A. The following supplements modify AIA Document A701, "Instructions to Bidders." Where a portion of the Instructions to Bidders is modified or deleted by these Supplementary Instructions to Bidders, unaltered portions of the Instructions to Bidders shall remain in effect.

1.3 ARTICLE 2 - BIDDER'S REPRESENTATIONS

- A. Add Section 2.1.3.1:
 - 1. 2.1.3.1 - The Bidder has investigated all required fees, permits, and regulatory requirements of authorities having jurisdiction and has properly included in the submitted bid the cost of such fees, permits, and requirements not otherwise indicated as provided by Owner.
- B. Add Section 2.1.5:
 - 1. 2.1.5 - The Bidder is a properly licensed Contractor according to the laws and regulations of the State of Indiana, Putnam County and meets qualifications indicated in the Procurement and Contracting Documents.
- C. Add Section 2.1.6:
 - 1. 2.1.6 - The Bidder has incorporated into the Bid adequate sums for work performed by installers whose qualifications meet those indicated in the Procurement and Contracting Documents.

1.4 ARTICLE 3 - BIDDING DOCUMENTS

- A. 3.4 - Addenda:
 - 1. Delete Section 3.4.3 and replace with the following:
 - a. 3.4.3 - Addenda may be issued at any time prior to the receipt of bids.
 - 2. Add Section 3.4.4.1:

- a. 3.4.4.1 - Owner may elect to waive the requirement for acknowledging receipt of 3.4.4 Addenda as follows:
 - 1) 3.4.4.1.1 - Information received as part of the Bid indicates that the Bid, as submitted, reflects modifications to the Procurement and Contracting Documents included in an unacknowledged Addendum.
 - 2) 3.4.4.1.2 - Modifications to the Procurement and Contracting Documents in an unacknowledged Addendum do not, in the opinion of Owner, affect the Contract Sum or Contract Time.

1.5 ARTICLE 4 - BIDDING PROCEDURES

A. 4.1 - Preparation of Bids:

- 1. Add Section 4.1.1.1:
 - a. 4.1.1.1 - Printable electronic Bid Forms and related documents are available from Construction Manager.
- 2. Add Section 4.1.9:
 - a. 4.1.8 - The Bid shall include unit prices when called for by the Procurement and Contracting Documents. Owner may elect to consider unit prices in the determination of award. Unit prices will be incorporated into the Contract.
- 3. Add Section 4.1.10:
 - a. 4.1.9 - Owner may elect to disqualify a bid due to failure to submit a bid in the form requested, failure to bid requested alternates or unit prices, failure to complete entries in all blanks in the Bid Form, or inclusion by the Bidder of any alternates, conditions, limitations or provisions not called for.

B. 4.3 - Submission of Bids:

- 1. Add Section 4.3.1.2:
 - a. 4.3.1.2 - Include Bidder's Contractor License Number applicable in Project jurisdiction on the face of the sealed bid envelope.

C. 4.4 - Modification or Withdrawal of Bids:

- 1. Add the following sections to 4.4.2:
 - a. 4.4.2.1 - Such modifications to or withdrawal of a bid may only be made by persons authorized to act on behalf of the Bidder. Authorized persons are those so identified in the Bidder's corporate bylaws, specifically empowered by the Bidder's charter or similar legally binding document acceptable to Owner, or by a power of attorney, signed and dated, describing the scope and limitations of the power of attorney. Make such documentation available to Owner at the time of seeking modifications or withdrawal of the Bid.

- b. 4.4.2.2 - Owner will consider modifications to a bid written on the sealed bid envelope by authorized persons when such modifications comply with the following: the modification is indicated by a percent or stated amount to be added to or deducted from the Bid; the amount of the Bid itself is not made known by the modification; a signature of the authorized person, along with the time and date of the modification, accompanies the modification. Completion of an unsealed bid form, awaiting final figures from the Bidder, does not require power of attorney due to the evidenced authorization of the Bidder implied by the circumstance of the completion and delivery of the Bid.

D. 4.6 - Subcontractors, Suppliers, and Manufacturers List Bid Supplement:

1. Add Section 4.6:

- a. 4.6 - Provide list of major subcontractors, suppliers, and manufacturers furnishing or installing products no later than two (2) business days following CM's request.

1.6 ARTICLE 5 - CONSIDERATION OF BIDS

A. 5.2 - Rejection of Bids:

1. Add Section 5.2.1:

- a. 5.2.1 - Owner reserves the right to reject a bid based on Owner's and Architect's evaluation of qualification information submitted following opening of bids. Owner's evaluation of the Bidder's qualifications will include: status of licensure and record of compliance with licensing requirements, record of quality of completed work, record of Project completion and ability to complete, record of financial management including financial resources available to complete Project and record of timely payment of obligations, record of Project site management including compliance with requirements of authorities having jurisdiction, record of and number of current claims and disputes and the status of their resolution, and qualifications of the Bidder's proposed Project staff and proposed subcontractors.

1.7 ARTICLE 6 - POSTBID INFORMATION

A. 6.1 - Contractor's Qualification Statement:

B. 6.3 - Submittals:

1. Add Section 6.3.1.4:

- a. 6.3.1.4 - Submit information requested in Sections 6.3.1.1, 6.3.1.2, and 6.3.1.3 no later than two (2) business days following CM's request.

1.8 ARTICLE 7 - PERFORMANCE BOND AND PAYMENT BOND

A. 7.1 - Bond Requirements:

1. Add Section 7.1.1.1:
 - a. 7.1.1.1 - Both a Performance Bond and a Payment Bond will be required, each in an amount equal to 100 percent of the Contract Sum.
 - B. 7.2 - Time of Delivery and Form of Bonds:
 1. Delete the first sentence of Section 7.2.1 and insert the following:
 - a. The Bidder shall deliver the required bonds to Owner no later than ten (10) days after the date of Notice of Intent to Award and no later than the date of execution of the Contract, whichever occurs first. Owner may deem the failure of the Bidder to deliver required bonds within the period of time allowed a default.
 2. Delete Section 7.2.3 and insert the following:
 - a. 7.2.3 - Bonds shall be executed and be in force on the date of the execution of the Contract.
- 1.9 ARTICLE 8 – ENUMERATION OF THE PROPOSED CONTRACT DOCUMENTS
- A. Change 8.1.1 to AIA A132. A copy is available upon request.
 - B. Delete 8.1.2 through 8.1.9.
- 1.10 ARTICLE 9 - EXECUTION OF THE CONTRACT
- A. Add Article 9:
 1. 9.1.1 - Subsequent to the Notice of Intent to Award, and within 10 days after the prescribed Form of Agreement is presented to the Awardee for signature, the Awardee shall execute and deliver the Agreement to Owner through Michael Kinder and Sons, Inc., in such number of counterparts as Owner may require.
 2. 9.1.2 - Owner may deem as a default the failure of the Awardee to execute the Contract and to supply the required bonds when the Agreement is presented for signature within the period of time allowed.
 3. 9.1.3 - Unless otherwise indicated in the Procurement and Contracting Documents or the executed Agreement, the date of commencement of the Work shall be the date of the executed Agreement.
 4. 9.1.4 - In the event of a default, Owner may declare the amount of the Bid security forfeited and elect to either award the Contract to the next responsible bidder or re-advertise for bids.

END OF DOCUMENT 002213

DOCUMENT 00 26 00.00 - PROCUREMENT SUBSTITUTION PROCEDURES

1.1 DEFINITIONS

- A. Procurement Substitution Requests: Requests for changes in products, materials, equipment, and methods of construction from those indicated in the Procurement and Contracting Documents, submitted prior to receipt of bids.
- B. Substitution Requests: Requests for changes in products, materials, equipment, and methods of construction from those indicated in the Contract Documents, submitted following Contract award. See Section 012500 "Substitution Procedures" for conditions under which Substitution requests will be considered following Contract award.

1.2 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

1.3 PROCUREMENT SUBSTITUTIONS

- A. Procurement Substitutions, General: By submitting a bid, the Bidder represents that its bid is based on materials and equipment described in the Procurement and Contracting Documents, including Addenda. Bidders are encouraged to request approval of qualifying substitute materials and equipment when the Specifications Sections list materials and equipment by product or manufacturer name.
- B. Procurement Substitution Requests will be received and considered by Owner when the following conditions are satisfied, as determined by A/E; otherwise requests will be returned without action:
 - 1. Extensive revisions to the Contract Documents are not required.
 - 2. Proposed changes are in keeping with the general intent of the Contract Documents, including the level of quality of the Work represented by the requirements therein.
 - 3. The request is fully documented and properly submitted.

1.4 SUBMITTALS

- A. Procurement Substitution Request: Submit to Construction Manager and A/E. Procurement Substitution Request must be made in writing in compliance with the following requirements:
 - 1. Requests for substitution of materials and equipment will be considered if received no later than 10 days prior to date of bid opening.
 - 2. Submittal Format: Electronically submit each written Procurement Substitution Request, using form bound in Project Manual in accordance with Division 00 Section "Instructions to Bidders".
 - a. Identify the product or the fabrication or installation method to be replaced in each request. Include related Specifications Sections and drawing numbers.
 - b. Provide complete documentation on both the product specified and the proposed substitute, including the following information as appropriate:
 - 1) Point-by-point comparison of specified and proposed substitute product data, fabrication drawings, and installation procedures.
 - 2) Copies of current, independent third-party test data of salient product or system characteristics.
 - 3) Samples where applicable or when requested by A/E.
 - 4) Detailed comparison of significant qualities of the proposed substitute with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.

- 5) Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - 6) Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, which will become necessary to accommodate the proposed substitute.
 - c. Provide certification by manufacturer that the substitute proposed is equal to or superior to that required by the Procurement and Contracting Documents, and that its in-place performance will be equal to or superior to the product or equipment specified in the application indicated.
 - d. Bidder, in submitting the Procurement Substitution Request, waives the right to additional payment or an extension of Contract Time because of the failure of the substitute to perform as represented in the Procurement Substitution Request.
- B. A/E's Action:
- 1. A/E may request additional information or documentation necessary for evaluation of the Procurement Substitution Request. A/E will notify all bidders of acceptance of the proposed substitute by means of an Addendum to the Procurement and Contracting Documents.
- C. A/E's approval of a substitute during bidding does not relieve Contractor of the responsibility to submit required shop drawings and to comply with all other requirements of the Contract Documents.

END OF DOCUMENT 00 26 00

DOCUMENT 00 26 00.01 - SUBSTITUTION REQUEST FORM
(During Procurement)

To _____ Date: _____

Project _____

We hereby submit for your consideration the following product instead of the specified item(s) for the above project:

<u>Section</u>	<u>Article/Paragraph (Page)</u>	<u>Specified Item</u>
Proposed Substitution: _____	_____	Model: _____
Manufacturer: _____		Phone: _____

Attach complete technical data including laboratory tests if applicable.

Include complete information changes to Drawings and/or Specifications which proposed substitution require for proper installation.

Fill in Blanks Below, use additional sheets if necessary:

- A. Does the substitution affect dimensions shown on Drawings?

- B. Will the undersigned pay for changes to building design, including engineering and detailing costs caused by substitution, if any?

- C. What effect does substitution have on other trades? _____

- D. Differences between proposed substitution and specified item?

- E. Manufacturer's guarantees of proposed and specified items are:
_____ Same _____ Different (explain on attachment)

The undersigned certifies that the function, appearance and quality are equivalent or superior to the specified item.

Submitted By:

Signature

Firm

Address

Telephone

Fax

Email

For Use by Design Consultant:

Accepted	Accepted as Noted
Not Accepted	Received too Late
PM _____	
Specifier _____	
Date _____	
Remarks _____	
Telephone _____	

END OF SECTION 00 26 00.01

**BIDDER REMINDER LIST TO BE COMPLETED AND
INCLUDED IN BID PACKAGE FOR REVIEW AT BID OPENING**

	YES	NO
Have you properly and completely executed the Bid Form ?		
Is the Bid Total written in both words and figures?		
Are the Alternate amounts in both words and figures and noted as Add or Deduct ?		
Is PART II of the bid form completely filled out?		
Is the Signatures Page completely filled out?		
Is the Written Drug Testing Plan included?		
Did you include the original and one copy of the bid form?		
Have you included the unit price bid form from Section 01 22 00?		
Have you included allowances on bid form as per Section 01 21 00?		
Have you enclosed a certified check or Bid Bond ? (Note: bond must be signed by Surety and Principal)		
If bidding a Combination Bid , a separate bid form in a separate envelope indicating on the envelope cover with packages are being combined. A combined amount bid bond is to be included in this envelope as well as any combined alternates for applicable combined bid packages.		
Have you included your company's Financial Statement ? This can be in a separate sealed envelope.		
Will you send Contractors and Products List to the Construction Manager within 48 Hours of the Letter of Intent?		
On the outside of the envelope containing your Bid have you indicated: <ul style="list-style-type: none"> • Name of project • Name of bidder • Bid package number and name. • Date and time of closing of bids 		

NOTE: IF ANY OF THE REQUIRED BIDDING DOCUMENTS ARE NOT INCLUDED, DATED OR PROPERLY EXECUTED, THE CONTRACTOR'S BID MAY NOT BE ACCEPTED.

CONTRACTOR'S BID FOR PUBLIC WORKS FORM NO. 96

Format (Revised 2013) (Amended for SPCSC project)

SOUTH PUTNAM HIGH SCHOOL & CENTRAL ELEMENTARY SCHOOL ROOF
REPLACEMENT
BID FORM – PART I

Bidder: _____

Address: _____

Phone: _____ Estimator/Sales Person: _____

Estimator/Sales Person Email: _____

Bid Package Number: 07A ROOFING

Bid Package Title: 07A ROOFING

To: **SOUTH PUTNAM COMMUNITY SCHOOL CORPORATION**
3999 South U.S. Highway 231
Greencastle, IN 46135

I have received and carefully reviewed the Contract Documents prepared and certified by:

Architect:

Fanning Howey
350 East New York St. Suite 300
Indianapolis, IN 46204
Phone: (317) 848-0966

Construction Manager:

Michael Kinder and Sons, Inc.
6055 Innovation Blvd.
Fort Wayne, IN 46818
Phone: (260) 744-4359

In submitting this proposal, I agree to the following:

1. To hold my bid open sixty (60) days after receipt of bids.
2. To accept the provisions in the Instructions to Bidders.
3. To enter into and execute a contract in the form contained in this bid package, if awarded on the basis of this proposal, and to furnish Contract Performance, Payment, and Maintenance Bonds. The cost of this bond is included in base bid at this time.
4. To accomplish the Work in accordance with the Contract Documents.
5. To submit Certificates of Insurance for the coverage specified in the Contract Documents.

BID CONFIRMATIONS: I have examined all documents, all drawings and submit the following proposal. I have received either hard copies or via electronic format all bid documents and verify that I have reviewed all available information.

Received and include provisions for the following Addendum Nos. _____

• Reviewed all bid packages provided in Project Manual/Bid Package Description. YES _____ NO _____

• Attended Pre-Bid Conference YES _____ NO _____

• Visited the Jobsite YES _____ NO _____

• ~~Acknowledge receipt and reviewed MKS's Subcontract and/or Purchase Order sample that was included in this bid manual and understand that edits to the contract language of the final agreement will not be allowed. Signed contract or checklist are not necessary when submitting a bid but will be required once awarded the contract.~~

~~YES _____ NO _____~~

• Bidder has reviewed the Schedule provided and the intent of the schedule can be met:

YES _____ NO _____

• Bidder has included their Written Drug Testing Plan that covers all employees of the bidder who will perform Work on the public Work project and meets or exceeds the requirements set in IC 4-13-18-5 or IC 4-13-18-6.

YES _____ NO _____

The undersigned further agrees to furnish a bond or certified check with this Bid for an amount specified in the Notice to Bidders.

If additional units of material included in the contract are needed, the cost of units must be the same as that shown in the original contract if accepted by the governmental unit. If the bid is to be awarded on a unit basis, the itemization of the units shall be shown on a separate attachment.

The successful bidder and its Contractors, if any, shall not discriminate against or intimidate any employee, or applicant for employment, to be employed in the performance of this contract, with respect to any matter directly or indirectly related to employment because of race, religion, color, sex, national origin, or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

CERTIFICATION OF USE OF UNITED STATES STEEL PRODUCTS
(if applicable)

I, the undersigned bidder, or agent as a contractor on a public Works project, understand my statutory obligation to use steel products made in the United States (I.C. 5-16-8-2). I hereby certify that I and all Contractors employed by me for this project will use U.S. steel on this project if awarded. I understand that violations hereunder may result in forfeiture of contractual payments.

ALLOWANCES: The following allowances are to be included in bid.

\$ 75,000.00 for Base Bid Allowance

\$ for 3,200 SF Steel Deck Repair

\$ for 1,300 SF Steel Deck Replacement

\$ for 6,400 SF Lightweight Concrete Deck Repair

\$ for 2,600 SF Lightweight Concrete Deck Replacement

\$ for Replacing 1 Exhaust Fan Hood

BASE BID: I agree to execute the Work of the following Bid Package indicated for the lump sum amount given therein.

BID PACKAGE NUMBER: 07A ROOFING

BASE BID 1 RF01 – 43,100 SF AT HIGH SCHOOL

DOLLAR AMOUNT: \$

DOLLAR AMOUNT WORDS:

BASE BID 2 RF02/RF03 – 25,200 SF AT HIGH SCHOOL

DOLLAR AMOUNT: \$

DOLLAR AMOUNT WORDS:

BASE BID 3 RF01 – 25,700 SF AT ELEMENTARY SCHOOL

DOLLAR AMOUNT: \$

DOLLAR AMOUNT WORDS:

COMBINATION OF BIDS: Any bidder desiring to submit a bid combining more than one bid package must first complete the separate bid package bid prior to completing the combination bid. Each combination bid must be submitted on a separate bid form and indicate on the bid form cover which packages are being combined. In addition, each separate combined bid form must include any combined alternates for the applicable combined bid packages.

COMBINATION BID PACKAGE NUMBERS: _____

BID PACKAGE DESCRIPTIONS: _____

COMBINATION DOLLAR AMOUNT: \$_____

COMBINATION DOLLAR AMOUNT WORDS: _____

BID FORM - PART II

(For projects of \$150,000 or more – IC 36-1-12-4)

These statements are to be submitted under oath by each bidder with, and as a part of, its bid. (Attach additional pages for each section as needed.)

SECTION I EXPERIENCE QUESTIONNAIRE

- 1. What public Works projects has your organization completed for the period of one (1) year prior to the date of the current bid?**

Contract Amount	Class of Work	Completion Date	Name and Address of Owner

- 2. What public Works projects are now in process of construction by your organization?**

Contract Amount	Class of Work	Completion Date	Name and Address of Owner

- 3. Have you ever failed to complete any Work awarded to you?_____If so, where, and why?**

- 4. List references from private firms for which you have performed Work.**

SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

1. Explain your plan or layout for performing proposed Work. (Examples could include a narrative of when you could begin, complete the Work, number of Workers, etc. and any other information which you believe would enable the Construction Manager to consider your bid.)

2. Please list the names and addresses of all Contractors (i.e., persons or firms outside your own firm who have performed part of the Work) that you have used on public Works projects during the past five (5) years along with a brief description of the Work done by each Contractor.

3. If you intend to sublet any portion of the Work, state the name, and addresses of each Contractor, equipment to be used by the Contractor, and whether you will require a bond. However, if you are unable to currently provide a listing, please understand a listing must be provided prior to contract approval. Until the completion of the proposed project, you are under a continuing obligation to immediately notify the Construction Manager in the event that you subsequently determine that you will use a Contractor on the proposed Work.

4. What equipment do you have available to use for the proposed Work? Any equipment used by Contractors may also be required to be listed by the Construction Manager.

5. Have you entered into contracts or received offers for all materials which substantiate the prices used in preparing your bid? If not, please explain the rationale used which corroborate the process listed.

SECTION III CONTRACTOR'S FINANCIAL STATEMENT

Attachment of bidder's financial statement is mandatory. Any bid submitted without said financial statement as required by statute shall thereby be rendered invalid. The financial statement provided hereunder to the Construction Manager must be specific enough in detail so that the Construction Manager can make a proper determination of the bidder's capability for completing the Work, if awarded.

SECTION IV CONTRACTOR NON-COLLUSION AFFIDAVIT

The undersigned bidder or agent, being duly sworn on oath, says that it has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by the bidder, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to induce anyone to refrain from bidding, and that this bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

The undersigned bidder or agent further says that no person or persons, firms, or corporations has, have, or will receive directly or indirectly, any rebate, fee, gift, commission, or thing of value on account of such contract.

SECTION V OATH AND AFFIRMATION

I HEREBY AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE FACTS AND INFORMATION CONTAINED IN THE FOREGOING BID FOR PUBLIC WORKS ARE TRUE AND CORRECT

Sole Proprietor:

IN TESTIMONY WHEREOF, the bidder has hereunto set his/her hand this _____ day of _____ 2024.

Bidder: _____

Partnership:

IN TESTIMONY WHEREOF, the bidder has hereunto set its hand this _____ day of _____ 2024.

Firm: _____

By: _____

Individual Names:

Corporation:

IN TESTIMONY WHEREOF, the bidder has hereunto set its hand this _____ day of _____ 2024.

Corporation: _____

President: _____

Secretary: _____

(SEAL)

ACKNOWLEDGEMENT

STATE OF _____

COUNTY OF _____

Before me, a Notary Public, personally appeared the above-named _____

Swore that the statements contained in the foregoing document are true and correct.

Subscribed and sworn to before me this _____ day of _____ 2024

Notary Public Name

My Commission Expires: _____

County of Residence: _____

BID OF

(Contractor)

(Address)

FOR
PUBLIC WORKS PROJECTS
OF

Filed _____, _____

Action taken _____

END OF SECTION 004584

ALTERNATE BIDS

I agree to execute the Work for this Bid Package indicated for the lump sum amount given therein. (MUST CIRCLE ADD or DEDUCT). Base bid amount may be increased or decreased in accordance with such of the following alternate proposals as may be selected. If there is no bid submitted for the alternate, it will be assumed that the alternate has no effect on the bidder's scope of Work. See Section 01 23 00 Alternates for a complete description of the scope of work.

ALTERNATE BID #1:	State the cost to increase new PVC membrane thickness to 80 mil at HS RF01 area
ADD/DEDUCT	(\$ _____)
ALTERNATE BID #2:	State the cost to provide EPDM 60 mil membrane at HS RF01
ADD/DEDUCT	(\$ _____)
ALTERNATE BID #3:	State the cost to increase EPDM to 90 mil at HS RF01
ADD/DEDUCT	(\$ _____)
ALTERNATE BID #4:	State the cost to increase new PVC thickness to 80 mil at HS RF02/RF03
ADD/DEDUCT	(\$ _____)
ALTERNATE BID #5:	State the cost to provide EPDM 60 mil membrane at HS RF02/RF03
ADD/DEDUCT	(\$ _____)
ALTERNATE BID #6:	State the cost to increase EPDM to 90 mil at HS RF02/RF03
ADD/DEDUCT	(\$ _____)
ALTERNATE BID #7:	State the cost to increase new PVC membrane thickness to 80 mil at CES RF01
ADD/DEDUCT	(\$ _____)
ALTERNATE BID #8:	State the cost to provide EPDM 60 mil membrane at CES RF01
ADD/DEDUCT	(\$ _____)
ALTERNATE BID #9:	State the cost to increase EPDM to 90 mil at CES RF01
ADD/DEDUCT	(\$ _____)
ALTERNATE BID #10:	State the cost for HS RF01 to be completed in 2025
ADD/DEDUCT	(\$ _____)
ALTERNATE BID #11:	State the cost for HS RF02/RF03 to be completed in 2025
ADD/DEDUCT	(\$ _____)
ALTERNATE BID #12:	State the cost for CES RF01 to be completed in 2025
ADD/DEDUCT	(\$ _____)
ALTERNATE BID #13A:	State the cost to delete the Performance& Payment Bond to Base Bid 01.
ADD/DEDUCT	(\$ _____)
ALTERNATE BID #13B:	State the cost to delete the Performance& Payment Bond to Base Bid 02.
ADD/DEDUCT	(\$ _____)
ALTERNATE BID #13C:	State the cost to delete the Performance& Payment Bond to Base Bid 03.
ADD/DEDUCT	(\$ _____)

BACKGROUND CHECK & DRUG TESTING - CERTIFICATE OF COMPLIANCE

This is to certify that _____ (Contractor name) and all of its sub-contractors have screened and will continue to screen all employees providing services to the owner throughout the duration of the project.

A drug testing program will remain in place throughout the duration of the project.

Background check screening need only occur once at the beginning of the project, as long as the contractor and sub-contractors continually screen new hires and provide documentation of same in the form of re-submission of this form with the new date.

Background check screening shall include a minimum of the following information: local, state and national criminal history records check, sex and violent offender registry check through a website such as www.SafeHiringSolutions.com

_____ (Contractor name) shall further report arrest and/or filing of criminal charges against each employee within two business days of the occurrence and the disposition of such arrest or filing of charges throughout duration of project.

Non-compliance with these requirements shall be a breach of a material term of any contract and reason for termination. Personally identifiable information obtained in the implementation of this policy shall not be released except as necessary to implement this policy or to defend a decision made pursuant to it.

Authorized Signature

Date

INDIANA CONTRACTOR QUALIFICATION CERTIFICATION

Pursuant to Indiana Code 5-16-13, Contractor hereby certifies that he/she shall be qualified under either IC 4-13-6.4 (Qualification for State Public Works Projects) or IC 8-23-10 (Qualifications of Bidders for Contracts) prior to performing any work on a South Putnam Community School Corporation public works project. Contractor further certifies that subcontractors of Contractor awarded subcontracts on a Public Works Contract in excess of \$300,000 shall be qualified under the applicable statute. Contractor acknowledges that if he/she violates any of the foregoing qualification requirements, he/she shall be ineligible to bid on Public Works Contracts for such time period as the SPCSC determines.

Name of Company

By: _____
(Signature)

(Printed Name)

Title: _____

IRAN INVESTMENT CERTIFICATION

South Putnam Community School Corporation

South Putnam High School & Central

Elementary School Roof Replacement

The undersigned contractor hereby certifies in accordance with I.C. 5-22-16.5-1 et seq., to the above mentioned school corporation, that the undersigned is not engaged in investment activities in Iran as defined in the above cited statute

Signature

Printed Name

NOTE: These items must be filled in when submitting your bid. All days below refer to calendar days. All lead times greater than 4 weeks after receipt of LOI or contract must be shown below.

1.	Material Name/Equipment Name	
	Shop Drawing Lead Time (calendar days)	
	Delivery after Approved Shops received (calendar days)	
2.	Material Name/Equipment Name	
	Shop Drawing Lead Time (calendar days)	
	Delivery after Approved Shops received (calendar days)	
3.	Material Name/Equipment Name	
	Shop Drawing Lead Time (calendar days)	
	Delivery after Approved Shops received (calendar days)	
4.	Material Name/Equipment Name	
	Shop Drawing Lead Time (calendar days)	
	Delivery after Approved Shops received (calendar days)	
5.	Material Name/Equipment Name	
	Shop Drawing Lead Time (calendar days)	
	Delivery after Approved Shops received (calendar days)	
6.	Material Name/Equipment Name	
	Shop Drawing Lead Time (calendar days)	
	Delivery after Approved Shops received (calendar days)	
7.	Material Name/Equipment Name	
	Shop Drawing Lead Time (calendar days)	
	Delivery after Approved Shops received (calendar days)	
8.	Material Name/Equipment Name	
	Shop Drawing Lead Time (calendar days)	
	Delivery after Approved Shops received (calendar days)	
9.	Material Name/Equipment Name	
	Shop Drawing Lead Time (calendar days)	
	Delivery after Approved Shops received (calendar days)	
10.	Material Name/Equipment Name	
	Shop Drawing Lead Time (calendar days)	
	Delivery after Approved Shops received (calendar days)	

SECTION 00 60 00
PROJECT FORMS

1.1 FORM OF AGREEMENT

A. The following form of Owner/Contractor Agreement and form of the General Conditions shall be used for Project:

1. AIA A132 Standard Form of Agreement Between Owner and Contractor, Construction Manager as Advisor Edition
2. An electronic copy is available upon request.

B. Payment Forms:

1. Schedule of Values Form: AIA Document G703-1992 "Continuation Sheet."
2. Payment Application: AIA Document G702-1992/703-1992 "Application and Certificate for Payment and Continuation Sheet."
3. Exhibit C – Michael Kinder and Sons, Inc. Standard Lien Waivers
4. An electronic copy of each is available upon request.

END OF SECTION 00 60 00

SECTION 01 12 00 CONTRACT SUMMARY

Table of Contents

General Notes	2
Bid Package 07a South Putnam HS & Central ES Roof Replacement	6
Exhibit A Terms and Conditions	8
Exhibit C.....	19
Waiver of Lien to Date Sample	19
Subcontractor's Affidavit Sample	20
Sub-Subcontractor Waiver of Lien to Date Sample.....	21
Sub-Subcontractor's Affidavit Sample	21
Material Supplier Waiver of Lien to Date Sample	22
Material Supplier Affidavit Sample	22
Exhibit D Insurance Compliance Checklist.....	23

General Notes

Each bid package is responsible for the below items.

1. PROJECT SITE WILL BE 100% HARDHAT & SAFETY GLASSES. ALL CONTRACTORS ARE RESPONSIBLE TO PROVIDE HARDHATS & SAFETY GLASSES TO THEIR EMPLOYEES.
2. Each successful Prime Contractor is required to submit background checks for all onsite tradesman and supervisory personnel, including office staff that will be onsite. Include all lower tier contractors under contract to the Prime. Turn over background checks to MKS.
3. Personal Protective Equipment:
 - a. Subcontractors are required to wear hardhats.
 - b. Suitable work boots.
 - c. High visibility vest, shirt, sweatshirt, etc. throughout the project.
 - d. Long pants must be worn.
 - e. Shorts sleeves (4 inches) are permitted.
 - f. Shirts with sleeves must be worn and shall not have obscene, offensive, distasteful, or harassing slogans. Determination of what constitutes obscene, offensive, distasteful, and harassing is solely up to the discretion of the owner, and MKS.
 - g. Eye protection / safety glasses or side shields
4. All interactions with staff must be conducted professionally. Adherence to safety procedures outlined in each subcontractor's contract is mandatory throughout the project. Operators of lifts or equipment must be certified and carry their certification cards at all times. A trained competent person must be present on-site when performing work requiring such expertise as per OSHA regulations. Profanity or offensive language will not be tolerated.
5. Subcontractors are responsible for enforcing disciplinary measures among their employees. Superintendents and foremen are required to caution employees against safety breaches and terminate those who refuse to adhere. Serious and deliberate violations may warrant instant dismissal from the project, encompassing on-site tobacco usage, possession of alcohol, firearms, or illicit substances, engaging in altercations, tampering with emergency equipment, or disregarding fall protection protocols.
6. Compliance with MKS Fall Protection guidelines is mandatory whenever employees are exposed to falls exceeding six (6) feet. Failure to comply will result in immediate expulsion from the worksite.
7. Daily removal of debris, particularly combustible scraps, is mandatory.
8. Prompt reporting and documentation of all incidents are obligatory. Project foremen must report each incident immediately to the MKS site supervisor and respective safety personnel. Documentation should be completed on the day of the incident and includes injuries, property damage, theft, or non-compliance with stated rules and code of conduct.
9. AM/FM radios, CD players, MP3 players, personal entertainment devices, or similar items are prohibited on the construction site.
10. Construction vehicles must park in designated areas only. Unauthorized parking may result in towing.
11. Use of the Site: Limit use of the premises to work in areas indicated. Confine operations to areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which the Work is indicated.
 - a. Owner Occupancy: Allow for Owner occupancy.
 - b. Driveways and Entrances: Keep driveways and entrances outside of construction limits, serving the premises, clear and available to the Owner, the Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of

- materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on site.
- c. Construction personnel are prohibited from using owner facilities such as restrooms or breakrooms. Any person found breaking this rule will be asked to leave the site and not return.
12. Use of the Existing Building: Maintain the existing building in a weathertight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the building and its occupants during the construction period.
13. Owners Right to Maintain Operations
- a. During the course of this Project, normal and customary functions and operations must be maintained. The Contract Documents are intended to define a strict separation between the school activities of students and staff from the activities of the construction project.
 - b. The Construction Manager, Architect, and Owner will not tolerate any visible or audible actions initiated or responded to by any employees of Contractors on this Project toward any students, teachers, or staff members at the school system. Violators shall be promptly removed from the site.
 - c. The Owner intends to instruct students, teachers, and staff to refrain from communications with Contractor's personnel working on this Project. All communication with Owner and staff shall be through the Construction Manager.
 - d. Contractors must expend their best effort toward protection of the health, safety, and welfare of occupants on the Owner's property during the course of construction on this Project.
 - e. Contractors and Subcontractors shall be subject to such rules and regulations for the conduct of the Work as the Owner may establish. Employees shall be properly and completely clothed while working. Bare torsos, legs and feet will not be allowed.
 - f. Possession or consumption of alcoholic beverages or drugs, tobacco or other noxious behavior on the site is strictly prohibited. Violators shall be promptly removed from the site. Smoking is not permitted on school property or within school buildings.
14. The Work shall be performed in accordance with the health, safety and environmental regulations of the authorities having jurisdiction and all federal, state, and local laws.
15. Each bid package is required to understand and adhere to the project schedule, phasing plans and logistic plans.
16. Where bid documents reference the term "General Contractor" change to "Construction Manager".
17. Each bid package to include all mobilizations and demobilizations required for performance of the Work.
18. A single prime contract will be awarded as per the "Contract Summary". Contractors shall include Work required by the Specifications and Drawings for each contract area defined in the Schedule.
19. The contract will be AIA A132 Contract between Owner and Contractor, Construction Manager as Adviser Edition.
20. Each bid package shall provide protection of existing and new work by others during his operations. The costs associated with repair and/or replacement of materials damaged by his work operations will be the responsibility of the bid package that damaged. Each bid package shall provide adequate protection to all areas of existing finishes to remain during any operations performed under their scope of work.
21. Although specifications are allocated to respective bid packages each bid package must read and understand all contract documents assigned to the other trades.

22. Each bid package includes all work, including coordination with related work performed under other contracts, to result in a functional system or product.
23. Each Bid Package will perform all work in coordination with other trades and the CMA.
24. Use of motor oil or machine oil on or above slab will not be permitted. All lifts are required to be fitted with lift diapers to contain any oil leaks from the equipment. Diapers should be inspected periodically during each day of use.
25. Each Contractor utilizing a pipe cutting or threading tool shall have a sand box or litter box directly under said tool to protect floor from oil staining. Construction Manager reserves the right to immediately dispose of any threading/cutting tool on the project site that is being used without stated boxes underneath.
26. Clean-up is a Safety Priority. Accordingly, daily clean-up, i.e., broom clean, consistently organized and neatly stacked materials, and daily removal of trash to dumpsters by each Prime Contractor is required. No tolerance will be allowed for failure to comply. CMA shall issue one verbal request to the Prime Contractor's Foreman. If corrective action is needed, and if not corrected immediately or as requested, CMA will provide manpower to properly clean the Prime Contractor's area(s) and shall issue a deductive CO for the labor and material cost, plus 15% Administrative Fee.
27. Each bid package is required to give minimum 72 hours written notice prior to any disruption in utilities, roadway, or any other activity that would interrupt the normal operations of the Owner's facilities and shall receive written acknowledgement from CMA before undertaking any such work.
28. Each bid package must coordinate deliveries in advance with CMA project staff on a daily basis. Due to site security, logistics, space limitations, and Owner operations, deliveries that come directly to the site without prior knowledge or proper authorization will be rejected. Any deliveries that block traffic or pose any safety concern whatsoever shall require flagmen provided by responsible bid package. Deliveries must be received and unloaded by each bid package. CMA will not provide labor or equipment to unload deliveries from subcontractors.
29. Each bid package is responsible for obtaining written approval from CMA prior to proceeding with any extra work. If written approval is not received, payment for extra work will not be approved.
30. All bidders are responsible to review and ensure compliance with timeline issued for bidding and construction. Weather (eg. Rainout) days will be made up through longer hours, Saturdays, or Sunday. Each Prime Contractor is fully obligated to meet the requirements of the project schedule within these constraints.
31. When a bid package is to supply materials that will be installed by another bid package, the bid package supplying materials shall be responsible for submitting lay-out and product shop drawings to comply with project schedule.
32. Detailed notes provided for each bid package are provided for clarification purposes and do not represent a complete listing of scope of work. Bidders are responsible for the work assigned in the bid packages, specification and on the drawings.
33. Any access panels not shown on drawings but required by a bid package will be borne by said bid package.
34. Any wood or metal blocking required by a bid package that is not specifically shown on the drawings will be the responsibility of the said bid package.
35. Bid packages are to remove stickers, labels, clean and provide protection over finished products.
36. All submittals must be submitted per the specifications and in accordance with the project schedule.

37. All bidders must agree to terms and conditions of MKS subcontract agreement as defined in the specifications.
38. Building is not to be used for material storage. All materials are to be stored in trailers or off site until needed for installation. Preferably materials should be delivered just in time for installation in accord with the project schedule. See logistics plan for laydown areas.
39. Punch list Work – Upon delivery of a “Completion List” by CMA and later a punch list by the Architect, Engineer, and Owner each bid package shall provide a “Punch list Crew” as required to address open items and shall staff the crew with sufficient manpower of persons to complete all Punch list items within 5 days. Subcontractor to provide sufficient manpower that does not take away from other work required by the Project Schedule. Once in the Punch list Phase, CMA will hold weekly punch list meetings and require the Subcontractors punch list crew lead employee to attend, update progress, and coordinate with other trades as needed.
40. All closeout documentation is required to be submitted within 30 days of substantial completion. Final payments will not be made until all closeout documentation is received.
41. If temporary roof protection is not in place, each contractor accessing or traversing the roof is responsible for protection of the roof membrane. Contractors will be held liable for any damages resulting from failure to protect.
42. See Logistics Plan for staging areas.
43. Food and beverage consumption will be permitted in contractor provided break trailers or employees vehicles.
44. The project worksite is TOBACCO FREE! The use of tobacco, smoking, chewing, vaping, E-cig and sunflower seeds on the site will not be permitted. Anyone who violates will be removed from the project.
45. Project is exempt from Indiana sales tax.

Bid Package 07a South Putnam HS & Central ES Roof Replacement

Specifications:

Division 00 Procurement and Contracting Requirements	Division 01 General Requirements
05 01 30 Maintenance of Steel Roof Decking	06 10 63 Exterior Rough Carpentry
Div 07 – All Sections	22 14 26 Roof Drains

Supplemental Instructions to this Bid Package:

This bid package shall include, but shall not necessarily be limited to, the following scope of work:

1. This bid package is responsible for the labor, materials, supervision, taxes, insurance, equipment, placing, hoisting, scaffolding, protection, transportation, permits (General Contractor to provide general permit) licenses, fees necessary to complete this scope of work.
2. This bid package is responsible for visiting site to review existing conditions.
3. Prior to commencing any work on site, this bid package shall contact all utility companies for locating and flagging all existing utilities within the project boundaries if required. Any damage to existing utilities or structures is the responsibility of this contractor.
4. This bid package is responsible for providing dumpsters for debris generated by this scope of work.
5. This bid package is responsible for portable toilets for use by the tradesmen of this bid package.
6. All work to comply with O.S.H.A., City and State rules and regulations.
7. This bid package is responsible for adequate fire protection during construction.
8. This bid package is responsible for all required barricading associated with this work.
9. This bid package is responsible for a competent person observing or 100% tie-off will be required for all roofing work as required by OSHA.
10. This bid package is responsible to protect utilities, plumbing work/equipment, HVAC work/equipment, gas lines, and miscellaneous equipment shown to remain.
11. This bid package is responsible for coordinating delivery and offloading of materials.
12. This bid package is responsible for completing the bid form including all alternates and unit pricing as applicable. A .pdf copy of this form is included in this document.
13. See attached Supplemental Conditions "Exhibit A", "Exhibit C", and "Exhibit D" which will be part of the Contract Agreement between South Putnam Community School Corporation and this bid package.

Project Specific Requirements

14. This bid package is responsible for removing all existing roofing, roofing foam, gravel stops, flashings, roof drains, pipe flashings, all existing roofing materials down to lightweight concrete deck or metal deck. All debris is to be legally disposed of offsite.
15. This bid package is responsible for inspecting lightweight concrete substrate and complete spot repairs as required.
16. This bid package is responsible for the metal deck and complete spot repairs as required.
17. This bid package is responsible for any repairs to masonry joints sawed for flashings.
18. This bid package is responsible for furnishing and installing all blocking, both dimensioned lumber and plywood, as shown on the contract documents.
19. This bid package is responsible for elevating roof curbs to maintain flashing height as denoted on the contract documents.
20. This bid package is responsible for partnering with an Indiana licensed plumbing contractor for roof drain replacement and miscellaneous plumbing work associated with equipment removal.

21. This bid package is responsible for partnering with an Indiana licensed HVAC contractor for HVAC equipment removal work.
22. This bid package is responsible for partnering with an Indiana licensed electrical contractor for electrical work required for HVAC equipment removal work and any miscellaneous electrical work required for the reroof.
23. This bid package is responsible for temporary curb caps for weather when equipment is removed.
24. This bid package is responsible for temporary protection from weather when roof drains are removed.
25. This bid package is responsible for scheduling and coordinating all lower tier contractor work.
26. This bid package is responsible for furnishing and installing all roof membranes as denoted on the contract documents.
27. This bid package is responsible for furnishing and installing new gravel edge as denoted on the contract documents.
28. This bid package is responsible for furnishing and installing all flashings as denoted on the contract documents.
29. This bid package is responsible for furnishing and installing stainless steel bent plates as denoted on the contract documents.
30. This bid package is responsible for furnishing and installing all sealants associated with the work by this bid package.
31. This bid package is responsible for furnishing and installing all expansion joints as denoted on the contract documents.
32. This bid package is responsible for furnishing and installing all pipe boots, rain collars, sealants at pipe penetrations as denoted on the contract documents.
33. This bid package is responsible for removal and replacement of all roof drains as denoted on the contract documents.
34. This bid package is responsible for removal and replacing existing mechanical units as denoted on the contract documents.
35. All equipment that was disturbed will require testing by licensed contractors after reinstallation.
36. This bid package is responsible for grading and seeding all disturbed areas including repairs to any damage/ruts created by onsite equipment use.
37. All layout, both line and grade, for the new work is by this BP.
38. This bid package is responsible for As-Built drawings upon completion of work.
39. Work to start no earlier than May 28, 2024.
40. The work is to be completed, tested and owner training by August 2, 2024. If not completed, liquidated damages of \$ 500.00 per day will be deducted from prime bidders contract.

Exhibit A Terms and Conditions

SUPPLEMENTAL CONDITIONS:

DEFINITION OF CONTRACTOR – The term “Contractor” wherever it is used herein shall mean Michael Kinder & Sons, Inc.

1. Safety

- 1.1 The Subcontractor agrees that the prevention of accidents to workmen and property engaged upon or in the vicinity of the Subcontract Work is its responsibility. The Subcontractor agrees to comply with all Federal, State, Municipal and local laws, ordinances, rules, regulations, codes, standards, orders, notices and requirements concerning safety as shall be applicable to the Subcontract Work, including, among others, the Federal Occupational Safety and Health Act of 1970, as amended, and all standards, rules, regulations and orders which have been or shall be adopted or issued thereunder, and with the safety standards established during the progress of the Subcontract Work by the Contractor.
- 1.2 When so ordered, the Subcontractor shall stop any part of the Subcontract Work which the Contractor deems unsafe until corrective measures satisfactory to the Contractor have been taken. The Subcontractor agrees that it shall not have nor make any claim for damages arising from such stoppages. Should the Subcontractor fail to take appropriate corrective measures in a timely manner, the Contractor may do so at the cost and expense of the Subcontractor and may deduct the cost and expense thereof from any payments due or to become due to the Subcontractor. Failure on the part of the Contractor to stop unsafe practices shall in no way relieve the Subcontractor of its responsibility therefore.
- 1.3 **Safety Training and Competent or Qualified Person.** Each worker sent to perform specific duties on the project will have required training and/or competency to meet all applicable Federal, State, and local regulations. Proof of training shall be submitted to the Contractor's Safety Director prior to commencement of work if requested. Tasks which require the appointment of a Qualified or Competent Person shall have credentials submitted to the Contractor's Safety Director prior to start of work.
- 1.4 **Subcontractor Injuries and Incidents.** Subcontractor shall notify Contractor of any incident or injury involving an employee of Subcontractor or one of its Subcontractors on the day of the injury or incident. Subcontractor shall complete an Incident Report and Investigation and submit the completed investigation to Contractor within twenty- four (24) hours of the incident or injury. Subcontractor agrees that all injuries and incidents will be investigated to determine root cause, corrective action, and preventative action to ensure similar injuries or incidents do not occur.
- 1.5 **Minimum Working Apparel.** Subcontractor agrees that the minimum working apparel includes hardhat meeting the current version of ANSI Standard Z89.1, safety glasses and side shields meeting the current version of ANSI Standard Z87.1, shirt with three inch or longer sleeves, long pants and durable work boots. Refer to the Safety Standard Operating Procedures Plan Personal Protection Equipment Section for more specific requirements.
- 1.6 **Fall Prevention.** Subcontractor shall comply with the Contractor Fall Protection Policy, which requires that no worker exposed to a fall hazard of six (6) feet or greater will work without one hundred percent (100%) fall protection. Subcontractor will take all practical measures to eliminate, prevent and control fall hazards of six (6) feet or more before resorting to a personal fall arrest system. When personal fall arrest is required, Subcontractor shall provide such proper equipment for this purpose and all necessary instruction and training in the care and use of the equipment, including refresher training. All training shall be documented and made available to Contractor upon request.
- 1.7 **Silica.** Subcontractor must provide action plan when workers may be exposed to silica beyond the action limit. Provide copy of written exposure control plan, name of competent person, practices to limit exposures, training practices, and medical surveillance for all affected workers
- 1.8 **Disciplinary Action.** Contractor may issue a written notice to individuals who are observed violating the laws, ordinances, rules, regulations, codes, standards, orders, and requirements noted under Regulatory Compliance above. Any Subcontractor or Subcontractor personnel who receive three (3) written violation notices within a one (1) year period may be removed from the Project. Individuals may be removed from the Project after one (1) written notice if Contractor determines in its discretion that the violation observed warrants such removal.
- 1.9 **Hazard Communication.** Subcontractor will provide Contractor with Project specific hazardous material inventory list and Safety Data Sheets (SDS) for each hazardous material Subcontractor or one of its Subcontractors will bring onto the Projects site.
- 1.10 **Utility Locates.** The Subcontractor will follow the provisions of all applicable statutes and ordinances which require persons or firms doing excavation to do so only after giving notice to utility companies and obtaining information on the location of utilities (such as “one-call” systems).
- 1.11 **Regulatory Inspections.** If Contractor is fined by any regulatory inspection by a Federal, State, County or Municipal agency or body as a result of any act or omission of Subcontractor or one of its Subcontractors, Contractor will deduct the amount thereof and associated costs from any payments due or to become due to Subcontractor.
- 1.12 **Illegal Acts.** The theft, conversion, misappropriation, unauthorized removal, possession, or use of property or equipment belonging to Contractor, Owner, Subcontractor, or other worker including but not limited to, materials, tools documents, and propriety information is prohibited.
- 1.13 **General Safety Requirements**
 - Subcontractors must observe and follow all posted safety signs.
 - Any worker that is involved in an injury or loss event on the job must be drug tested at the expense of their employer and results cleared before they can continue working on the project.
 - Subcontractors are expected to supply their own personal protective equipment (PPE).
 - Adequate ventilation must be provided when using vapor producing materials or creating high dust levels. Subcontractor must notify Contractor twenty-four (24) hours in advance whenever work is being done that may generate any hazardous odors or dust.
 - Subcontractors may not, under any circumstances, operate or disconnect any device used to control building services until permission has been obtained from the Contractor Superintendent.

- The following activities are prohibited on site and are causes for immediate dismissal: Using alcohol or illicit drugs, Fighting or horseplay, Tampering with equipment, Possession of firearms.
- Subcontractor must have a first aid/CPR-trained foreman on site whenever work is being performed.
- Subcontractor will conduct weekly employee toolbox meetings and copy Contractor with material covered and attendance record.
- *No radios or headsets, including cellular phones and earbuds, are allowed in work areas.*
- Subcontractor must submit safety plans and hazard specific work plans to Contractor prior to beginning work when requested.
- Subcontractor's equipment, tools, and personnel must comply with OSHA Safety and Health Regulations for Construction.
- No one under eighteen (18) years of age is allowed to work on or access to Contractor's jobsites.
- Subcontractor shall provide all required safety information of their sub tier subcontractors as required by Contractor or Contractor's insurance provider.
- Subcontractor must immediately correct any unsafe acts or practices brought to its attention.
- Subcontractor will have qualified operators on all equipment.
- Subcontractor will inspect all its equipment per the manufacturer's instructions daily.

The above Safety Requirement items are general in nature and not all inclusive of every situation or condition on Michael Kinder & Sons, Inc. construction projects.

2. Subcontractor Representations

- 2.1 The Subcontractor acknowledges receipt of all policies/procedures included in the Bid Documents. Subject to applicable law the Subcontractor further agrees to be bound by these policies/procedures as part of this Agreement. The Subcontractor represents and agrees that it has carefully examined and understands this Agreement and the other Subcontract Documents, has investigated the nature, locality and site of the Subcontract Work and the conditions and difficulties under which it is to be performed, and that it enters into this Agreement on the basis of its own examination, investigation and evaluation of all such matters and not in reliance upon any opinions or representations of the Contractor, the Owner or any of their respective officers, agents or employees.
- 2.2 The commencement of the Subcontract Work by the Subcontractor on the site of the Project shall constitute the legal and binding acceptance by the Subcontractor of this Agreement. For purposes of this paragraph the mobilization of equipment, delivery of materials or the performance of actual labor on the Project site, whichever occurs first, shall constitute a "commencement" of Subcontract Work by the Subcontractor. The Contractor reserves the right, however, to insist on a signed Agreement prior to the making of any payment to the Subcontractor.

3. Bonds

- 3.1 If required by the Contractor, a Performance Bond and a Separate Payment Bond satisfactory to the Contractor, in its sole determination are required to be furnished in the full amount of the Subcontract Amount. If Bonds are required, they shall be furnished by a surety acceptable to the Contractor, in the full amount of the Subcontract Amount. Subcontractor must also furnish any applicable statutory bonds if required by the state in which the Project is located.

4 Subcontractor Duties

- 4.1 **Subcontract Work.** The Contractor retains the Subcontractor as an independent contractor, to provide all labor, materials, equipment, and services necessary or incidental to complete the part of the work which the Contractor has contracted with the Owner to provide on the Project as set forth in Scope of Work included in this Agreement, consistent with the Project Schedule and in strict accordance with and reasonably inferable from the Subcontract Documents. The Subcontractor agrees to perform such part of the work (hereafter called "Subcontract Work") for the Project under the general direction of the Contractor and subject to the final approval of the Contractor, Architect/Engineer, or other specified representative of the Owner.
- 4.2 **Subcontract Documents.** The Subcontract Documents include this Agreement, Agreement between the Owner and the Contractor ("Prime Contract"), including all addenda, modifications, revisions, plans, drawings, specifications, details, together with all general, technical, supplementary and special terms and conditions, any invitations for bids or information for bidders, if any, to the extent applicable, and all other documents listed in or referred to by the Prime Contract. The Contractor and the Subcontractor are mutually bound by the terms of this Subcontract. To the extent the terms of the Prime Contract apply to the work of the Subcontractor, then the Contractor assumes toward the Subcontractor all the obligations, rights, duties and redress that the Owner under the Prime Contract assumes toward the Contractor. In the identical way, the Subcontractor assumes toward the Contractor all the same obligations, rights, duties and redress that the Contractor assumes toward the Owner and Architect/Engineer under the Prime Contract. This Agreement and the rest of the Subcontract Documents are intended to supplement and complement each other and shall, where possible, be so interpreted. However, if any provision of this Agreement irreconcilably conflicts with a provision of the Subcontract Documents, the provision granting greater rights or remedies to the Contractor or imposing the greater duty, standard or responsibility or obligation on the Subcontractor shall govern.
- 4.3 **Submittals.** Subcontractor shall, at its own expense, prepare and submit to the Contractor such Shop Drawings, Samples, Models and other submittal data for the materials to be furnished hereunder as detailed in the contract documents and as requested by Contractor, such Shop Drawings, Samples, Models and data to be approved in writing by such entities as Contractor may designate before Subcontractor proceeds under this Agreement. Such Documents shall be submitted to Contractor with reasonable promptness and in such sequence to cause no delay in the work or activities of the Contractor or other subcontractors. Any such approval of submittals or the receipt of materials and/or labor or payment therefore pursuant thereto shall in no event constitute an acceptance of such materials and/or labor and shall not limit or impair Contractor's right of inspection or rejection or any other rights or remedies to which Contractor may be entitled or relieve Subcontractor of any of its obligations and warranties hereunder. Subcontractor is responsible for reviewing Specifications prior to submitting any items verifying all Specification / Contract requirements. All submittals must be submitted electronically in .pdf format. All submittals must be submitted and approved prior to any payment to Subcontractor. All items must be submitted within 20 days of Subcontract date. All submittals must have a separate transmittal for each item and be labeled with the specification section. Any delays in material/equipment deliveries associated with delay in submission of submittal data which causes delays in the project schedule will be responsibility of Subcontractor as denoted in Section 1 of this agreement. Subcontractor may also be required to submit hard copies of submittals when requested by Contractor.
- 4.4 **Design Delegation.** If the Subcontract Documents (1) specifically require the Subcontractor to provide design services and (2) specify all design and performance criteria, the Subcontractor shall provide the design services necessary to satisfactorily complete the Subcontract Work. Design services provided by the Subcontractor shall be procured from licensed, design professionals (the "Designer") retained by the Subcontractor as permitted by the law of the place where the Project is located. The Designer's signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by the Designer. Shop Drawings and other submittals related to the

Subcontract Work designed or certified by the Designer, if prepared by others, shall bear the Subcontractor's and the Designer's written approvals when submitted to the Contractor. The Contractor shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by the Designer.

- 4.4.1 If the Designer is an independent professional, the design services shall be procured pursuant to a separate agreement between the Subcontractor and the Designer. The Subcontractor-Designer agreement shall not provide for any limitation of liability or exclusion from participation in the multiparty proceedings requirement of Paragraph 20.6. If applicable, the Designer(s) is (are)

The Subcontractor shall notify the Contractor in writing if it intends to change the Designer. The Subcontractor warrants the design furnished by the Designer will be in conformance with the information given and the design concept expressed in the Subcontract Documents. The Subcontractor shall not be responsible for the adequacy of the performance or design criteria required by the Subcontract Documents furnished by the Owner, Architect/Engineer or Contractor

- 4.4.2 The Subcontractor shall not be required to provide design services in violation of any applicable law.

- 4.5 **Clean Up.** The Subcontractor is responsible for its own "clean-up" and keeping the Subcontract Work areas "broom clean". If the Contractor determines the Subcontract Work area to be unsatisfactorily cleaned, the Contractor will so advise the Subcontractor. If the Subcontractor fails to commence cleaning procedures within twenty four (24) hours and continue to clean said area to the Contractor's satisfaction, the Contractor may without further notice execute and complete such clean up activities as the Contractor deems necessary and charge the cost to the Subcontractor or deduct such cost from payments due to the Subcontractor. The Subcontractor is responsible to clean the mud and gravel off its vehicles (including vehicles operated by its subcontractors and suppliers) prior to leaving the site. Any mud or gravel that is tracked onto the surrounding roads shall be removed immediately. The Contractor has the right to clean up surrounding roads immediately upon the Subcontractor's failure to do so, the cost of which shall be deducted from the Subcontractor's next payment.
- 4.6 **Protection of Subcontract Work.** The Subcontractor is responsible for protection of its material, equipment, and installation until the final acceptance by the Owner and the Architect.
- 4.7 **Protection of the Project.** The Subcontractor shall confine operations at the Project site to areas permitted by the Contractor and shall not unreasonably encumber the Project site with materials or equipment. The Subcontractor is responsible for any damage caused to adjacent property or access roads by the Subcontractor, its subcontractors, or suppliers during the course of the Subcontract Work.
- 4.8 **Supervision.** All of the Subcontract Work is the sole and absolute responsibility of the Subcontractor; shall be initiated, managed, performed and completed by qualified, competent, skilled and reputable supervisors, administrators, mechanics and laborers, all of which are satisfactory to the Contractor; shall be in full compliance with the Subcontract Documents including this Subcontract; and shall meet the approval and acceptance of the Contractor and the Owner or its authorized representative. Subcontractor shall not change their Superintendent or Project Manager without written approval from the Contractor.
- 4.9 **Deliveries.** A minimum of twenty-four (24) hours notice is required for all deliveries to the jobsite. Notify Contractor prior to any major deliveries providing ample time for coordination. Deliveries are to be made at the place, in the quantities and at the times specified in instructions set forth herein or in other written instructions, which may from time to time be furnished by Contractor. Contractor may from time to time change, in writing, delivery instructions or direct that shipment or work be temporarily suspended. Subcontractor shall make no commitments for material or production arrangements in excess of the amount or in advance of the time necessary to comply with Contractor's delivery or performance instructions.
- 4.10 **Layout.** The Subcontractor shall take careful field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to the Subcontractor with the Contract Documents before the commencement of the Work. Errors, inconsistencies, or omissions shall be reported at once to the Contractor. Each Subcontractor is responsible for its own layout work.

5. Schedule

- 5.1 Time is of the essence. The Subcontractor shall commence the Subcontract Work under this Subcontract when notified by the Contractor and shall complete the Subcontract Work in a diligent manner in accordance with the Subcontract Documents and the Schedule of Work provided in this Agreement so that progress or completion of the Project will not be delayed and in such a manner that the Contractor, any other subcontractors, and any separate contractors of the Owner shall not be delayed or impeded in their work. The Subcontractor shall participate and cooperate in the development of schedules and other efforts to achieve timely completion of the Subcontract Work by providing information on the timing and sequence of operations so as to meet the Contractor's overall schedule requirements. The Subcontractor shall continuously monitor the Project Schedule including any revisions thereto, and other work on the Project so as to execute the Subcontract Work in accordance with the requirements of the Project Schedule. The Subcontractor agrees to be responsible for, carry out, and perform all time guarantees upon work or materials referred to in the Subcontract Documents relating to any labor performed or material furnished under this Subcontract. If Subcontractor falls behind schedule, all costs to get back on schedule will be the responsibility of the Subcontractor, including additional costs to the Contractor or other subcontractors that are directly affected by the Subcontractors delays. This includes, but not limited to, overtime, additional supervision and project management, delivery expenses, storage fees, and any other cost and expense incurred in an effort to get back on schedule. If Contractor is responsible for Liquidated Damages and Subcontractor causes delay and Liquidated Damages are charged, the costs of Liquidated Damages will be passed onto the Subcontractor. The Project Schedule is subject to change at the direction of the Contractor at no additional cost.

6. Payment

- 6.1 In consideration of faithful and timely performance by the Subcontractor of all the covenants and the conditions aforesaid, the Contractor agrees to pay the Subcontractor, subject to other provisions hereof, including authorized additions and deletions the "Subcontract Amount" which sum includes all applicable taxes. Payment shall only be due for the portion of the Subcontract Work actually completed to the satisfaction of the Contractor, the Architect and the Owner. Within ten (10) days after receipt by the Contractor of payment from the Owner, the Contractor shall make payment in the amount and to the extent received from the Owner, less ten percent (10%) retainage. However, receipt of payment by the Contractor from the Owner for the Subcontract Work is a condition precedent to the obligation by the Contractor to pay the Subcontractor for the Subcontract Work in accordance with the preceding sentence, and payment for the Subcontract Work will be made to Subcontractor by the Contractor if and only to the extent such payment is received by the Contractor from the Owner. The Subcontractor hereby acknowledges that it relies on its own evaluation of the credit worthiness of the Owner, and not the credit worthiness of the Contractor, with respect to payment for

the Subcontract Work, and expressly assumes the risk of non-payment by the Owner thereof, for any reason including, without limitation, insolvency of the Owner. Notwithstanding Subparagraph 4.2 of this Agreement, the provisions of this Section shall prevail over any conflicting provisions in the Prime Contract. Progress payment applications must be submitted by the Subcontractor each month in an amount equal to One Hundred percent (100%) of the estimated value of the labor, materials and equipment incorporated in the construction and materials and equipment suitably stored at the Project site, less the aggregate of previous payments. The Subcontractor's Affidavit and Waiver of Lien for prior payments must be properly executed by an authorized representative of the Subcontractor and returned to the Contractor prior to issuance of subsequent payments. Subcontractor must use Waiver Forms included as Exhibit "C" to this Agreement. Subcontractor will be required to provide Sub-Subcontractor and Vendor waivers for values exceeding \$5,000.00. No other waiver forms other than those in Exhibit "C" will be accepted.

- 6.3 Each payment request or invoice must be received by the Contractor by the 20th day of the month to be processed with the Contractor's payment application that month. Invoices and payment requests received that are inaccurate or without substantiation, or after said day of the month will be held until corrected and substantiated, and then processed with the following month's payment application. Subcontractor shall submit all applications electronically, in PDF format, to accounts payable at AP@kinderandsons.com.
- 6.4 The Subcontractor shall submit its request for partial payment conforming to the standard AIA G702/G703 billing form, with schedule of values attached thereto, representing a true and accurate estimate of the Subcontract Work completed, and materials stored during the immediately preceding month or such other immediately preceding period as directed by the Contractor. In addition, if allowed by the Subcontract Documents, all invoices and insurance certificates shall be included for all stored materials in an off-site storage area applicable to the payment request. Materials not onsite can only be billed for as stored materials, if allowed. If requested, Subcontractor shall submit copies of payrolls to document the value of work in place.
- 6.6 If the Contractor, in its sole discretion, deems it necessary, the Subcontractor agrees to receive each of its progress payments and final payment in the form of multiple checks issued jointly between the Subcontractor's lower tier subcontractors and major material suppliers and the Subcontractor. Lower tier subcontractors that are to receive part or all of their progress payments as joint checks shall additionally submit with their Payment Requests all invoices from each lower tier subcontractor and major supplier and the net payments to be issued to each.
- 6.7 No partial payment, or certificate, therefore, shall constitute acceptance or approval by the Contractor of the Subcontract Work or material for which the partial payment is made. No partial payment shall constitute a waiver by the Contractor of any right to require fulfillment of all the terms of this Subcontract. Neither the final payment nor any partial payment, nor any certificate for either, shall constitute acceptance by the Contractor of defective work or improper materials or of any element of the Subcontractor's performance determined to be at variance with this Subcontract.
- 6.8 The Contractor shall have the right to set off any amounts the Subcontractor owes to the Contractor under this Subcontract or bylaw against the remaining balance under this Subcontract, or against any amounts due the Subcontractor under any other agreements with the Contractor.
- 6.9 **Final Payment.** Final payment by the Contractor to the Subcontractor shall not become due and payable to the Subcontractor until the following express conditions precedent have been met: (1) The completion of the Subcontract Work required by this Subcontract and acceptance of the Subcontract Work by the Contractor, the Owner and the Architect; (2) Final Waiver shall be provided in exchange for final payment; (3) all closeout and warranty documentation provided by the Contractor has been submitted to Contractor; and (4) complete and full satisfaction of all claims, demands, disputes and obligations of the Subcontractor arising out of or related to this Subcontract, including those between the Contractor and the Subcontractor and between the Subcontractor and any third party. Should there be any such claim, lien or unsatisfied obligation, whether before or after final payment is made, the Subcontractor shall deliver payment to the Contractor an amount equal to whatever cost the Contractor and/or the Owner must pay to discharge or defend against any such claim, obligation, lien or action brought, or any judgment thereon and all costs, including legal fees and expenses and a 15% Administrative Fee, incurred in connection therewith.

7. Hazardous Materials

- 7.1 The Subcontractor shall at all times comply with all rules and regulations of any municipality, state or federal environmental protection, and toxic waste and hazardous substances laws, ordinances and regulations, and how they relate to the Subcontract Work, and shall be equally responsible for actions and inactions of subcontractors, sub subcontractors, and any other agents or independent contractors of the Subcontractor. The Subcontractor shall be deemed to, and shall, have included in the Subcontract Amount the containment, removal, disposal or neutralization of all toxic wastes and hazardous substances created, generated, or transported to or from the Project site in conjunction with the Subcontract Work. The Subcontractor will be responsible for identifying toxic wastes and hazardous substances generated, released, caused by or resulting from the Subcontract Work and notifying the Contractor of its presence in writing as soon as it is identified. The terms "toxic wastes" and "hazardous substances" shall have the same meaning as defined under federal environmental laws and regulations. At all times, the Subcontractor shall defend, indemnify, and hold harmless the Contractor from any and all expenses, costs, damages, suits, fines, assessments, penalties and/or causes of action, including attorney's fees through all investigations, negotiations, hearings or appeals, relating to or arising out of the Subcontractor's failure to strictly comply with the terms of this paragraph.

8. Compliance with Laws

- 8.1 The Subcontractor agrees to be bound by, and at its own costs comply with, all federal, state, and local laws, ordinances, and regulations (the "Laws") applicable to the Subcontract Work, including but not limited to safety, equal employment opportunity, minority business enterprise, women's business enterprise, disadvantaged business enterprise, sexual and racial harassment, and all other Laws with which the Contractor must comply.
- 8.2 Where prescribed by Law pursuant to direct Federal contracts or Federally-financed or aided contracts, or otherwise required by Law, the Subcontractor agrees the following clauses found in the Subcontract Documents or in the Code of Federal Regulations (CFR) are incorporated in this Subcontract and binding on Subcontractor as if written herein word for word: the clauses entitled "Equal Opportunity Clause" (41 CFR Sections 60-1.4 & 60-4.3); "Affirmative Action Obligations of Contractors and Subcontractors for Disabled Veterans of the Vietnam Era" (41 CFR Section 60-250.4); "Affirmative Action Obligations of Contractors and Subcontractors for Handicapped Workers" (41 CFR Section 60-741.1); "Contract Work Hours and Safety Standards Act-Overtime Compensation"; "Apprentices and Trainees"; "Payrolls and Basic Records"; "Compliance with Copeland Act Requirements"; "Withholding"; "Subcontracts"; "Contract Termination-Department"; "Disputes Concerning Labor Standards"; "Compliance with Davis-Bacon and Related Act Requirements"; and "Certification of Eligibility" and such other clauses as the Federal Government has required by law or contract. Subcontractor agrees to include all such clauses in any non-exempt, lower-tier subcontracts.

- 8.3 **Immigration Compliance.** The Subcontractor represents and warrants to the Contractor that the Subcontractor is in compliance with, and shall remain in compliance with, the provisions of the Immigration Reform and Control Act of 1986 (The "Act") and all other Federal, State, and/or local immigration statutes/ordinances, as applicable, including, but not limited to the provisions of the Act prohibiting hiring and continued employment of unauthorized aliens, requiring verification and record keeping with respect to identity and eligibility for employment and prohibiting discrimination on the basis of national origin, United States citizenship, or intending citizen status. The Subcontractor agrees to indemnify the Contractor and to hold the Contractor harmless from all liability, including liability for interest and penalties, the Contractor incurs which results from or is attributable to the Subcontractor's failure to comply with any provisions of the Act, and or applicable Federal, State, and/or local immigration statute/ordinance, including reimbursing the Contractor any monies expended by the Contractor in participating in or responding to any investigation/suit/civil or criminal immigration matter involving the Subcontractor. As it relates to immigration compliance, the Subcontractor shall be responsible for completing any and all required documentation in accordance with requirements put forth by the Owner, Contractor or applicable law.
- 8.4 The Subcontractor shall be liable to the Contractor and the Owner for all loss, cost and expense attributable to any acts of commission or omission by the Subcontractor, its Sub-Subcontractors at any tier, and its and their respective employees and agents resulting from the failure to comply with Laws, including, but not limited to, any fines, penalties, restitution, judgments, and other damages resulting from such acts of commission or omission.

9. Insurance

- 9.1 The Subcontractor agrees to procure, pay for, and maintain in full force and effect during the course of the performance of the Subcontract all insurance required by the laws of the state in which the Subcontract Work covered by this Subcontract is being performed, and in such form and amounts as described in in this section and in Exhibit D, whichever is greater, which is attached hereto and incorporated into this Subcontract. Certificates of Insurance on The American Institute of Architect's Form G-705 or other form acceptable to Contractor and Contractor's counsel must be returned to the Contractor with signed Contract Agreement prior to commencement of the Work or receiving any payment on the project. Subcontractor is responsible for the following insurance for protection from claims that may arise out of or result from Subcontractor's operations under this Agreement, whether such operations be by Subcontractor or by any sub-subcontractor, or by anyone directly or indirectly employed by any of them, or by anyone or whose acts any of them may be liable.
- (a) Worker's compensation insurance in accordance with statutory laws and with limits as provided by statute.
 - (b) Comprehensive general liability, including completed operations coverage for a period of three (3) years from the Project Substantial Completion date, products liability coverage (with the Contractor and Owner protected as additional insured), and contractual liability coverage, with limits of not less than
 - (i) \$1,000,000 each occurrence and \$2,000,000 in the aggregate per project for bodily injury or death; and (ii) \$1,000,000 each occurrence and \$2,000,000 in the aggregate per project for property damage.
 - (c) Automobile insurance with coverage for owned and non-owned vehicles with a combined single limit of \$1,000,000 public liability and property damage.
 - (d) Installation Floater with a combined limit not less than \$500,000.
 - (e) In addition, Subcontractor shall purchase an umbrella policy with minimum limits of \$5,000,000 per occurrence. This policy must provide coverage over the underlying liability policies.
 - (f) Professional Liability with a limit not less than \$1,000,000.

Unless Contractor otherwise agrees in writing, the liability policies to be maintained by Subcontractor hereunder shall name Contractor and Owner as additional named insureds. All insurance limits and minimums must be in accord with both the above and/or that noted in the Project Manual/Specifications whichever minimums are greater. All insurance is to be classified as Primary/Non-Contributory (Form #CG7061 or equivalent) and denoted accordingly on Contractor's Insurance Certificate. Subcontractor shall defend, indemnify and hold harmless Contractor and Owner and their agents and employees from and against all claims, damages, causes of action, losses and expenses, including attorney's fees, arising out of or resulting from the performance of the work, provided that such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including the loss of use resulting therefrom; and (2) is caused in whole or in part by any negligent act or omission of Subcontractor or any of Subcontractor's subcontractors, anyone directly or indirectly employed by any of them or for anyone for whose acts any of them may be liable, regardless of whether it is caused in part by a party indemnified hereunder.

- 9.2 **Waiver of Subrogation.** A Blanket Waiver of Subrogation clause shall be added to the general liability (Policy Form #CG7036) or equivalent; automobile liability (Policy Form #CA0444) or equivalent and worker's compensation (Policy Form #WC000313 or equivalent). The policies shall be in favor of Michael Kinder & Sons, Inc. and this clause shall apply to Michael Kinder & Sons, Inc. officers, agents and employees, with respect to all projects during the policy term.
- 9.3 **Cancellation of Coverage.** Each policy of insurance shall provide notification to Contractor and Owner at least thirty (30) days prior to any cancellation or modification to reduce the insurance coverage.
- 9.4 **Sub-Subcontractors.** To the extent that the Subcontractor subcontracts with any other entity or individual to perform all or part of the Subcontractor's Work, the Subcontractor shall require the other Sub-Subcontractors to furnish evidence of equivalent insurance coverage, in all respects, terms and conditions as set forth herein, prior to the commencement of the Work by the Sub-Subcontractor. The Contractor and Owner shall be named as additional insured as detailed below.
- 9.5 **Blanket Additional Insured on General Liability and Automobile Liability.** Michael Kinder & Sons, Inc., and their affiliates, directors, employees, subsidiaries, representatives, and any other parties as required by this Contract Agreement. They must be listed as certificate holder, and the Contractor and Owner must be protected as additional insured for Ongoing Operations and Products/Completed Operations on the Subcontractor's and any Sub-Subcontractor's Commercial General Liability Policies. The coverage must be primary and non-contributory with respect to the additional insured. The Blanket Additional Insured coverage must be provided by General Liability Policy Form #CG7037 or equivalent and Automobile Liability Policy Form #CA2048 or equivalent.
- 9.6 The Contractor shall have no duty to the Subcontractor or to any of its insurers or their insurance agents to review any certificates or copies of insurance furnished to the Contractor or to determine whether the terms of each certificate or policy of insurance comply with the insurance-related provisions of the Subcontract. A failure of the Contractor to detect that the Subcontractor has not submitted certificates, or proper certificates, or is otherwise not in compliance with the insurance-related provisions of the Subcontract shall not be construed as a waiver or

other impairment of any of the Contractor's rights under such insurance-related provisions.

- 9.7 If the Subcontractor fails to procure and maintain such insurance, in addition to the option of declaring the Subcontractor in default for breach of a material provision of this Subcontract, the Contractor shall have the right, but not the duty, to procure and maintain the same insurance, or other insurance that provides the Contractor with equivalent protection, and the Subcontractor shall furnish all necessary information to make effective and maintain such insurance. At the option of the Contractor, the cost of said insurance purchased by the Contractor shall be charged against and deducted from any monies then due or to become due to the Subcontractor or the Contractor shall notify the Subcontractor of the cost thereof and the Subcontractor shall promptly pay such cost.
- 9.8 The Subcontractor shall identify by certificate any Residential, Mold, EIFS, Silica or other major exclusions that impact the Subcontractor's ability to insure its risk. If the Project includes any Residential components or the proposed design includes EIFS systems, then the Subcontractor shall obtain appropriate endorsements acceptable to the Contractor as a condition of this Subcontract.
- 9.9 The Subcontractor shall at its own expense provide insurance coverage for materials stored off the site after written approval of the Contractor at the value established in the approval, and also for portions of the Subcontract Work in transit until such materials are permanently incorporated into the Project. The risk of loss for material and equipment provided by this Subcontract, whether in a deliverable state or otherwise, shall remain with the Subcontractor. Any damages to the material and equipment or loss of any kind occasioned in transit shall be borne by the Subcontractor, notwithstanding the manner in which the goods are shipped or who pays the freight or other transportation costs.

10. Indemnity

- 10.1 **General Indemnity.** To the fullest extent allowed by law, the Subcontractor agrees to defend, indemnify and hold harmless the Contractor to the same extent Contractor is obligated to defend, indemnify and hold harmless the Owner. In the absence of such Owner-required defense and indemnification, the Subcontractor shall defend, indemnify and hold harmless the Contractor, the Contractor's other subcontractors, the Architect/Engineer, the Owner and their agents, consultants, members and employees (the Indemnitees) from and against all claims, damages, losses and expenses, including, but not limited to, attorneys' fees, costs and expenses for bodily injury and property damage that may arise from the performance of the Subcontract Work to the extent of the negligent acts or omissions by, or the fault of, the Subcontractor, the Subcontractor's sub-subcontractors or anyone employed directly or indirectly by any of them or by anyone for whose acts or omissions any of them may be liable. The Subcontractor agrees to purchase and maintain contractual liability insurance covering its obligations in this article. These obligations shall not be interpreted to reduce or negate any other rights or obligations of indemnity otherwise existing with regard as to any party or person described in this Article.
- 10.2 **Patents.** The Subcontractor hereby agrees to defend, indemnify and hold harmless the Contractor and the Owner from and against any and all liability, loss or damage and to reimburse the Contractor and the Owner for any costs, including legal fees and expenses, which the Contractor and the Owner may incur because of claims or litigation on account of infringement or alleged infringement of any letters patent or patent rights by reason of the Subcontract Work, or materials, equipment or other items used by the Subcontractor in its performance.
- 10.3 **No Limitations.** In furtherance to, but not in limitation of the indemnity provisions in this Subcontract, the Subcontractor hereby expressly and specifically agrees that its obligation to indemnify, defend and hold harmless as provided in this Subcontract shall not in any way be affected or diminished by any statutory or constitutional immunity it enjoys from suits by its own employees or from limitations of liability or recovery under worker's compensation laws.

11. Termination for Convenience

- 11.1 It is understood that the basic assumption underlying the mutual obligations and responsibilities entered into by the parties to this Subcontract is the continued performance with respect to the Prime Contract that exists between the Contractor and the Owner. If, for any reason, the Prime Contract is breached, rescinded, or terminated, the Contractor shall have the right to immediately terminate this Subcontract. In no event shall the Contractor be obligated to the Subcontractor for any anticipatory profits or any damages incurred by the Subcontractor as a result of the termination of this Subcontract, unless approved and paid by the Owner. The Subcontractor agrees that the Contractor's decision or determination regarding the pro rata share of any monies received from the Owner as damages or compensation for said breach, rescission or termination of the Agreement shall be final and conclusive and that the Subcontractor shall have no claim or cause of action against the Contractor for any reason or greater amount.
- 11.2 The Contractor shall have the right at any time by written notice to the Subcontractor, to terminate this Subcontract without cause and require the Subcontractor to cease work. In the event of such a termination for convenience, the Subcontractor shall be entitled to payment pursuant to the terms of the Subcontract for the portion of the Subcontract Work actually completed as of the date of termination, together with reasonable costs of demobilization and such other reasonable costs as may be encountered by the Subcontractor and directly attributable to such termination provided that such amount may be reduced by all amounts for which the Subcontractor is liable or responsible. However, the Subcontractor shall only be entitled to profit on that portion of the work actually completed and approved for payment to the date of termination together with retainages withheld from prior payments. The Subcontractor waives any claim for loss of anticipated profits or other damages in the event the Contractor exercises this clause.

12. Failure of Performance

- 12.1 **Non-Conforming Subcontract Work.** The Subcontractor shall provide sufficient, safe, and proper facilities at all times for inspection by the Architect, the Owner or the Contractor of the Subcontract Work in the field, at shops or at any other place where materials required hereunder are in course of preparation, manufacture, treatment or storage. The Subcontractor shall, within twenty four (24) hours after receiving written notice from the Contractor to that effect, proceed to remove from the site any materials condemned by the Architect, the Owner, or the Contractor, whether worked or unworked, and to take down all portions of the Subcontract Work which the Architect, the Owner or the Contractor has condemned in writing, as unsound or improper, or as in any way failing to conform to the drawings, specifications and addenda and shall take full financial responsibility for all damage caused by such removal. In the event that all or any portion of the Subcontract Work as condemned should be of such a nature, or the time available should be so limited, that in the judgment of the Architect, the Owner or the Contractor it would not be expedient to order the same replaced or corrected, the Contractor, at its option, may deduct from the payments due or to become due to the Subcontractor such amount or amounts as in the opinion of the Architect or the Owner shall represent the difference between the fair and reasonable value of the Subcontract Work so condemned and its value had it been executed in conformity with the Subcontract Documents.
- 12.2 **Use of Non-Conforming Materials and Remedies.** Any materials and/or labor which at any time, whether before or after delivery, payment and/or utilization in the Project, fail to conform to any descriptions, specifications, or provisions contained in this Contract Agreement, or fail to

satisfy any of Subcontractor's express or implied warranties, or are shipped or delivered other than in the quantities or not at the time and place specified in Contractor's delivery instructions, or other than in containers or packages conforming to Contractor's specifications (or, in the absence of such specifications, in recognized standard containers), or which are otherwise not in conformance with this Contract Agreement shall be deemed "non-conforming materials and/or labor." If Subcontractor provides or utilizes any non-conforming materials and/or labor, Contractor, without limitation of any other right or remedy Contractor may have, may (a) require Subcontractor to repair or replace, at Contractor's option, such materials and/or labor at Subcontractor's expense; or (b) reject, in whole or in part, the materials and/or labor that are the subject of this Contract Agreement and receive credit or refund for such whole or part of the purchase price associated therewith. Non-conforming materials may be held (or returned to Subcontractor), at Subcontractor expense and risk, and shall be replaced by Subcontractor only upon the written request of the Contractor. Contractor may charge to Subcontractor all expenses of unpacking, examining, testing, repacking, storing and reshipping of any such non-conforming materials and/or of inspecting and testing any such non-conforming labor and may also charge to Subcontractor any other incidental or consequential damages suffered by Contractor as a result thereof.

- 12.3 **Remedies Cumulative.** The remedies provided for in this Contract Agreement are cumulative and shall be in addition to, and not in limitation of, the rights and remedies which may be available to Contractor at law or in equity. No waiver of a breach of any provision of this Agreement shall be effective unless in writing and no such waiver shall constitute a waiver of any other breach or of the same breach at a different time. The exercise by Contractor of the rights provided herein shall not be considered as a waiver of any damages which may be incurred by Contractor or a waiver of any other rights or remedies to which Contractor might be entitled.
- 12.4 **Notice to Cure.** If the Subcontractor is unable, refuses or fails to supply enough properly-skilled workers, proper materials, correct non-conforming Subcontract Work, or maintain the Schedule of Work, or fails to make prompt payment to its workers, subcontractors or suppliers, or disregards laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, or otherwise is guilty of a material breach of a provision of this Agreement, the Subcontractor shall be deemed in default of this Agreement. If the Subcontractor fails within three (3) business days after written notification to commence and continue satisfactory correction of the default with diligence and promptness, then the Contractor without prejudice to any other rights or remedies, shall have the right to any or all of the following remedies:
- 12.4.1 to supply workers, materials, equipment and facilities as the Contractor deems necessary for the completion of the Subcontract Work or any part which the Subcontractor has failed to complete or perform after written notification, and charge the cost, including reasonable overhead, profit, attorneys' fees, costs and expenses to the Subcontractor;
 - 12.4.2 to contract with one or more additional contractors to perform such part of the Subcontract Work as the Contractor determines will provide the most expeditious completion of the Subcontract Work, and charge the cost to the Subcontractor; and/or
 - 12.4.3 withhold any payments due or to become due the Subcontractor pending corrective action in amounts sufficient to cover losses and compel performance to the extent required by and to the satisfaction of the Contractor.
 - 12.4.4 terminate the Subcontractor for default by delivering written notice of such termination to the Subcontractor.
 - 12.4.5 to charge to the Subcontractor an Administrative Fee of 15% of all costs incurred by the Contractor in exercising any of the above remedies.

In the event of an emergency affecting the safety of persons or property, the Contractor may proceed as above without notice, but the Contractor shall give the Subcontractor notice promptly after the fact as a precondition of cost recovery.

- 12.3 **Termination for Default.** If the Subcontractor has been terminated for default, the Contractor may take possession of the Subcontract Work, materials, tools, appliances and equipment of the Subcontractor at the Project site, and through itself or others provide labor, equipment and materials to prosecute Subcontract Work on such terms and conditions as shall be deemed by the Contractor as necessary, and shall deduct the cost, including without restriction all claims, charges, expenses, losses, costs, damages, and attorneys' fees, incurred as a result of the Subcontractor's failure to perform, from any money then due or thereafter to become due to the Subcontractor under this Agreement.
- 12.3.1 If the Contractor so terminates the employment of the Subcontractor, the Subcontractor shall not be entitled to any further payments under this Agreement and no sum shall be deemed due or to become due to the Subcontractor until Subcontract Work has been completed and accepted by the Owner, all Subcontract requirements have been fulfilled, and payment has been received by the Contractor from the Owner. In the event the unpaid subcontract earnings exceed the Contractor's cost of completion and any and all incidental costs, including administrative, legal and other professional fees, the difference shall be paid to the Subcontractor, but if such expenses exceed the subcontract earnings, the Subcontractor agrees to pay the difference to the Contractor promptly.
 - 12.3.2 If it is determined or agreed that the Contractor wrongfully exercised any option under this Article, the Contractor shall be liable to the Subcontractor solely for the reasonable value of Subcontract Work performed by the Subcontractor prior to such action, including reasonable overhead and profit on the Subcontract Work performed, less prior payments made. Under no circumstances shall the Subcontractor be entitled to recovery of claimed lost future profits.

13. Delays

- 13.1 Should the progress of the Subcontract Work be delayed, obstructed or interfered with through any fault, action or failure to act by the Subcontractor or any of its officers, agents, employees, subcontractors or suppliers so as to cause any additional cost, expense, liability or damage to the Contractor or the Owner, including legal fees or expenses incurred in defending claims arising from such delay or seeking reimbursement and indemnity from the Subcontractor and its surety hereunder, the Subcontractor and its surety agree to compensate and indemnify the Contractor and the Owner against all such costs, expenses, damages and liabilities.
- 13.2 In addition, the Subcontractor, at the Contractor's direction and at the Subcontractor's own cost and expense, shall work such overtime as may be necessary to make up for all time lost in the completion of the Subcontract Work and in the completion of the Project due to such delay. Weather days will be made up through longer hours, Saturdays, and/or Sundays. Subcontractor fully obligated to meet the requirements of the project schedule within these constraints. If the Subcontractor fails to make up for the time lost by reason of such delay, the Contractor has the right to use other subcontractors or suppliers and to take whatever other action the Contractor deems necessary to avoid delay in the completion of the Subcontract Work and the Project, the cost of which shall be borne by the Subcontractor. In the event Subcontractor delays timely performance of the Subcontract Work or to the completion of the Project, either by its acts or omissions, and such delays result in the Contractor being charged by the Owner with actual or liquidated damages, then the Subcontractor shall reimburse the Contractor the full amount of all such damages and charges resulting from the delays caused by the Subcontractor. The Contractor may offset any such damages

against the remaining balance due to the Subcontractor on the Subcontract Amount, if any.

- 13.3 If the commencement and/or progress of the Subcontract Work is delayed without the fault or responsibility of the Subcontractor, the time for the Subcontract Work shall be extended by Subcontract Change Order to the extent obtained by the Contractor from the Owner pursuant to the Prime Contract, and the Schedule of Work shall be revised accordingly.

14. Changes

- 14.1 Subcontract Changes. The Contractor and the Subcontractor agree the Contractor may make changes to the Subcontract Work, including but not limited to; additions, deletions or revisions. Any changes made to the Subcontract Work involved, or any other parts of this Agreement, shall be by a written Change Order. To the extent that any such change impacts Subcontractor's cost of or time for performance, the Subcontract Amount and Subcontract Schedule shall be equitably adjusted to compensate for such impact. Changes shall be initiated by one of the three methods outlined below, or as provided in the Prime Contract and shall be incorporated into the Subcontract by a Change Order.

14.1.1. **Request for Change Proposal.** A Request for Change Proposal (RFCP) is a written request that informs Subcontractor about a potential change in the Subcontract Work and requests a proposal for the potential change. Subcontractor shall promptly reply with such request. Subcontractor shall not implement the change or incur any costs until a Change Order is fully executed.

14.1.2. **Construction Change Directive.** A Construction Change Directive (CCD) is a written directive that instructs Subcontractor to take some immediate action in connection with the Subcontract Work. CCDs are issued when there is not time to issue a RFCO or Change Order. Subcontractor shall immediately proceed so as not to delay the progress of the Work and in accordance with the terms of the CCD. Any impact of a CCD on the Contract Price or Schedule shall be adjusted by a Change Order.

14.1.3. **Change Order Requests.** Within seven (7) calendar days after the occurrence of any event or observance of any condition that Subcontractor believes entitles Subcontractor to an adjustment in Subcontract Amount and/or Subcontract Schedule, Subcontractor shall prepare and submit a Change Order Request (COR) to Contractor. The COR shall include a detailed factual narrative, a detailed analysis showing entitlement and a detailed analysis of the proposed change to the Subcontract Amount and/or Subcontract Schedule.

- 14.2 **Change Orders.** A Change Order (CO) is a written instrument prepared by the Contractor and signed by the Subcontractor stating their agreement with the change in the Subcontract Work and any adjustment to the Subcontract Amount and/or Subcontract Schedule. All changes and/or additions in the Subcontract Work ordered in writing by the Contractor shall be deemed a part of the Subcontract Work and shall be performed and furnished in strict accordance with all terms and conditions of this Agreement and the Subcontract Documents, including the current Schedule of Work.

Change Orders will be used to implement approved Requests for Change Proposals, Construction Change Directives and Change Order Requests. Upon receipt of a properly documented COR or CCD, the parties shall negotiate in good faith to determine if the Subcontractor is entitled to a Change Order and, if so, the appropriate equitable adjustment. Any adjustment to the Subcontract Amount shall be established by one of the following methods:

- a. mutual acceptance of an itemized lump sum, or
- b. unit prices as indicated in the Subcontract Documents or as subsequently agreed to by the parties; or
- c. costs determined in a manner acceptable to the parties and a mutually acceptable fixed or percentage fee; or
- d. another method provided in the Subcontract Documents.

If the Parties are unable to agree on the dispositions of a COR or CCD, Contractor will either (i) issue a Notice denying Subcontractor's request or (ii) issue a unilateral Change Order setting forth the Contractor's final determination regarding the adjustments. Any cost and schedule adjustments shall be a full accord and satisfaction for all cumulative impacts of the underlying change.

- 14.3 The Subcontractor shall not be entitled to receive additional compensation for extra work or materials or changes of any kind except to the extent the same was ordered by the Contractor or any of its representatives. The Subcontractor shall be responsible for any costs incurred by the Contractor for changes of any kind made by the Subcontractor that increase the cost of the Work for either the Contractor or other subcontractors when the Subcontractor proceeds with such changes without a Change Order or Construction Change Directive.
- 14.4 Determination by Owner or Architect/Engineer. Notwithstanding any other provision, if the Subcontract Work for which the Subcontractor claims additional compensation is determined by the Owner or Architect/Engineer not to entitle the Contractor to a Change Order, additional compensation or a time extension, the Contractor shall not be liable to the Subcontractor for any additional compensation or time extension for such Subcontract Work, unless the Contractor agrees in writing to pay such additional compensation or to grant such extension.

15. Claims

- 15.1 A Claim is a written demand by Subcontractor seeking an adjustment in the Subcontract Amount and/or Subcontract Schedule or some other relief under the terms of the Subcontract for events other than a RFCP that has been denied in writing. Subcontractor shall provide Notice to Contractor of any potential Claim within seven (7) calendar days after the event giving rise to the Claim. Within fifteen (15) calendar days thereafter, Subcontractor shall submit a detailed factual narrative, a detailed analysis showing entitlement and a detailed analysis of the alleged change to the Subcontract Amount and/or Subcontract Schedule. Claims not timely made, in writing, by the Subcontractor shall be deemed to have been abandoned and waived. The acceptance and consideration of any claim out of time by the Contractor shall not create any precedent nor "course of dealing" between the Contractor and the Subcontractor, nor shall it waive the Contractor's right to insist on strict adherence by the Subcontractor to the contract claims procedures. If Contractor denies Subcontractor's Claim, Subcontractor may pursue the matter under Article 21 Dispute Resolution.
- 15.2 The Subcontractor shall not delay or suspend the Subcontract Work because of the pendency of or the denial by the Contractor of any such claim or because of the continuance of the condition out of which the claim arose, but shall proceed diligently in performing the Subcontract Work while the claim is being resolved by agreement or being fully adjudicated.
- 15.3 In the event the Subcontractor asserts that it should receive additional compensation because of an act or omission on the Owner's part, or someone for whom the Owner is responsible, the Subcontractor shall promptly submit the claim to the Contractor in writing at least three (3) working days before the date the Contractor is required to submit such claims under the Prime Contract. If timely submitted with all documentation required by the Prime Contract, the Contractor will, on behalf of the Subcontractor, submit the same to the Owner for its

consideration. Failure of the Subcontractor to submit such claims in a timely and proper manner shall result in a waiver of such claim and the Contractor is not required to submit it to the Owner, and the Subcontractor shall be bound to the same consequence which the Contractor would suffer under the Prime Contract.

- 15.4 The Subcontractor shall fully cooperate with the Contractor in the submission of such pass through claims, shall prepare all supporting data and do everything else necessary to properly present the claims, including payment of legal fees incurred by the Contractor to prepare, submit and negotiate or otherwise resolve such claim. Should the Owner allow and pay additional compensation to the Contractor on account of such pass through claim asserted by the Subcontractor, the Contractor will pay the same to the Subcontractor, less the Contractor's overhead, costs, expenses, legal fees and a 15% Administrative Fee.
- 15.5 It shall be an express condition precedent to any obligation on the part of the Contractor to make payment of any cost, reimbursement, compensation or damages to the Subcontractor hereunder that the Contractor shall first be determined to be entitled to such compensation on behalf of the Subcontractor and then receive such payment from Owner, and Subcontractor expressly acknowledges that the Contractor is not obligated or required to pursue the Subcontractor's claim against the Owner if the Contractor, in its sole discretion, after review of the Subcontractor's claim, has deemed the claim to lack merit in whole or in part.
- 15.6 If at any time a controversy should arise between the Contractor and the Subcontractor with respect to any matter in this Subcontract which the Contractor determines is not a claim, dispute or controversy which should involve or be asserted against the Owner, the decision of the Contractor relating to the subject of the controversy shall be followed by the Subcontractor.

16. Taxes

- 16.1 The Subcontract Amount includes all applicable sales, excise, transportation, unemployment compensation, social security, and any other taxes presently existing or subsequently imposed and levied and the Subcontractor agrees to pay all of the above and to conform to all applicable municipal, state and federal laws in connection with such taxes. The Subcontractor further agrees to withhold taxes from the wages and salaries of all employees of the Subcontractor and pay the same in accordance with the federal and state laws and regulations pertaining thereto. The Subcontract Amount includes federal, state, and municipal taxes now levied or in force or hereafter imposed on any and all tangible personal property sold or transferred to the Contractor under this Subcontract and the Subcontractor agrees to pay such tax or taxes on such property, the cost of which is included in the Subcontract Amount.

17. Liens

- 17.1 The Subcontractor shall promptly pay when due all its project creditors, together with the project creditors of all those below it in the contractual chain.
- 17.2 If the Project involves private work, the Subcontractor shall keep the property and improvements free and clear of all mechanic, materialmen and similar lien claims or statements. In the event any such lien is filed, asserted, or claimed, the Subcontractor shall immediately secure its release either by paying the lien claimant, by filing a lien release bond, or by any other means permitted by law. If not so released, the Contractor may retain an amount equal to 150% of the lien or claim and may pay the claimant and offset that amount, plus any legal fees from the amount so retained. If the Project involves public work, the Subcontractor shall promptly pay and secure releases from all of its project creditors, including all those below it in the contractual chain, who are entitled to assert claims against the Contractor or its surety.
- 17.3 If any claim or lien is made or filed with or against the Contractor, the Owner, the Project, the Premises or the Project funds by any person claiming that the Subcontractor or any subcontractor or other person under subcontract to the Subcontractor, or any person or entity employed or engaged by the Subcontractor at any tier, has failed to make payment for any labor, services, materials, equipment, taxes or other obligations furnished or incurred in connection with the Subcontract Work, or if the Subcontractor or any subcontractor or other person under subcontract to the Subcontractor, or any person or entity employed or engaged by the Subcontractor at any tier causes damage to the Subcontract Work or any other work on the project, or if the Subcontractor fails to perform or is otherwise in default of any term or provision of this Subcontract, the Contractor shall have the right to retain from any payment then due or thereafter due an amount which the Contractor deems sufficient to (1) satisfy, discharge and/or defend against any such claim or lien, (2) make good any such nonpayment, failure, damage or default, and (3) defend, indemnify and hold harmless the Contractor and the Owner against any and all losses, damages and costs, including legal fees and expenses, incurred by either or both of them. The Contractor shall require proof that any such nonpayment, claim or lien is fully satisfied, dismissed, and discharged before any remaining retained funds will be released. The Contractor shall, in addition, have the right to apply and charge against the Subcontractor so much of the amount retained as may be required for the foregoing purposes and the Subcontractor shall pay and reimburse the Contractor and the Owner all such losses, damages, and costs incurred by them which exceed the retained funds.

18. Assignment

- 18.1 To the fullest extent permitted by law, the Subcontractor agrees that it shall not assign, sell, transfer, delegate or encumber any rights, duties or obligations arising under this Subcontract including, but not limited to, any right to receive payments hereunder, without the prior written consent of the Contractor in its sole discretion and the giving of any such consent to a particular assignment shall not dispense with the necessity of such consent to any further or other assignments. In the event the Subcontractor assigns, sells, encumbers, or otherwise transfers its right to any funds due or to become due under this Subcontract as security for any loan, financing or other indebtedness ("Assignment"), notification to the Contractor of such Assignment must be sent by certified mail, return receipt requested, to the Contractor and the Assignment shall not be effective as against the Contractor until the Contractor provides its written consent to such Assignment. The Subcontractor agrees that any such Assignment shall not relieve the Subcontractor of any of its agreements, duties, responsibilities or obligations under this Subcontract and the Subcontract Documents and shall not create a contractual relationship or a third party beneficiary relationship of any kind between the Contractor and such assignee or transferee.

19. Guarantee/Warranty

- 19.1 For a period equal to that imposed upon the Contractor under the Prime Contract, but in no event less than one year from the date of the Owner's final acceptance of the Subcontract Work, the Subcontractor guarantees and warrants that the Subcontract Work complies with the Subcontract Documents requirements and is free from defects in material and workmanship. The Subcontractor shall remain liable for defects in the Subcontract Work for the same period the Contractor remains liable to the Owner under the Prime Contract, or as required by law, whichever is greater. This guarantee/warranty shall include, but is not limited to, the cost of all labor, material, and related items necessary to correct any such defect, plus the cost of repairing any damage to other items which may have been caused by the defective material or

workmanship. If the Subcontractor fails to begin warranty work within seventy-two (72) hours of being notified that such work is necessary, the Contractor may, at its option, perform the necessary remedial work or secure its performance by others and charge the Subcontractor with the cost thereof, plus a 15% Administrative Fee. Nothing in this paragraph shall shorten the statute of limitations on any action by the Contractor for breach of contract, negligence, or other cause of action against the Subcontractor.

20. Dispute Resolution

- 20.1 **Scope of Disputes Provisions.** All Claims, disputes, or other matters in question between the parties to this Subcontract which arise out of or relate to this Agreement (or the breach thereof), whether in contract or tort, (hereinafter "Dispute") shall be subject to the dispute resolutions set forth below.
- 20.2 **Initial Dispute Resolution/Mediation.** A Dispute which either party desires to pursue shall be set forth in a detailed written statement of claim submitted to the other party providing the specific basis upon which monetary or other relief is claimed to be due, the specific contractual provision(s) supporting the claim and an itemization of the amount claimed to be due. Following submission of the detailed statement of claim, Contractor and Subcontractor shall endeavor to settle the Dispute first through face to face direct discussions between corporate officers of the Contractor and Subcontractor which discussions shall be held at the Contractor's office location involved with the Project within thirty (30) calendar days of a request by either party. If the Dispute cannot be resolved through direct discussions, the parties shall participate in mediation under the Construction Industry Mediation Rules of the American Arbitration Association as a condition precedent and before recourse to any other form of binding dispute resolution. The location of the mediation shall be Allen County, Indiana, unless the parties agree on another location. Upon written notice requesting mediation provided to the other party and the American Arbitration Association, the parties agree to proceed with the mediation as scheduled by the mediator. Either party may terminate the mediation at any time after the first session, but the decision to terminate must be personally delivered to the other party and the mediator.
- 20.3 **Binding Dispute Resolution.** In the event Contractor and Subcontractor cannot resolve the Dispute through direct discussions or mediation as contemplated above, then the Dispute shall, at the sole discretion of Contractor, be decided either by submission to (a) arbitration administered by the American Arbitration Association or other arbitration tribunal mutually agreed upon by the parties; or (b) litigation subject to the exclusive jurisdiction and venue of Allen County, Indiana.
- 20.4 **Arbitration Election**
- 20.4.1 In the event Contractor exercises its exclusive right to resolve the Dispute in arbitration, such arbitration shall be conducted in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association or the applicable rules of such other arbitration tribunal as the parties may mutually determine in effect at the time the arbitration is commenced as modified by the terms hereof. Any arbitration hereunder shall be held in Allen County, Indiana.
- 20.4.2 Should Contractor exercise its exclusive right to resolve the Dispute by arbitration, then within fourteen (14) days after Contractor gives Subcontractor notice of Contractor's election of arbitration, the parties shall use good faith efforts to select a single arbitrator mutually acceptable to both parties. If the parties are unable to select an arbitrator, then the parties will select the arbitrator(s) from a panel of experienced construction arbitrators on the American Arbitration Association's large complex case panel or a comparable panel of experienced construction arbitrators maintained by such other arbitration tribunal mutually selected by the parties then in effect. In the event the amount in Dispute exceeds \$1,000,000.00, Contractor and Subcontractor agree the arbitration shall be heard by a panel of three (3) arbitrators; otherwise, the Dispute shall be heard by a single arbitrator.
- 20.4.3 The parties will enter into an Electronically Stored Information Agreement outlining the scope and volume for ESI discovery, which shall take into account the amount and complexity of the Dispute.
- 20.4.4 The arbitration award shall be final and binding upon the parties, shall include attorneys' fees and costs to the prevailing party or parties, and may be entered as a judgment in any court having proper jurisdiction. In any arbitration the Arbitrator(s) shall have no power to render an award which has the effect of altering or amending or changing in any way any provisions of this Subcontract.
- 20.4.5 The parties stipulate and agree that the performance of this Subcontract is a transaction involving interstate commerce. Notwithstanding other provisions in the Subcontract, or choice of law provisions to the contrary, this agreement to arbitrate shall be enforced pursuant to, and governed by, the Federal Arbitration Act, 9 U. S. C. §1 et seq., which shall not be superseded or supplemented by any other arbitration act, statute, or regulation.
- 20.4.6 At the sole discretion of Contractor, any arbitration with Subcontractor shall be consolidated with any other arbitration proceeding relating to the work under the General Contract.
- 20.5 **Litigation Election.** In the event Contractor elects not to exercise its exclusive right to resolve the Dispute by arbitration, or in the event the Dispute between Contractor and Subcontractor, or any portion thereof, is found to be non-arbitrable, then the parties hereby agree that the Dispute or a portion thereof (as the case may be) shall be subject to exclusive jurisdiction and venue of Allen County, Indiana. In any such Dispute or portion thereof which is resolved by litigation, Subcontractor expressly waives any right to trial by jury.
- 20.6 **Multiparty Proceeding.** To the extent permitted by Subcontract Documents, all parties necessary to resolve a claim shall be parties to the same dispute resolution proceeding. To the extent Disputes between the Contractor and the Subcontractor involve in whole or in part disputes between the Contractor and the Owner, Disputes between the Subcontractor and the Contractor shall be decided by the same tribunal and in the same forum as disputes between the Contractor and the Owner.
- 20.7 **Stay of Proceedings.** (a) In the event the provisions for resolution of disputes between the Contractor and the Owner contained in the Subcontract Documents do not permit consolidation or joinder with disputes of third parties, such as the Subcontractor, resolution of any Dispute between Contractor and Subcontractor involving in whole or in part disputes between Contractor and Owner shall be stayed pending conclusion of any dispute resolution proceeding between Contractor and Owner. (b) In the event that any action is filed prior to exhaustion of remedies under the Subcontract; such action shall be stayed pending conclusion of any dispute resolution proceedings.
- 20.8 **Work Continuation and Payment.** Unless otherwise agreed in writing, Subcontractor shall continue the Subcontract Work and maintain the Schedule of Work during any dispute resolution proceedings. As Subcontractor continues to perform, Contractor shall continue to make payments in accordance with this Agreement.
- 20.9 **Cost of Dispute Resolution; Attorneys' Fees.** The cost of any mediation proceeding shall be shared equally by the parties participating.

- 20.9.1 The prevailing party in any Dispute arising out of or relating to this Agreement or its breach that is resolved by a dispute resolution procedure designated in the Subcontract Documents shall be entitled to recover from the other party those reasonable attorneys' fees, costs and expenses (including expert fees and expenses) incurred by the prevailing party in connection with such dispute resolution process after direct discussions and mediation.
- 20.9.2 In the event the Subcontractor is awarded an amount equal to or less than the last written offer of settlement from Contractor, prior to the commencement of binding dispute resolution, Contractor shall be deemed prevailing party and be entitled to recover those reasonable attorneys' fees, costs and expenses (including expert fees and expenses) incurred by the Contractor.

21. Miscellaneous

- 21.1 No one, other than the parties hereto, their successors, trustees and assigns, shall be entitled to bring action on this Subcontract or the Performance Bond provided by the Subcontractor, it being the express intent of the parties that this Subcontract shall not be for the benefit of any third party.
- 21.2 Any term or provision of this Subcontract which is held to be invalid or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity or unenforceability without rendering invalid or unenforceable the remaining terms and provisions of this Subcontract or affecting the validity or enforceability of any of the terms or provisions of this Subcontract in any other jurisdiction.
- 21.3 This Subcontract, together with the documents referred to or incorporated herein by reference, constitute the complete agreement between the parties. No agent or employee of either party possesses the authority to make, and the parties shall not be bound by nor liable for, any statement, representation, promise or agreement not set forth herein. Any article, section, paragraph, or other headings contained in this Subcontract are for reference purposes and shall not affect in any way the meaning or interpretation of this Subcontract.
- 21.4 The terms and provisions shall extend to and be binding upon the successors, trustees and assigns of the parties hereto, and shall be governed and controlled, except as expressly provided herein or as required by the Subcontract Documents, by the laws of the State of the Project.
- 21.5 The Subcontractor agrees to comply with the provisions and any applicable local, state, or federal ordinance, regulation, status, or other mandate regarding affirmative action and/or minority/women's business enterprise participation.
- 21.6 This subcontract has not been altered in any manner from its original form as sent to the Subcontractor except for required signatures and dates, or as clearly marked and initialed by this Subcontractor. Any changes to this subcontract not initialed by the Contractor will not be binding.
- 21.7 Project Meetings. Subcontractor is required to attend all progress meetings when requested by Contractor, Architect, or Owner. Absence of Subcontractor at Progress Meetings when attendance is requested shall be subject to a \$100.00 fine.
- 21.8 Equipment / Scaffolding. At no time shall subcontractor or any forces employed by or acting for, by, through or under subcontractor use any equipment or scaffolding which is owned, rented, or maintained by Contractor without prior written consent of Contractor and signed Release of Liability Waiver.
- 21.9 All requirements of Specification Divisions 00 and 01 apply to Subcontractor.

Exhibit C

Waiver of Lien to Date Sample

STATE OF: _____

Pay Application #: _____

COUNTY OF: _____

Invoice No.: _____

TO WHOM IT MAY CONCERN:

WHEREAS the undersigned has been employed by Michael Kinder & Sons, Inc. to furnish labor, material and equipment for the project known XXX is the owner.

THE undersigned, for and in consideration of _____ and ____/100 (\$ _____)

Dollars, and other good and valuable considerations, upon the receipt whereof will be acknowledged, will hereby waive and release any and all lien or claim of, or right to lien, under the statutes of the State of Indiana, relating to mechanics' liens, with respect to and on said above-described premises, and the improvements, thereon, and on the material, fixtures, apparatus or machinery furnished, and on the moneys, funds or other considerations due or to become due from the owner, on account of all labor, services, material, fixtures, apparatus or machinery, furnished to this date by the undersigned for the above-described premises, INCLUDING EXTRAS.*

DATE _____

COMPANY NAME _____

COMPANY ADDRESS _____

CITY, STATE, ZIP _____

BY: _____

TITLE: _____

*EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN TO THE CONTRACT.

Subcontractor's Affidavit Sample

STATE OF: _____

COUNTY OF: _____

Pay Application #: _____

Invoice No.: _____

TO WHOM IT MAY CONCERN:

That the total amount of the contract with Michael Kinder and Sons, Inc. including extras* is \$_____ on which he or she has received payment of \$_____ as of the notarized date below. That all waivers are true, correct and genuine and delivered unconditionally and that there is no claim either legal or equitable to defeat the validity of said waivers.

That for the purpose of said contract, the following persons, firms or corporations have been engaged to furnish, have furnished, or will furnish materials and/or labor for said project; that there are due or to become due to them respectively, the amounts set opposite their names for said materials and/or labor; that there are no other known commitments and there is nothing due or to become due to any person, firm, or corporation for labor, services, materials, fixtures, machinery, apparatus, supplies or services, other than as stated herein.

That there are no other contracts for said work outstanding, and that there is nothing due or to become due to any person for material, labor or other work of any kind done or to be done upon or in connection with said work other than below stated.

			(A)	(B)	(C)	A-B-C=
MATERIAL SUPPLIER OR SUBCONTRACTOR	PHONE NUMBER	PROVIDED	CONTRACT PRICE INCLDG EXTRAS*	PREVIOUSLY REQUESTED TO DATE	CURRENT PAYMENT DUE	BALANCE OWED
TOTAL LABOR AND MATERIAL INCLUDING EXTRAS* TO COMPLETE.						

DATE _____

COMPANY NAME: _____

BY: _____

TITLE: _____

I HERBY CERTIFY THAT THE PERSON NAMED ABOVE, APPREARED BEFORE ME THIS DAY IN PERSON AND ACKNOWLEDGED THEY SIGNED THIS DOCUMENT (INCLUDING SUPPLEMENTAL SHEETS ATTACHED HERETO) AS THEIR FREE AND VOLUNTARY ACT AND DEED FOR THE USES AND PURPOSES HEREIN STATED.

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____

NOTARY PUBLIC _____

MY COMMISSION EXPIRES: _____

*EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN TO THE CONTRACT.

Subcontractor is required to provide sub-subcontractor and material supplier waivers for values exceeding \$5,000.00

Sub-Subcontractor Waiver of Lien to Date Sample

STATE OF: _____

Pay Application #: _____

COUNTY OF: _____

Invoice No.: _____

TO WHOM IT MAY CONCERN:

WHEREAS the undersigned has been employed by _____ to furnish labor, material and equipment for the project known as Huhtamaki Restroom Renovation of which XXX is the owner.

THE undersigned, for and in consideration of _____ and ____/100 (\$_____) Dollars, and other good and valuable considerations, upon the receipt whereof will be acknowledged, will waive and release any and all lien or claim of, or right to lien, under the statutes of the State of Indiana, relating to mechanics' liens, with respect to and on said above-described premises, and the improvements, thereon, and on the material, fixtures, apparatus or machinery furnished, and on the moneys, funds or other considerations due or to become due from the owner, on account of all labor, services, material, fixtures, apparatus or machinery, furnished to this date by the undersigned for the above-described premises, INCLUDING EXTRAS.*

DATE _____

COMPANY NAME _____

ADDRESS _____

CITY, STATE, ZIP _____

BY: _____

TITLE: _____

*EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN TO THE CONTRACT.

Sub-Subcontractor's Affidavit Sample

STATE OF: _____

COUNTY OF: _____

TO WHOM IT MAY CONCERN:

THE undersigned, (Name) _____ being duly sworn, deposes and says that he or she is (Position) _____ of (Company Name) _____ who is the contractor furnishing _____ on the building located at XXX, owned by XXX.

That the total amount of the contract including extras* is \$_____ on which he or she has received payment of \$_____ as of the notarized date below. That all waivers are true, correct and genuine and delivered unconditionally and that there is no claim either legal or equitable to defeat the validity of said waivers. That the following are the names and addresses of all parties who have furnished material or labor, or both, for said work and all parties having contracts or sub contracts for specific portions of said work or for material entering into the construction thereof and the amount due or to become due to each, and that the items mentioned include all labor and material required to complete said work according to plans and specifications.

That there are no other contracts for said work outstanding, and that there is nothing due or to become due to any person for material, labor or other work of any kind done or to be done upon or in connection with said work other than above stated.

DATE _____

SIGNATURE _____

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____

NOTARY PUBLIC _____

MY COMMISSION EXPIRES: _____

Material Supplier Waiver of Lien to Date Sample

STATE OF: _____

Pay Application #: _____

COUNTY OF: _____

Invoice No.: _____

TO WHOM IT MAY CONCERN:

WHEREAS the undersigned has been employed by _____ to furnish material and/or equipment for the project known as XXX is the owner.

THE undersigned, for and in consideration of _____ and ____/100 (\$_____) Dollars, and other good and valuable considerations, upon the receipt whereof will acknowledged, will waive and release any and all lien or claim of, or right to lien, under the statutes of the State of Indiana, relating to mechanics' liens, with respect to and on said above-described premises, and the improvements, thereon, and on the material, fixtures, apparatus or machinery furnished, and on the moneys, funds or other considerations due or to become due from the owner, on account of all labor, services, material, fixtures, apparatus or machinery, furnished to this date by the undersigned for the above-described premises, INCLUDING EXTRAS.*

DATE _____

COMPANY NAME _____

ADDRESS _____

CITY, STATE, ZIP _____

BY: _____

TITLE: _____

*EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN TO THE CONTRACT

Material Supplier Affidavit Sample

STATE OF: _____

TO WHOM IT MAY CONCERN:

THE undersigned, (Name) _____ being duly sworn, deposes and says that he or she is (Position) _____ of (Company Name) _____ who is the material supplier furnishing _____ for _____ (Company purchasing material) on the building located at XXX, owned by XXX.

That the total amount of the contract including extras* is \$ _____ on which he or she has received payment of \$ _____ as of the notarized date below. That all waivers are true, correct and genuine and delivered unconditionally and that there is no claim either legal or equitable to defeat the validity of said waivers. That the following are the names and addresses of all parties who have furnished material or labor, or both, for said work and all parties having contracts or sub contracts for specific portions of said work or for material entering into the construction thereof and the amount due or to become due to each, and that the items mentioned include all labor and material required to complete said work according to plans and specifications.

That there are no other contracts for said work outstanding, and that there is nothing due or to become due to any person for material, labor or other work of any kind done or to be done upon or in connection with said work other than above stated.

DATE _____

SIGNATURE _____

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____

NOTARY PUBLIC _____

MY COMMISSION EXPIRES: _____

Exhibit D Insurance Compliance Checklist

The following sample Certificate of Insurance shows the requirements needed to meet the terms of the Contract Agreement with Michael Kinder & Sons, Inc.

Please submit your client's Certificate of Insurance electronically to our office.

Please be sure your certificate of insurance and coverage meet the following requirements:

1. General aggregate limit is on a per project basis.
2. Limits are equal to or greater than those required.
3. Installation floater is included.
4. Michael Kinder & Sons, Inc. and the project owner are protected as blanket additional insured on the General Liability Policy (per Form #CG7037 or equivalent) including ongoing operations and products/completed operations as required by contract.
5. Michael Kinder & Sons, Inc. and the project owner are protected as blanket additional insured on the Auto Liability Policy (per Form #CA2048 or equivalent).
6. All insurance is primary and non-contributory.
7. Waiver of Subrogation in favor of Michael Kinder & Sons, Inc. on the General Liability and Workers Compensation policies is included.

Should you have any questions, please contact the project manager at our office. (260) 744-4359

Thank you.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
8/16/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER ISU Stewart, Brimmer, Peters & Company 3702 Rupp Drive Fort Wayne IN 46815		CONTACT NAME: Account Manager Name PHONE: (260) 482-6900 FAX: (260) 482-7305 E-MAIL: Account Manager email address ADDRESS:	
INSURED Full Named Insured Address City St Zip		INSURER(S) AFFORDING COVERAGE INSURER A Name of Insurance Company INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:	

COVERAGES **CERTIFICATE NUMBER: 17718 Sample** **REVISION NUMBER:**
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSP	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:	X	Y	123456789	XX/XX/XXXX	XX/XX/XXXX	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMPIOP AGG \$ 2,000,000
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS	X	Y	123456789	XX/XX/XXXX	XX/XX/XXXX	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ Underinsured motorist \$ 1,000,000
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$			123456789	XX/XX/XXXX	XX/XX/XXXX	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000
A	WORKERS COMPENSATION ANDEMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A Y	123456789	XX/XX/XXXX	XX/XX/XXXX	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 500,000 E.L. DISEASE - EA EMPLOYEE \$ 500,000 E.L. DISEASE - POLICY LIMIT \$ 500,000
A	Installation Floater			123456789	XX/XX/XXXX	XX/XX/XXXX	Limit \$500,000 Deductible \$500

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Michael Kinder & Sons, Inc., & their affiliates, directors, employees, subsidiaries, representative & any other parties as required by the GC/SubContractor contract agreement are listed as certificate holders. Per the signed contract, contractor & owner must be protected as blkt addl insureds on the GL policy incl on-going operations & prod/completed operations (Form #CG7037 or equivalent), & on the Auto Liab policy (Form CA2048 or equivalent). All insurance for subcontractors/sub-subcontractors shall be Primary & Non-Contributory. A Waiver of Subro clause in favor of Michael Kinder & Sons, Inc. shall be added to the GL, Auto and Work Comp Policies. Umbrella follows form.

CERTIFICATE HOLDER wboyer@kinderandsons.com Michael Kinder & Sons, Inc. 5206 Decatur Road Fort Wayne, IN 46806	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE Jeff Peters/AJP
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SECTION 01 21 00 - ALLOWANCES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements governing allowances.
 - 1. Certain items are specified in Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. If necessary, additional requirements will be issued by Change Order.
- B. Types of allowances include following:
 - 1. Contingency allowances.
- C. Related Sections include following:
 - 1. Division 01 Section "Unit Prices" for procedures for using unit prices.
 - 2. Divisions 02 through 49 Sections for items of Work covered by allowances.

1.2 SELECTION AND PURCHASE

- A. At earliest practical date after award of Contract, advise A/E of date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying Work.
- B. At A/E's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing Work.
- C. Purchase products and systems selected by A/E from designated supplier.

1.3 SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances, in form specified for Change Orders.
- B. Informational/Quality Assurance/Control Submittals
 - 1. Submit invoices or delivery slips to show actual quantities of materials delivered to site for use in fulfillment of each allowance.
 - 2. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of allowance.
 - 3. Coordinate and process submittals for allowance items in same manner as for other portions of Work.

1.4 COORDINATION

- A. Coordinate allowance items with other portions of Work. Furnish templates as required to coordinate installation.

1.5 CONTINGENCY ALLOWANCES

- A. Use contingency allowance only as directed by A/E for Owner's purposes and only by Change Order that indicate amounts to be charged to allowance.
- B. Contractor's overhead, profit, and related costs for products and equipment ordered by Owner under contingency allowance are included in allowance and are not part of Contract Sum. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.
 - 1. Coordinate percentage of markups with General Conditions, "Changes in Work".

- C. Change Order authorizing use of funds from contingency allowance will include Contractor's related costs and reasonable overhead and profit margins.
- D. At Project closeout, credit unused amounts remaining in contingency allowance to Owner by Change Order.

1.6 UNUSED MATERIALS

- A. Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after installation has been completed and accepted.
 - 1. If requested by A/E, prepare unused material for storage by Owner when it is not economically practical to return material for credit. If directed by A/E, deliver unused material to Owner's storage space. Otherwise, disposal of unused material is Contractor's responsibility.
 - 2. Unused amounts of monies included under allowances shall be credited to Owner by deduct Change Order prior to approval of Final Application for Payment.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALLOWANCES

- A. Contingency Allowances: Include following amounts in bid for inclusion in Contract Sum:

WORK ITEM	Unit	Quantity
Base Bid (monetary allowance)		\$75,000.00
Base Bid (steel deck repair)	SF	3,200
Base Bid (steel deck replacement)	SF	1,300
Base Bid (lightweight concrete deck repair)	SF	6,400
Base Bid (lightweight concrete deck replacement)	SF	2,600
Base Bid (exhaust fan hood replacement)	EA	1

END OF SECTION 01 21 00

SECTION – 01 22 00 UNIT PRICES

PART 1 - GENERAL

1.01 GENERAL REQUIREMENTS

- A. Requirements stated in the Drawings and General Conditions of these Specifications apply to all work in this Section.

1.02 NAME OF PROJECT

- A. South Putnam High School – Roof Replacement Project
- B. Central Elementary School - Roof Replacement Project

1.03 DEFINITIONS

- A. Unit price is a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

1.04 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: See individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

PART 2 – PRODUCTS - Not Used

PART 3 - EXECUTION

3.01 SCHEDULE OF UNIT PRICES

Description	Unit	Unit Price
Repair of steel roof deck	Sq. Ft.	
Replace of steel roof deck	Sq. Ft.	
Repair of lightweight concrete roof deck	Sq. Ft.	
Replace of lightweight concrete roof deck	Sq. Ft.	
Replacement of 1x6 wood blocking, with stainless steel fasteners	Ln. Ft.	
Replacement of 2x4 or 2x6 wood blocking, with stainless steel fasteners	Ln. Ft.	
Replacement of 2x8 or 2x10 wood blocking, with stainless steel fasteners	Ln. Ft.	
Replacement of 2x12 wood blocking, with stainless steel fasteners	Ln. Ft.	
Remove existing and replace with new, rooftop mechanical equipment and roof curb supports, includes costs for electrical work associated with roof top mechanical work	Per Unit	
Replace existing cast-iron roof drain head	Per Drain	
Replace interior roof drainage pipe, include all insulation and accessories	Ln. Ft.	
Clean-out existing roof drain lines	Each	
Replace existing rooftop equipment curb	Each	
PMMA coating of PVC Membrane; areas of identified ponding water, if needed	Sq. Ft.	
Provide additional membrane walk pad in location determined by owner (in addition to amount already shown on roof plan).	Ln. Ft.	
Replace existing two-piece fascia extender to match existing profile. Color to match new gravel stop edge metal.	Ln. Ft.	

END OF UNIT PRICES

SECTION 01 23 00 - ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for alternates.

1.2 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on Bid Form for certain work defined in Bidding Requirements that may be added to or deducted from Base Bid amount if Owner decides to accept a corresponding change either in quantity of construction to be completed or in products, materials, equipment, systems, or installation methods described in Contract Documents.
 - 1. The cost or credit for each alternate is net addition to or deduction from Contract Sum to incorporate alternate into Work. No other adjustments are made to Contract Sum.
 - 2. Alternates described in this Section are part of Work only if enumerated in Agreement.

1.3 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of Contract, notify each entity involved, in writing, of status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. Execute accepted alternates under same conditions as other work of Contract.
- D. Schedule: A Schedule of Alternates is included at end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

- A. Alternate No. 1: Provide costs additive, costs to increase new PVC membrane thickness from 60-mil to 80-mil at the High School RF01 roof replacement areas.
- B. Alternate No. 2: Provide cost to provide new EPDM 60-mil membrane assembly at the High School RF01.
- C. Alternate No. 3: Provide costs additive, costs to increase EPDM membrane thickness from 60-mil to 90-mil at the High School RF01.
- D. Alternate No. 4: Provide costs additive, costs to increase new PVC membrane thickness from 60-mil to 80-mil at the High School RF02/RF03 roof replacement areas.
- E. Alternate No. 5: Provide cost to provide new EPDM 60-mil membrane assembly at the High School RF02/RF03.

- F. Alternate No. 6: Provide costs additive, costs to increase EPDM membrane thickness from 60-mil to 90-mil at the High School RF02/RF03.
- G. Alternate No. 7: Provide costs additive, costs to increase new PVC membrane thickness from 60-mil to 80-mil at the Central Elementary School roof replacement areas.
- H. Alternate No. 8: Provide cost to provide new EPDM 60-mil membrane assembly at Central Elementary School RF01.
- I. Alternate No. 9: Provide costs additive, costs to provide new EPDM 90-mil membrane assembly at Central Elementary School RF01.
- J. Alternate No. 10: State the cost for HS RF01 to be completed in 2025.
- K. Alternate No. 11: State the cost for HS RF02/RF03 to be completed in 2025.
- L. Alternate No. 12: State the cost for CES RF01 to be completed in 2025.
- M. Alternate No. 13a: State the cost to delete the Performance& Payment Bond to Base Bid 01.
- N. Alternate No. 13b: State the cost to delete the Performance& Payment Bond to Base Bid 02.
- O. Alternate No. 13c: State the cost to delete the Performance& Payment Bond to Base Bid 03.

END OF SECTION 01 23 00

SECTION 01 33 00 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Submittal schedule requirements.
 - 2. Administrative and procedural requirements for submittals.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require A/E's and Construction Manager's responsive action. Action submittals are those submittals indicated in individual specification sections as "Action Submittals".
- B. Informational Submittals: Written and graphic information and physical samples that do not require A/E's and Construction Manager's responsive action. Submittals may be rejected for not complying with requirements. Information submittals are those submittals indicated in individual specification sections as "Quality Assurance/Control Submittals" or "Informational Submittals."
- C. Closeout Submittals: Written and graphic information and physical extra stock items required at or near completion of a project. Requirements for those submittals are included in the General Conditions of the contract and Division 01 Section "Closeout Procedures".
- D. File Transfer Protocol (FTP): Communications protocol that enables transfer of files to and from another computer over a network and that serves as the basis for standard Internet protocols. An FTP site is a portion of a network located outside of network firewalls within which internal and external users are able to access files.
- E. Portable Document Format (PDF): An open standard file format licensed by Adobe Systems used for representing documents in a device-independent and display resolution-independent fixed-layout document format.

1.3 SUBMITTAL SCHEDULE

- A. A list of required submittals will be provided to the Contractor by the Construction Manager, for use as a checklist, at the Pre-Construction Meeting. Color and Material sample submittals are required within 45 days of the Pre-Construction Meeting. All submittals are required to be completed within 120 days of the Pre-Construction Meeting or within a shorter, more immediate timeframe as required by the Project Schedule.

1.4 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. A/E's Digital Data Files: Electronic copies of CAD Drawings of the Contract Drawings may be provided by A/E for Contractor's use in preparing submittals.
 - 1. The cost to obtain Drawing files shall be as indicated on the "Digital Data Transmittal".
 - 2. Contractor shall send a "Digital Data Transmittal" to A/E to request digital data files.
 - a. Digital Data Transmittal is included hereinafter.
 - 3. Allow 14 days for processing Digital Data request.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
 - 3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.

4. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Where submission of samples, shop drawings, or other items are required from suppliers or subcontractors, it shall be the responsibility of the Contractor for whom the subcontractor is executing the Work to see that the submittal items required are complete and properly submitted, and corrected and resubmitted at the time and in the order required so as not to delay the progress of the Work. Submittals shall include sufficient detail to determine that the contractor clearly understands the requirements of the Contract Documents.
 - b. Contractors on this Project shall provide submittals in accordance with the requirements of this Section. Where a submittal is required by a Contractor but assistance needed from others, Contractors shall participate and cooperate to expedite each submittal. .
 - c. A/E and Construction Manager reserve the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on A/E's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
 1. Initial Review: Allow 14 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Construction Manager will advise Contractor when a submittal being processed must be delayed for coordination.
 2. Resubmittal Review: Allow 14 days for review of each resubmittal.
 3. Submittals Not Required: A/E will send a transmittal indicating submittals were "not required for review". All copies of the submittals may be disposed of by the A/E.
- D. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:
 1. Assemble complete submittal package into a single indexed file with links enabling navigation to each item.
 2. Each submittal shall be transmitted separately and shall cover only one specification section.
 3. Name file with submittal number or other unique identifier, including revision identifier.
 - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).
 4. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by A/E and Construction Manager.
- E. Options: Identify options requiring selection by the A/E.
- F. Deviations and Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by A/E and Construction Manager on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.
- G. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 1. Note date and content of previous submittal.
 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 3. Resubmit submittals until they are marked with approval notation from A/E's and Construction Manager's action stamp.

- H. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
 - 1. Final Shop Drawings: Furnish one full-size copy (as marked) to be kept at the Project site.
- I. Use for Construction: Use only final submittals that are marked "No Exceptions Taken" or "Note Markings" from A/E's action stamp.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES, GENERAL

- A. Submittals, including those specified herein to be submitted to the Architect, shall be submitted directly to the Construction Manager for review. The Construction Manager will forward required submittals to the Architect for review.
- B. General Submittal Procedure Requirements: All submittals are to be submitted electronically.
 - 1. The Contractor shall limit each electronic submittal to a single Specification Section. Compile all sheets of each submittal into a single non-changeable electronic PDF file format.
 - 2. Electronic files can be received in format size up to 30 inches by 42 inches. Electronic CAD files are also acceptable. Submittals in a different manner or format will require prior approval from the Construction Manager.
 - 3. Each electronic submittal transmittal shall include the following information:
 - a. Date submitted.
 - b. Project title, Construction Manager number and A/E Project Number.
 - c. Contractor's name and address.
 - d. Identification by Specification Section and quantity submitted for each submittal including name of subcontractors, manufacturer or supplier.
 - e. Notification of deviations from the Contract Documents for each submittal.
- C. The Contractor shall check each submittal and note their approval, comments or suggestion on the submittal.
 - 1. Contractor's written approval or stamp must be marked on each submittal or it will be returned without action.
 - 2. Contractor shall identify any options requiring selection by A/E.
- D. A/E, through the Construction Manager, will return annotated files electronically.
 - 1. Comments will consist of annotations applied electronically to the file or transmittal form.
- E. Resubmittals: Make resubmittals in same form as initial submittal.
 - 1. Note date and content of previous submittal.
 - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 - 3. Resubmit submittals until they are marked with approval notation from A/E's and Construction Manager's action stamp.
- F. Electronic submittals will only be accepted in an unchangeable electronic format such as pdf. File formats such as MS Word (.doc or .docx), MS Excel (.xls or .xlsx), AutoDesk, AutoCAD (.dwg or .dwt), are considered unacceptable as the original file submitted could be accidentally altered from the originators intended document. These file types will be rejected by A/E.

2.2 ACTION SUBMITTALS

- A. General: Prepare and submit Action Submittals required by individual specification sections.
- B. Product Data: Collect information into a single submittal for each element of construction or system. Product data includes printed information, such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams, and performance curves.

1. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products that are not required, mark copies to indicate the applicable information. Product data unmarked by Contractor may be returned unreviewed by A/E. Include the following information, as applicable:
 - a. Manufacturer's product specifications
 - b. Manufacturer's installation instructions
 - c. Standard color charts
 - d. Manufacturer's catalog cuts
 - e. Compliance with specified trade association standards.
 - f. Compliance with recognized testing agency standards.
 - g. Application of testing agency labels and seals.
 - h. Notation of dimensions verified by field measurement.
 - i. Notation of coordination requirements.
 - j. Availability and delivery time information.
 2. For equipment, include the following in addition to the above, as applicable.
 - a. Wiring diagrams showing factory-installed wiring.
 - b. Printed performance curves.
 - c. Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying shop drawings.
 3. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed. Submit before or concurrent with samples and Shop Drawings.
 - a. Preliminary Submittal: Submit a preliminary single copy of Product Data where selection of options is required.
 4. If a product changes or a name change has occurred an accompanying letter of explanation with the submittal is in order.
 5. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
 - a. Do not proceed with installation until a copy of Product Data is in the Installer's possession.
 - b. Do not permit use of unsubmitted copies of Product Data in connection with construction.
 6. In compliance with the OSHA Hazard Communication Standard (1910.1200, 08-24-1987) Contractors shall post at the site MSDS (Material Safety Data Sheets) for ALL products classified as hazardous that their firm has knowledge that they will be furnishing, using, or storing on the jobsite during the duration of this Project in accordance with OSHA standards. At the completion of the project, the Contractor shall turn their "MSDS" information directly over to the Owner with a receipt for the Owner to sign. A copy of the signed receipt only shall be submitted to the A/E.
 - a. Material Safety Data Sheets (MSDS) should not be submitted to the A/E for review. Material Safety Data Sheets submitted to A/E will removed or cross out with no action taken.
 7. Submit product data in the following format:
 - a. PDF electronic file.
- C. Shop Drawings: Prepare project specific information, drawn accurately to scale. Do not base shop drawings on reproductions of the Contract Documents or standard printed data, unless submittal based on A/E's digital data drawing files is otherwise permitted.
1. The Contractor shall perform no portion of the Work requiring submittal and review of shop drawings, product data, samples or similar submittals until the A/E has approved the respective submittal. Such Work shall be in accordance with approved submittals.
 2. Submit newly prepared information drawn accurately to scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the bases of Shop Drawings. Standard information prepared without specific reference to the Project is not a Shop Drawing.

3. Shop drawings are drawings, diagrams, illustrations, schedules, performance charts, brochures, and other data that are prepared by the Contractor or subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work. Shop drawings are to be specially prepared for a specific Product to show how a given item is to be fabricated and installed; this is what distinguishes shop drawings from product data. Shop drawings show how the Contractor intends to fulfill contractual obligations and reflect the Contractor's understanding of the information given in the Contract Documents. Contract Documents do not show every condition that may exist, and they do not fully indicate how every part and piece must be fabricated or incorporated into the Construction. Preparing accurate Shop Drawings provides the opportunity to fully detail all conditions and show how requirements will be satisfied. Do not base shop drawings on reproduction of the Contract Documents.
 - a. Advertising brochures will not be accepted as shop drawings.
 - b. Erection and setting drawings as referred to in these Specifications will be considered as shop drawings and shall be submitted along with detailed shop drawings.
 - c. Where schedules are required to indicate locations, they shall be submitted as part of the shop drawings package for that item.
 - d. Shop drawings and schedules shall repeat the identification shown on the Contract Drawings.
 - e. The Contractor shall check all shop drawings, samples and other submittals and submit them to the A/E utilizing a Transmittal Form, giving his approval and/or comments and suggestions. Failure to use a Transmittal Form will result in submittals being returned "without action".
 - f. Include the following information:
 - 1) Dimensions
 - 2) Identification of products and materials included by sheet and detail number
 - 3) Compliance with specified standards
 - 4) Notation of coordination requirements
 - 5) Notation of dimensions established by field measurements
 - 6) Fabrication and installation drawings
 - 7) Roughing-in and setting diagrams
 - 8) Wiring diagrams showing field installed wiring, including power, signal, and control wiring
 - 9) Shop work manufacturing instructions
 - 10) Templates and patterns
 - 11) Schedules
 - 12) Design calculations
 - 13) Seal and signature of professional engineer, if specified.
 - 14) Relationship and attachment to adjoining construction clearly indicated.
4. Preparation of Submittals: Provide permanent marking on each submittal to identify project, date, Contractor, Subcontractor, submittal name, and similar information to distinguish it from other submittals. Show Contractor's executed review and approval marking and provide space for A/E's "action" marking. Package each submittal appropriately for transmittal and handling.
5. By approving and submitting shop drawings, the Contractor thereby represents that he has determined and verified field measurements, field construction criteria, materials, catalog numbers, and similar data, and that he has checked and coordinated each shop drawing with the requirements of the Work and of the Contract Documents prior to submitting to the A/E.
6. The Contractor shall make corrections required by the A/E and shall resubmit shop drawings until appropriately marked. The Contractor shall direct specific attention in writing or on resubmitted shop drawings to revisions other than the corrections requested by the A/E on previous submissions.
7. The A/E will review shop drawings only for conformance with the design concept of the Project and with the information given in the Contract Documents. The A/E's review of a separate item shall not indicate review of an assembly in which the item functions.

8. The A/E's review of shop drawings shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents unless the Contractor has informed the A/E in writing of such deviation at the time of submission and the A/E has given written approval to the specific deviation, nor shall the A/E's action relieve the Contractor from responsibility for errors or omissions in the shop drawings.
 - a. The A/E's review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and qualities, or for substantiating instructions or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The A/E's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the A/E, of any construction means, methods, techniques, sequences, or procedures. The A/E's approval of a specific item shall not indicate approval of an assembly of which it is a component.
 9. Notations and remarks added to shop drawings by the A/E are to ensure compliance to Drawings and Specifications and do not imply a requested or approved change to contract cost.
 10. Should deviations, discrepancies, or conflicts between shop and contract drawings and Specifications be discovered, either prior to or after review, Contract Documents shall control and be followed.
 11. Submit shop drawings in the following format:
 - a. PDF electronic file.
 12. Shop drawings not requested by the A/E shall be returned without action.
- D. Samples for Initial Selection: Prepare physical units of materials or products, including the following:
1. The Contractor shall submit to the A/E samples to illustrate materials or workmanship, colors, and textures, and establish standards by which the Work will be judged.
 - a. Transmit samples that contain multiple, related components such as accessories together in one submittal package.
 2. Identification: Attach label on unexposed side of samples that includes the following:
 - a. Generic description of sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of applicable specification section.
 - e. Specification paragraph number and generic name of each item.
 3. Email Transmittal: Provide corresponding electronic submittal of sample transmittal, digital image file illustrating sample characteristics, and identification information for record.
 4. Samples for Initial Selection: Submit manufacturer's color published charts consisting of units or sections of units showing the full range of colors, textures, and patterns available. Reproductions, facsimiles, or copies will be rejected.
 - a. Number of Samples for Initial Selection: Submit two full sets of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. A/E will return one submittal with options selected.
- E. Samples for Verification: Submit full size, fully fabricated samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials, color range sets, and swatches showing color, texture, and pattern.
1. Number of Samples for Verification: Submit 2 sets of samples. A/E will retain sample sets, unless otherwise noted.
 - a. Contractor shall receive written notification.
 2. Email Transmittal: Provide corresponding electronic submittal of sample transmittal, digital image file illustrating sample characteristics, and identification information for record.
 3. Disposition: Maintain sets of approved samples at project site, available for quality control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.

- a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such samples must be in an undamaged condition at time of use.
 - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
- 4. Identification: Permanently attach label on unexposed side of Samples that include the following:
 - a. Product name and submittal number.
 - b. Generic description of the sample.
 - c. Product name and name of manufacturer.
 - d. Sample source.
 - e. Number and title of applicable Specification Section.
 - f. Specification paragraph number and generic name of each item.
- 5. Submit samples for review of size, kind, color, pattern, and texture. Submit samples for a final check of these characteristics with other elements and a comparison of these characteristics between the final submittal and the actual component as delivered and installed.
 - a. Where variation in color, pattern, texture, and other characteristic is inherent in the material or product represented, submit at least 3 multiple units that show approximate limits of the variations.
 - b. Refer to other Specification Sections for requirements for samples that illustrate workmanship, fabrication techniques, details of assembly, connections, operation, and similar construction characteristics.
- 6. By approving and submitting samples, the Contractor thereby represents that he has determined and verified materials, catalog numbers, and similar data, and that he has checked and coordinated each sample with the requirements of the Work and of the Contract Documents prior to submitting to the A/E.
- 7. The Contractor shall resubmit the required number of correct or new samples until approved. The Contractor shall direct specific attention in writing or on resubmitted samples to revisions other than the changes requested by the A/E on previous submissions.
- 8. The A/E will review samples but only for conformance with the design concept of the Project and with the information given in the Contract Documents. The A/E's review of a separate item shall not indicate approval of an assembly in which the item functions.
- 9. The A/E's action shall not relieve the Contractor of responsibility for deviations from the requirements of the Contract Documents unless the Contractor has informed the A/E in writing of the deviation at the time of submission and the A/E has given written approval to the specific deviation, nor shall the A/E's action relieve the Contractor from responsibility for errors or omissions in the samples.
- 10. Unless otherwise specified, samples shall be in duplicate and of adequate size to show function, equality, type, color, range, finish, and texture of material. When requested full technical information and certified test data shall be supplied.
 - a. Each sample shall be labeled, bearing material name and quality, the Contractor's name, date, project name, and other pertinent data.
 - b. Transportation charges to and from the A/E's office must be prepaid on samples forwarded. The A/E shall retain samples until the Work for which they were submitted has been accepted.
- 11. Materials shall not be ordered until final review is received in writing from the A/E. Materials shall be furnished, equal in every respect to reviewed samples. Where color or shade cannot be guaranteed, the manufacturer shall indicate the maximum deviation. Work shall be in accordance with the final reviewed samples.

2.3 INFORMATIONAL/QUALITY ASSURANCE/CONTROL SUBMITTALS

- A. General: Prepare and submit informational submittals required by other Specification Sections.
- B. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of A/E's and Owners, and other information specified.

- C. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
1. Type of product. Include unique identifier for each product indicated in the Contract Documents.
 2. Manufacturer and product name, and model number if applicable.
 3. Number and name of room or space.
 4. Location within room or space.
 5. Submit product schedule in the following format:
 - a. PDF electronic file.
- D. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumption and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.
- E. Certificates:
1. Certificates and Certification Submittals: Submit a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity. Provide a notarized signature where indicated.
 2. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized for this specific project.
 3. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements. Include evidence of manufacturing experience where required.
 4. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements.
 5. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements.
 6. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.
- F. Test and Research Reports:
1. Compatibility Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
 2. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements.
 3. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements.
 4. Preconstruction Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements.
 5. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
 - a. Test reports shall be no older than 15 months, unless otherwise noted or approved by A/E.
 6. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:

- a. Name of evaluation organization.
 - b. Date of evaluation.
 - c. Time period when report is in effect.
 - d. Product and manufacturers' names.
 - e. Description of product.
 - f. Test procedures and results.
 - g. Limitations of use.
- G. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements in Division 01 Section "Closeout Procedures".
- H. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer. Include the following, as applicable:
 - 1. Preparation of substrates
 - 2. Required substrate tolerances
 - 3. Sequence of installation or erection
 - 4. Required installation tolerances
 - 5. Required adjustments
 - 6. Recommendations for cleaning and protection
- I. Manufacturer's Field Reports: Prepare written information documenting factory authorized service representative's tests and inspections. Include the following, as applicable:
 - 1. Name, address, and telephone number of factory authorized service representative making report.
 - 2. Statement on condition of substrates and their acceptability for installation of product.
 - 3. Statement that products at project site comply with requirements.
 - 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 - 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 - 6. Statement whether conditions, products, and installation will affect warranty.
 - 7. Other required items indicated in individual Specification Sections.
- J. Material Safety Data Sheets (MSDSs) or Safety Data Sheet(s): Submit information directly to Owner; do not submit to A/E. MSDS are to be collected and field as the jobsite by the Contractor as required by OSHA and other authorities. They communicate, to the Contractor's employees and other persons authorized to be on the Project site, important information about hazardous materials, such as their chemical and common names; ingredients that have been determined to be health hazards or carcinogens; physical and chemical characteristics; ingredients that have been determined to be physical hazards (potential for fire, explosion, reactivity, and so forth); health hazards, including signs and symptoms of exposures; and the OSHA – permissible exposure limit. Also included are precautions for their safe handling and use along with emergency and first-aid procedures to follow in case of exposure.
 - 1. This information relates directly to construction safety, which is the sole responsibility of the Contractor.
 - 2. MSDS or SDS shall not be submitted to the A/E for review.
 - 3. MSDS or SDS submitted to A/E will be either removed or crossed out of submittal with no action taken.
- K. Coordination Drawings: Comply with requirements specified in Division 1 Section "Project Management and Coordination".
- L. Contractor's Construction Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation."
- M. Application for Payment: Comply with requirements specified in Division 01 Section "Payment Procedures."

2.4 CLOSEOUT SUBMITTALS

- A. General: Closeout Submittals are to be submitted with O and M Manuals only. Do not submit with other ACTION and INFORMATIONAL Submittals.
 - 1. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements in Division 01 Section "Closeout Procedures".

2.5 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to A/E.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally-signed PDF electronic file signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
 - 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Action and Informational/Quality Assurance/Control Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to A/E and Construction Manager.
- B. Project Closeout and Maintenance/Material Submittals: Refer to requirements in Division 01 Section "Closeout Procedures."
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 A/E'S AND CONSTRUCTION MANAGER'S ACTION

- A. General: A/E and Construction Manager will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: A/E and Construction Manager will review each submittal, make marks to indicate corrections or modifications required, and return it. A/E will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.
 - 1. Shop drawings will be marked as follows: Contractor shall take the following action for each respective marking:
 - a. "REVIEWED" – Contractor shall make and distribute copies.
 - b. "FURNISH AS CORRECTED" – Final Release; Contractor may proceed with fabrication, taking into account the necessary corrections on submittal or attached and with Contract Documents.
 - c. "REVISE AND RESUBMIT" - Contractor may proceed with fabrication, taking into account the necessary corrections. Corrected shop drawings shall be resubmitted before fabrication of this work is complete to obtain a different action marking. Do not allow drawings marked "Resubmit" to be used in connection with installation of the Work.

- d. "REJECTED" - Contractor will be required to resubmit shop drawings in their entirety. No fabrication or installation shall be started until shop drawings so marked have been completely revised, resubmitted, and marked by A/E according to preceding Paragraphs a., b., or c.
 - e. "SUBMIT SPECIFIED ITEM" – Contractor shall not submit substitutions in Shop Drawings. Submittal is rejected. Submit specified item.
 - f. "NOT REQUIRED FOR REVIEW (INFORMATIONAL)" – Contractor shall submit Information Submittals for A/E records only.
- C. Informational/Quality Assurance/Control Submittals: A/E and Construction Manager will review each submittal and will not return it, or will return it if it does not comply with requirements.
- D. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from A/E and Construction Manager.
- E. Incomplete submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- F. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION 01 33 00

SECTION 01 60 00 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.
 - 1. It is the intent of the Specifications and Drawings to accomplish a complete and first-rate installation executed by competent and experienced workers.
 - 2. Equipment, specialties, and similar items shall be checked for compliance and approved prior to installation. Contractors are cautioned that work or equipment installed without approval is subject to condemnation, removal, and subsequent replacement with an approved item without extra remuneration.
- B. Related Sections include the following:
 - 1. Divisions 02 through 49 Sections for specific requirements for warranties on products and installations specified to be warranted.

1.2 DEFINITIONS

- A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.

1.3 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.
 - 1. Each contractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
 - 2. If a dispute arises between contractors over concurrently selectable but incompatible products, A/E will determine which products shall be used.

1.4 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.

- B. Delivery and Handling:
1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
- C. Storage:
1. Store products to allow for inspection and measurement of quantity or counting of units.
 2. Store materials in a manner that will not endanger Project structure.
 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
 4. Store cementitious products and materials on elevated platforms.
 5. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
 6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
 7. Protect stored products from damage and liquids from freezing.
 8. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.
- D. Each Contractor shall be responsible for materials he orders for delivery to the jobsite. Responsibility includes, but is not limited to, receiving, unloading, storing, protecting, and setting in place; ready for final connections.
1. The Owner will not be responsible for deliveries related to the construction or operation of the Contractor. The Owner cannot sign delivery forms for the Contractor.
- E. Contractors shall insure that products are delivered to the Project in accordance with the Construction Schedule of the Project. In determining date of delivery, sufficient time shall be allowed for shop drawings and sample approvals, including the possibility of having to resubmit improperly prepared submittals or products other than those specified and the necessary fabrication or procurement time along with the delivery method and distance involved.

1.5 WARRANTIES

- A. Specific warranties or bonds called for in the Contract Documents, in addition to that falling under the general warranty as set forth in General Conditions, shall be furnished in accordance with the requirements of the Specifications.
1. Owner's Recourse: Expressed warranties made to the Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under law. Expressed warranty periods shall not be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations, rights, or remedies.
 - a. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
- B. Each Contractor shall and does hereby agree to warrant for a period of one year, or for longer periods, where so provided in the Specifications, as evidenced by the date of Substantial Completion issued by the A/E, products installed under the Contract to be of good quality in every respect and to remain so for periods described herein.

- C. Should defects develop in the previously mentioned Work within the specified periods, due to faults in products or their workmanship, the Contractor hereby agrees to make repairs and do necessary Work to correct defective Work to the A/E's satisfaction, in accordance with the General and Supplementary Conditions. Such repairs and corrective Work, including costs of making good other Work damaged by or otherwise affected by making repairs or corrective Work, shall be done without cost to the Owner and at the entire cost and expense of the Contractor within 30 days after written notice to the Contractor by the Owner.
1. Related Damages and Losses: When correcting failed or damaged warranted construction, remove and replace construction that has been damaged as a result of such failure or must be removed and replaced to provide access for correction of warranted construction.
 2. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- D. Nothing herein intends or implies that the warranty shall apply to Work that has been abused, neglected, or improperly maintained by the Owner or his successor in interest.
- E. Where service on products is required under this Article, it shall be promptly provided when notified by the Owner and no additional charge shall be made, unless it can be established that the defect or malfunctioning was caused by abuse or accidental damage not to be expected under conditions of ordinary wear and tear.
- F. In the event movement in the adjoining structure or components causes malfunctioning, the Contractor responsible for the original installation of the adjoining structure or components shall provide such repair, replacement, or correction necessary to provide for proper functioning to bring the equipment back into the same operating condition as approved at the completion of the building.
- G. The manufacturer and supplier expressly warrants that each item of equipment furnished by him and installed in this Project is suitable for the application shown and specified in the Contract Documents and includes features, accessories, and performing characteristics listed in the manufacturer's catalog in force on the date bids are requested for the Work. This warranty is intended as an assurance by the manufacturer that his equipment is not being misapplied and is fit and sufficient for the service intended. This warranty is in addition to and not in limitation of other warranties or remedies required by law or by the Contract Documents. It shall be the responsibility of the Contractor for the particular equipment to obtain this warranty in writing.
- H. In case the Contractor fails to do Work so ordered, the Owner may have Work done and charge the cost thereof against monies retained as provided for in the Agreement and, if said retained monies shall be insufficient to pay such cost or if no money is available, the Contractor and his Sureties shall agree to pay to the Owner the cost of such Work.
- I. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
1. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 2. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.
- J. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.
1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.

2. Specified Form: When specified forms are included with the Specifications, prepare a written document using appropriate form properly executed.
3. Refer to Divisions 02 through 49 Sections for specific content requirements and particular requirements for submitting special warranties.

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.
 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 4. Where products are accompanied by the term "as selected," A/E will make selection.
 5. Where products are accompanied by the term "match sample," sample to be matched is A/E's.
 6. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.
- B. Product Selection Procedures:
 1. Product: Where Specifications name a single product and manufacturer, provide the named product that complies with requirements.
 2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements.
 3. Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.
 - a. Restricted List: Where specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Substitutions for Contractor's convenience will not be considered after award, unless otherwise noted.
 4. Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
 - a. Restricted List: Where specifications include a list of manufacturer's names, provide a product by one of the manufacturers listed that complies with requirements. Substitutions for Contractor's convenience will not be considered, unless otherwise indicated.
 5. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named.
 6. Visual Matching Specification: Where Specifications require matching an established Sample, select a product that complies with requirements and matches A/E's sample. A/E's decision will be final on whether a proposed product matches.
 - a. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 Article "Product Substitutions" for proposal of product.
 7. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, and textures" or a similar phrase, select a product that complies with other specified requirements.
 - a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, A/E will select color, pattern, density, or texture from manufacturer's product line that does not include premium items.
 - b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, A/E will select color, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 PROTECTION

- A. Contractor shall protect building elements and products subject to damage. Should workers or other persons employed or commissioned by a Contractor be responsible for damage, the entire cost of repairing said damage shall be assumed by that individual Contractor. Should damage be done by a person or persons not employed or commissioned by a Contractor, the respective Contractors shall make repairs and charge the cost to the guilty person or persons. The affected Contractors shall be responsible for collecting such charges. If the person or persons responsible for damage cannot be discovered, the respective Contractor shall make full and satisfactory repairs, and the cost of Work shall be prorated against each Contractor.
- B. The respective Contractors shall protect their products prior to installation and final acceptance. Storage shall be dry, clean, and safe. Materials or equipment damaged, deteriorated, rusted, or defaced due to improper storage shall be repaired, refinished, or replaced, as required by the A/E. Products lost through theft or mishandling shall be replaced by the Contractor without cost to the Owner.

2.3 ACCEPTANCE OF EQUIPMENT OR SYSTEMS

- A. The Owner will not accept the start of the warranty period on systems or equipment until Substantial Completion is issued to the respective Contractor(s) for Owner's occupancy of the building, in part or whole. Each Contractor shall make such provisions as required to extend the manufacturer's warranty from time of initial operation of systems or equipment until Substantial Completion is given in writing.

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 60 00

SECTION 01 73 29 - CUTTING AND PATCHING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes procedural requirements for cutting and patching.
- B. Related Sections include the following:
 - 1. Division 02 Section "Selective Structure Demolition" for demolition of selected portions of the building.
 - 2. Divisions 2 through 33 Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work.
 - 3. Division 07 Section "Penetration Firestopping" for patching fire-rated construction.

1.2 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of other Work.
- B. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other Work.
- C. Cutting and patching performed during the manufacture of products or during the initial fabrication, erection, or installation processes is not considered to be "cutting and patching" under this definition. Drilling of holes to install fasteners and similar operations are also not considered to be "cutting and patching".

1.3 QUALITY ASSURANCE

- A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
 - 1. Structural Elements: When cutting and patching structural elements, notify A/E of locations and details of cutting and await directions from the A/E before proceeding. Shore, brace, and support structural element during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection.
 - a. Foundation construction.
 - b. Bearing and retaining walls.
 - c. Structural concrete.
 - d. Structural steel.
 - e. Lintels.
 - f. Structural decking.
 - g. Miscellaneous structural metals.
 - h. Exterior curtainwall construction.
 - i. Equipment supports.
 - j. Piping, ductwork, vessels, and equipment.
 - k. Structural systems of special construction in Division 13 Sections.
- B. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety. Operating elements include the following:
 - 1. Primary operational systems and equipment.
 - 2. Air or smoke barriers.
 - 3. Fire-suppression systems.
 - 4. Mechanical systems piping and ducts.
 - 5. Control systems.
 - 6. Communication systems.
 - 7. Conveying systems.
 - 8. Electrical wiring systems.

9. Operating systems of special construction in Division 13 Sections.
 10. Fire detection and alarm systems.
 11. Fire separation assemblies.
- C. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety. Miscellaneous elements include the following:
1. Water, moisture, or vapor barriers.
 2. Membranes and flashings.
 3. Exterior curtain-wall construction.
 4. Equipment supports.
 5. Piping, ductwork, vessels, and equipment.
 6. Noise- and vibration-control elements and systems.
 7. Sprayed fire-resistive material.
- D. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in A/E's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
- E. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.
- F. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of in-place materials.
- C. Cast-In-Place Concrete
1. Cementitious Materials
 - a. Portland Cement: ASTM C150, Type I or III, grey.
 - b. Normal-Weight Aggregate: ASTM C33, Class 3S.
 2. Mix
 - a. Minimum Compressive Strength: 3500 psi at 28 days.
 - b. Maximum Water-Cementitious Materials Ratio: 0.45.
 - c. Slump Limit: 4 inches, plus or minus 1 inch, before adding water-reducing or plasticizing admixtures, with maximum slump less than 6 inches.
 - 1) High range water reducers are not allowed.
 - d. Air Content: Do not allow air content of troweled finish floors to exceed 3 percent.
- D. Hydraulic Cement Repair Underlayment: Cement-based, polymer-modified self-leveling product that can be applied in thicknesses required to patch and that can be feathered at edges to match adjacent floor elevations.
1. Cement Binder: ASTM C150, Portland cement or hydraulic or blended hydraulic cement as defined in ASTM C219.
 2. Primer: Product of underlayment manufacturer recommended for substrate, conditions, and application.

3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch or coarse sand as recommended by underlayment manufacturer.
 - a. Provide aggregate when recommended in writing by underlayment manufacturer for underlayment thickness required.
 4. Compressive Strength: Not less than 4,000 psi at 28 days when tested according to ASTM C 109.
 5. Products: Subject to compliance with requirements, provide one of the following:
 - a. Ardex, Inc.; Ardex k-15
 - b. BASF; Enemrex Self-Leveling Underlayment of MBT Mastertop 110 Plus Underlayments.
 - c. Dayton Superior Corp.; Levelayer
 - d. Dependable Chemical Co.; Skimflow ES
 - e. Euclid Chemical Company; Super Flo-Top
 - f. MAPEI Corp.; Ultrapan 1 Plus
 - g. Maxxon Corp.; Level-Right
 - h. TEC Specialty Products; EZ Level
- E. Masonry Materials
1. Concrete Masonry Units: ASTM C90, normal weight, unless otherwise noted.
 2. Mortar Material: Comply with ASTM C270, property specification.
 - a. Portland Cement: ASTM C150, Type I or Type II.
 - b. Hydrated Lime: ASTM C207, Type S.
 - c. Aggregate for Mortar: ASTM C144.
 - d. Use Type N mortar, unless otherwise noted.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with in-place finishes or primers.
 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Existing Warranties: Remove, replace, patch and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
- B. Temporary Support: Provide temporary support of Work to be cut.
- C. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- D. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of free passage to adjoining areas is unavoidable, coordinate cutting and patching according to requirements in Division 01 Section "Summary."
- E. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to prevent interruption to occupied areas.

3.3 CUTTING AND PATCHING

- A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
 2. Do not use cutting torches.
 3. Contractor shall make arrangements with the other trades for fitting his Work into the construction. Where the Contractor was given sufficient information as to required openings prior to construction and then the cost for cutting and restoring shall be paid for by the Contractor failing to provide the required openings.
 4. Contractor shall be responsible for cutting, fitting, and patching that may be required to complete his Work. Contractors shall not endanger Work of other Contractors by cutting, excavating, or otherwise altering Work; and shall not cut or alter the Work of other Contractors except with written consent of the A/E. Costs caused by defective or ill-timed Work shall be borne by the party responsible.
 5. Cutting or restoring performed by Contractors which is condemned by the A/E shall have such correction or restoration work performed through the General Contractor when so instructed by the A/E. The cost of such Work shall be borne by the Contractor responsible for the originally defective Work.
 6. No Contractor shall not do cutting that may impair the strength of the building or its components. No holes except for small screws or bolts may be drilled in the beams or other structural members for the purpose of supporting, routing, or attaching Work without obtaining prior approval from the A/E.
 - a. Provide temporary support of work to be cut.
 7. Contractor shall do his own cutting and patching work in the existing building. This shall include cutting and patching required installing new utilities on the Project site.
 8. Refer to other Sections of these Specifications for specific cutting and patching requirements and limitations applicable to individual units of Work.
 9. Unless otherwise specified, requirements of this Section apply to Mechanical and Electrical Work.
 - a. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to prevent interruption to occupied areas.
- B. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 3. Concrete or Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
 - a. After coring, Contractor shall pack and grout openings around sleeves or work penetrating the floor or deck.
 - b. CMU Removal: Remove units that are damaged or require removal to accommodate new work. Carefully remove entire units joint to joint, without damaging surrounding masonry in a manner that permits replacement with full size units.
 - 1) Support and protect remaining masonry that surrounds removal area. Maintain reinforcement and adjoining construction in an undamaged condition.
 - 2) Clean surrounding removal areas by removing mortar, dust, and loose particles in preparation for replacement.

4. Excavating and Backfilling: Comply with requirements in applicable Division 31 Sections where required by cutting and patching operations.
 5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
 6. Do not proceed with patching until after construction operations requiring cutting in immediate area are complete.
- C. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.
1. Patching should occur with materials and finishes to match the existing surrounding construction.
 2. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
 3. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 - a. Clean piping, conduit, and similar features before applying paint or other finishing materials.
 - b. Restore damaged pipe covering to its original condition.
 4. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
 - a. Where patching occurs in a painted surface, apply primer and intermediate paint coats over the patch and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.
 - b. Patch Floor: Mix and apply underlayment components according to manufacturer's written instructions.
 - 1) Close areas to traffic during underlayment and for time period after application recommended in writing by manufacturer.
 - 2) Coordinate application of components to provide optimum underlayment-to-substrate and intercoat adhesion.
 - 3) At substrate expansion, isolation, and other moving joints, allow joint of same width to continue underlayment.
 - 4) Apply primer over prepared substrate at manufacturer's recommended spreading rate.
 - 5) Apply underlayment to a uniform, level surface.
 - a) Apply a final layer without aggregate to produce surface.
 - b) Feather edges to match adjacent floor elevations.
 - 6) Cure underlayment according to manufacturer's written instructions. Prevent contamination during application and curing processes.
 - 7) Do not install floor coverings over underlayment until after time period recommended in writing by underlayment manufacturer.
 - 8) Remove and replace underlayment areas that evidence lack of bond with substrate, including areas that emit a "hollow" sound when tapped.
 - c. Patch CMU: Replace damaged or removed units into bonding and coursing pattern of existing. Lay replacement units with completely filled bed, head, and collar joints. Butter ends with sufficient mortar to fill head joints and shove into place.
 5. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
 - a. Cut, patch, and repair plaster as necessary to accommodate new work and to restore to match adjacent undisturbed surfaces. Repair or replace work to eliminate evidence of new work.
 6. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.

- D. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.

END OF SECTION 01 73 29

SECTION 01 77 00 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Inspection procedures.
 - a. Prerequisites to Substantial Completion.
 - b. Prerequisites to Final Payment.
 - 2. Warranties.
 - a. Correction of work period.
 - 3. Final cleaning.
 - 4. Corrections/Punch List.
 - 5. Record documents.
 - 6. Maintenance and operating manuals
 - 7. Instructions to the Owner's personnel
 - 8. Repair of work
- B. Related Sections include the following:
 - 1. Division 01 Section "Payment Procedures" for requirements for Applications for Payment for Substantial and Final Completion.
 - 2. Division 01 Section "Construction Cleaning" for progress cleaning of Project site.

1.2 SUBMITTALS

- A. Action Submittals
 - 1. Contractor's List of Incomplete Items: Initial submittal of Substantial Completion.
 - 2. Certified List of Incomplete Items: Final submittal at Final Completion.
- B. Closeout Submittals
 - 1. Certificate of Insurance: For continued coverage.
 - 2. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other sections.
 - 3. Record Drawings: Comply with the following:
 - a. Number of Copies: Submit PDF electronic files of scanned record prints.
 - b. Print each drawing, whether or not changes and additional information were recorded.

1.3 SUBSTANTIAL COMPLETION

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's Corrections/Punch List), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Submit closeout submittals specified in other Division 01 Sections, including project record documents, operation and maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, property surveys, and similar final record information.
 - 2. Submit closeout submittals specified in individual Divisions 02 through 33 Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 3. Submit maintenance material submittals specified in individual Divisions 02 through 33 Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Owner. Label with manufacturer's name and model number where applicable.

- a. Schedule of Maintenance Material Items: Prepare and submit schedule of maintenance material submittal items, including name and quantity of each item and name and number of related Specification Section. Obtain Owner's signature for receipt of submittals.
- 4. Certificates
 - a. Submit certification stating that no materials containing more than 1 percent asbestos were incorporated into the work.
- 5. Project Warranties:
 - a. Organize warranty documents based on table of contents of Project Manual.
 - b. Electronic File: Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
 - c. This document shall be included as part of Maintenance and Operating Manuals.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Advise Owner of pending insurance changeover requirements.
 - 2. Perform preventive maintenance on equipment used prior to Substantial Completion.
 - 3. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
 - 4. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 - 5. Complete final cleaning requirements, including touchup painting.
 - 6. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- D. Inspection: Submit a written request for inspection for Substantial Completion a minimum of 14 days prior the date the work will be substantially complete. On receipt of request, A/E will either proceed with inspection or notify Contractor of unfulfilled requirements. A/E will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by A/E, that must be completed or corrected before certificate will be issued.
 - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
 - a. If more than one reinspection is necessary, Contractor shall be charged \$500.00 for each reinspection when work is found not to be substantially complete.
 - 2. Results of completed inspection will form the basis of requirements for Final Completion.

1.4 FINAL COMPLETION

- A. Inspection: Submit a written request for final inspection for acceptance a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, A/E will either proceed with inspection or notify Contractor of unfulfilled requirements. A/E will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
 - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
 - a. For all additional reinspections, the Contractor shall be charged \$500.00 per occurrence.

1.5 LIST OF INCOMPLETE ITEMS (CORRECTIONS/PUNCH LIST)

- A. Prior to the A/E's preparation of a Corrections/Punch List, Contractor, shall prepare an initial Corrections/Punch List on the job for use by his employees and subcontractors and for use by other Contractors and for use by the A/E to facilitate completion of the Work.
- B. Preparation: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
 3. Include the following information at the top of each page:
 - a. Project name.
 - b. Date.
 - c. Name of A/E.
 - d. Name of Contractor.
 - e. Page number.
- C. Upon receipt of the initial Corrections/Punch List, the A/E will inspect the Work to determine if the work is substantially complete. Following the inspection, the A/E will issue a supplement to the Contractor's list of a Final Corrections/Punch List.
- D. At the time the A/E commences the Substantial Completion Inspection, if the A/E discovers excessive additional items requiring completion or correction, the A/E may decline to continue the inspection, instructing the Contractor as to the general classification of deficiencies which must be corrected before the A/E will resume the Substantial Completion Inspection. If the Contractor fails to pursue the Work so as to make it ready for Substantial Completion Inspection in a timely fashion, the A/E shall, after notifying the Contractor, conduct inspections and develop a list of items to be completed or corrected. This list of items shall be furnished to the Contractor who shall proceed to correct such items within 21 days. The A/E will conduct additional inspections as required to determine that the Work is ready for Substantial Completion Inspection. The A/E will invoice the Owner for \$500.00 per reinspection.
- E. The time fixed by the A/E for the completion of all items on the Final Corrections/Punch List shall not be greater than 21 days. The Contractor shall complete items on the list within such 21 day period. The Contractor shall begin completion and correction and correction activities within 7 days of receipt of the lists and complete all activities within the 21 day period specified. If the Contractor fails to do so, the Owner in its discretion may perform the Work by itself or others and the cost thereof shall be charged against the Contractor. If more than one inspection by the A/E for the purpose of evaluating corrected work is required by the subject list of items to be completed or corrected, it will be performed at the cost of \$500.00 per inspection and deducted from the Contractor's Contract.
1. The A/E will reinspect the work, upon request by the Contractor or within 21 days, if items required for Substantial Completion have been completed a certificate for Substantial Completion will be issued.
- F. Deferred Items
1. With the approval of Owner, A/E, upon reinspection, items of Work that cannot be completed within 21 days or because of seasonal conditions, such as bituminous paving or landscaping, or if the Owner has a schedule conflict, payment will be released to the Contractor less twice the cost of completing the remaining work as determined by the A/E.
- 1.6 CORRECTION OF WORK PERIOD (WARRANTY)
- A. One month prior to the expiration of the one year correction of work period (warranty), the A/E will schedule a walk through to see if additional Work by the Contractor(s) is needed to make good on the warranties. An itemized list will be furnished to the Contractor for corrective or replacement work.
1. The walk through will be attended by the A/E and Owner.
- B. This Work shall be completed immediately by the Contractor(s) after receiving notification.

PART 2 - PRODUCTS

2.1 MATERIALS

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

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - d. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - e. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
 - f. Sweep concrete floors broom clean in unoccupied spaces.
 - g. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
 - h. Remove labels that are not permanent.
 - i. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
 - j. Replace parts subject to unusual operating conditions.
 - k. Leave Project clean and ready for occupancy.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

3.2 PROJECT RECORD DOCUMENTS

- A. Project Record Documents include drawings, product data, and samples.
- B. The Contractor shall update "Project Record Documents" on separate blue or black line prints set aside especially for this purpose on the job. Drawings shall incorporate all changes made in the Work of the respective trades during the construction period. Such changes shall be indicated at the time they occur.

- C. Each of these project record drawings shall be clearly marked "Project Record Document"; maintained in good condition; available for observation by the A/E; and shall not be used for construction purposes. Mark these drawings to show the actual installation where the installation varies from the installation shown originally. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later. Items required to be marked include, but are not limited to, the following:
1. Dimensional changes to the Drawings.
 2. Significant detail not shown in the original Contract Documents including Change Orders or Construction Change Directives.
 3. The location of underground utilities and appurtenances, dimensionally referenced to permanent surface improvements.
 4. The location of internal utilities and appurtenances concealed in building structures, referenced to visible and accessible features of the structures.
 5. When elements are placed exactly as shown on Drawings, so indicate; otherwise show changed location.
 6. Revisions to details shown on the Drawings.
 7. Depths of foundations below the first floor.
 8. Revisions to routing of piping and conduits.
 9. Revisions to electrical circuiting.
 10. Actual equipment locations.
 11. Duct size and routing.
 12. Changes made following the A/E's written orders.
 13. Details not on original Contract Drawings.
- D. Record Drawings: Comply with the following:
1. Number of Copies: Submit copies of record drawings as follows:
 - a. Submit PDF electronic files of scanned record prints and three set(s) of prints.
 - b. Print each drawing, whether or not changes and additional information where recorded.

3.3 MAINTENANCE AND OPERATING MANUALS

- A. At the time that Contractor's pay application reaches 75 percent complete, the Contractor shall submit to the A/E copy of a rough draft for a comprehensive Maintenance and Operating Manual presenting complete directions and recommendations for the proper care and maintenance of visible surfaces as well as maintenance and operating instructions for equipment items which he has provided.
- B. Operating instructions shall include necessary printed directions for correct operations, adjustment, servicing, and maintenance of movable parts. Also included shall be suitable parts lists, final shop drawings, and diagrams showing parts location and assembly, and information specified in individual Specification Sections and the following:
1. Emergency instructions.
 2. Copies of specific warranties.
 3. Wiring diagrams.
 4. Recommended maintenance procedures and turn around times.
 5. Inspection and system test procedures.
 6. Precautions against improper maintenance and exposure.
 7. Charts and locations of concealed work.
 - a. Charts shall list each item, together with its function, item number, and location.
 - b. Locations throughout the building shall be identified on the wall or ceiling by permanent, nonobstructive plates, labels, or other approved means secured in a permanent manner.
 - c. Chart details, identification methods, locations, and methods of attachment shall be as approved by the A/E's representative at the jobsite upon full submission of proposed procedures and proper execution of same.

- C. For each titled item or work portion, manual must provide the names, addresses, and phone numbers of the following parties:
1. Contractor/installer
 2. Manufacturer
 3. Nearest dealer/supplier
 4. Nearest agency capable of supplying parts and service
- D. For each manual label on front cover or spine shall indicate the following information:
1. Project name and address
 2. Owner's name
 3. Name and address of A/E
 4. Name and address of Contractor
 5. Date of submission
- E. Roof Maintenance and Inspection Manual.
1. Data: For roofing system to include in maintenance manuals.
 - a. Roofing membrane manufacturer shall submit a Roof Maintenance and Inspection Manual with warranties and project closeout submittals. (Final payment will not be made until roof maintenance manual is submitted.)
 - b. Roof Maintenance and Inspection Manual shall include:
 - 1) Cover letter recommending to the Owner that 2 roof maintenance inspections should be conducted per year.
 - 2) Table of Contents.
 - 3) Visual observation checklist indicating specific flashings and details to be observed. Include items such as base flashing seams, reglets and counterflashings, roof edge flashings, roof penetration flashings, roof curb flashings, boot flashings, roof drain areas, parapet wall flashings, copings, roof membrane seams, skylight flashings, etc. Applicable items shall be listed per project.
 - 4) Copies of "Project Record" roofing details.
 - 5) Roof plan indicating penetrations, detail locations, roof drains, and seams.
 - 6) Final inspection report.
 2. Inspection Report: Copy of roofing system manufacturer's inspection report of completed roofing installation.
- F. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.
1. Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
 2. File Names and Bookmarks: Enable bookmarking of individual documents based upon file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel upon opening file.

3.4 INSTRUCTIONS FOR THE OWNER'S PERSONNEL

- A. Arrange for each Installer of equipment that requires regular maintenance and noted in technical sections, to meet with the Owner's personnel to provide instruction in proper operation and maintenance. Provide instruction by manufacturer's representatives if Installers are not experienced in operation and maintenance procedures. Include a detailed review of the following items:
1. Maintenance manuals
 2. Record documents
 3. Spare parts and materials
 4. Tools
 5. Lubricants
 6. Fuels

7. Identification systems
8. Control sequences
9. Hazards
10. Cleaning
11. Warranties and bonds
12. Maintenance agreements and similar continuing commitments

B. As part of instruction for operating equipment, demonstrate the following procedures:

1. Startup
2. Shutdown
3. Emergency operations
4. Noise and vibration adjustments
5. Safety procedures
6. Economy and efficiency adjustments
7. Effective energy utilization

3.5 REPAIR OF THE WORK

A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.

B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.

1. Remove and replace chipped, scratched, and broken glass, reflective surfaces, and other damaged transparent materials.
2. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that already show evidence of repair or restoration.
 - a. Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates. Remove paint applied to required labels and identification.
3. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
4. Replace burned-out bulbs, bulbs noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.

END OF SECTION 01 77 00

SECTION 01 12 00 CONTRACT SUMMARY

Table of Contents

General Notes	2
Bid Package 07a South Putnam HS & Central ES Roof Replacement	6
Exhibit A Terms and Conditions	8
Exhibit C.....	19
Waiver of Lien to Date Sample	19
Subcontractor's Affidavit Sample	20
Sub-Subcontractor Waiver of Lien to Date Sample.....	21
Sub-Subcontractor's Affidavit Sample	21
Material Supplier Waiver of Lien to Date Sample	22
Material Supplier Affidavit Sample	22
Exhibit D Insurance Compliance Checklist.....	23

General Notes

Each bid package is responsible for the below items.

1. PROJECT SITE WILL BE 100% HARDHAT & SAFETY GLASSES. ALL CONTRACTORS ARE RESPONSIBLE TO PROVIDE HARDHATS & SAFETY GLASSES TO THEIR EMPLOYEES.
2. Each successful Prime Contractor is required to submit background checks for all onsite tradesman and supervisory personnel, including office staff that will be onsite. Include all lower tier contractors under contract to the Prime. Turn over background checks to MKS.
3. Personal Protective Equipment:
 - a. Subcontractors are required to wear hardhats.
 - b. Suitable work boots.
 - c. High visibility vest, shirt, sweatshirt, etc. throughout the project.
 - d. Long pants must be worn.
 - e. Shorts sleeves (4 inches) are permitted.
 - f. Shirts with sleeves must be worn and shall not have obscene, offensive, distasteful, or harassing slogans. Determination of what constitutes obscene, offensive, distasteful, and harassing is solely up to the discretion of the owner, and MKS.
 - g. Eye protection / safety glasses or side shields
4. All interactions with staff must be conducted professionally. Adherence to safety procedures outlined in each subcontractor's contract is mandatory throughout the project. Operators of lifts or equipment must be certified and carry their certification cards at all times. A trained competent person must be present on-site when performing work requiring such expertise as per OSHA regulations. Profanity or offensive language will not be tolerated.
5. Subcontractors are responsible for enforcing disciplinary measures among their employees. Superintendents and foremen are required to caution employees against safety breaches and terminate those who refuse to adhere. Serious and deliberate violations may warrant instant dismissal from the project, encompassing on-site tobacco usage, possession of alcohol, firearms, or illicit substances, engaging in altercations, tampering with emergency equipment, or disregarding fall protection protocols.
6. Compliance with MKS Fall Protection guidelines is mandatory whenever employees are exposed to falls exceeding six (6) feet. Failure to comply will result in immediate expulsion from the worksite.
7. Daily removal of debris, particularly combustible scraps, is mandatory.
8. Prompt reporting and documentation of all incidents are obligatory. Project foremen must report each incident immediately to the MKS site supervisor and respective safety personnel. Documentation should be completed on the day of the incident and includes injuries, property damage, theft, or non-compliance with stated rules and code of conduct.
9. AM/FM radios, CD players, MP3 players, personal entertainment devices, or similar items are prohibited on the construction site.
10. Construction vehicles must park in designated areas only. Unauthorized parking may result in towing.
11. Use of the Site: Limit use of the premises to work in areas indicated. Confine operations to areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which the Work is indicated.
 - a. Owner Occupancy: Allow for Owner occupancy.
 - b. Driveways and Entrances: Keep driveways and entrances outside of construction limits, serving the premises, clear and available to the Owner, the Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of

- materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on site.
- c. Construction personnel are prohibited from using owner facilities such as restrooms or breakrooms. Any person found breaking this rule will be asked to leave the site and not return.
12. Use of the Existing Building: Maintain the existing building in a weathertight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the building and its occupants during the construction period.
13. Owners Right to Maintain Operations
- a. During the course of this Project, normal and customary functions and operations must be maintained. The Contract Documents are intended to define a strict separation between the school activities of students and staff from the activities of the construction project.
 - b. The Construction Manager, Architect, and Owner will not tolerate any visible or audible actions initiated or responded to by any employees of Contractors on this Project toward any students, teachers, or staff members at the school system. Violators shall be promptly removed from the site.
 - c. The Owner intends to instruct students, teachers, and staff to refrain from communications with Contractor's personnel working on this Project. All communication with Owner and staff shall be through the Construction Manager.
 - d. Contractors must expend their best effort toward protection of the health, safety, and welfare of occupants on the Owner's property during the course of construction on this Project.
 - e. Contractors and Subcontractors shall be subject to such rules and regulations for the conduct of the Work as the Owner may establish. Employees shall be properly and completely clothed while working. Bare torsos, legs and feet will not be allowed.
 - f. Possession or consumption of alcoholic beverages or drugs, tobacco or other noxious behavior on the site is strictly prohibited. Violators shall be promptly removed from the site. Smoking is not permitted on school property or within school buildings.
14. The Work shall be performed in accordance with the health, safety and environmental regulations of the authorities having jurisdiction and all federal, state, and local laws.
15. Each bid package is required to understand and adhere to the project schedule, phasing plans and logistic plans.
16. Where bid documents reference the term "General Contractor" change to "Construction Manager".
17. Each bid package to include all mobilizations and demobilizations required for performance of the Work.
18. A single prime contract will be awarded as per the "Contract Summary". Contractors shall include Work required by the Specifications and Drawings for each contract area defined in the Schedule.
19. The contract will be AIA A132 Contract between Owner and Contractor, Construction Manager as Adviser Edition.
20. Each bid package shall provide protection of existing and new work by others during his operations. The costs associated with repair and/or replacement of materials damaged by his work operations will be the responsibility of the bid package that damaged. Each bid package shall provide adequate protection to all areas of existing finishes to remain during any operations performed under their scope of work.
21. Although specifications are allocated to respective bid packages each bid package must read and understand all contract documents assigned to the other trades.

22. Each bid package includes all work, including coordination with related work performed under other contracts, to result in a functional system or product.
23. Each Bid Package will perform all work in coordination with other trades and the CMA.
24. Use of motor oil or machine oil on or above slab will not be permitted. All lifts are required to be fitted with lift diapers to contain any oil leaks from the equipment. Diapers should be inspected periodically during each day of use.
25. Each Contractor utilizing a pipe cutting or threading tool shall have a sand box or litter box directly under said tool to protect floor from oil staining. Construction Manager reserves the right to immediately dispose of any threading/cutting tool on the project site that is being used without stated boxes underneath.
26. Clean-up is a Safety Priority. Accordingly, daily clean-up, i.e., broom clean, consistently organized and neatly stacked materials, and daily removal of trash to dumpsters by each Prime Contractor is required. No tolerance will be allowed for failure to comply. CMA shall issue one verbal request to the Prime Contractor's Foreman. If corrective action is needed, and if not corrected immediately or as requested, CMA will provide manpower to properly clean the Prime Contractor's area(s) and shall issue a deductive CO for the labor and material cost, plus 15% Administrative Fee.
27. Each bid package is required to give minimum 72 hours written notice prior to any disruption in utilities, roadway, or any other activity that would interrupt the normal operations of the Owner's facilities and shall receive written acknowledgement from CMA before undertaking any such work.
28. Each bid package must coordinate deliveries in advance with CMA project staff on a daily basis. Due to site security, logistics, space limitations, and Owner operations, deliveries that come directly to the site without prior knowledge or proper authorization will be rejected. Any deliveries that block traffic or pose any safety concern whatsoever shall require flagmen provided by responsible bid package. Deliveries must be received and unloaded by each bid package. CMA will not provide labor or equipment to unload deliveries from subcontractors.
29. Each bid package is responsible for obtaining written approval from CMA prior to proceeding with any extra work. If written approval is not received, payment for extra work will not be approved.
30. All bidders are responsible to review and ensure compliance with timeline issued for bidding and construction. Weather (eg. Rainout) days will be made up through longer hours, Saturdays, or Sunday. Each Prime Contractor is fully obligated to meet the requirements of the project schedule within these constraints.
31. When a bid package is to supply materials that will be installed by another bid package, the bid package supplying materials shall be responsible for submitting lay-out and product shop drawings to comply with project schedule.
32. Detailed notes provided for each bid package are provided for clarification purposes and do not represent a complete listing of scope of work. Bidders are responsible for the work assigned in the bid packages, specification and on the drawings.
33. Any access panels not shown on drawings but required by a bid package will be borne by said bid package.
34. Any wood or metal blocking required by a bid package that is not specifically shown on the drawings will be the responsibility of the said bid package.
35. Bid packages are to remove stickers, labels, clean and provide protection over finished products.
36. All submittals must be submitted per the specifications and in accordance with the project schedule.

37. All bidders must agree to terms and conditions of MKS subcontract agreement as defined in the specifications.
38. Building is not to be used for material storage. All materials are to be stored in trailers or off site until needed for installation. Preferably materials should be delivered just in time for installation in accord with the project schedule. See logistics plan for laydown areas.
39. Punch list Work – Upon delivery of a “Completion List” by CMA and later a punch list by the Architect, Engineer, and Owner each bid package shall provide a “Punch list Crew” as required to address open items and shall staff the crew with sufficient manpower of persons to complete all Punch list items within 5 days. Subcontractor to provide sufficient manpower that does not take away from other work required by the Project Schedule. Once in the Punch list Phase, CMA will hold weekly punch list meetings and require the Subcontractors punch list crew lead employee to attend, update progress, and coordinate with other trades as needed.
40. All closeout documentation is required to be submitted within 30 days of substantial completion. Final payments will not be made until all closeout documentation is received.
41. If temporary roof protection is not in place, each contractor accessing or traversing the roof is responsible for protection of the roof membrane. Contractors will be held liable for any damages resulting from failure to protect.
42. See Logistics Plan for staging areas.
43. Food and beverage consumption will be permitted in contractor provided break trailers or employees vehicles.
44. The project worksite is TOBACCO FREE! The use of tobacco, smoking, chewing, vaping, E-cig and sunflower seeds on the site will not be permitted. Anyone who violates will be removed from the project.
45. Project is exempt from Indiana sales tax.

Bid Package 07a South Putnam HS & Central ES Roof Replacement

Specifications:

Division 00 Procurement and Contracting Requirements	Division 01 General Requirements
05 01 30 Maintenance of Steel Roof Decking	06 10 63 Exterior Rough Carpentry
Div 07 – All Sections	22 14 26 Roof Drains

Supplemental Instructions to this Bid Package:

This bid package shall include, but shall not necessarily be limited to, the following scope of work:

1. This bid package is responsible for the labor, materials, supervision, taxes, insurance, equipment, placing, hoisting, scaffolding, protection, transportation, permits (General Contractor to provide general permit) licenses, fees necessary to complete this scope of work.
2. This bid package is responsible for visiting site to review existing conditions.
3. Prior to commencing any work on site, this bid package shall contact all utility companies for locating and flagging all existing utilities within the project boundaries if required. Any damage to existing utilities or structures is the responsibility of this contractor.
4. This bid package is responsible for providing dumpsters for debris generated by this scope of work.
5. This bid package is responsible for portable toilets for use by the tradesmen of this bid package.
6. All work to comply with O.S.H.A., City and State rules and regulations.
7. This bid package is responsible for adequate fire protection during construction.
8. This bid package is responsible for all required barricading associated with this work.
9. This bid package is responsible for a competent
10. This bid package is responsible to protect utilities, plumbing work/equipment, HVAC work/equipment, gas lines, and miscellaneous equipment shown to remain.
11. This bid package is responsible for coordinating delivery and offloading of materials.
12. This bid package is responsible for completing the bid form including all alternates and unit pricing as applicable. A .pdf copy of this form is included in this document.
13. See attached Supplemental Conditions "Exhibit A", "Exhibit C", and "Exhibit D" which will be part of the Contract Agreement between South Putnam Community School Corporation and this bid package.

Project Specific Requirements

14. This bid package is responsible for removing all existing roofing, roofing foam, gravel stops, flashings, roof drains, pipe flashings, all existing roofing materials down to lightweight concrete deck or metal deck. All debris is to be legally disposed of offsite.
15. This bid package is responsible for inspecting lightweight concrete substrate and complete spot repairs as required.
16. This bid package is responsible for the metal deck and complete spot repairs as required.
17. This bid package is responsible for any repairs to masonry joints sawed for flashings.
18. This bid package is responsible for furnishing and installing all blocking, both dimensioned lumber and plywood, as shown on the contract documents.
19. This bid package is responsible for elevating roof curbs to maintain flashing height as denoted on the contract documents.
20. This bid package is responsible for partnering with an Indiana licensed plumbing contractor for roof drain replacement and miscellaneous plumbing work associated with equipment removal.
21. This bid package is responsible for partnering with an Indiana licensed HVAC contractor for HVAC equipment removal work.

22. This bid package is responsible for partnering with an Indiana licensed electrical contractor for electrical work required for HVAC equipment removal work and any miscellaneous electrical work required for the reroof.
23. This bid package is responsible for temporary curb caps for weather when equipment is removed.
24. This bid package is responsible for temporary protection from weather when roof drains are removed.
25. This bid package is responsible for scheduling and coordinating all lower tier contractor work.
26. This bid package is responsible for furnishing and installing all roof membranes as denoted on the contract documents.
27. This bid package is responsible for furnishing and installing new gravel edge as denoted on the contract documents.
28. This bid package is responsible for furnishing and installing all flashings as denoted on the contract documents.
29. This bid package is responsible for furnishing and installing stainless steel bent plates as denoted on the contract documents.
30. This bid package is responsible for furnishing and installing all sealants associated with the work by this bid package.
31. This bid package is responsible for furnishing and installing all expansion joints as denoted on the contract documents.
32. This bid package is responsible for furnishing and installing all pipe boots, rain collars, sealants at pipe penetrations as denoted on the contract documents.
33. This bid package is responsible for removal and replacement of all roof drains as denoted on the contract documents.
34. This bid package is responsible for removal and replacing existing mechanical units as denoted on the contract documents.
35. All equipment that was disturbed will require testing by licensed contractors after reinstallation.
36. This bid package is responsible for grading and seeding all disturbed areas including repairs to any damage/ruts created by onsite equipment use.
37. All layout, both line and grade, for the new work is by this BP.
38. This bid package is responsible for As-Built drawings upon completion of work.
39. Work to start no earlier than May 27, 2024.
40. The work is to be completed, tested and owner training by August 2, 2024. If not completed, liquidated damages of \$ 500.00 per day will be deducted from prime bidders contract.

Exhibit A Terms and Conditions

SUPPLEMENTAL CONDITIONS:

DEFINITION OF CONTRACTOR – The term “Contractor” wherever it is used herein shall mean Michael Kinder & Sons, Inc.

1. Safety

- 1.1 The Subcontractor agrees that the prevention of accidents to workmen and property engaged upon or in the vicinity of the Subcontract Work is its responsibility. The Subcontractor agrees to comply with all Federal, State, Municipal and local laws, ordinances, rules, regulations, codes, standards, orders, notices and requirements concerning safety as shall be applicable to the Subcontract Work, including, among others, the Federal Occupational Safety and Health Act of 1970, as amended, and all standards, rules, regulations and orders which have been or shall be adopted or issued thereunder, and with the safety standards established during the progress of the Subcontract Work by the Contractor.
- 1.2 When so ordered, the Subcontractor shall stop any part of the Subcontract Work which the Contractor deems unsafe until corrective measures satisfactory to the Contractor have been taken. The Subcontractor agrees that it shall not have nor make any claim for damages arising from such stoppages. Should the Subcontractor fail to take appropriate corrective measures in a timely manner, the Contractor may do so at the cost and expense of the Subcontractor and may deduct the cost and expense thereof from any payments due or to become due to the Subcontractor. Failure on the part of the Contractor to stop unsafe practices shall in no way relieve the Subcontractor of its responsibility therefore.
- 1.3 **Safety Training and Competent or Qualified Person.** Each worker sent to perform specific duties on the project will have required training and/or competency to meet all applicable Federal, State, and local regulations. Proof of training shall be submitted to the Contractor's Safety Director prior to commencement of work if requested. Tasks which require the appointment of a Qualified or Competent Person shall have credentials submitted to the Contractor's Safety Director prior to start of work.
- 1.4 **Subcontractor Injuries and Incidents.** Subcontractor shall notify Contractor of any incident or injury involving an employee of Subcontractor or one of its Subcontractors on the day of the injury or incident. Subcontractor shall complete an Incident Report and Investigation and submit the completed investigation to Contractor within twenty- four (24) hours of the incident or injury. Subcontractor agrees that all injuries and incidents will be investigated to determine root cause, corrective action, and preventative action to ensure similar injuries or incidents do not occur.
- 1.5 **Minimum Working Apparel.** Subcontractor agrees that the minimum working apparel includes hardhat meeting the current version of ANSI Standard Z89.1, safety glasses and side shields meeting the current version of ANSI Standard Z87.1, shirt with three inch or longer sleeves, long pants and durable work boots. Refer to the Safety Standard Operating Procedures Plan Personal Protection Equipment Section for more specific requirements.
- 1.6 **Fall Prevention.** Subcontractor shall comply with the Contractor Fall Protection Policy, which requires that no worker exposed to a fall hazard of six (6) feet or greater will work without one hundred percent (100%) fall protection. Subcontractor will take all practical measures to eliminate, prevent and control fall hazards of six (6) feet or more before resorting to a personal fall arrest system. When personal fall arrest is required, Subcontractor shall provide such proper equipment for this purpose and all necessary instruction and training in the care and use of the equipment, including refresher training. All training shall be documented and made available to Contractor upon request.
- 1.7 **Silica.** Subcontractor must provide action plan when workers may be exposed to silica beyond the action limit. Provide copy of written exposure control plan, name of competent person, practices to limit exposures, training practices, and medical surveillance for all affected workers
- 1.8 **Disciplinary Action.** Contractor may issue a written notice to individuals who are observed violating the laws, ordinances, rules, regulations, codes, standards, orders, and requirements noted under Regulatory Compliance above. Any Subcontractor or Subcontractor personnel who receive three (3) written violation notices within a one (1) year period may be removed from the Project. Individuals may be removed from the Project after one (1) written notice if Contractor determines in its discretion that the violation observed warrants such removal.
- 1.9 **Hazard Communication.** Subcontractor will provide Contractor with Project specific hazardous material inventory list and Safety Data Sheets (SDS) for each hazardous material Subcontractor or one of its Subcontractors will bring onto the Projects site.
- 1.10 **Utility Locates.** The Subcontractor will follow the provisions of all applicable statutes and ordinances which require persons or firms doing excavation to do so only after giving notice to utility companies and obtaining information on the location of utilities (such as “one-call” systems).
- 1.11 **Regulatory Inspections.** If Contractor is fined by any regulatory inspection by a Federal, State, County or Municipal agency or body as a result of any act or omission of Subcontractor or one of its Subcontractors, Contractor will deduct the amount thereof and associated costs from any payments due or to become due to Subcontractor.
- 1.12 **Illegal Acts.** The theft, conversion, misappropriation, unauthorized removal, possession, or use of property or equipment belonging to Contractor, Owner, Subcontractor, or other worker including but not limited to, materials, tools documents, and propriety information is prohibited.
- 1.13 **General Safety Requirements**
 - Subcontractors must observe and follow all posted safety signs.
 - Any worker that is involved in an injury or loss event on the job must be drug tested at the expense of their employer and results cleared before they can continue working on the project.
 - Subcontractors are expected to supply their own personal protective equipment (PPE).
 - Adequate ventilation must be provided when using vapor producing materials or creating high dust levels. Subcontractor must notify Contractor twenty-four (24) hours in advance whenever work is being done that may generate any hazardous odors or dust.
 - Subcontractors may not, under any circumstances, operate or disconnect any device used to control building services until permission has been obtained from the Contractor Superintendent.

- The following activities are prohibited on site and are causes for immediate dismissal: Using alcohol or illicit drugs, Fighting or horseplay, Tampering with equipment, Possession of firearms.
- Subcontractor must have a first aid/CPR-trained foreman on site whenever work is being performed.
- Subcontractor will conduct weekly employee toolbox meetings and copy Contractor with material covered and attendance record.
- *No radios or headsets, including cellular phones and earbuds, are allowed in work areas.*
- Subcontractor must submit safety plans and hazard specific work plans to Contractor prior to beginning work when requested.
- Subcontractor's equipment, tools, and personnel must comply with OSHA Safety and Health Regulations for Construction.
- No one under eighteen (18) years of age is allowed to work on or access to Contractor's jobsites.
- Subcontractor shall provide all required safety information of their sub tier subcontractors as required by Contractor or Contractor's insurance provider.
- Subcontractor must immediately correct any unsafe acts or practices brought to its attention.
- Subcontractor will have qualified operators on all equipment.
- Subcontractor will inspect all its equipment per the manufacturer's instructions daily.

The above Safety Requirement items are general in nature and not all inclusive of every situation or condition on Michael Kinder & Sons, Inc. construction projects.

2. Subcontractor Representations

- 2.1 The Subcontractor acknowledges receipt of all policies/procedures included in the Bid Documents. Subject to applicable law the Subcontractor further agrees to be bound by these policies/procedures as part of this Agreement. The Subcontractor represents and agrees that it has carefully examined and understands this Agreement and the other Subcontract Documents, has investigated the nature, locality and site of the Subcontract Work and the conditions and difficulties under which it is to be performed, and that it enters into this Agreement on the basis of its own examination, investigation and evaluation of all such matters and not in reliance upon any opinions or representations of the Contractor, the Owner or any of their respective officers, agents or employees.
- 2.2 The commencement of the Subcontract Work by the Subcontractor on the site of the Project shall constitute the legal and binding acceptance by the Subcontractor of this Agreement. For purposes of this paragraph the mobilization of equipment, delivery of materials or the performance of actual labor on the Project site, whichever occurs first, shall constitute a "commencement" of Subcontract Work by the Subcontractor. The Contractor reserves the right, however, to insist on a signed Agreement prior to the making of any payment to the Subcontractor.

3. Bonds

- 3.1 If required by the Contractor, a Performance Bond and a Separate Payment Bond satisfactory to the Contractor, in its sole determination are required to be furnished in the full amount of the Subcontract Amount. If Bonds are required, they shall be furnished by a surety acceptable to the Contractor, in the full amount of the Subcontract Amount. Subcontractor must also furnish any applicable statutory bonds if required by the state in which the Project is located.

4 Subcontractor Duties

- 4.1 **Subcontract Work.** The Contractor retains the Subcontractor as an independent contractor, to provide all labor, materials, equipment, and services necessary or incidental to complete the part of the work which the Contractor has contracted with the Owner to provide on the Project as set forth in Scope of Work included in this Agreement, consistent with the Project Schedule and in strict accordance with and reasonably inferable from the Subcontract Documents. The Subcontractor agrees to perform such part of the work (hereafter called "Subcontract Work") for the Project under the general direction of the Contractor and subject to the final approval of the Contractor, Architect/Engineer, or other specified representative of the Owner.
- 4.2 **Subcontract Documents.** The Subcontract Documents include this Agreement, Agreement between the Owner and the Contractor ("Prime Contract"), including all addenda, modifications, revisions, plans, drawings, specifications, details, together with all general, technical, supplementary and special terms and conditions, any invitations for bids or information for bidders, if any, to the extent applicable, and all other documents listed in or referred to by the Prime Contract. The Contractor and the Subcontractor are mutually bound by the terms of this Subcontract. To the extent the terms of the Prime Contract apply to the work of the Subcontractor, then the Contractor assumes toward the Subcontractor all the obligations, rights, duties and redress that the Owner under the Prime Contract assumes toward the Contractor. In the identical way, the Subcontractor assumes toward the Contractor all the same obligations, rights, duties and redress that the Contractor assumes toward the Owner and Architect/Engineer under the Prime Contract. This Agreement and the rest of the Subcontract Documents are intended to supplement and complement each other and shall, where possible, be so interpreted. However, if any provision of this Agreement irreconcilably conflicts with a provision of the Subcontract Documents, the provision granting greater rights or remedies to the Contractor or imposing the greater duty, standard or responsibility or obligation on the Subcontractor shall govern.
- 4.3 **Submittals.** Subcontractor shall, at its own expense, prepare and submit to the Contractor such Shop Drawings, Samples, Models and other submittal data for the materials to be furnished hereunder as detailed in the contract documents and as requested by Contractor, such Shop Drawings, Samples, Models and data to be approved in writing by such entities as Contractor may designate before Subcontractor proceeds under this Agreement. Such Documents shall be submitted to Contractor with reasonable promptness and in such sequence to cause no delay in the work or activities of the Contractor or other subcontractors. Any such approval of submittals or the receipt of materials and/or labor or payment therefore pursuant thereto shall in no event constitute an acceptance of such materials and/or labor and shall not limit or impair Contractor's right of inspection or rejection or any other rights or remedies to which Contractor may be entitled or relieve Subcontractor of any of its obligations and warranties hereunder. Subcontractor is responsible for reviewing Specifications prior to submitting any items verifying all Specification / Contract requirements. All submittals must be submitted electronically in .pdf format. All submittals must be submitted and approved prior to any payment to Subcontractor. All items must be submitted within 20 days of Subcontract date. All submittals must have a separate transmittal for each item and be labeled with the specification section. Any delays in material/equipment deliveries associated with delay in submission of submittal data which causes delays in the project schedule will be responsibility of Subcontractor as denoted in Section 1 of this agreement. Subcontractor may also be required to submit hard copies of submittals when requested by Contractor.
- 4.4 **Design Delegation.** If the Subcontract Documents (1) specifically require the Subcontractor to provide design services and (2) specify all design and performance criteria, the Subcontractor shall provide the design services necessary to satisfactorily complete the Subcontract Work. Design services provided by the Subcontractor shall be procured from licensed, design professionals (the "Designer") retained by the Subcontractor as permitted by the law of the place where the Project is located. The Designer's signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by the Designer. Shop Drawings and other submittals related to the

Subcontract Work designed or certified by the Designer, if prepared by others, shall bear the Subcontractor's and the Designer's written approvals when submitted to the Contractor. The Contractor shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by the Designer.

- 4.4.1 If the Designer is an independent professional, the design services shall be procured pursuant to a separate agreement between the Subcontractor and the Designer. The Subcontractor-Designer agreement shall not provide for any limitation of liability or exclusion from participation in the multiparty proceedings requirement of Paragraph 20.6. If applicable, the Designer(s) is (are)

The Subcontractor shall notify the Contractor in writing if it intends to change the Designer. The Subcontractor warrants the design furnished by the Designer will be in conformance with the information given and the design concept expressed in the Subcontract Documents. The Subcontractor shall not be responsible for the adequacy of the performance or design criteria required by the Subcontract Documents furnished by the Owner, Architect/Engineer or Contractor

- 4.4.2 The Subcontractor shall not be required to provide design services in violation of any applicable law.

- 4.5 **Clean Up.** The Subcontractor is responsible for its own "clean-up" and keeping the Subcontract Work areas "broom clean". If the Contractor determines the Subcontract Work area to be unsatisfactorily cleaned, the Contractor will so advise the Subcontractor. If the Subcontractor fails to commence cleaning procedures within twenty four (24) hours and continue to clean said area to the Contractor's satisfaction, the Contractor may without further notice execute and complete such clean up activities as the Contractor deems necessary and charge the cost to the Subcontractor or deduct such cost from payments due to the Subcontractor. The Subcontractor is responsible to clean the mud and gravel off its vehicles (including vehicles operated by its subcontractors and suppliers) prior to leaving the site. Any mud or gravel that is tracked onto the surrounding roads shall be removed immediately. The Contractor has the right to clean up surrounding roads immediately upon the Subcontractor's failure to do so, the cost of which shall be deducted from the Subcontractor's next payment.
- 4.6 **Protection of Subcontract Work.** The Subcontractor is responsible for protection of its material, equipment, and installation until the final acceptance by the Owner and the Architect.
- 4.7 **Protection of the Project.** The Subcontractor shall confine operations at the Project site to areas permitted by the Contractor and shall not unreasonably encumber the Project site with materials or equipment. The Subcontractor is responsible for any damage caused to adjacent property or access roads by the Subcontractor, its subcontractors, or suppliers during the course of the Subcontract Work.
- 4.8 **Supervision.** All of the Subcontract Work is the sole and absolute responsibility of the Subcontractor; shall be initiated, managed, performed and completed by qualified, competent, skilled and reputable supervisors, administrators, mechanics and laborers, all of which are satisfactory to the Contractor; shall be in full compliance with the Subcontract Documents including this Subcontract; and shall meet the approval and acceptance of the Contractor and the Owner or its authorized representative. Subcontractor shall not change their Superintendent or Project Manager without written approval from the Contractor.
- 4.9 **Deliveries.** A minimum of twenty-four (24) hours notice is required for all deliveries to the jobsite. Notify Contractor prior to any major deliveries providing ample time for coordination. Deliveries are to be made at the place, in the quantities and at the times specified in instructions set forth herein or in other written instructions, which may from time to time be furnished by Contractor. Contractor may from time to time change, in writing, delivery instructions or direct that shipment or work be temporarily suspended. Subcontractor shall make no commitments for material or production arrangements in excess of the amount or in advance of the time necessary to comply with Contractor's delivery or performance instructions.
- 4.10 **Layout.** The Subcontractor shall take careful field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to the Subcontractor with the Contract Documents before the commencement of the Work. Errors, inconsistencies, or omissions shall be reported at once to the Contractor. Each Subcontractor is responsible for its own layout work.

5. Schedule

- 5.1 Time is of the essence. The Subcontractor shall commence the Subcontract Work under this Subcontract when notified by the Contractor and shall complete the Subcontract Work in a diligent manner in accordance with the Subcontract Documents and the Schedule of Work provided in this Agreement so that progress or completion of the Project will not be delayed and in such a manner that the Contractor, any other subcontractors, and any separate contractors of the Owner shall not be delayed or impeded in their work. The Subcontractor shall participate and cooperate in the development of schedules and other efforts to achieve timely completion of the Subcontract Work by providing information on the timing and sequence of operations so as to meet the Contractor's overall schedule requirements. The Subcontractor shall continuously monitor the Project Schedule including any revisions thereto, and other work on the Project so as to execute the Subcontract Work in accordance with the requirements of the Project Schedule. The Subcontractor agrees to be responsible for, carry out, and perform all time guarantees upon work or materials referred to in the Subcontract Documents relating to any labor performed or material furnished under this Subcontract. If Subcontractor falls behind schedule, all costs to get back on schedule will be the responsibility of the Subcontractor, including additional costs to the Contractor or other subcontractors that are directly affected by the Subcontractors delays. This includes, but not limited to, overtime, additional supervision and project management, delivery expenses, storage fees, and any other cost and expense incurred in an effort to get back on schedule. If Contractor is responsible for Liquidated Damages and Subcontractor causes delay and Liquidated Damages are charged, the costs of Liquidated Damages will be passed onto the Subcontractor. The Project Schedule is subject to change at the direction of the Contractor at no additional cost.

6. Payment

- 6.1 In consideration of faithful and timely performance by the Subcontractor of all the covenants and the conditions aforesaid, the Contractor agrees to pay the Subcontractor, subject to other provisions hereof, including authorized additions and deletions the "Subcontract Amount" which sum includes all applicable taxes. Payment shall only be due for the portion of the Subcontract Work actually completed to the satisfaction of the Contractor, the Architect and the Owner. Within ten (10) days after receipt by the Contractor of payment from the Owner, the Contractor shall make payment in the amount and to the extent received from the Owner, less ten percent (10%) retainage. However, receipt of payment by the Contractor from the Owner for the Subcontract Work is a condition precedent to the obligation by the Contractor to pay the Subcontractor for the Subcontract Work in accordance with the preceding sentence, and payment for the Subcontract Work will be made to Subcontractor by the Contractor if and only to the extent such payment is received by the Contractor from the Owner. The Subcontractor hereby acknowledges that it relies on its own evaluation of the credit worthiness of the Owner, and not the credit worthiness of the Contractor, with respect to payment for

the Subcontract Work, and expressly assumes the risk of non-payment by the Owner thereof, for any reason including, without limitation, insolvency of the Owner. Notwithstanding Subparagraph 4.2 of this Agreement, the provisions of this Section shall prevail over any conflicting provisions in the Prime Contract. Progress payment applications must be submitted by the Subcontractor each month in an amount equal to One Hundred percent (100%) of the estimated value of the labor, materials and equipment incorporated in the construction and materials and equipment suitably stored at the Project site, less the aggregate of previous payments. The Subcontractor's Affidavit and Waiver of Lien for prior payments must be properly executed by an authorized representative of the Subcontractor and returned to the Contractor prior to issuance of subsequent payments. Subcontractor must use Waiver Forms included as Exhibit "C" to this Agreement. Subcontractor will be required to provide Sub-Subcontractor and Vendor waivers for values exceeding \$5,000.00. No other waiver forms other than those in Exhibit "C" will be accepted.

- 6.3 Each payment request or invoice must be received by the Contractor by the 20th day of the month to be processed with the Contractor's payment application that month. Invoices and payment requests received that are inaccurate or without substantiation, or after said day of the month will be held until corrected and substantiated, and then processed with the following month's payment application. Subcontractor shall submit all applications electronically, in PDF format, to accounts payable at AP@kinderandsons.com.
- 6.4 The Subcontractor shall submit its request for partial payment conforming to the standard AIA G702/G703 billing form, with schedule of values attached thereto, representing a true and accurate estimate of the Subcontract Work completed, and materials stored during the immediately preceding month or such other immediately preceding period as directed by the Contractor. In addition, if allowed by the Subcontract Documents, all invoices and insurance certificates shall be included for all stored materials in an off-site storage area applicable to the payment request. Materials not onsite can only be billed for as stored materials, if allowed. If requested, Subcontractor shall submit copies of payrolls to document the value of work in place.
- 6.6 If the Contractor, in its sole discretion, deems it necessary, the Subcontractor agrees to receive each of its progress payments and final payment in the form of multiple checks issued jointly between the Subcontractor's lower tier subcontractors and major material suppliers and the Subcontractor. Lower tier subcontractors that are to receive part or all of their progress payments as joint checks shall additionally submit with their Payment Requests all invoices from each lower tier subcontractor and major supplier and the net payments to be issued to each.
- 6.7 No partial payment, or certificate, therefore, shall constitute acceptance or approval by the Contractor of the Subcontract Work or material for which the partial payment is made. No partial payment shall constitute a waiver by the Contractor of any right to require fulfillment of all the terms of this Subcontract. Neither the final payment nor any partial payment, nor any certificate for either, shall constitute acceptance by the Contractor of defective work or improper materials or of any element of the Subcontractor's performance determined to be at variance with this Subcontract.
- 6.8 The Contractor shall have the right to set off any amounts the Subcontractor owes to the Contractor under this Subcontract or bylaw against the remaining balance under this Subcontract, or against any amounts due the Subcontractor under any other agreements with the Contractor.
- 6.9 **Final Payment.** Final payment by the Contractor to the Subcontractor shall not become due and payable to the Subcontractor until the following express conditions precedent have been met: (1) The completion of the Subcontract Work required by this Subcontract and acceptance of the Subcontract Work by the Contractor, the Owner and the Architect; (2) Final Waiver shall be provided in exchange for final payment; (3) all closeout and warranty documentation provided by the Contractor has been submitted to Contractor; and (4) complete and full satisfaction of all claims, demands, disputes and obligations of the Subcontractor arising out of or related to this Subcontract, including those between the Contractor and the Subcontractor and between the Subcontractor and any third party. Should there be any such claim, lien or unsatisfied obligation, whether before or after final payment is made, the Subcontractor shall deliver payment to the Contractor an amount equal to whatever cost the Contractor and/or the Owner must pay to discharge or defend against any such claim, obligation, lien or action brought, or any judgment thereon and all costs, including legal fees and expenses and a 15% Administrative Fee, incurred in connection therewith.

7. Hazardous Materials

- 7.1 The Subcontractor shall at all times comply with all rules and regulations of any municipality, state or federal environmental protection, and toxic waste and hazardous substances laws, ordinances and regulations, and how they relate to the Subcontract Work, and shall be equally responsible for actions and inactions of subcontractors, sub subcontractors, and any other agents or independent contractors of the Subcontractor. The Subcontractor shall be deemed to, and shall, have included in the Subcontract Amount the containment, removal, disposal or neutralization of all toxic wastes and hazardous substances created, generated, or transported to or from the Project site in conjunction with the Subcontract Work. The Subcontractor will be responsible for identifying toxic wastes and hazardous substances generated, released, caused by or resulting from the Subcontract Work and notifying the Contractor of its presence in writing as soon as it is identified. The terms "toxic wastes" and "hazardous substances" shall have the same meaning as defined under federal environmental laws and regulations. At all times, the Subcontractor shall defend, indemnify, and hold harmless the Contractor from any and all expenses, costs, damages, suits, fines, assessments, penalties and/or causes of action, including attorney's fees through all investigations, negotiations, hearings or appeals, relating to or arising out of the Subcontractor's failure to strictly comply with the terms of this paragraph.

8. Compliance with Laws

- 8.1 The Subcontractor agrees to be bound by, and at its own costs comply with, all federal, state, and local laws, ordinances, and regulations (the "Laws") applicable to the Subcontract Work, including but not limited to safety, equal employment opportunity, minority business enterprise, women's business enterprise, disadvantaged business enterprise, sexual and racial harassment, and all other Laws with which the Contractor must comply.
- 8.2 Where prescribed by Law pursuant to direct Federal contracts or Federally-financed or aided contracts, or otherwise required by Law, the Subcontractor agrees the following clauses found in the Subcontract Documents or in the Code of Federal Regulations (CFR) are incorporated in this Subcontract and binding on Subcontractor as if written herein word for word: the clauses entitled "Equal Opportunity Clause" (41 CFR Sections 60-1.4 & 60-4.3); "Affirmative Action Obligations of Contractors and Subcontractors for Disabled Veterans of the Vietnam Era" (41 CFR Section 60-250.4); "Affirmative Action Obligations of Contractors and Subcontractors for Handicapped Workers" (41 CFR Section 60-741.1); "Contract Work Hours and Safety Standards Act-Overtime Compensation"; "Apprentices and Trainees"; "Payrolls and Basic Records"; "Compliance with Copeland Act Requirements"; "Withholding"; "Subcontracts"; "Contract Termination-Department"; "Disputes Concerning Labor Standards"; "Compliance with Davis-Bacon and Related Act Requirements"; and "Certification of Eligibility" and such other clauses as the Federal Government has required by law or contract. Subcontractor agrees to include all such clauses in any non-exempt, lower-tier subcontracts.

- 8.3 **Immigration Compliance.** The Subcontractor represents and warrants to the Contractor that the Subcontractor is in compliance with, and shall remain in compliance with, the provisions of the Immigration Reform and Control Act of 1986 (The "Act") and all other Federal, State, and/or local immigration statutes/ordinances, as applicable, including, but not limited to the provisions of the Act prohibiting hiring and continued employment of unauthorized aliens, requiring verification and record keeping with respect to identity and eligibility for employment and prohibiting discrimination on the basis of national origin, United States citizenship, or intending citizen status. The Subcontractor agrees to indemnify the Contractor and to hold the Contractor harmless from all liability, including liability for interest and penalties, the Contractor incurs which results from or is attributable to the Subcontractor's failure to comply with any provisions of the Act, and or applicable Federal, State, and/or local immigration statute/ordinance, including reimbursing the Contractor any monies expended by the Contractor in participating in or responding to any investigation/suit/civil or criminal immigration matter involving the Subcontractor. As it relates to immigration compliance, the Subcontractor shall be responsible for completing any and all required documentation in accordance with requirements put forth by the Owner, Contractor or applicable law.
- 8.4 The Subcontractor shall be liable to the Contractor and the Owner for all loss, cost and expense attributable to any acts of commission or omission by the Subcontractor, its Sub-Subcontractors at any tier, and its and their respective employees and agents resulting from the failure to comply with Laws, including, but not limited to, any fines, penalties, restitution, judgments, and other damages resulting from such acts of commission or omission.

9. Insurance

- 9.1 The Subcontractor agrees to procure, pay for, and maintain in full force and effect during the course of the performance of the Subcontract all insurance required by the laws of the state in which the Subcontract Work covered by this Subcontract is being performed, and in such form and amounts as described in in this section and in Exhibit D, whichever is greater, which is attached hereto and incorporated into this Subcontract. Certificates of Insurance on The American Institute of Architect's Form G-705 or other form acceptable to Contractor and Contractor's counsel must be returned to the Contractor with signed Contract Agreement prior to commencement of the Work or receiving any payment on the project. Subcontractor is responsible for the following insurance for protection from claims that may arise out of or result from Subcontractor's operations under this Agreement, whether such operations be by Subcontractor or by any sub-subcontractor, or by anyone directly or indirectly employed by any of them, or by anyone or whose acts any of them may be liable.
- (a) Worker's compensation insurance in accordance with statutory laws and with limits as provided by statute.
 - (b) Comprehensive general liability, including completed operations coverage for a period of three (3) years from the Project Substantial Completion date, products liability coverage (with the Contractor and Owner protected as additional insured), and contractual liability coverage, with limits of not less than
 - (i) \$1,000,000 each occurrence and \$2,000,000 in the aggregate per project for bodily injury or death; and (ii) \$1,000,000 each occurrence and \$2,000,000 in the aggregate per project for property damage.
 - (c) Automobile insurance with coverage for owned and non-owned vehicles with a combined single limit of \$1,000,000 public liability and property damage.
 - (d) Installation Floater with a combined limit not less than \$500,000.
 - (e) In addition, Subcontractor shall purchase an umbrella policy with minimum limits of \$5,000,000 per occurrence. This policy must provide coverage over the underlying liability policies.
 - (f) Professional Liability with a limit not less than \$1,000,000.

Unless Contractor otherwise agrees in writing, the liability policies to be maintained by Subcontractor hereunder shall name Contractor and Owner as additional named insureds. All insurance limits and minimums must be in accord with both the above and/or that noted in the Project Manual/Specifications whichever minimums are greater. All insurance is to be classified as Primary/Non-Contributory (Form #CG7061 or equivalent) and denoted accordingly on Contractor's Insurance Certificate. Subcontractor shall defend, indemnify and hold harmless Contractor and Owner and their agents and employees from and against all claims, damages, causes of action, losses and expenses, including attorney's fees, arising out of or resulting from the performance of the work, provided that such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including the loss of use resulting therefrom; and (2) is caused in whole or in part by any negligent act or omission of Subcontractor or any of Subcontractor's subcontractors, anyone directly or indirectly employed by any of them or for anyone for whose acts any of them may be liable, regardless of whether it is caused in part by a party indemnified hereunder.

- 9.2 **Waiver of Subrogation.** A Blanket Waiver of Subrogation clause shall be added to the general liability (Policy Form #CG7036) or equivalent; automobile liability (Policy Form #CA0444) or equivalent and worker's compensation (Policy Form #WC000313 or equivalent). The policies shall be in favor of Michael Kinder & Sons, Inc. and this clause shall apply to Michael Kinder & Sons, Inc. officers, agents and employees, with respect to all projects during the policy term.
- 9.3 **Cancellation of Coverage.** Each policy of insurance shall provide notification to Contractor and Owner at least thirty (30) days prior to any cancellation or modification to reduce the insurance coverage.
- 9.4 **Sub-Subcontractors.** To the extent that the Subcontractor subcontracts with any other entity or individual to perform all or part of the Subcontractor's Work, the Subcontractor shall require the other Sub-Subcontractors to furnish evidence of equivalent insurance coverage, in all respects, terms and conditions as set forth herein, prior to the commencement of the Work by the Sub-Subcontractor. The Contractor and Owner shall be named as additional insured as detailed below.
- 9.5 **Blanket Additional Insured on General Liability and Automobile Liability.** Michael Kinder & Sons, Inc., and their affiliates, directors, employees, subsidiaries, representatives, and any other parties as required by this Contract Agreement. They must be listed as certificate holder, and the Contractor and Owner must be protected as additional insured for Ongoing Operations and Products/Completed Operations on the Subcontractor's and any Sub-Subcontractor's Commercial General Liability Policies. The coverage must be primary and non-contributory with respect to the additional insured. The Blanket Additional Insured coverage must be provided by General Liability Policy Form #CG7037 or equivalent and Automobile Liability Policy Form #CA2048 or equivalent.
- 9.6 The Contractor shall have no duty to the Subcontractor or to any of its insurers or their insurance agents to review any certificates or copies of insurance furnished to the Contractor or to determine whether the terms of each certificate or policy of insurance comply with the insurance-related provisions of the Subcontract. A failure of the Contractor to detect that the Subcontractor has not submitted certificates, or proper certificates, or is otherwise not in compliance with the insurance-related provisions of the Subcontract shall not be construed as a waiver or

other impairment of any of the Contractor's rights under such insurance-related provisions.

- 9.7 If the Subcontractor fails to procure and maintain such insurance, in addition to the option of declaring the Subcontractor in default for breach of a material provision of this Subcontract, the Contractor shall have the right, but not the duty, to procure and maintain the same insurance, or other insurance that provides the Contractor with equivalent protection, and the Subcontractor shall furnish all necessary information to make effective and maintain such insurance. At the option of the Contractor, the cost of said insurance purchased by the Contractor shall be charged against and deducted from any monies then due or to become due to the Subcontractor or the Contractor shall notify the Subcontractor of the cost thereof and the Subcontractor shall promptly pay such cost.
- 9.8 The Subcontractor shall identify by certificate any Residential, Mold, EIFS, Silica or other major exclusions that impact the Subcontractor's ability to insure its risk. If the Project includes any Residential components or the proposed design includes EIFS systems, then the Subcontractor shall obtain appropriate endorsements acceptable to the Contractor as a condition of this Subcontract.
- 9.9 The Subcontractor shall at its own expense provide insurance coverage for materials stored off the site after written approval of the Contractor at the value established in the approval, and also for portions of the Subcontract Work in transit until such materials are permanently incorporated into the Project. The risk of loss for material and equipment provided by this Subcontract, whether in a deliverable state or otherwise, shall remain with the Subcontractor. Any damages to the material and equipment or loss of any kind occasioned in transit shall be borne by the Subcontractor, notwithstanding the manner in which the goods are shipped or who pays the freight or other transportation costs.

10. Indemnity

- 10.1 **General Indemnity.** To the fullest extent allowed by law, the Subcontractor agrees to defend, indemnify and hold harmless the Contractor to the same extent Contractor is obligated to defend, indemnify and hold harmless the Owner. In the absence of such Owner-required defense and indemnification, the Subcontractor shall defend, indemnify and hold harmless the Contractor, the Contractor's other subcontractors, the Architect/Engineer, the Owner and their agents, consultants, members and employees (the Indemnitees) from and against all claims, damages, losses and expenses, including, but not limited to, attorneys' fees, costs and expenses for bodily injury and property damage that may arise from the performance of the Subcontract Work to the extent of the negligent acts or omissions by, or the fault of, the Subcontractor, the Subcontractor's sub-subcontractors or anyone employed directly or indirectly by any of them or by anyone for whose acts or omissions any of them may be liable. The Subcontractor agrees to purchase and maintain contractual liability insurance covering its obligations in this article. These obligations shall not be interpreted to reduce or negate any other rights or obligations of indemnity otherwise existing with regard as to any party or person described in this Article.
- 10.2 **Patents.** The Subcontractor hereby agrees to defend, indemnify and hold harmless the Contractor and the Owner from and against any and all liability, loss or damage and to reimburse the Contractor and the Owner for any costs, including legal fees and expenses, which the Contractor and the Owner may incur because of claims or litigation on account of infringement or alleged infringement of any letters patent or patent rights by reason of the Subcontract Work, or materials, equipment or other items used by the Subcontractor in its performance.
- 10.3 **No Limitations.** In furtherance to, but not in limitation of the indemnity provisions in this Subcontract, the Subcontractor hereby expressly and specifically agrees that its obligation to indemnify, defend and hold harmless as provided in this Subcontract shall not in any way be affected or diminished by any statutory or constitutional immunity it enjoys from suits by its own employees or from limitations of liability or recovery under worker's compensation laws.

11. Termination for Convenience

- 11.1 It is understood that the basic assumption underlying the mutual obligations and responsibilities entered into by the parties to this Subcontract is the continued performance with respect to the Prime Contract that exists between the Contractor and the Owner. If, for any reason, the Prime Contract is breached, rescinded, or terminated, the Contractor shall have the right to immediately terminate this Subcontract. In no event shall the Contractor be obligated to the Subcontractor for any anticipatory profits or any damages incurred by the Subcontractor as a result of the termination of this Subcontract, unless approved and paid by the Owner. The Subcontractor agrees that the Contractor's decision or determination regarding the pro rata share of any monies received from the Owner as damages or compensation for said breach, rescission or termination of the Agreement shall be final and conclusive and that the Subcontractor shall have no claim or cause of action against the Contractor for any reason or greater amount.
- 11.2 The Contractor shall have the right at any time by written notice to the Subcontractor, to terminate this Subcontract without cause and require the Subcontractor to cease work. In the event of such a termination for convenience, the Subcontractor shall be entitled to payment pursuant to the terms of the Subcontract for the portion of the Subcontract Work actually completed as of the date of termination, together with reasonable costs of demobilization and such other reasonable costs as may be encountered by the Subcontractor and directly attributable to such termination provided that such amount may be reduced by all amounts for which the Subcontractor is liable or responsible. However, the Subcontractor shall only be entitled to profit on that portion of the work actually completed and approved for payment to the date of termination together with retainages withheld from prior payments. The Subcontractor waives any claim for loss of anticipated profits or other damages in the event the Contractor exercises this clause.

12. Failure of Performance

- 12.1 **Non-Conforming Subcontract Work.** The Subcontractor shall provide sufficient, safe, and proper facilities at all times for inspection by the Architect, the Owner or the Contractor of the Subcontract Work in the field, at shops or at any other place where materials required hereunder are in course of preparation, manufacture, treatment or storage. The Subcontractor shall, within twenty four (24) hours after receiving written notice from the Contractor to that effect, proceed to remove from the site any materials condemned by the Architect, the Owner, or the Contractor, whether worked or unworked, and to take down all portions of the Subcontract Work which the Architect, the Owner or the Contractor has condemned in writing, as unsound or improper, or as in any way failing to conform to the drawings, specifications and addenda and shall take full financial responsibility for all damage caused by such removal. In the event that all or any portion of the Subcontract Work as condemned should be of such a nature, or the time available should be so limited, that in the judgment of the Architect, the Owner or the Contractor it would not be expedient to order the same replaced or corrected, the Contractor, at its option, may deduct from the payments due or to become due to the Subcontractor such amount or amounts as in the opinion of the Architect or the Owner shall represent the difference between the fair and reasonable value of the Subcontract Work so condemned and its value had it been executed in conformity with the Subcontract Documents.
- 12.2 **Use of Non-Conforming Materials and Remedies.** Any materials and/or labor which at any time, whether before or after delivery, payment and/or utilization in the Project, fail to conform to any descriptions, specifications, or provisions contained in this Contract Agreement, or fail to

satisfy any of Subcontractor's express or implied warranties, or are shipped or delivered other than in the quantities or not at the time and place specified in Contractor's delivery instructions, or other than in containers or packages conforming to Contractor's specifications (or, in the absence of such specifications, in recognized standard containers), or which are otherwise not in conformance with this Contract Agreement shall be deemed "non-conforming materials and/or labor." If Subcontractor provides or utilizes any non-conforming materials and/or labor, Contractor, without limitation of any other right or remedy Contractor may have, may (a) require Subcontractor to repair or replace, at Contractor's option, such materials and/or labor at Subcontractor's expense; or (b) reject, in whole or in part, the materials and/or labor that are the subject of this Contract Agreement and receive credit or refund for such whole or part of the purchase price associated therewith. Non-conforming materials may be held (or returned to Subcontractor), at Subcontractor expense and risk, and shall be replaced by Subcontractor only upon the written request of the Contractor. Contractor may charge to Subcontractor all expenses of unpacking, examining, testing, repacking, storing and reshipping of any such non-conforming materials and/or of inspecting and testing any such non-conforming labor and may also charge to Subcontractor any other incidental or consequential damages suffered by Contractor as a result thereof.

- 12.3 **Remedies Cumulative.** The remedies provided for in this Contract Agreement are cumulative and shall be in addition to, and not in limitation of, the rights and remedies which may be available to Contractor at law or in equity. No waiver of a breach of any provision of this Agreement shall be effective unless in writing and no such waiver shall constitute a waiver of any other breach or of the same breach at a different time. The exercise by Contractor of the rights provided herein shall not be considered as a waiver of any damages which may be incurred by Contractor or a waiver of any other rights or remedies to which Contractor might be entitled.
- 12.4 **Notice to Cure.** If the Subcontractor is unable, refuses or fails to supply enough properly-skilled workers, proper materials, correct non-conforming Subcontract Work, or maintain the Schedule of Work, or fails to make prompt payment to its workers, subcontractors or suppliers, or disregards laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, or otherwise is guilty of a material breach of a provision of this Agreement, the Subcontractor shall be deemed in default of this Agreement. If the Subcontractor fails within three (3) business days after written notification to commence and continue satisfactory correction of the default with diligence and promptness, then the Contractor without prejudice to any other rights or remedies, shall have the right to any or all of the following remedies:
- 12.4.1 to supply workers, materials, equipment and facilities as the Contractor deems necessary for the completion of the Subcontract Work or any part which the Subcontractor has failed to complete or perform after written notification, and charge the cost, including reasonable overhead, profit, attorneys' fees, costs and expenses to the Subcontractor;
 - 12.4.2 to contract with one or more additional contractors to perform such part of the Subcontract Work as the Contractor determines will provide the most expeditious completion of the Subcontract Work, and charge the cost to the Subcontractor; and/or
 - 12.4.3 withhold any payments due or to become due the Subcontractor pending corrective action in amounts sufficient to cover losses and compel performance to the extent required by and to the satisfaction of the Contractor.
 - 12.4.4 terminate the Subcontractor for default by delivering written notice of such termination to the Subcontractor.
 - 12.4.5 to charge to the Subcontractor an Administrative Fee of 15% of all costs incurred by the Contractor in exercising any of the above remedies.

In the event of an emergency affecting the safety of persons or property, the Contractor may proceed as above without notice, but the Contractor shall give the Subcontractor notice promptly after the fact as a precondition of cost recovery.

- 12.3 **Termination for Default.** If the Subcontractor has been terminated for default, the Contractor may take possession of the Subcontract Work, materials, tools, appliances and equipment of the Subcontractor at the Project site, and through itself or others provide labor, equipment and materials to prosecute Subcontract Work on such terms and conditions as shall be deemed by the Contractor as necessary, and shall deduct the cost, including without restriction all claims, charges, expenses, losses, costs, damages, and attorneys' fees, incurred as a result of the Subcontractor's failure to perform, from any money then due or thereafter to become due to the Subcontractor under this Agreement.
- 12.3.1 If the Contractor so terminates the employment of the Subcontractor, the Subcontractor shall not be entitled to any further payments under this Agreement and no sum shall be deemed due or to become due to the Subcontractor until Subcontract Work has been completed and accepted by the Owner, all Subcontract requirements have been fulfilled, and payment has been received by the Contractor from the Owner. In the event the unpaid subcontract earnings exceed the Contractor's cost of completion and any and all incidental costs, including administrative, legal and other professional fees, the difference shall be paid to the Subcontractor, but if such expenses exceed the subcontract earnings, the Subcontractor agrees to pay the difference to the Contractor promptly.
 - 12.3.2 If it is determined or agreed that the Contractor wrongfully exercised any option under this Article, the Contractor shall be liable to the Subcontractor solely for the reasonable value of Subcontract Work performed by the Subcontractor prior to such action, including reasonable overhead and profit on the Subcontract Work performed, less prior payments made. Under no circumstances shall the Subcontractor be entitled to recovery of claimed lost future profits.

13. Delays

- 13.1 Should the progress of the Subcontract Work be delayed, obstructed or interfered with through any fault, action or failure to act by the Subcontractor or any of its officers, agents, employees, subcontractors or suppliers so as to cause any additional cost, expense, liability or damage to the Contractor or the Owner, including legal fees or expenses incurred in defending claims arising from such delay or seeking reimbursement and indemnity from the Subcontractor and its surety hereunder, the Subcontractor and its surety agree to compensate and indemnify the Contractor and the Owner against all such costs, expenses, damages and liabilities.
- 13.2 In addition, the Subcontractor, at the Contractor's direction and at the Subcontractor's own cost and expense, shall work such overtime as may be necessary to make up for all time lost in the completion of the Subcontract Work and in the completion of the Project due to such delay. Weather days will be made up through longer hours, Saturdays, and/or Sundays. Subcontractor fully obligated to meet the requirements of the project schedule within these constraints. If the Subcontractor fails to make up for the time lost by reason of such delay, the Contractor has the right to use other subcontractors or suppliers and to take whatever other action the Contractor deems necessary to avoid delay in the completion of the Subcontract Work and the Project, the cost of which shall be borne by the Subcontractor. In the event Subcontractor delays timely performance of the Subcontract Work or to the completion of the Project, either by its acts or omissions, and such delays result in the Contractor being charged by the Owner with actual or liquidated damages, then the Subcontractor shall reimburse the Contractor the full amount of all such damages and charges resulting from the delays caused by the Subcontractor. The Contractor may offset any such damages

against the remaining balance due to the Subcontractor on the Subcontract Amount, if any.

- 13.3 If the commencement and/or progress of the Subcontract Work is delayed without the fault or responsibility of the Subcontractor, the time for the Subcontract Work shall be extended by Subcontract Change Order to the extent obtained by the Contractor from the Owner pursuant to the Prime Contract, and the Schedule of Work shall be revised accordingly.

14. Changes

- 14.1 Subcontract Changes. The Contractor and the Subcontractor agree the Contractor may make changes to the Subcontract Work, including but not limited to; additions, deletions or revisions. Any changes made to the Subcontract Work involved, or any other parts of this Agreement, shall be by a written Change Order. To the extent that any such change impacts Subcontractor's cost of or time for performance, the Subcontract Amount and Subcontract Schedule shall be equitably adjusted to compensate for such impact. Changes shall be initiated by one of the three methods outlined below, or as provided in the Prime Contract and shall be incorporated into the Subcontract by a Change Order.

14.1.1. **Request for Change Proposal.** A Request for Change Proposal (RFCP) is a written request that informs Subcontractor about a potential change in the Subcontract Work and requests a proposal for the potential change. Subcontractor shall promptly reply with such request. Subcontractor shall not implement the change or incur any costs until a Change Order is fully executed.

14.1.2. **Construction Change Directive.** A Construction Change Directive (CCD) is a written directive that instructs Subcontractor to take some immediate action in connection with the Subcontract Work. CCDs are issued when there is not time to issue a RFCO or Change Order. Subcontractor shall immediately proceed so as not to delay the progress of the Work and in accordance with the terms of the CCD. Any impact of a CCD on the Contract Price or Schedule shall be adjusted by a Change Order.

14.1.3. **Change Order Requests.** Within seven (7) calendar days after the occurrence of any event or observance of any condition that Subcontractor believes entitles Subcontractor to an adjustment in Subcontract Amount and/or Subcontract Schedule, Subcontractor shall prepare and submit a Change Order Request (COR) to Contractor. The COR shall include a detailed factual narrative, a detailed analysis showing entitlement and a detailed analysis of the proposed change to the Subcontract Amount and/or Subcontract Schedule.

- 14.2 **Change Orders.** A Change Order (CO) is a written instrument prepared by the Contractor and signed by the Subcontractor stating their agreement with the change in the Subcontract Work and any adjustment to the Subcontract Amount and/or Subcontract Schedule. All changes and/or additions in the Subcontract Work ordered in writing by the Contractor shall be deemed a part of the Subcontract Work and shall be performed and furnished in strict accordance with all terms and conditions of this Agreement and the Subcontract Documents, including the current Schedule of Work.

Change Orders will be used to implement approved Requests for Change Proposals, Construction Change Directives and Change Order Requests. Upon receipt of a properly documented COR or CCD, the parties shall negotiate in good faith to determine if the Subcontractor is entitled to a Change Order and, if so, the appropriate equitable adjustment. Any adjustment to the Subcontract Amount shall be established by one of the following methods:

- a. mutual acceptance of an itemized lump sum, or
- b. unit prices as indicated in the Subcontract Documents or as subsequently agreed to by the parties; or
- c. costs determined in a manner acceptable to the parties and a mutually acceptable fixed or percentage fee; or
- d. another method provided in the Subcontract Documents.

If the Parties are unable to agree on the dispositions of a COR or CCD, Contractor will either (i) issue a Notice denying Subcontractor's request or (ii) issue a unilateral Change Order setting forth the Contractor's final determination regarding the adjustments. Any cost and schedule adjustments shall be a full accord and satisfaction for all cumulative impacts of the underlying change.

- 14.3 The Subcontractor shall not be entitled to receive additional compensation for extra work or materials or changes of any kind except to the extent the same was ordered by the Contractor or any of its representatives. The Subcontractor shall be responsible for any costs incurred by the Contractor for changes of any kind made by the Subcontractor that increase the cost of the Work for either the Contractor or other subcontractors when the Subcontractor proceeds with such changes without a Change Order or Construction Change Directive.
- 14.4 Determination by Owner or Architect/Engineer. Notwithstanding any other provision, if the Subcontract Work for which the Subcontractor claims additional compensation is determined by the Owner or Architect/Engineer not to entitle the Contractor to a Change Order, additional compensation or a time extension, the Contractor shall not be liable to the Subcontractor for any additional compensation or time extension for such Subcontract Work, unless the Contractor agrees in writing to pay such additional compensation or to grant such extension.

15. Claims

- 15.1 A Claim is a written demand by Subcontractor seeking an adjustment in the Subcontract Amount and/or Subcontract Schedule or some other relief under the terms of the Subcontract for events other than a RFCP that has been denied in writing. Subcontractor shall provide Notice to Contractor of any potential Claim within seven (7) calendar days after the event giving rise to the Claim. Within fifteen (15) calendar days thereafter, Subcontractor shall submit a detailed factual narrative, a detailed analysis showing entitlement and a detailed analysis of the alleged change to the Subcontract Amount and/or Subcontract Schedule. Claims not timely made, in writing, by the Subcontractor shall be deemed to have been abandoned and waived. The acceptance and consideration of any claim out of time by the Contractor shall not create any precedent nor "course of dealing" between the Contractor and the Subcontractor, nor shall it waive the Contractor's right to insist on strict adherence by the Subcontractor to the contract claims procedures. If Contractor denies Subcontractor's Claim, Subcontractor may pursue the matter under Article 21 Dispute Resolution.
- 15.2 The Subcontractor shall not delay or suspend the Subcontract Work because of the pendency of or the denial by the Contractor of any such claim or because of the continuance of the condition out of which the claim arose, but shall proceed diligently in performing the Subcontract Work while the claim is being resolved by agreement or being fully adjudicated.
- 15.3 In the event the Subcontractor asserts that it should receive additional compensation because of an act or omission on the Owner's part, or someone for whom the Owner is responsible, the Subcontractor shall promptly submit the claim to the Contractor in writing at least three (3) working days before the date the Contractor is required to submit such claims under the Prime Contract. If timely submitted with all documentation required by the Prime Contract, the Contractor will, on behalf of the Subcontractor, submit the same to the Owner for its

consideration. Failure of the Subcontractor to submit such claims in a timely and proper manner shall result in a waiver of such claim and the Contractor is not required to submit it to the Owner, and the Subcontractor shall be bound to the same consequence which the Contractor would suffer under the Prime Contract.

- 15.4 The Subcontractor shall fully cooperate with the Contractor in the submission of such pass through claims, shall prepare all supporting data and do everything else necessary to properly present the claims, including payment of legal fees incurred by the Contractor to prepare, submit and negotiate or otherwise resolve such claim. Should the Owner allow and pay additional compensation to the Contractor on account of such pass through claim asserted by the Subcontractor, the Contractor will pay the same to the Subcontractor, less the Contractor's overhead, costs, expenses, legal fees and a 15% Administrative Fee.
- 15.5 It shall be an express condition precedent to any obligation on the part of the Contractor to make payment of any cost, reimbursement, compensation or damages to the Subcontractor hereunder that the Contractor shall first be determined to be entitled to such compensation on behalf of the Subcontractor and then receive such payment from Owner, and Subcontractor expressly acknowledges that the Contractor is not obligated or required to pursue the Subcontractor's claim against the Owner if the Contractor, in its sole discretion, after review of the Subcontractor's claim, has deemed the claim to lack merit in whole or in part.
- 15.6 If at any time a controversy should arise between the Contractor and the Subcontractor with respect to any matter in this Subcontract which the Contractor determines is not a claim, dispute or controversy which should involve or be asserted against the Owner, the decision of the Contractor relating to the subject of the controversy shall be followed by the Subcontractor.

16. Taxes

- 16.1 The Subcontract Amount includes all applicable sales, excise, transportation, unemployment compensation, social security, and any other taxes presently existing or subsequently imposed and levied and the Subcontractor agrees to pay all of the above and to conform to all applicable municipal, state and federal laws in connection with such taxes. The Subcontractor further agrees to withhold taxes from the wages and salaries of all employees of the Subcontractor and pay the same in accordance with the federal and state laws and regulations pertaining thereto. The Subcontract Amount includes federal, state, and municipal taxes now levied or in force or hereafter imposed on any and all tangible personal property sold or transferred to the Contractor under this Subcontract and the Subcontractor agrees to pay such tax or taxes on such property, the cost of which is included in the Subcontract Amount.

17. Liens

- 17.1 The Subcontractor shall promptly pay when due all its project creditors, together with the project creditors of all those below it in the contractual chain.
- 17.2 If the Project involves private work, the Subcontractor shall keep the property and improvements free and clear of all mechanic, materialmen and similar lien claims or statements. In the event any such lien is filed, asserted, or claimed, the Subcontractor shall immediately secure its release either by paying the lien claimant, by filing a lien release bond, or by any other means permitted by law. If not so released, the Contractor may retain an amount equal to 150% of the lien or claim and may pay the claimant and offset that amount, plus any legal fees from the amount so retained. If the Project involves public work, the Subcontractor shall promptly pay and secure releases from all of its project creditors, including all those below it in the contractual chain, who are entitled to assert claims against the Contractor or its surety.
- 17.3 If any claim or lien is made or filed with or against the Contractor, the Owner, the Project, the Premises or the Project funds by any person claiming that the Subcontractor or any subcontractor or other person under subcontract to the Subcontractor, or any person or entity employed or engaged by the Subcontractor at any tier, has failed to make payment for any labor, services, materials, equipment, taxes or other obligations furnished or incurred in connection with the Subcontract Work, or if the Subcontractor or any subcontractor or other person under subcontract to the Subcontractor, or any person or entity employed or engaged by the Subcontractor at any tier causes damage to the Subcontract Work or any other work on the project, or if the Subcontractor fails to perform or is otherwise in default of any term or provision of this Subcontract, the Contractor shall have the right to retain from any payment then due or thereafter due an amount which the Contractor deems sufficient to (1) satisfy, discharge and/or defend against any such claim or lien, (2) make good any such nonpayment, failure, damage or default, and (3) defend, indemnify and hold harmless the Contractor and the Owner against any and all losses, damages and costs, including legal fees and expenses, incurred by either or both of them. The Contractor shall require proof that any such nonpayment, claim or lien is fully satisfied, dismissed, and discharged before any remaining retained funds will be released. The Contractor shall, in addition, have the right to apply and charge against the Subcontractor so much of the amount retained as may be required for the foregoing purposes and the Subcontractor shall pay and reimburse the Contractor and the Owner all such losses, damages, and costs incurred by them which exceed the retained funds.

18. Assignment

- 18.1 To the fullest extent permitted by law, the Subcontractor agrees that it shall not assign, sell, transfer, delegate or encumber any rights, duties or obligations arising under this Subcontract including, but not limited to, any right to receive payments hereunder, without the prior written consent of the Contractor in its sole discretion and the giving of any such consent to a particular assignment shall not dispense with the necessity of such consent to any further or other assignments. In the event the Subcontractor assigns, sells, encumbers, or otherwise transfers its right to any funds due or to become due under this Subcontract as security for any loan, financing or other indebtedness ("Assignment"), notification to the Contractor of such Assignment must be sent by certified mail, return receipt requested, to the Contractor and the Assignment shall not be effective as against the Contractor until the Contractor provides its written consent to such Assignment. The Subcontractor agrees that any such Assignment shall not relieve the Subcontractor of any of its agreements, duties, responsibilities or obligations under this Subcontract and the Subcontract Documents and shall not create a contractual relationship or a third party beneficiary relationship of any kind between the Contractor and such assignee or transferee.

19. Guarantee/Warranty

- 19.1 For a period equal to that imposed upon the Contractor under the Prime Contract, but in no event less than one year from the date of the Owner's final acceptance of the Subcontract Work, the Subcontractor guarantees and warrants that the Subcontract Work complies with the Subcontract Documents requirements and is free from defects in material and workmanship. The Subcontractor shall remain liable for defects in the Subcontract Work for the same period the Contractor remains liable to the Owner under the Prime Contract, or as required by law, whichever is greater. This guarantee/warranty shall include, but is not limited to, the cost of all labor, material, and related items necessary to correct any such defect, plus the cost of repairing any damage to other items which may have been caused by the defective material or

workmanship. If the Subcontractor fails to begin warranty work within seventy-two (72) hours of being notified that such work is necessary, the Contractor may, at its option, perform the necessary remedial work or secure its performance by others and charge the Subcontractor with the cost thereof, plus a 15% Administrative Fee. Nothing in this paragraph shall shorten the statute of limitations on any action by the Contractor for breach of contract, negligence, or other cause of action against the Subcontractor.

20. Dispute Resolution

- 20.1 **Scope of Disputes Provisions.** All Claims, disputes, or other matters in question between the parties to this Subcontract which arise out of or relate to this Agreement (or the breach thereof), whether in contract or tort, (hereinafter "Dispute") shall be subject to the dispute resolutions set forth below.
- 20.2 **Initial Dispute Resolution/Mediation.** A Dispute which either party desires to pursue shall be set forth in a detailed written statement of claim submitted to the other party providing the specific basis upon which monetary or other relief is claimed to be due, the specific contractual provision(s) supporting the claim and an itemization of the amount claimed to be due. Following submission of the detailed statement of claim, Contractor and Subcontractor shall endeavor to settle the Dispute first through face to face direct discussions between corporate officers of the Contractor and Subcontractor which discussions shall be held at the Contractor's office location involved with the Project within thirty (30) calendar days of a request by either party. If the Dispute cannot be resolved through direct discussions, the parties shall participate in mediation under the Construction Industry Mediation Rules of the American Arbitration Association as a condition precedent and before recourse to any other form of binding dispute resolution. The location of the mediation shall be Allen County, Indiana, unless the parties agree on another location. Upon written notice requesting mediation provided to the other party and the American Arbitration Association, the parties agree to proceed with the mediation as scheduled by the mediator. Either party may terminate the mediation at any time after the first session, but the decision to terminate must be personally delivered to the other party and the mediator.
- 20.3 **Binding Dispute Resolution.** In the event Contractor and Subcontractor cannot resolve the Dispute through direct discussions or mediation as contemplated above, then the Dispute shall, at the sole discretion of Contractor, be decided either by submission to (a) arbitration administered by the American Arbitration Association or other arbitration tribunal mutually agreed upon by the parties; or (b) litigation subject to the exclusive jurisdiction and venue of Allen County, Indiana.
- 20.4 **Arbitration Election**
- 20.4.1 In the event Contractor exercises its exclusive right to resolve the Dispute in arbitration, such arbitration shall be conducted in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association or the applicable rules of such other arbitration tribunal as the parties may mutually determine in effect at the time the arbitration is commenced as modified by the terms hereof. Any arbitration hereunder shall be held in Allen County, Indiana.
- 20.4.2 Should Contractor exercise its exclusive right to resolve the Dispute by arbitration, then within fourteen (14) days after Contractor gives Subcontractor notice of Contractor's election of arbitration, the parties shall use good faith efforts to select a single arbitrator mutually acceptable to both parties. If the parties are unable to select an arbitrator, then the parties will select the arbitrator(s) from a panel of experienced construction arbitrators on the American Arbitration Association's large complex case panel or a comparable panel of experienced construction arbitrators maintained by such other arbitration tribunal mutually selected by the parties then in effect. In the event the amount in Dispute exceeds \$1,000,000.00, Contractor and Subcontractor agree the arbitration shall be heard by a panel of three (3) arbitrators; otherwise, the Dispute shall be heard by a single arbitrator.
- 20.4.3 The parties will enter into an Electronically Stored Information Agreement outlining the scope and volume for ESI discovery, which shall take into account the amount and complexity of the Dispute.
- 20.4.4 The arbitration award shall be final and binding upon the parties, shall include attorneys' fees and costs to the prevailing party or parties, and may be entered as a judgment in any court having proper jurisdiction. In any arbitration the Arbitrator(s) shall have no power to render an award which has the effect of altering or amending or changing in any way any provisions of this Subcontract.
- 20.4.5 The parties stipulate and agree that the performance of this Subcontract is a transaction involving interstate commerce. Notwithstanding other provisions in the Subcontract, or choice of law provisions to the contrary, this agreement to arbitrate shall be enforced pursuant to, and governed by, the Federal Arbitration Act, 9 U. S. C. §1 et seq., which shall not be superseded or supplemented by any other arbitration act, statute, or regulation.
- 20.4.6 At the sole discretion of Contractor, any arbitration with Subcontractor shall be consolidated with any other arbitration proceeding relating to the work under the General Contract.
- 20.5 **Litigation Election.** In the event Contractor elects not to exercise its exclusive right to resolve the Dispute by arbitration, or in the event the Dispute between Contractor and Subcontractor, or any portion thereof, is found to be non-arbitrable, then the parties hereby agree that the Dispute or a portion thereof (as the case may be) shall be subject to exclusive jurisdiction and venue of Allen County, Indiana. In any such Dispute or portion thereof which is resolved by litigation, Subcontractor expressly waives any right to trial by jury.
- 20.6 **Multiparty Proceeding.** To the extent permitted by Subcontract Documents, all parties necessary to resolve a claim shall be parties to the same dispute resolution proceeding. To the extent Disputes between the Contractor and the Subcontractor involve in whole or in part disputes between the Contractor and the Owner, Disputes between the Subcontractor and the Contractor shall be decided by the same tribunal and in the same forum as disputes between the Contractor and the Owner.
- 20.7 **Stay of Proceedings.** (a) In the event the provisions for resolution of disputes between the Contractor and the Owner contained in the Subcontract Documents do not permit consolidation or joinder with disputes of third parties, such as the Subcontractor, resolution of any Dispute between Contractor and Subcontractor involving in whole or in part disputes between Contractor and Owner shall be stayed pending conclusion of any dispute resolution proceeding between Contractor and Owner. (b) In the event that any action is filed prior to exhaustion of remedies under the Subcontract; such action shall be stayed pending conclusion of any dispute resolution proceedings.
- 20.8 **Work Continuation and Payment.** Unless otherwise agreed in writing, Subcontractor shall continue the Subcontract Work and maintain the Schedule of Work during any dispute resolution proceedings. As Subcontractor continues to perform, Contractor shall continue to make payments in accordance with this Agreement.
- 20.9 **Cost of Dispute Resolution; Attorneys' Fees.** The cost of any mediation proceeding shall be shared equally by the parties participating.

- 20.9.1 The prevailing party in any Dispute arising out of or relating to this Agreement or its breach that is resolved by a dispute resolution procedure designated in the Subcontract Documents shall be entitled to recover from the other party those reasonable attorneys' fees, costs and expenses (including expert fees and expenses) incurred by the prevailing party in connection with such dispute resolution process after direct discussions and mediation.
- 20.9.2 In the event the Subcontractor is awarded an amount equal to or less than the last written offer of settlement from Contractor, prior to the commencement of binding dispute resolution, Contractor shall be deemed prevailing party and be entitled to recover those reasonable attorneys' fees, costs and expenses (including expert fees and expenses) incurred by the Contractor.

21. Miscellaneous

- 21.1 No one, other than the parties hereto, their successors, trustees and assigns, shall be entitled to bring action on this Subcontract or the Performance Bond provided by the Subcontractor, it being the express intent of the parties that this Subcontract shall not be for the benefit of any third party.
- 21.2 Any term or provision of this Subcontract which is held to be invalid or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity or unenforceability without rendering invalid or unenforceable the remaining terms and provisions of this Subcontract or affecting the validity or enforceability of any of the terms or provisions of this Subcontract in any other jurisdiction.
- 21.3 This Subcontract, together with the documents referred to or incorporated herein by reference, constitute the complete agreement between the parties. No agent or employee of either party possesses the authority to make, and the parties shall not be bound by nor liable for, any statement, representation, promise or agreement not set forth herein. Any article, section, paragraph, or other headings contained in this Subcontract are for reference purposes and shall not affect in any way the meaning or interpretation of this Subcontract.
- 21.4 The terms and provisions shall extend to and be binding upon the successors, trustees and assigns of the parties hereto, and shall be governed and controlled, except as expressly provided herein or as required by the Subcontract Documents, by the laws of the State of the Project.
- 21.5 The Subcontractor agrees to comply with the provisions and any applicable local, state, or federal ordinance, regulation, status, or other mandate regarding affirmative action and/or minority/women's business enterprise participation.
- 21.6 This subcontract has not been altered in any manner from its original form as sent to the Subcontractor except for required signatures and dates, or as clearly marked and initialed by this Subcontractor. Any changes to this subcontract not initialed by the Contractor will not be binding.
- 21.7 Project Meetings. Subcontractor is required to attend all progress meetings when requested by Contractor, Architect, or Owner. Absence of Subcontractor at Progress Meetings when attendance is requested shall be subject to a \$100.00 fine.
- 21.8 Equipment / Scaffolding. At no time shall subcontractor or any forces employed by or acting for, by, through or under subcontractor use any equipment or scaffolding which is owned, rented, or maintained by Contractor without prior written consent of Contractor and signed Release of Liability Waiver.
- 21.9 All requirements of Specification Divisions 00 and 01 apply to Subcontractor.

Exhibit C

Waiver of Lien to Date Sample

STATE OF: _____

Pay Application #: _____

COUNTY OF: _____

Invoice No.: _____

TO WHOM IT MAY CONCERN:

WHEREAS the undersigned has been employed by Michael Kinder & Sons, Inc. to furnish labor, material and equipment for the project known XXX is the owner.

THE undersigned, for and in consideration of _____ and ____/100 (\$ _____)

Dollars, and other good and valuable considerations, upon the receipt whereof will be acknowledged, will hereby waive and release any and all lien or claim of, or right to lien, under the statutes of the State of Indiana, relating to mechanics' liens, with respect to and on said above-described premises, and the improvements, thereon, and on the material, fixtures, apparatus or machinery furnished, and on the moneys, funds or other considerations due or to become due from the owner, on account of all labor, services, material, fixtures, apparatus or machinery, furnished to this date by the undersigned for the above-described premises, INCLUDING EXTRAS.*

DATE _____

COMPANY NAME _____

COMPANY ADDRESS _____

CITY, STATE, ZIP _____

BY: _____

TITLE: _____

*EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN TO THE CONTRACT.

Subcontractor's Affidavit Sample

STATE OF: _____
COUNTY OF: _____

Pay Application #: _____
Invoice No.: _____

TO WHOM IT MAY CONCERN:

That the total amount of the contract with Michael Kinder and Sons, Inc. including extras* is \$_____ on which he or she has received payment of \$_____ as of the notarized date below. That all waivers are true, correct and genuine and delivered unconditionally and that there is no claim either legal or equitable to defeat the validity of said waivers.

That for the purpose of said contract, the following persons, firms or corporations have been engaged to furnish, have furnished, or will furnish materials and/or labor for said project; that there are due or to become due to them respectively, the amounts set opposite their names for said materials and/or labor; that there are no other known commitments and there is nothing due or to become due to any person, firm, or corporation for labor, services, materials, fixtures, machinery, apparatus, supplies or services, other than as stated herein.

That there are no other contracts for said work outstanding, and that there is nothing due or to become due to any person for material, labor or other work of any kind done or to be done upon or in connection with said work other than below stated.

			(A)	(B)	(C)	A-B-C=
MATERIAL SUPPLIER OR SUBCONTRACTOR	PHONE NUMBER	PROVIDED	CONTRACT PRICE INCLDG EXTRAS*	PREVIOUSLY REQUESTED TO DATE	CURRENT PAYMENT DUE	BALANCE OWED
TOTAL LABOR AND MATERIAL INCLUDING EXTRAS* TO COMPLETE.						

DATE _____

COMPANY NAME: _____

BY: _____
TITLE: _____

I HERBY CERTIFY THAT THE PERSON NAMED ABOVE, APPREARED BEFORE ME THIS DAY IN PERSON AND ACKNOWLEDGED THEY SIGNED THIS DOCUMENT (INCLUDING SUPPLEMENTAL SHEETS ATTACHED HERETO) AS THEIR FREE AND VOLUNTARY ACT AND DEED FOR THE USES AND PURPOSES HEREIN STATED.

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____

NOTARY PUBLIC _____

MY COMMISSION EXPIRES: _____

*EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN TO THE CONTRACT.

Subcontractor is required to provide sub-subcontractor and material supplier waivers for values exceeding \$5,000.00

Sub-Subcontractor Waiver of Lien to Date Sample

STATE OF: _____

Pay Application #: _____

COUNTY OF: _____

Invoice No.: _____

TO WHOM IT MAY CONCERN:

WHEREAS the undersigned has been employed by _____ to furnish labor, material and equipment for the project known as Huhtamaki Restroom Renovation of which XXX is the owner.

THE undersigned, for and in consideration of _____ and ____/100 (\$_____) Dollars, and other good and valuable considerations, upon the receipt whereof will be acknowledged, will waive and release any and all lien or claim of, or right to lien, under the statutes of the State of Indiana, relating to mechanics' liens, with respect to and on said above-described premises, and the improvements, thereon, and on the material, fixtures, apparatus or machinery furnished, and on the moneys, funds or other considerations due or to become due from the owner, on account of all labor, services, material, fixtures, apparatus or machinery, furnished to this date by the undersigned for the above-described premises, INCLUDING EXTRAS.*

DATE _____

COMPANY NAME _____

ADDRESS _____

CITY, STATE, ZIP _____

BY: _____

TITLE: _____

*EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN TO THE CONTRACT.

Sub-Subcontractor's Affidavit Sample

STATE OF: _____

COUNTY OF: _____

TO WHOM IT MAY CONCERN:

THE undersigned, (Name) _____ being duly sworn, deposes and says that he or she is (Position) _____ of (Company Name) _____ who is the contractor furnishing _____ on the building located at XXX, owned by XXX.

That the total amount of the contract including extras* is \$_____ on which he or she has received payment of \$_____ as of the notarized date below. That all waivers are true, correct and genuine and delivered unconditionally and that there is no claim either legal or equitable to defeat the validity of said waivers. That the following are the names and addresses of all parties who have furnished material or labor, or both, for said work and all parties having contracts or sub contracts for specific portions of said work or for material entering into the construction thereof and the amount due or to become due to each, and that the items mentioned include all labor and material required to complete said work according to plans and specifications.

That there are no other contracts for said work outstanding, and that there is nothing due or to become due to any person for material, labor or other work of any kind done or to be done upon or in connection with said work other than above stated.

DATE _____

SIGNATURE _____

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____

NOTARY PUBLIC _____

MY COMMISSION EXPIRES: _____

Material Supplier Waiver of Lien to Date Sample

STATE OF: _____

COUNTY OF: _____

Pay Application #: _____

Invoice No.: _____

TO WHOM IT MAY CONCERN:

WHEREAS the undersigned has been employed by _____ to furnish material and/or equipment for the project known as XXX is the owner.

THE undersigned, for and in consideration of _____ and ____/100 (\$_____) Dollars, and other good and valuable considerations, upon the receipt whereof will acknowledged, will waive and release any and all lien or claim of, or right to lien, under the statutes of the State of Indiana, relating to mechanics' liens, with respect to and on said above-described premises, and the improvements, thereon, and on the material, fixtures, apparatus or machinery furnished, and on the moneys, funds or other considerations due or to become due from the owner, on account of all labor, services, material, fixtures, apparatus or machinery, furnished to this date by the undersigned for the above-described premises, INCLUDING EXTRAS.*

DATE _____

COMPANY NAME _____

ADDRESS _____

CITY, STATE, ZIP _____

BY: _____

TITLE: _____

*EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN TO THE CONTRACT

Material Supplier Affidavit Sample

STATE OF: _____

TO WHOM IT MAY CONCERN:

THE undersigned, (Name) _____ being duly sworn, deposes and says that he or she is (Position) _____ of (Company Name) _____ who is the material supplier furnishing _____ for _____ (Company purchasing material) on the building located at XXX, owned by XXX.

That the total amount of the contract including extras* is \$ _____ on which he or she has received payment of \$ _____ as of the notarized date below. That all waivers are true, correct and genuine and delivered unconditionally and that there is no claim either legal or equitable to defeat the validity of said waivers. That the following are the names and addresses of all parties who have furnished material or labor, or both, for said work and all parties having contracts or sub contracts for specific portions of said work or for material entering into the construction thereof and the amount due or to become due to each, and that the items mentioned include all labor and material required to complete said work according to plans and specifications.

That there are no other contracts for said work outstanding, and that there is nothing due or to become due to any person for material, labor or other work of any kind done or to be done upon or in connection with said work other than above stated.

DATE _____

SIGNATURE _____

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____

NOTARY PUBLIC _____

MY COMMISSION EXPIRES: _____

Exhibit D Insurance Compliance Checklist

The following sample Certificate of Insurance shows the requirements needed to meet the terms of the Contract Agreement with Michael Kinder & Sons, Inc.

Please submit your client's Certificate of Insurance electronically to our office.

Please be sure your certificate of insurance and coverage meet the following requirements:

1. General aggregate limit is on a per project basis.
2. Limits are equal to or greater than those required.
3. Installation floater is included.
4. Michael Kinder & Sons, Inc. and the project owner are protected as blanket additional insured on the General Liability Policy (per Form #CG7037 or equivalent) including ongoing operations and products/completed operations as required by contract.
5. Michael Kinder & Sons, Inc. and the project owner are protected as blanket additional insured on the Auto Liability Policy (per Form #CA2048 or equivalent).
6. All insurance is primary and non-contributory.
7. Waiver of Subrogation in favor of Michael Kinder & Sons, Inc. on the General Liability and Workers Compensation policies is included.

Should you have any questions, please contact the project manager at our office. (260) 744-4359

Thank you.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
8/16/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER ISU Stewart, Brimmer, Peters & Company 3702 Rupp Drive Fort Wayne IN 46815	CONTACT NAME: Account Manager Name PHONE: (260) 482-6900 FAX: (260) 482-7305 E-MAIL: Account Manager email address ADDRESS: INSURER(S) AFFORDING COVERAGE INSURER A Name of Insurance Company INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:
INSURED Full Named Insured Address City St Zip	

COVERAGES CERTIFICATE NUMBER: 17718 Sample REVISION NUMBER:
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSP	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:	X	Y	123456789	XX/XX/XXXX	XX/XX/XXXX	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMPIOP AGG \$ 2,000,000
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS	X	Y	123456789	XX/XX/XXXX	XX/XX/XXXX	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ Underinsured motorist \$ 1,000,000
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$	X	Y	123456789	XX/XX/XXXX	XX/XX/XXXX	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	123456789	XX/XX/XXXX	XX/XX/XXXX	<input checked="" type="checkbox"/> PER STATUTE E.L. EACH ACCIDENT \$ 500,000 E.L. DISEASE - EA EMPLOYEE \$ 500,000 E.L. DISEASE - POLICY LIMIT \$ 500,000
A	Installation Floater			123456789	XX/XX/XXXX	XX/XX/XXXX	Limit \$500,000 Deductible \$500

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Michael Kinder & Sons, Inc., & their affiliates, directors, employees, subsidiaries, representative & any other parties as required by the GC/SubContractor contract agreement are listed as certificate holders. Per the signed contract, contractor & owner must be protected as blkt addl insureds on the GL policy incl on-going operations & prod/completed operations (Form #CG7037 or equivalent), & on the Auto Liab policy (Form CA2048 or equivalent). All insurance for subcontractors/sub-subcontractors shall be Primary & Non-Contributory. A Waiver of Subro clause in favor of Michael Kinder & Sons, Inc. shall be added to the GL, Auto and Work Comp Policies. Umbrella follows form.

CERTIFICATE HOLDER wboyer@kinderandsons.com Michael Kinder & Sons, Inc. 5206 Decatur Road Fort Wayne, IN 46806	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE Jeff Peters/AJP
--	--

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PART 3 - EXECUTION

3.01 SCHEDULE OF UNIT PRICES

Description	Unit	Unit Price
Repair of steel roof deck	Sq. Ft.	
Replace of steel roof deck	Sq. Ft.	
Repair of lightweight concrete roof deck	Sq. Ft.	
Replace of lightweight concrete roof deck	Sq. Ft.	
Replacement of 1x6 wood blocking, with stainless steel fasteners	Ln. Ft.	
Replacement of 2x4 or 2x6 wood blocking, with stainless steel fasteners	Ln. Ft.	
Replacement of 2x8 or 2x10 wood blocking, with stainless steel fasteners	Ln. Ft.	
Replacement of 2x12 wood blocking, with stainless steel fasteners	Ln. Ft.	
Remove existing and replace with new, rooftop mechanical equipment and roof curb supports, includes costs for electrical work associated with roof top mechanical work	Per Unit	
Replace existing cast-iron roof drain head	Per Drain	
Replace interior roof drainage pipe, include all insulation and accessories	Ln. Ft.	
Clean-out existing roof drain lines	Each	
Replace existing rooftop equipment curb	Each	
PMMA coating of PVC Membrane; areas of identified ponding water, if needed	Sq. Ft.	
Provide additional membrane walk pad in location determined by owner (in addition to amount already shown on roof plan).	Ln. Ft.	
Replace existing two-piece fascia extender to match existing profile. Color to match new gravel stop edge metal.	Ln. Ft.	

END OF UNIT PRICES

SECTION 02 41 19 – SELECTIVE DEMOLITION

PART 1 - GENERAL

1.01 GENERAL CONDITIONS AND OTHER CONTRACT DOCUMENTS

- A. The General Conditions and other Contract Documents as set forth in the foregoing pages are hereby incorporated into and become a part of the Specifications for the work under this Section, insofar as they apply hereto.
- B. Due to resident occupancy concerns noise producing demolition work hours may be restricted.

1.02 WORK INCLUDED

- A. Work generally includes but is not limited to the following: (Refer to Drawings and Specifications for detailed demolition and removal requirements.)
- B. Perform selective demolition work in a systematic manner.
 - 1. Completely remove all existing field roof membranes, insulation layers, and flashing down to the existing tapered lightweight concrete, as specified.
 - 2. Complete spot repairs at the lightweight concrete substrate as required to attach a new base sheet membrane.
- C. If unanticipated structural, mechanical, or electrical elements conflict with the intended function or design, notify the Consultant of the conflict. The consultant shall promptly notify the Contractor of any changes or deviations to the Selective Demolition schedule.

1.03 PROTECTION

- A. Make such explorations and probes as are necessary to ascertain any required protective measures before proceeding with demolition and removal.
- B. Take necessary precautions to prevent dust and dirt from entering interior areas of the building and areas outside of the identified interior work areas.
- C. Provide adequate fire protection in accordance with local Fire Department requirements.
- D. Conduct operations with minimum traffic interference.
- E. Be responsible for any damage to the existing structure or contents due to the insufficiency of protection provided.

- F. If unanticipated structural, mechanical, or electrical elements, which conflict with intended function or design, are encountered, notify Consultant of conflict. Consultant shall promptly notify Contractor of any changes or deviations to the Selective Demolition schedule.

1.04 SCHEDULING

- A. Before commencing any demolition work notify the Consultant 48 hours in advance.

PART 2 – PRODUCTS - Not Used

PART 3 – EXECUTION - Not Used

END OF SELECTIVE DEMOLITION

SECTION 05 01 30 – MAINTENANCE OF STEEL ROOF DECKING

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Roof deck; repair or replacement of existing, as required.

1.02 REFERENCE STANDARDS

- A. ASTM A36/A36M - Standard Specification for Carbon Structural Steel; 2012.
- B. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2013.
- C. ASTM B633 - Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel; 2013.
- D. FM DS 1-28 - Wind Design; 2007.
- E. FM DS 1-29 - Roof Deck Securement and Above-Deck Roof Components; Factory Mutual System; 2006.
- F. ICC-ES AC43 - Acceptance Criteria for Steel Deck Roof and Floor Systems; ICC Evaluation Service, Inc.; 2010 (R2013).
- G. SDI (DM) - Publication No.31, Design Manual for Composite Decks, Form Decks, Roof Decks; Steel Deck Institute; 2007.
- H. SSPC-Paint 20 - Zinc-Rich Primers (Type I, "Inorganic," and Type II, "Organic"); The Society for Protective Coatings; 2002 (Ed. 2004).

1.03 DELIVERY, STORAGE AND HANDLING

- A. Cut plastic wrap to encourage ventilation.
- B. Store deck on dry wood sleepers; slope for positive drainage.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Steel Deck:
 - 1. Nucor-Vulcraft Group: www.vulcraft.com.
 - 2. Substitutions: See Section 01 60 00 - "Product Requirements".

2.02 STEEL DECK

- A. All Deck Types: Select and design metal deck in accordance with SDI Design Manual.
 - 1. Maximum Vertical Deflection of Roof Deck: 1/240 of span.

- B. Roof Deck: Non-composite type, fluted steel sheet.
 - 1. Galvanized Steel Sheet: ASTM A653/A653M, Structural Steel (SS) Grade 40/275, with G90/Z275 galvanized coating.
 - 2. Profile and thickness to match existing.
 - 3. Span Design: Double.
 - 4. Minimum Metal Thickness, Excluding Finish: 22 gage (0.8 mm).
 - 5. Side Joints: Lapped, mechanically fastened.
 - 6. End Joints: Lapped, mechanically fastened.

2.03 ACCESSORY MATERIALS

- A. Bearing Plates and Angles: ASTM A36/A36M steel, unfinished.
- B. Metal closure strips and cover plates, 22 gage (0.8 mm) thick sheet steel; of profile and size as indicated; finished same as deck.
- C. Mechanical Fasteners: Steel; hex washer head, self-drilling, self-tapping.
 - 1. Design Requirements for Sidelap Connections: Provide number and type of fasteners that comply with the applicable requirements of SDI design method for roof deck applications, ICC-ES AC43, and FM wind uplift resistance.
 - 2. Fasteners for Steel Roof Decks Protected with Waterproofing Membrane: ASTM B633, SC1, Type III zinc electroplate.
 - a. Sheet metal stitching: 10-14 x 7/8 inch, ICH TRAXX/1 with pilot point.
 - b. Steel decking to bar joist: 12-24 x 7/8 inch, ICH TRAXX/4.
 - c. Steel decking to structural steel: 12-24 x 1-1/4 inch, ICH TRAXX/5.
 - d. At interlocking side laps: 10-14 x 7/8 inch, ICH TRAXX/1 with pilot point.
 - 3. Substitutions: See Section 01 60 00 - "Product Requirements".
- D. Touch-Up Primer for Galvanized Surfaces: SSPC-Paint 20, complying with VOC limitations of authorities having jurisdiction.
- E. Rust-Inhibitive Coating:
 - 1. Aliphatic Acrylic Urethane Gloss DM74/DM75, by Benjamin Moore and Company, Montvale, NJ.
 - 2. Pitthane Urethane Aliphatic Pigmented Gloss, PPG Architectural Finishes, Pittsburgh, PA.
 - 3. Industrial DTM Urethane Mastic, by Rust-oleum Corporation, Vernon Hills, IL.
 - 4. Corothane I Aliphatic Finish, by The Sherwin-Williams Company, Cleveland, OH.
- F. Acoustical Insulation: Glass fiber type, minimum 1.1 lb/cu ft density; profiled to suit deck, where applicable.

2.04 FABRICATED DECK ACCESSORIES

- A. Sheet Metal Deck Accessories:

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify, prior to start of decking removal, the existence and location of deck-supported utilities and accessories including, but not limited to water and gas lines, fire-sprinkler systems, above and below deck conduit and tubing, and ceiling suspension systems. Coordinate any work that may affect these utilities with the Owner.
- B. Evaluate deteriorated steel decking:
 - 1. Repair decking that is surface-rusted, with no pinholes through the steel after wire-brushing.
 - 2. Install reinforcing plates over openings 16 inches (400 mm) square or less or decking deteriorated in excess of the limit specified above.
 - 3. Replace decking sections that:
 - a. Are cut or otherwise damaged;
 - b. Have openings larger than 16 inches (400 mm) square;
 - c. Have multiple openings between support members;
 - d. Are rusted over more than twenty-five percent (25%) of the area between supports; or
 - e. Are deflected or otherwise compromised structurally.

3.02 DECKING REPAIR

- A. Preparation for repair – rust removal:
 - 1. Remove all loose rust from surface of steel decking by means of wire brushing.
 - 2. Decking shall be cleaned to achieve a surface grade acceptable for specified coating.
- B. Clean all loose rust particles and dust from surface of decking and apply two (2) coats of rust-inhibitive coating over prepared areas and/or areas of raw metal.
- C. Deck reattachment:
 - 1. Mechanically attach loose ends of decking to steel support members at 12 inches (300 mm) on center maximum, in field, and at 6 inches (150 mm) on center maximum, in the corners and perimeter as defined in FM DS 1-29.
 - 2. Mechanically attach side laps as specified below.
- D. Deck reinforcement:
 - 1. Install sheet metal reinforcing plate to cover severely rusted areas or openings. Extend a minimum of 3 inches (75 mm) onto adjacent, sound areas of decking.
 - 2. Ensure that the reinforcing plate sets flat and smooth with top of decking.
 - 3. Mechanically attach all edges of reinforcing plate to steel decking 3 inches (75 mm) on center, including at all corners.
 - 4. Apply two (2) coats of specified primer to cut edges of reinforcing plate.

- E. Splice plates at changes in deck direction:
 - 1. Where deck changes direction and is cut and butted, install a 12 inch (300 mm) wide sheet metal reinforcing plate centered over joint.
 - 2. Ensure that the reinforcing plate sets flat and smooth with top of decking.
 - 3. Mechanically attach each edge of reinforcing plate to steel decking 6 inches (150 mm) on center maximum.
 - 4. Apply two (2) coats of specified primer to cut edges of reinforcing plate.

3.03 DECKING REPLACEMENT

- A. Steel decking removal:
 - 1. Prior to the removal and replacement of the existing steel roof decking, provide a barricade under the work area, within the building, staffed with a watchman.
 - 2. Remove select sections of damaged or deteriorated steel decking.
- B. Erect new steel deck in accordance with SDI Design Manual and manufacturer's instructions. Align and level.
- C. On concrete and masonry surfaces provide minimum 4 inch (100 mm) bearing.
- D. On steel supports provide minimum 1-1/2 inch (38 mm) bearing.
- E. Fasten deck to steel support members at ends and intermediate supports at 12 inches (300 mm) on center maximum, parallel with the deck flute and at each transverse flute using methods specified.
- F. At mechanically fastened male/female side laps fasten at 24 inches (600 mm) on center maximum.
- G. Drive mechanical sidelap connectors completely through adjacent lapped sheets; positively engage adjacent sheets with minimum three-thread penetration.
- H. At deck openings from 6 inches (150 mm) to 18 inches (450 mm) in size, provide 2 x 2 x 1/4-inch (50 x 50 x 6 mm) steel angle reinforcement. Place angles perpendicular to flutes; extend minimum two flutes beyond each side of opening and mechanically attach to deck at each flute.
- I. At openings between deck and walls, columns, and openings, provide sheet steel closures and angle flashings to close openings.

END OF MAINTENANCE OF STEEL ROOF DECKING

SECTION 06 10 63 – EXTERIOR ROUGH CARPENTRY

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 DESCRIPTION OF WORK

- A. Definition: Rough carpentry includes carpentry work not specified as part of other sections and which is generally not exposed except as otherwise indicated.

1.03 SUMMARY

- A. Types of work in this section include rough carpentry for wood insulation stops, sheet metal flange blocking, wood roof curbs, expansion joint curbing, and other nailers as required to achieve a complete roof system.
- B. Roof edge wood blocking, edge metals and installation shall meet ANSI/SPRI/FM 4435/ES-1 "Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems" and be ES-1 certified. Wood nailer attachments shall be sufficient to resist a vertical load or uplift of not less than 200 lbs./ft. or the design load, whichever is greater. Roof perimeter wood blocking thickness and width shall be no less than a 2 X 6 measuring a true 1 1/2" X 5 1/2".
- C. Material Certificates: Where dimensional lumber is provided to comply with minimum allowable unit stresses, submit listing of species and grade selected for each use along with evidence of compliance with specified requirements. Compliance may be in the form of a signed copy of an applicable portion of the lumber producer's grading rules showing design values for selected species and grade. Design values shall be as approved by the Board of Review of the American Lumber Standards Committee.
- D. Wood Treatment Data: Submit chemical treatment manufacturer's instructions for the proper use of each type of treated material.
- E. Preservative Treatment: For each type specified, include certification by treating plant stating the type of preservative retained and conformance with applicable standards.
- F. For water-borne treatment, include statement that moisture content of treated materials was reduced to levels indicated prior to shipment to the job site.
- G. Fire Retardant Treatments: Include certification by treating plant that fire retardant treated material complies with specified fire-retardant standard and other requirements.
- H. Stainless Steel screws or bolt type fasteners must be used on all perimeter wood blocking or when using Preservative Treated Wood. Nails not permitted. For fastening patterns refer to ANSI/SPRI/FM 4435 /ES-1 "Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems".

1.04 PRODUCT HANDLING

- A. Delivery and Storage: Keep materials dry at all times. Protect against weather exposure and contact with damp or wet surfaces. Stack lumber as well as plywood and other panels; provide for air circulation within and around stacks and under temporary coverings including polyethylene and similar material stacks.

1.05 PROJECT CONDITIONS

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

PART 2 - PRODUCTS

2.01 LUMBER - GENERAL

- A. Lumber Standards: Manufacturer lumber to comply with PS 20 "American Softwood Lumber Standard" and with applicable grading rules of inspection agencies certified by the American Lumber Standards Committee's (ALSC) Board of Review.
- B. Grade Stamps: Factory mark each piece of lumber with grade stamp of inspection agency evidencing compliance with grading rule requirements of identifying grading agency, grade, species, moisture content at time of surfacing and mill.
- C. For exposed lumber, apply grade stamps to ends or back of each piece or omit grade stamps entirely and issue certificate of grade compliance from inspection agency in lieu of grade stamp.
- D. Nominal sizes are indicated, except as shown by detail dimensions. Provide actual sizes as required by PS 20 for moisture content specified for each use.
- E. Provide dressed lumber, S4S, unless otherwise indicated.
- F. Provide seasoned lumber with 19% maximum moisture content at time of dressing shipment for sizes 2" or less in nominal thickness unless otherwise indicated.

2.02 DIMENSION LUMBER

- A. Grade: Construction grade light framing size lumber of any species or board size lumber as required. No. 3 Common or Standard grade boards per WCLIB or WWPA rules or No. 3 boards per SPIB rules.

2.03 FASTENERS

- A. All other wood nailers will be attached using series 3" long 300 stainless steel screws staggered at 12" O.C. #3 Phillips recessed tapered flat head.

2.04 CONSTRUCTION PANELS

- A. Construction Panel Standards: Comply with PS 1 "U.S. Product Standard for Construction and Industrial Plywood" for plywood panels. For products not manufactured under PS1 provisions, comply with American Plywood Associates (APA) "Performance Standard and Policies for Structural-Use Panels", Form No. E445. Match existing thickness of existing plywood sheathing installed in the areas of repair.
- B. Trademark: Factory-mark each construction panel with APA trademark evidencing compliance with grade requirements.

PART 3 - EXECUTION

3.01 INSTALLATION - GENERAL

- A. Discard units of material with defects that might impair the quality of the work and units that are too small to use in fabricating work with minimum joints or optimum joint arrangement.
- B. Set carpentry work to required levels and lines with members plumb and true to line and cut and fitted.
- C. Securely attach carpentry work to substrate by anchoring and fastening as shown and required by recognized standards. Countersink nail heads on exposed carpentry work and fill holes.
- D. Use galvanized nails except as otherwise indicated. Use finishing nails for finish work. Select fasteners of size that will not penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood; pre-drill as required.
- E. Raise mechanical curb heights a minimum of 8" above finished roof heights as required to accommodate required flashing system.
 - 1. Contractor shall extend all ductwork, electrical, and properly remove and reinstall refrigerant as required to provide minimum required flashing height.
- F. Raise plumbing vents a minimum of twelve (12) inches above the finished roof surface.
- G. Perimeter wood nailers shall be installed to a height equal to the new insulated roof system. Bottom layer shall be mechanically fastened to the masonry wall 24" o.c. Subsequent layer shall be nailed using a staggered pattern 6" o.c.

END OF EXTERIOR ROUGH CARPENTRY

SECTION 07 53 23 - ADHERED EPDM ROOFING SYSTEM

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section includes requirements related to the installation of adhered Ethylene Propylene Diene Monomer (EPDM) roofing membrane and flashings, related accessories, and warranty and guarantee requirements.
- B. The Work consists of the following:
 - 1. Alternate Bid 2 – High School RF01 – Provide new EPDM membrane 60-mil.
 - 2. Alternate Bid 3 – High School RF01 – Increase new EPDM membrane thickness from 60-mil to 90-mil.
 - 3. Alternate Bid 5 – High School RF02/RF03 – Provide new EPDM membrane 60-mil.
 - 4. Alternate Bid 6 – High School RF02/RF03 – Increase new EPDM membrane thickness from 60-mil to 90-mil.
 - 5. Alternate Bid 8 – Central Elementary School – Provide new EPDM membrane 60-mil.
 - 6. Alternate Bid 9 – Central Elementary School – Increase new EPDM membrane thickness from 60-mil to 90-mil.

1.02 RELATED SECTIONS

- A. Drawings and general provisions, general provisions of the Contract, and General and Special Conditions apply to this section.

1.03 DESCRIPTION OF WORK

- A. Extent of roofing work is specified as below and indicated on the drawings and is hereby defined to include membrane systems intended for weather exposure as primary roofing to replace the existing roof systems for the designated project.
- B. Description of work (refer to drawings) and Summary Section 01 10 00:
- C. Building/Roof Areas: **South Putnam High School and Central Elementary School.**
 - 1. Remove existing single-ply roof membrane, insulation, flashings, cants, strippings and sheet metal components down to the existing structural concrete deck.
 - 2. Inspect existing concrete deck for damage or deterioration. Complete repair work as required or directed after proper authorization.
 - 3. Seal all penetrations and transitions (self-adhering membrane or spray foam insulation) to prevent the migration of debris and roofing materials into the interior space of the building.

4. Curbs, Nailers, Plywood and Plumbing Vents:
 - a. Provide new wood nailers as detailed on the roof drawings and specifications per Section 06 10 63 Exterior Rough Carpentry.
 - b. All wood nailers required to accommodate the new specified roofing system installation per drawings, specifications and manufacturer's requirements are to be included in the Roofing Contractor's base bid.
 - c. Extend plumbing vents (soil stacks) to a minimum height of twelve (12) inches above the finished roof surface.
5. Provide new minimum 60 mil fully adhered thermoset single-ply roof membrane, flashings, and strippings.
6. Provide new sheet metal base flashings at rooftop penetrations.
7. Provide manufacturer's walkway pads at access ladder and stair access locations, three sides of roof access hatches, around serviceable rooftop equipment, and in traffic locations identified on the Drawings.
8. Provide new sheet metal counterflashings, closures and components.

1.04 QUALITY ASSURANCE

A. Manufacturer:

1. Obtain primary thermoset roof system, insulation, and materials from a single manufacturer.
2. Provide qualified technical representatives as required for purposes of advising Installer of procedures and precautions for use of roofing materials.

B. Installer:

1. A firm with not less than five (5) years of successful experience in installation of thermoplastic roofing systems. Experience shall include all related work and accessories associated with single-ply roofing systems including but not limited to vapor retarders, board type insulation substrate, concrete deck repair, membrane base flashings, sheet metal counterflashings, control joints, joint sealers, and all other required components of specified thermoplastic roofing system.
 - a. At the request of the Consultant, the Contractor shall provide documented experience of key personnel involved with the project, including project superintendent, foreman, and/or designated non-working safety individual. Crew members shall be experienced in the work specified in this Section.

- C. Pre-Roofing Conference: Prior to installation of roofing and associated work, a meeting shall be held at the site including the Roofing Contractor, system manufacturer, if necessary, Owner's representative and other entities concerned with roofing performance, including (where applicable) Owner's insurer, test agencies, governing authorities, Consultant and Owner. A Memorandum Record of discussions shall be taken, and copies of the pre-roofing conference

memorandum shall be distributed to each participant. A 72-hour notice shall be given to participants prior to convening the pre-roofing conference.

D. Documentation:

1. Examine the technical specifications and drawings and maintain a set of documents on the project at all times. Verify all dimensions, detail conditions, roof plan notes and existing site conditions that may affect the work. Verification of existing dimensions and site conditions is the responsibility of the Contractor. No additional compensation will be considered for failure to verify existing dimensions, detail conditions, roof plan note callouts, and existing site conditions.
2. Upon examination, if conflicts between the technical specifications and drawings, and those of federal, state, or local regulatory agencies, the product manufacturer, industry roofing standards, or Owner-mandated requirements are discovered, notify the Consultant immediately for resolution.
3. During the work, if conditions are discovered which do not allow for continuation of the work per the technical specifications and drawings, notify the Consultant immediately for resolution.

1.05 SUBMITTALS

- A. Product Data: Submit specifications, installation instructions and general recommendations from manufacturers of thermoset single-ply roofing system materials to include the types of roofing required. Include any data requiring special application considerations by the manufacturer.
- B. Material List: A complete listing of all products intended for use on the project shall be submitted.
- C. Assignment: The Roofing Contractor shall not subcontract any phase of the work without previous approval from the Consultant. Subcontracted work without previous approval is subject to rejection by the Consultant.
- D. Product Handling: Use all means necessary to protect all materials before, during and after installation. Storage outside on skids and covered with tarps will be permitted if securely tied at sides (no material visible) and sufficiently above ground to eliminate any water damage. No wet insulation will be installed under any conditions.
- E. All roofing equipment shall be placed so that the building or premises will not be damaged. The hoist shall be substantial and arranged so as not to deface the building with drippings or scarring. The Roofing Contractor shall be responsible for cleaning the building walls. At no time shall any materials not contained by a chute or hydraulic dumpster be thrown from the roof.
- F. Do not permit the temporary or finished roofing surface to be used for traffic. Use rubber-tired buggies for transporting heavy materials over insulated surfaces or plywood panels at certain conditions.
- G. In the event of damage, immediately make all repairs and replacement necessary to the Consultant's approval and at no additional cost to the Owner. Roofing Contractors shall list and document any and all damage prior to the start of their work and file it with the Owner and Consultant.

1.06 JOB CONDITIONS

- A. Weather: Proceed with roofing work when existing and forecasted weather conditions permit work to be performed in accordance with manufacturer's recommendations and warranty requirements.
- B. Workers: All workers shall be thoroughly experienced in the particular class of work employed on this project and all materials shall be securely fastened in place in a watertight, neat, and workmanlike manner. All work shall be done in accordance with these specifications and shall meet the approval in the field of the Owner's Representative and the Consultant.
 - 1. The Roofing Contractor's Representative or Job Superintendent shall have a complete copy of specifications and drawings on the job site at all times.
- C. The Roofing Contractor shall plan and conduct the operations of the work so that each section started on one day is complete and thoroughly protected before the close of that day.

1.07 WRITTEN GUARANTEE

- A. The Roofing Contractor and the roof system manufacturer shall furnish to the Owner the specified written guarantee on the complete roof installation to include the insulation and liquid applied flashing materials. The guarantee shall be sent in triplicate to Owner's Associate Consultant for review and filing. Said Guarantee shall begin when the project is completed and accepted by the Owner and Consultant.
- B. The Roofing Contractor shall furnish to the Owner an additional written Five (5) year workmanship guarantee on all work items not covered under Manufacturer's warranty (sheet metal, sealant, fasteners, base sheet attachment and insulation attachment). The guarantee shall be sent in triplicate to Owner's Associate Consultant for review and filing. Said Guarantee shall begin when the project is completed and accepted by the Owner and Consultant.
- C. The Guarantee shall cover, at no cost to the Owner, all labor and materials required to repair or replace roofing, flashing, sheet metal, coping and metal work against leaks or faulty workmanship. All costs for any of the above shall be absorbed by the Roofing Contractor primarily and materials manufacturer secondarily.
- D. Recommended Manufacturers Maintenance Guide/Instruction's: In addition to the guarantee, the Roofing Contractor shall furnish to the Owner, the Manufacturer's printed recommendations for proper maintenance of the specified roof system, including, inspection frequencies, penetration addition policies, temporary repairs, and leak call procedures.

1.08 INSPECTION

- A. During application of the materials, the Roofing Contractor shall have the manufacturer's representative accompanied by the Consultant on the job site for job meetings as required.
- B. Upon Completion, a final inspection will be made by the Consultant, a representative of the Owner, the material representative, and the Roofing Contractor. No final payment will be authorized for work done until such inspection has been made and all work is found to have been performed in accordance with the Specifications, manufacturer's requirements and to the satisfaction of the Consultant and Owner.

- C. The approved Manufacturer shall make site visits to the job during construction and after construction by a Certified Technical Representative of the Company. Sales Representative site visits will not be considered an official Technical site visit.
1. **Site visits** shall include attendance at the following:
 - a. Preconstruction meeting
 - b. Final Inspection
 - c. 18-month warranty inspection
 2. Site visit reports shall be provided to Owner and Consultant.
 3. Manufacturer shall provide an Inspection Report for each site visit and for each separate roof area.
 - a. Reports shall be distributed to Owner and Consultant.
- D. The Owner and Consultant must be notified 48 hours prior to the Roof Membrane Manufacturer's Final inspection and be present. A letter of the inspection results must be issued by the manufacturer representative to the Owner and Consultant.
1. Failure to properly notify the Consultant of the manufacturer's inspection could be cause to require a re-inspection of the project.

1.09 MANUFACTURER WARRANTY

- A. Provide a fully-transferable, manufacturer **20-Year No Dollar Limit (NDL)**, Non-Pro-Rated Warranty (including roofing membrane, insulation, underlayment and flashings) covering materials and labor, without exclusion. The warranty shall be provided to the Consultant for review and filing. The warranty term shall begin on the date of Final Acceptance, as determined by the Owner and Consultant. The warranty shall include the following additional items:
1. Wind rider: The maximum wind speed coverage shall be three (3) second peak gusts of ninety (90) mph measured at ten (10) meters above ground level.
 2. Roofing inspection by a technical representative of the roofing membrane manufacturer 18 months after date of Final Acceptance. The technical representative shall provide a report of the inspection to the Owner no later than 60 days after the inspection.
 3. Roofing manufacturer shall provide unlimited repairs during the warranty period with no cost limitation.
 4. Reasonable temporary emergency repairs may be made by the Owner without voiding warranty provisions. Permanent repairs shall be made in accordance with the requirements of the roofing membrane manufacturer.

1.10 CONTRACTOR GUARANTEE

- A. The Contractor shall provide a two-year contractor guarantee. At a minimum, the contractor guarantee shall include the following:
1. Contractor name, address, phone number and project contact name.
 2. The project completion date, and date of guarantee expiration.
 3. The contractor guarantee shall include, in writing, all project work, workmanship, and/or all materials installed by the contractor or subcontractors to be of a quality that will comply with all project specific requirements of the Construction Documents and other documents governing the specified work and workmanship through the guarantee period. In addition to materials and labor covered by the roof membrane manufacturer warranty, the contractor guarantee shall cover materials not covered by the manufacturer warranty, such as sheet metal counterflashings and sealant.
 4. The contractor shall investigate roof leaks during the guarantee period within a reasonable time period, but in no instance greater than 24-hours after notification of a leak. The contractor shall repair leaks determined to be the cause of the specified work at no cost to the Owner.

PART 2 – PRODUCTS

2.01 EPDM ROOFING SYSTEM SUMMARY

- A. The complete roofing system assembly shall consist of products specified within PART 2 - PRODUCTS of this Section.
- B. The complete roofing system assembly shall achieve a UL Class A fire rating and an FM 4450 Class 1 fire rating.
- C. The complete roofing system shall achieve an FM 4470 Class 1-SH (Severe Hail) rating.

2.02 ACCEPTABLE ROOFING SYSTEM MANUFACTURERS

- A. Conforming products meeting the requirements of the Project manual and drawings manufactured by the following:
1. Carlisle SynTec, Carlisle, PA; (800) 479-6832, www.carlisesyntec.com
 2. Elevate, Nashville, TN; (803) 496-5027, www.holcimelevate.com
 3. Johns Manville: Denver Colorado (800) 922-5922 www.jm.com
 4. With Consultant approval prior to bidding, other manufacturers meeting the requirements of the Bidding Documents may be considered.

2.03 VAPOR RETARDER

- A. EPDM roofing system manufacturer's approved mechanically-attached base sheet vapor retarder membrane.
1. Mechanically attached to existing lightweight concrete substrate using Manufacturer-approved fasteners.

- a. Fastener quantities and layout pattern to be determined by the Manufacturer based on the wind uplift values provided in the Wind Calculation sheet in the Drawing Set.

2. Thickness – minimum 30 mil.

2.04 ROOF INSULATION

- A. Polyisocyanurate roof insulation system; ASTM C1289, Type II, Class 1, Grade 2 (20 psi); HCFC-Free and Zero Ozone Depletion Potential (ODP); product type acceptable to the roofing manufacturer.

1. Roof Areas:

- a. Slope and Thickness:
- b. Field of Roof:

- 1) Flat stock insulation in multiple layers.
- 2) Thermal Value: R-30.0

- c. R-Value-Long Term Thermal Resistance (LTTR) Value

- 1) 5.0 R-value Minimum per inch

- d. Board Size:

- 1) 4-feet by 4-feet.

- B. Adhesive: Low-rise urethane foam adhesive; product acceptable to the roofing manufacturer and is capable of meeting the specified wind uplift requirements.

2.05 GYPSUM-BASED COVER BOARD

- A. Board type: Manufacturer-approved glass-mat or gypsum-fiber cover board; ASTM C1177 or C1278; meeting the following requirements:

1. Board thickness: 1/2-inch.
2. Board size: 4-feet by 4-feet.
3. Approved by the roofing manufacturer for this application, including installation of the specified adhered EPDM roof membrane over the completed cover board assembly.
4. Achieving the project wind uplift requirements within the specified roof assembly.

- B. Adhesive: Low-rise urethane foam adhesive; product acceptable to the roofing manufacturer and is capable of meeting the specified wind uplift requirements.

2.06 ROOFING MEMBRANE

- A. EPDM roofing membrane; fire resistant, cured, non-reinforced, nominal 60-mil thickness, black color; in compliance with ASTM D4637.

- B. EPDM flashing membrane:

1. Cured: fire-resistant, non-reinforced, nominal 60-mil thickness, black color; in compliance with ASTM D4637. Meeting or exceeding the standards listed in paragraph 2.3A.
2. Uncured: Non-reinforced, minimum 60-mil thickness, black color. Type approved by roofing manufacturer for specific flashing conditions encountered.

2.07 EPDM MEMBRANE SPLICE SYSTEM

- A. Cleaner/primer: Product approved by roofing membrane manufacturer.

- B. In-seam splice tape: Splice tape; minimum 6-inch width, product approved by the roofing membrane manufacturer.

2.08 OUTERSEAM FLASHING SYSTEM

- A. Cleaner/primer: Product approved by roofing membrane manufacturer.
- B. Outerseam flashing stripping, for use at perimeter edge metal and at other locations indicated on the project drawings or required by the roofing membrane manufacturer: EPDM pressure-sensitive flashing product, as indicated on the project drawings; 5-inch or 6-inch width.
- C. T-Joint covers: Factory-fabricated uncured 60-mil thick EPDM flashing laminated to a nominal 35-mil pressure-sensitive flashing.

2.09 PERIMETER REINFORCEMENT SYSTEM

- A. Cleaner/primer: Product approved by roofing membrane manufacturer.
- B. Reinforced perimeter fastening strip: Product approved by the roofing membrane manufacturer.
- C. Fasteners and plates: Product approved by the roofing membrane manufacturer; 2-inch diameter plates and minimum #14 fasteners.

2.10 RELATED EPDM PRODUCTS

- A. Adhesives, cements, sealants, water cut-off mastics, prefabricated accessories, and other related items: Unless otherwise indicated, products manufactured by, or approved by the roofing membrane manufacturer.

2.11 MEMBRANE AND FLASHING FASTENERS

- A. Unless otherwise indicated, types as required for project completion, and as recommended by the roofing membrane manufacturer and NRCA for the substrate condition encountered.

2.12 MISCELLANEOUS EPDM MATERIALS

- A. Walkpads: Heavy duty, solid rubber; with a dimpled design surface. Product approved by the roofing manufacturer.
- B. Splashblocks: Concrete; size as necessary to accommodate existing condition.

PART 3 - EXECUTION

3.01 GENERAL

- A. Refer to Sections 02 41 19 for general work and substrate preparation requirements.
- B. It shall be the Contractor's responsibility to protect all property and surfaces from drippings by means of masking, shielding or screening. Any drippings adhering to surfaces not intended to receive materials, including automobiles, shall be removed by the Contractor to the satisfaction of the Owner.

- C. During the course of the job, the Contractor shall maintain good housekeeping practices. Debris shall not be allowed to accumulate, but will be removed from the site on a daily basis. At the completion of the job, all areas shall be left clean to the satisfaction of the Owner's representative.
- D. Ensure that the all underlying roof system components are installed as specified, and the substrate is suitable to receive roofing membrane materials.
- E. Use of torches during roof replacement:
 - 1. Torches may only be used with the written consent of the Owner, following Owner-mandated notification requirements related to hot work.
 - 2. Torch-related work shall be performed in full compliance with local fire codes, Owner-mandated requirements related to torch use, and the requirements and recommendations indicated within the CERTA "Torch-Applied Roof System Safety Student Manual". This manual is available at the National Roofing Contractors Association website: www.nrca.net.
 - 3. At the request of the Owner, the use of torches may be discontinued at any time.
- F. Immediately upon job completion, the EPDM Black roof membrane and flashing surfaces shall be cleaned of debris and all marred surfaces. The Contractor shall be responsible for thoroughly cleaning all dust and debris that was caused by the roof replacement. The Contractor shall clean all joists, duct, and light fixtures in the ceiling. The contractor shall clean all floor areas ensuring to leave no foreign particles in place. The cleaning is required to be done by an approved subcontractor and all cleaning shall be included in the Base Bid price. The cleaning shall be inspected with Owner, Contractor, and Consultant present before final payment is released.
- G. Immediately upon job completion, the area surrounding exterior of the building shall be cleaned of debris and any damage or deficiencies shall be repaired and the price shall be included in the bid price.

3.02 VAPOR RETARDER INSTALLATION

- A. Ensure that the existing lightweight concrete is prepared to receive vapor retarder materials.
- B. Except as may be modified by the technical specifications and project drawings, install the vapor retarder in accordance with the requirements and recommendations of the roofing membrane manufacturer, using the manufacturer's current printed instructions.
- C. Chalk lining: Beginning at the low points or drains, chalk line the surface to serve as a guide for the proper laying of the vapor retarder sheets.
- D. Mechanically-attach the vapor retarder. Position the membrane carefully to avoid fish-mouths and wrinkles. Provide minimum 4-inch side laps, and minimum 6-inch end laps. Extend the vapor retarder up roof-to-wall transitions, taking care not to exceed the maximum insulation elevation.

3.03 POLYISOCYANURATE AND ROOF COVER BOARD INSTALLATION

- A. Closely butt the insulation boards and roof cover boards.

- B. Stagger board joints by the maximum dimensions possible. Joint stagger between boards shall be 6-inches, minimum; offset joints 12-inches, minimum between insulation layers.
- C. Neatly cut insulation and roof cover boards to fit around all penetrations through the roof deck. At locations where less than a full-sized sheet of insulation or cover board is required, use the largest size practical to fill in the area. Do not install numerous small sections of cover board or insulation at these locations.
- D. Fill gaps between boards, and between boards and walls, curbs, blocking, and equipment with additional insulation material.
- E. Insulation saddle and cricket installation: Install insulation saddles and crickets to provide positive drainage to drainage accessories, here indicated on the project drawings, and on the upslope side of roof curbs.
 - 1. Adjust saddle and cricket dimensions, if necessary, to accommodate actual field conditions.
 - 2. Adjust saddle and cricket slope if necessary to ensure proper drainage. Saddles and crickets must slope at a greater rate than the finished slope of the main field of the roof.
- F. Protect all insulation and cover board from weather and standing water at all times. Do not install more insulation and cover board than can be completely covered with the roofing membrane on the same day.
- G. Install temporary water cut-offs at the edges of insulation at the end of each workday.
- H. Prior to installing the insulation, inspect the underside of the roof deck to determine if objects, such as sprinklers, lights, conduits, fans, or gas lines are attached to the deck. Exercise caution to ensure that insulation fasteners do not penetrate these objects.
- I. Adhesion of insulation and cover boards: Adhere insulation and cover boards at the rate and pattern required by the manufacturer to meet the wind uplift requirements of ASCE 7-16, and the wind rider requirements of the specified warranty. At a minimum, adhere at the following rates:
 - 1. Field of roof: 3/4-inch wide bands of adhesive, 12-inches o.c.
 - 2. At perimeters: 3/4-inch bands of adhesive, 6-inches o.c.
 - 3. At corners: 3/4-inch wide bands of adhesive, 4-inches o.c.

3.04 ROOFING MEMBRANE INSTALLATION

- A. Except as may be modified by the technical specifications and project drawings, install roofing membrane in accordance with the requirements and recommendations of the roofing membrane manufacturer, using the manufacturer's current printed instructions.
- B. Do not use bituminous products in conjunction with EPDM materials. Petroleum-based products, grease, oil and solvents should not come in contact with the EPDM roof membrane system.
- C. All membrane splicing and bonding surfaces must be clean and dry.

- D. Install only as much roofing as can be completed in a work day, including flashing and detail work. All installed field seams shall be sealed to a watertight condition prior to leaving the site daily.
- E. Sequence roofing work to eliminate the use of installed roofing as a walkway, or as a storage platform for materials.
- F. Overnight tie-in: Care should be exercised to ensure that water does not flow beneath any existing or completed sections of the roof by temporarily sealing the loose edge of the membrane at the end of each work day and when the weather is threatening. The roofing membrane manufacturer's requirements should be followed closely. **Under no circumstance shall the roofing contractor leave an open, unsealed roof system upon completion of daily work.**
- G. The contractor is responsible for providing temporary repairs to existing roof systems scheduled for replacement, caused by excessive foot or vehicle traffic, equipment or material storage, or other contractor-related activities. Repairs shall be sufficient to provide a watertight condition until the damaged area is replaced.
- H. Remove debris from the roof daily prior to leaving the site. Inspect the site at ground level. Remove any roof replacement related debris from the ground.
- I. Do not use open flame to dry the roof membrane or to heat the flashing materials.

3.05 PERIMETER REINFORCEMENT SYSTEM INSTALLATION

- A. Install perimeter reinforcement strips at the base of walls, curbs, hatches, area transitions, elevation changes, where indicated on the project drawings, and other locations recommended by the roofing membrane manufacturer.
- B. Prior to installation of roofing membrane, position the reinforcing cover strip adjacent to the wall/curb transition. Spot-adhere the strip to the underlying cover board as necessary to hold in place.
- C. Secure the strip with specified fasteners and 2-inch plates 6-inches o.c. Position the plates in a manner that allows the reinforcing perimeter strip to extend 1/2-inch, minimum out beyond the plate toward the wall/curb transition.
- D. At locations where horizontal placement of the reinforcing perimeter strip and securement into the underlying structural deck is not possible or desirable, contact the roofing membrane manufacturer for instructions related to alternate placement and securement methods.
- E. Install the adhered membrane over the perimeter reinforcing strip, following the recommendations and requirements of the roofing membrane manufacturer for adhesion.

3.06 EPDM MEMBRANE SPLICE SYSTEM INSTALLATION

- A. Ensure splice area is clean, dry and free of foreign material or contaminants.
- B. Apply primer to the splice area as recommended by the roofing membrane manufacturer.

- C. Install specified in-seam splice tape at field-spliced seams. Install in-seam splice system in accordance with roofing membrane manufacturer requirements. Position in-seam splice tape in a manner that allows a consistent 1/8-inch “bleed out” from overlying membrane sheet.
- D. Set overlying EPDM roofing membrane sheet.

3.07 FLASHINGS AND STRIPPINGS

- A. Complete all flashings on a daily basis as the roof system work progresses.
- B. Wall flashings: Install flashings as indicated on the project drawings and in accordance with the requirements and recommendations of the roofing membrane manufacturer.
 - 1. Follow manufacturer-generated details for flashing requirements at inside (90-degree) and outside (270-degree) corners of curbs and walls.
- C. Roof curb and hatch flashings: Install flashings as indicated on the project drawings and in accordance with the requirements and recommendations of the roofing membrane manufacturer.
 - 1. Follow manufacturer-generated details for flashing requirements at inside (90-degree) and outside (270-degree) corners of curbs and walls.
 - 2. Install pressure-sensitive flashing at the base seam(s) of curbs and roof hatches:
 - a. Ensure seam area is clean, dry and free of foreign material or contaminants.
 - b. Apply primer to the outerseam flashing area as recommended by the roofing membrane manufacturer.
 - c. Where indicated, install specified outerseam flashing at seams. Position the outerseam flashing over the center of the seam and install in accordance with the requirements of the roofing membrane manufacturer.
- D. Tubular penetration flashings: Install tubular penetration flashings as indicated on the project drawings and in accordance with the requirements and recommendations of the roofing membrane manufacturer.
 - 1. Finished tubular penetration flashings shall be a minimum of 8-inches above the finished roof membrane elevation.
 - 2. Install pressure-sensitive flashing at the base seam(s) of tubular penetrations:
 - a. Ensure seam area is clean, dry and free of foreign material or contaminants.
 - b. Apply primer to the outerseam flashing area as recommended by the roofing membrane manufacturer.
 - c. Where indicated, install specified outerseam flashing at seams. Position the outerseam flashing over the center of the seam and install in accordance with the requirements of the roofing membrane manufacturer.
- E. Pitch pan flashings:
 - 1. Install pressure-sensitive flashing at pitch pan penetrations. Refer to Section 07 62 00 for pitch pan fabrication requirements. Install flashings as indicated on the project drawings.
 - 2. Install pressure-sensitive flashing at the base seam(s) of pitch pans:
 - a. Ensure seam area is clean, dry and free of foreign material or contaminants.
 - b. Apply primer to the outerseam flashing area as recommended by the roofing membrane manufacturer.
 - c. Where indicated, install specified outerseam flashing at seams. Position the outerseam flashing over the center of the seam and install in accordance with the requirements of the roofing membrane manufacturer.

- F. Sheet metal flange strippings:
 - 1. Install pressure-sensitive flashing at perimeter edge metal flanges. Refer to Section 07 62 00 for perimeter edge metal fabrication requirements.
 - a. Install strippings as indicated on the project drawings.
- G. Follow the additional requirements and recommendations of the roofing membrane manufacturer regarding flashing product installation.

3.08 SHEET METAL FLASHINGS

- A. Refer to Section 07 62 00 for sheet metal flashing requirements related to EPDM roofing.

3.09 MISCELLANEOUS INSTALLATIONS/TREATMENTS

- A. Walkpads: Install walkpads at locations indicated on the project drawings. Install in accordance with the requirements and recommendations of the roofing manufacturer. Walkpads used to create a walkway shall not impede drainage; provide a minimum gap of 2-inches between individual walkpads.
- B. Install splashblocks set on walkpads at locations indicated on the drawings.

END OF SECTION

SECTION 07 54 00 – THERMOPLASTIC SINGLE-PLY MEMBRANE ROOFING

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section includes requirements related to the installation of the thermoplastic single-ply membrane roofing system, including vapor retarder/temporary roof membrane, insulation, cover board, roof membrane, flashings, and related accessories.
- B. The Work consists of the following:
 - 1. Base Bid 1 – High School – Replacement of RF01, with new PVC membrane assembly.
 - a. Alternate Bid 1 – High School RF01 – Increase new PVC membrane thickness from 60-mil to 80-mil.
 - 2. Base Bid 2 – High School – Replacement of RF02/RF03 with new PVC membrane assembly.
 - a. Alternate Bid 4 – High School RF02/RF03 – Increase new PVC membrane thickness from 60-mil to 80-mil.
 - 3. Base Bid 3 – Central Elementary School – Replacement of RF01, with new PVC membrane assembly.
 - a. Alternate Bid 7 – Central Elementary School – Increase new PVC membrane thickness from 60-mil to 80-mil.

1.02 RELATED DOCUMENTS

- A. Drawings and general provisions, general provisions of the Contract, and General and Special Conditions apply to this section.

1.03 DESCRIPTION OF WORK

- A. Extent of roofing work is specified as below and indicated on the drawings and is hereby defined to include membrane systems intended for weather exposure as primary roofing to replace the existing roof systems for the designated project.
- B. Description of work (refer to drawings) and Summary Section 01 10 00:
- C. Building/Roof Areas: **South Putnam High School and Central Elementary School.**
 - 1. Remove existing single-ply roof membrane, insulation, flashings, cants, strippings and sheet metal components down to the existing structural concrete deck.
 - 2. Inspect existing concrete deck for damage or deterioration. Complete repair work as required or directed after proper authorization.
 - 3. Seal all penetrations and transitions (self-adhering membrane or spray foam insulation) to prevent the migration of debris and roofing materials into the interior space of the building.
 - 4. Curbs, Nailers, Plywood and Plumbing Vents:

- a. Provide new wood nailers as detailed on the roof drawings and specifications per Section 06 10 63 Exterior Rough Carpentry.
 - b. All wood nailers required to accommodate the new specified roofing system installation per drawings, specifications and manufacturer's requirements **are to be included in the Roofing Contractor's base bid.**
 - c. Extend plumbing vents (soil stacks) to a minimum height of twelve (12) inches above the finished roof surface.
5. Provide new minimum 50 mil fully adhered thermoplastic single-ply roof membrane, flashings and strippings.
 6. Provide new sheet metal base flashings at rooftop penetrations.
 7. Provide manufacturer's walkway pads at access ladder and stair access locations, three sides of roof access hatches, around serviceable rooftop equipment, and in traffic locations identified on the Drawings.
 8. Provide new sheet metal counterflashings, closures and components.

1.04 QUALITY ASSURANCE

A. Manufacturer:

1. Obtain primary thermoplastic roof system, insulation, and materials from a single manufacturer.
2. Provide qualified technical representatives as required for purposes of advising Installer of procedures and precautions for use of roofing materials.

B. Installer:

1. A firm with not less than five (5) years of successful experience in installation of thermoplastic roofing systems. Experience shall include all related work and accessories associated with single-ply roofing systems including but not limited to vapor retarders, board type insulation substrate, concrete deck repair, membrane base flashings, sheet metal counterflashings, control joints, joint sealers, and all other required components of specified thermoplastic roofing system.
 - a. At the request of the Consultant, the Contractor shall provide documented experience of key personnel involved with the project, including project superintendent, foreman, and/or designated non-working safety individual. Crew members shall be experienced in the work specified in this Section.

- C. Pre-Roofing Conference: Prior to installation of roofing and associated work, a meeting shall be held at the site including the Roofing Contractor, system manufacturer, if necessary, Owner's representative and other entities concerned with roofing performance, including (where applicable) Owner's insurer, test agencies, governing authorities, Consultant and Owner. A Memorandum Record of discussions shall be taken, and copies of the pre-roofing conference memorandum shall be distributed to each participant. A 72-hour notice shall be given to participants prior to convening the pre-roofing conference.

D. Documentation:

1. Examine the technical specifications and drawings and maintain a set of documents on the project at all times. Verify all dimensions, detail conditions, roof plan notes and existing site conditions that may affect the work. Verification of existing dimensions and site conditions is the responsibility of the Contractor. No additional compensation will be considered for failure to verify existing dimensions, detail conditions, roof plan note callouts, and existing site conditions.
2. Upon examination, if conflicts between the technical specifications and drawings, and those of federal, state, or local regulatory agencies, the product manufacturer, industry roofing standards, or Owner-mandated requirements are discovered, notify the Consultant immediately for resolution.
3. During the work, if conditions are discovered which do not allow for continuation of the work per the technical specifications and drawings, notify the Consultant immediately for resolution.

1.05 SUBMITTALS

- A. Product Data: Submit specifications, installation instructions and general recommendations from manufacturers of thermoplastic single-ply roofing system materials to include the types of roofing required. Include any data requiring special application considerations by the manufacturer.
- B. Material List: A complete listing of all products intended for use on the project shall be submitted.
- C. Assignment: The Roofing Contractor shall not subcontract any phase of the work without previous approval from the Consultant. Subcontracted work without previous approval is subject to rejection by the Consultant.
- D. Product Handling: Use all means necessary to protect all materials before, during and after installation. Storage outside on skids and covered with tarps will be permitted if securely tied at sides (no material visible) and sufficiently above ground to eliminate any water damage. No wet insulation will be installed under any conditions.
- E. All roofing equipment shall be placed so that the building or premises will not be damaged. The hoist shall be substantial and arranged so as not to deface the building with drippings or scarring. The Roofing Contractor shall be responsible for cleaning the building walls. At no time shall any materials not contained by a chute or hydraulic dumpster be thrown from the roof.
- F. Do not permit the temporary or finished roofing surface to be used for traffic. Use rubber-tired buggies for transporting heavy materials over insulated surfaces or plywood panels at certain conditions.
- G. In the event of damage, immediately make all repairs and replacement necessary to the Consultant's approval and at no additional cost to the Owner. Roofing Contractors shall list and document any and all damage prior to the start of their work and file it with the Owner and Consultant.

1.06 JOB CONDITIONS

- A. Weather: Proceed with roofing work when existing and forecasted weather conditions permit work to be performed in accordance with manufacturer's recommendations and warranty requirements.
- B. Workers: All workers shall be thoroughly experienced in the particular class of work employed on this project and all materials shall be securely fastened in place in a watertight, neat, and workmanlike manner. All work shall be done in accordance with these specifications and shall meet the approval in the field of the Owner's Representative and the Consultant.
 - 1. The Roofing Contractor's Representative or Job Superintendent shall have a complete copy of specifications and drawings on the job site at all times.
- C. The Roofing Contractor shall plan and conduct the operations of the work so that each section started on one day is complete and thoroughly protected before the close of that day.

1.07 WRITTEN GUARANTEE

- A. The Roofing Contractor and the roof system manufacturer shall furnish to the Owner the specified written guarantee on the complete roof installation to include the insulation and liquid applied flashing materials. The guarantee shall be sent in triplicate to Owner's Associate Consultant for review and filing. Said Guarantee shall begin when the project is completed and accepted by the Owner and Consultant.
- B. The Roofing Contractor shall furnish to the Owner an additional written Five (5) year workmanship guarantee on all work items not covered under Manufacturer's warranty (sheet metal, sealant, fasteners, base sheet attachment and insulation attachment). The guarantee shall be sent in triplicate to Owner's Associate Consultant for review and filing. Said Guarantee shall begin when the project is completed and accepted by the Owner and Consultant.
- C. The Guarantee shall cover, at no cost to the Owner, all labor and materials required to repair or replace roofing, flashing, sheet metal, coping and metal work against leaks or faulty workmanship. All costs for any of the above shall be absorbed by the Roofing Contractor primarily and materials manufacturer secondarily.
- D. Recommended Manufacturers Maintenance Guide/Instruction's: In addition to the guarantee, the Roofing Contractor shall furnish to the Owner, the Manufacturer's printed recommendations for proper maintenance of the specified roof system, including, inspection frequencies, penetration addition policies, temporary repairs, and leak call procedures.

1.08 INSPECTION

- A. During application of the materials, the Roofing Contractor shall have the manufacturer's representative accompanied by the Consultant on the job site for job meetings as required.
- B. Upon Completion, a final inspection will be made by the Consultant, a representative of the Owner, the material representative, and the Roofing Contractor. No final payment will be authorized for work done until such inspection has been made and all work is found to have been performed in accordance with the Specifications, manufacturer's requirements and to the satisfaction of the Consultant and Owner.

- C. The approved Manufacturer shall make site visits to the job during construction and after construction by a Certified Technical Representative of the Company. Sales Representative site visits will not be considered an official Technical site visit.
1. **Site visits** shall include attendance at the following:
 - a. Preconstruction meeting
 - b. Final Inspection
 - c. 18-month warranty inspection
 2. Site visit reports shall be provided to Owner and Consultant.
 3. Manufacturer shall provide an Inspection Report for each site visit and for each separate roof area.
 - a. Reports shall be distributed to Owner and Consultant.
- D. The Owner and Consultant must be notified 48 hours prior to the Roof Membrane Manufacturer's Final inspection and be present. A letter of the inspection results must be issued by the manufacturer representative to the Owner and Consultant.
1. Failure to properly notify the Consultant of the manufacturer's inspection could be cause to require a re-inspection of the project.

1.09 MANUFACTURER WARRANTY

- A. Provide a fully-transferable, manufacturer **20-Year No Dollar Limit (NDL)**, Non-Pro-Rated Warranty (including roofing membrane, insulation, underlayment and flashings) covering materials and labor, without exclusion. The warranty shall be provided to the Consultant for review and filing. The warranty term shall begin on the date of Final Acceptance, as determined by the Owner and Consultant. The warranty shall include the following additional items:
1. Wind rider: The maximum wind speed coverage shall be three (3) second peak gusts of ninety (90) mph measured at ten (10) meters above ground level.
 2. Roofing inspection by a technical representative of the roofing membrane manufacturer 18 months after date of Final Acceptance. The technical representative shall provide a report of the inspection to the Owner no later than 60 days after the inspection.
 3. Roofing manufacturer shall provide unlimited repairs during the warranty period with no cost limitation.
 4. Reasonable temporary emergency repairs may be made by the Owner without voiding warranty provisions. Permanent repairs shall be made in accordance with the requirements of the roofing membrane manufacturer.

1.10 CONTRACTOR GUARANTEE

- A. The Contractor shall provide a two-year contractor guarantee. At a minimum, the contractor guarantee shall include the following:
1. Contractor name, address, phone number and project contact name.
 2. The project completion date, and date of guarantee expiration.
 3. The contractor guarantee shall include, in writing, all project work, workmanship, and/or all materials installed by the contractor or subcontractors to be of a quality

that will comply with all project specific requirements of the Construction Documents and other documents governing the specified work and workmanship through the guarantee period. In addition to materials and labor covered by the roof membrane manufacturer warranty, the contractor guarantee shall cover materials not covered by the manufacturer warranty, such as sheet metal counterflashings and sealant.

4. The contractor shall investigate roof leaks during the guarantee period within a reasonable time period, but in no instance greater than 24-hours after notification of a leak. The contractor shall repair leaks determined to be the cause of the specified work at no cost to the Owner.

PART 2 - PRODUCTS

2.01 APPROVED ROOF MEMBRANE AND MANUFACTURER'S SYSTEMS

A. Roofing Manufacturer's

1. FiberTite
2. Sika-Sarnafil
3. Carlisle Syntec

B. Materials and Standards

1. Thermoplastic Membrane:

- a. Minimum 50 mil thick polyvinyl chloride (PVC) membrane, white in color, reinforced with a non-woven fiberglass reinforcement with physical properties meeting or exceeding ASTM D4434 for Polyvinyl Sheet Roofing, Classification Type II, Grade I. Owner to select membrane color from the manufacturer's standard color pallet.
 - i. FiberTite – XT 50 mil PVC
 - ii. Sika-Sarnafil G410 60 mil PVC
 - iii. Carlisle SynTec Sure-Flex 60 mil PVC
- b. All accessories, components, adhesives, and sealants shall be supplied by the selected roof system manufacturer to provide a complete installation.

2. Thermoplastic Flashings:

- a. 60 mil thick polyvinyl chloride (PVC) membrane, white in color, reinforced with a non-woven fiberglass reinforcement with physical properties meeting or exceeding ASTM D4434 for Polyvinyl Sheet Roofing, Classification Type II, Grade I.
 - i. FiberTite – XT 50 mil PVC
 - ii. Sika-Sarnafil G410 60 mil PVC
 - iii. Carlisle SynTec Sure-Flex 60 mil PVC

3. Membrane Adhesive:

- a. Field Membrane
 - i. FiberTite FTR-190e
 - ii. Sika-Sarnafil Sarnacol AD
 - iii. Carlisle Syntec Cav-Grip PVC Adhesive
- b. Flashings

- i. FiberTite FTR-190e
 - ii. Sika-Sarnafil Sarnacol AD
 - iii. Carlisle Syntec Cav-Grip PVC Adhesive
4. Vapor retarder: Mechanically-attached base sheet, approved by the roofing membrane manufacturer within the warranted roof system and compatible with the specified low-rise polyurethane foam adhesive:
 - a. Mechanically attach to lightweight concrete substrate using manufacturer-approved fasteners – fastener pattern and spacing to be determined by Manufacturer based on the provided wind-uplift requirements.
5. For sealing roof penetrations and roof-to-wall transitions:
 - a. Sealant recommended by the roofing membrane manufacturer
6. Polyisocyanurate Insulation complying with ASTM C-1289(01), Type II, Class 1, Grade 2.
 - a. Flat-stock and tapered panels; maximum 4'-0 x 4'-0 board sizes
7. Gypsum cover board insulation complying with ASTM C-1177(91)
 - i. 1/2-inch DensDeck Prime by Georgia Pacific Corporation.
8. Tapered insulation edge strips complying with ASTM C-208(82)
9. Insulation Adhesive
 - a. Single-part or dual-part polyurethane foam insulation adhesive as manufactured or recommended for use by the roof system manufacturer.
10. Spray Filler Foam
 - a. Roof-Pak by Dow Chemical Company or approved equal
11. Walkway pads:
 - a. PVC membrane walkway pad/roll as supplied or manufactured by FiberTite, Sika-Sarnafil, or Carlisle Syntec.
 - i. Walkway pads must be heat-welded; ballasted walkway pads are not acceptable.

2.01 MECHANICAL FASTENERS

1. Standard types of mechanical fasteners for work tested by manufacturer for required pull-out strength where applicable, compatible with deck type and roofing products used, and corrosion protection to meet FM-4470 test procedure, and that will comply with the requirements of governing authorities and listing agencies (submit for approval)
 - a. Metal flange to wood blocking
 - i. FS FF-N-105B, Type II, Style 20, roofing nails; galvanized steel wire, flat head, diamond point, round, barbed shank.
 - ii. Length: Sufficient to penetrate wood blocking 1-1/4 inch.
 - b. One-inch cap nails
 - i. Type: Annular thread nail with integral 1-inch cap.

- ii. Acceptable manufacturers:
 - a) National Nail Corp., Grand Rapids, MI.
 - b) Simplex Nails Inc., Americus, GA.
 - c) W. H. Maze Co., Peru, IL.
- c. Sheet metal to sheet metal: 1/8-inch diameter Type 305 stainless steel rivet, dome head, 0.063 0.125-inch grip range by Triangle Fastener Corp., Cleveland, Ohio.
- d. Counterflashing to masonry: Nail-in anchors. Zinc with steel nail. Size: 1/4 inch by 1-1/2 inch. Type: Rawl Zamac Nailin.
- e. Termination bar to masonry: Nail-in anchors. Zinc with steel nail. Size: 1/4 inch by 1-1/2 inch. Type: Rawl Zamac Nailin.
- f. Sheet metal to wood: 10-16 x 1-1/4-inch indented hex washer head stainless steel sheet metal screw with a stainless-steel bonded washer assembly by Triangle Fastener Corp., Cleveland, Ohio, or Consultant approved equal.
- g. Wood to wood
 - i. Type: Stainless Steel Hex Head Trufast screws. Length: Sufficient to penetrate underlay blocking 1-1/4 inch.
 - ii. Acceptable manufacturers
 - a) Independent Nail Inc., Bridgewater, MA.
 - b) National Nail Co., Grand Rapids, MI.
 - c) W. H. Maze Co., Peru, IL.
- h. New blocking to existing blocking: Hex head Stainless Steel Trufast screws with length sufficient to penetrate existing blocking 1-1/4 inch.

PART 3 - EXECUTION

3.01 SURFACE PREPARATION

1. Removal of all existing roofing materials, flashings, strippings and sheet metal components. Roofing Contractor must use extreme caution removing the existing components, being careful not to cause damage to the exterior or interior of the building.
2. It is mandatory that the work be done in a manner that no weather element (rain, wind, dirt, snow, etc.) penetrate through the roof assembly into the enclosed building space. Special care is to be taken to limit the work of the day so that such weather protection occurs. A watertight tie-in is required at the end of each workday.
3. Clean existing lightweight concrete substrate free of all loose debris, contaminants, and deleterious materials.
4. Inspect lightweight concrete substrate conditions and make repairs, as necessary.
5. Seal all gaps at the perimeter edge conditions and around penetrations with self-adhering flashing membrane or spray filler foam insulation.
6. Clean lightweight concrete substrate surface free of contaminants.

3.02 VAPOR RETARDER INSTALLATION

1. Mechanically attach base sheet per Manufacturer guidelines using approved fasteners and fastening pattern.

3.03 INSULATION BOARD INSTALLATION

1. Adhesive attach all layers of the insulation to comply with or meet latest edition of ANSI/ASCE-07. Refer to the Wind Calculation Sheet in the Drawings for additional information.
2. Provide prescriptive enhancements at building corners and perimeters.
3. Roofing Contractor shall submit manufacturer's approved attachment and adhesion pattern with the project submittals. Adhesion enhancement patterns and placement for perimeters and corners shall be defined in the submittals.
4. Do not jam or deform boards. Eliminate open joints and uneven surfaces; gap boards as suggested by the Manufacturer.
5. Maximum gap: 1/8 inch. Maximum elevation variation between boards at joints: 1/8 inch.
6. Fill insulation board joint gaps larger than 1/4 inch with roof insulation.
7. Cut and fit insulation boards where roof deck intersects vertical surfaces. Cut board 1/8 inch from vertical surface.
8. Stagger joints at least 6 inches. Maintain board staggers at end of each day's work.
9. Offset joints between layers a minimum of twelve (12) inches.
10. Do not cantilever boards.

3.02 MEMBRANE INSTALLATION

A. GENERAL

1. Beginning at low point of roof, place membrane without stretching over substrate and allow to relax at least 30 minutes before attachment or splicing; in colder weather allow for longer relax time.
2. Lay out the membrane pieces so that field and flashing splices are installed to shed water.
3. Install membrane without wrinkles and without gaps or fishmouths in seams; bond and test seams and laps in accordance with membrane manufacturer's instructions and details.
4. Install membrane adhered to the substrate, with edge securement as specified.
5. Adhered Membrane: Bond membrane sheet to substrate using membrane manufacturer's recommended bonding material, application rate, and procedures.
 1. Do not apply bonding material to seaming area of membrane.
6. Edge Securement: Secure membrane at all locations where membrane terminates or goes through an angle change greater than 2 in 12 inches (1:6) using mechanically fastened

reinforced perimeter fastening strips, plates, or metal edging as indicated or as recommended by roofing manufacturer.

1. Exceptions: Round pipe penetrations less than 18 inches (460 mm) in diameter and square penetrations less than 4 inches (200 mm) square.

B. FLASHING AND ACCESSORIES INSTALLATION

1. Install flashings, including laps, splices, joints, bonding, adhesion, and attachment, as required by membrane manufacturer's recommendations and details.

C. FINISHING AND WALKWAY INSTALLATION

1. Install walkways outside roof access doors, at the top and bottom of roof access manladders, around rooftop equipment that may require maintenance, and where indicated on the drawings.
 1. Use specified manufacturer's walkway pads unless otherwise indicated.
 - a. Install in minimum 60" x 60" dimension at doors and manladders; install minimum 30" wide in continuous fashion around serviceable rooftop equipment and three sides of roof access hatches.

3.03 PROTECTION AND CLEAN UP

- A. It shall be the Roofing Contractor's responsibility to protect all property and surfaces from drippings by means of masking, shielding, or screening. Any drippings adhering to surfaces not intended to receive materials, the Roofing Contractor to the satisfaction of the Owner shall remove including automobiles.
- B. During the course of the job, the Roofing Contractor shall maintain good housekeeping practices. Debris shall not be allowed to accumulate but will be removed from the site on a daily basis. At the completion of the job, all areas shall be left clean to the satisfaction of the Owner's representative.

3.04 INTENT OF SPECIFICATIONS

- A. It is the intent of these specifications to call out the performance criteria desired for the roof membrane system and insulation on this project.
- B. It is the Roofing Contractor's responsibility to make all measurements and supply materials for all areas on the project as specified, including all changes made in writing prior to the bid.
- C. The Roofing Contractor shall also be responsible for providing approved drawings and details meeting the manufacturer's requirements so that a warranty will be issued upon completion.
- D. This specification shall cover all roof areas and related items necessary to complete the roofing project and must accommodate any current detail changes or deviations by the manufacturer necessary to ensure the Warranty will be issued as specified upon completion.

END OF SECTION

SECTION 07 62 00 – SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.01 SCOPE

- A. Work under this section includes furnishing and installing sheet metal flashing and fascia system to be incorporated into the membrane roofing system.

1.02 DESCRIPTION OF WORK

- A. Extent of each type of flashing and sheet metal work is indicated on drawings and by provisions of this Section.

1.03 ROOF ACCESSORIES

- A. System accessories installed integral with the waterproofing membrane are specified in waterproofing system sections as waterproofing work or in other Division 7 sections.

1.04 QUALITY ASSURANCE

- A. Field verifies all dimensions and measurements prior to placing orders for materials or fabrication. The materials specified herein shall be inspected upon delivery. Metal that exhibits dents; scratches, excessive oil-canning or improper fabrication shall be removed from the site and replaced at no additional cost to the Owner.

1.05 SUBMITTALS

- A. Product Data: Flashing, Sheet Metal, and Accessories: Submit manufacturer's product data, installation instructions, and general recommendations for each specified sheet material and fabricated product.
- B. Samples: Flashing, Sheet Metals, Copings, and Accessories: Submit 8" square samples of specified sheet materials to be exposed as finished surfaces. Submit 12" long completely finished units of specified factory-fabricated products exposed as finished work.
- C. Shop Drawings: Flashing, Sheet Metal, and Accessories: Shop drawings are required to show layout, joining profiles, and anchorages of fabricated work including major counter-flashings, trim/fascia units, and copings. New expansion joints in flashing and sheet metal shall align with existing expansion joints and control joints in adjacent construction. Layouts at 1/4" scale, details at 3" scale.
- D. Assignment: The Contractor shall not subcontract any part or phase of the work without prior approval by the Consultant and the Owner
 - 1. Contractor must provide a complete set of sheet metal shop drawings prior to fabrication and installation of all sheet metal components, for approval by Consultant and Owner.

1.06 JOB CONDITIONS

- A. Coordinate work of this section with interfacing and adjoining work for proper sequencing of each installation. Ensure best possible weather resistance, durability of the work, and protection of materials and finishes.

1.07 PRODUCT DELIVERY STORAGE AND HANDLING

- A. All material shall be delivered to the site in original manufacturer packaging. Metal sections shall be properly supported and handled to avoid bending, crushing, and denting. Metal shall be supplied free from scratches, dents, and defects. Cover materials and protect from weather, excessive heat, and wind. Remove protective films after installation.

PART 2 - PRODUCTS

2.01 PRODUCTS

- A. Fasteners: Same metal as flashing/sheet metal or other non-corrosive metal as recommended by the sheet metal manufacturer. Match finish of exposed heads to material being fastened. All materials must be of the same metal as the flashing. No dissimilar materials will be accepted. All fasteners must be of the same material as the metal trim or gravel stop.

2.02 FABRICATED UNITS

- A. General Metal Fabrication: Shop fabricate work to greatest extent possible. Comply with details shown and with applicable requirements 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 work.
- B. Form work to fit substrates. Comply with material manufacturer's instructions and recommendations for forming material. Form exposed sheet metal work without excessive oil-canning, buckling, and tool marks, true to line, and levels indicated with exposed edges folded back to form hems.

2.03 SEAMS

- A. Fabricate immobile seams in sheet metal with flat-lock seams. For metal other than aluminum, trim edges to be seamed, for seams, and solder. Form aluminum seams with epoxy seam sealer, rivet joints for additional strength where required.

2.04 EXPANSION PROVISIONS

- A. Where lapped or bayonet-type expansion provisions in work cannot be used or would not be sufficiently water-weatherproof, form expansion joints of intermeshing-hooked flanges not less than 1" deep and filled with mastic sealant (concealed within joints). Alignment of joints shall coincide with control joints in adjacent construction.

2.05 SEALANT JOINTS

- A. Where movable, non-expansion type joints are indicated or required for proper performance of work, form metal to provide for proper installation of elastomeric sealant in compliance with SMACNA standards.

2.06 SEPARATIONS

- A. Provide for separation of metal from incompatible metal or corrosive substrates by coating concealed surfaces at locations of contact with bituminous coating or other permanent separation as recommended by the manufacturer/fabricator.

2.07 MATERIALS

A. Galvanized steel

- 1. Galvanized steel sheet, gauge as specified, AISA-G90 Extra Smooth, minimum spangle, tensioned leveled, hot-dipped galvanized conforming to ASTM A525(86).

B. Pre-finished galvanized steel

- 1. Base steel shall be 24-gauge, minimum, AISA-G90 Extra Smooth, minimum spangle, tensioned leveled, hot-dipped galvanized conforming to ASTM A525(86).
 - a. Increase thickness to 22 gauge where sheet metal width exceed 14-inch in dimension or where specified on the Drawings.
 - b. Finish shall consist of primer on both sides, minimum 0.25-mil thickness, followed by a 70% Kynar 500® resin premium fluoropolymer (PVDF) coating on one side to achieve a 1.0 mil (+/- 0.1 mil) dry-film thickness.
 - c. Manufacturer's standard color which will be selected by the Owner.

C. Stainless Steel

- 1. Stainless Steel Sheet: ASTM A 240/A 240M or ASTM A 666, Type 304, dead soft, fully annealed.
 - a. Finish: 2B bright, cold rolled.
 - b. Surface: Smooth, flat.
 - c. Gage: As shown on the construction drawings.
 - d. All horizontal and vertical seams and joints shall be riveted and fully soldered prior to being incorporated into the new roofing system.
 - e. Solder: ASTM Specification B-32, Composition 50% tin and 50% lead.
 - f. Flux: Muriatic acid neutralized with zinc or approved brand of soldering flux.
 - g. Rivets: 1/8" - 3/16" diameter, with solid stainless-steel mandrels and washers.

D. Mastic Sealant: Polyisobutylene; non-hardening, non-skinning, non- drying, non-migrating sealant.

E. Sealant Caulking: Tremco Vulkem 116 – Polyurethane Sealant

- F. Epoxy Seam Sealer: Two-part non-corrosive metal seam cementing compound recommended by metal manufacturer for exterior/interior immobile joints, including riveted joints.
- G. Adhesives: Type recommended by flashing sheet manufacturer for waterproof/weather-resistant seaming and adhesive application of flashing sheet.
- H. 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, non-corrosive, with size and gauge required for performance.
- I. Miscellaneous.
 - a. Metal joint sealant: a non-drying, non-skinning, non-oxidizing, butyl sealant complying with AAMA Specification 808.3, such as Protective Treatments, Inc. "PTI 707".
 - b. Expansion shields: Fed. Spec. FF-S-325, machine bolt type, tubular type, or self-drilling tubular type.
 - c. High temperature resistant underlayment rubberized asphalt membrane.
 - i. Thickness: 40 mils
 - ii. White engineered polyolefin composite film
 - iii. High tensile-strength rubberized asphalt underlayment designed to withstand temperatures up to 250°F (121°C).

2.08 WORKMANSHIP

- A. General: Form the work to Project Document details and dimensions indicated, straight and true to line with flat surfaces, free of warping and bulging. All SMACNA recommendations and guidelines are to be incorporated into details.
- B. Most stringent detail requirements prevail.
- C. As far as practicable, design all work to be secured with concealed fastenings.

2.09 CONTINUOUS WIND CLEAT

- A. Fabricate continuous wind cleats as indicated on drawings and one gauge thicker than the gravel stop/edge metal/coping material specified.
- B. Continuous wind cleats shall be fastened every eight inches on center with ring shank type nails or screws.

2.10 EDGE METAL FLASHINGS

- A. Fabricate edge metal flashing as indicated on drawings.
- B. Provide sections in one-piece assemblies around internal and external corners, with vertical portion bent and horizontal portion mitered and welded.

- C. Flashings shall be fabricated to extend a minimum of one (1) inch below the lowest bottom vertical wall joint and one (1) inch below any and all wood nailers.

2.11 COUNTER FLASHING

- A. Fabricate counter flashing as indicated on drawings for units, curbs, perimeter wall flashings, and pipe penetrations.
- B. Provide sections in one-piece assemblies around internal and external corners, with vertical portion bent and horizontal portion mitered, soldered and/or welded.

PART 3 - EXECUTION

3.01 GENERAL INSTALLATION

- A. All sheet metal shall be fabricated and installed in accordance with the Project Document detail drawings and Sheet Metal & Air Conditioning Contractor's National Association (SMACNA) Architectural Sheet Metal Manual, Current Seventh Edition.
- B. 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 that will be permanently waterproof and weather tight.
- C. All sheet metal shall be fabricated and installed in accordance with the Project Document detail drawings and Sheet Metal & Air Conditioning Contractor's National Association (SMACNA) Architectural Sheet Metal Manual, Current Seventh Edition.
- D. Metal shall be handled and fabricated to field measured dimensions and shall be free from excessive bends, warping and surface damage. Metal shall be stiffened and reinforced in accordance with the recommended fabrication procedures. Installation shall include uniform joints and seams that allow for normal expansion and contraction of the materials used.
- E. Whenever available as supplied by the roof system materials manufacturer, provide premium level option of prefabricated sheet metal, and as approved by the Consultant.

3.02 EXAMINATION

- A. Verify that contact surfaces of masonry or concrete are dry, smooth, and free of loose materials and projections which might puncture flashing.

3.03 CLEANING AND PROTECTION

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

3.04 PREPARATION

A. General

1. Surfaces to be flashed or covered with sheet metal shall be clean and free from defects. Clean foreign matter from surfaces. Drive projecting nails flush.
2. Metal flashings shall be weather tight.
3. All sealant joints shall be properly tooled to create a convex finish and not a concave finish.
 - a. Sealant will be removed and replaced until consultant-desired finish is provided.

3.05 CAULKING

A. Color to match sheet metal color

3.06 COUNTER FLASHING

A. Roof area membrane base flashing sheet metal counterflashing at perimeter walls as follows:

1. Remove and replace with new, existing counter flashing metal as needed and install new sheet metal counterflashing to match existing receiver metal. The counter flashing metal should be formed to accept the reglet receiver where present.
 - a. Reglet counterflashing shall be secured with lead wedges spaced six (6) inches on center.
 - b. Sealant or mortar shall be returned to original condition after counterflashing is installed.
 - c. Cut a reglet in the masonry joint to a depth of 1-1/2". Counter flashing is to be held in place with lead wedges and the reglet filled with sealant.
 - d. Lap ends of each length of both portions of metal cap flashing not less than 3 inches. Weld or solder corner joints per AWS D1.3. Return ends at roof edge into reglet or wall.
2. Surface mounted counterflashing shall be formed to receive a sealant at the top of the metal.
 - a. Sealant shall be properly tooled in after installation.
 - b. Surface mounted counter flashing shall be secured every eighteen (18) inches on center.

3.07 CONTINUOUS WIND CLEAT

- A. Install continuous wind cleat with a minimum 1/8" gap between sections for expansion provisions.
- B. Fabricate in ten-foot sections or sections as long as possible.
- C. Do not install smaller than three-foot sections at all inside and outside corners.
- D. Continuous wind cleats end joints shall offset coping metal joints a minimum of two foot.
- E. Continuous wind cleats shall be fastened every eight (8) inches on center with ring shank type nails or screws every twelve (12) inches on center on vertical face of wall.
 - a. Horizontal fastening will not be accepted.

3.09 GRAVEL STOP/DRIP EDGE METAL

- A. Roof area edge metal flashing shall be as specified.
 - 1. Install new specified sheet metal drip edge or gravel stop flashing in manufacturers approved modified bitumen mastic and stripped in with two separate flashing plies.
 - 2. Flanges shall be stripped in after base ply membrane has been installed in order to maintain smooth surface membrane to smooth surface membrane.
 - 3. All flanges shall be nailed or screwed in place in a one (1) inch stagger pattern.
 - a. All flanges shall be nailed or screwed in place four (4) inches on center in a one (1) inch stagger pattern.
 - b. All flanges shall be screwed in place six (6) inches on center in a one (1) inch stagger pattern.
- B. Match profile, size and dimensions as required to accommodate new roof system.

3.10 SHEET METAL PIPE FLASHING

- A. Install new Stainless steel pitch pans and round sheet metal pipe flashings.
- B. Install new exterior wall escutcheons and seal through wall scuppers using a folded and hemmed style connection at the exterior wall location.
- C. All stainless-steel flashings shall be fully soldered. Round sheet metal pipe flashings will need to be soldered on the roof. Existing storm collars that are non-removable shall be left in place and re-used. New round sheet metal pipe flashings need to be installed to extend from the roof surface to the bottom of the storm collar.

END OF SHEET METAL FLASHING AND TRIM

SECTION 07 71 19 – MANUFACTURED GRAVEL STOPS AND FASCIAE

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Manufactured roof specialties; Preformed roof edge flashings/fascia.

1.02 REFERENCE STANDARDS

- A. American Architectural Manufacturers Association (AAMA):
 - 1. AAMA 2605 – Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels; 2005.
- B. American National Standards Institute (ANSI) and Single Ply Roofing Industry (SPRI) – ANSI/SPRI ES-1, Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems; current edition.
- C. FM Approval Standards; FM Global, current edition.
- D. Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) – Architectural Sheet Metal Manual (ASMM); 2003.

1.03 SUBMITTALS

- A. Product Data: Provide data on shape of components, materials and finishes, anchor types and locations.
- B. Shop Drawings: Indicate configuration and dimension of components, adjacent construction, required clearances and tolerances, and other affected work.
- C. Submit manufacturer's standard color chart for Owner's selection.
- D. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.

1.04 QUALITY ASSURANCE

- A. Perform work in accordance with SMACNA Architectural Sheet Metal Manual details and manufacturer's recommendations.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Roof Edge Flashings:
 - 1. Carlisle Syntec, Carlisle, PA: [carlisesyntec.com](http://carlisle syntec.com).
 - 2. Hickman Engineered Systems, Arden, NC, wph.com.
 - 3. Metal-Era Inc., Waukesha, WI; metalera.com.

2.02 COMPONENTS

- A. Roof Edge Flashings: Factory fabricated to sizes required; mitered, welded corners; concealed fasteners.
 - 1. Basis of Design: Anchor-Tite Standard Fascia (Fully Adhered Single Ply Version), by Metal-Era, manufactured and tested to meet the following criteria:

- a. ANSI/SPRI ES-1 Test Method RE-1 Test for Roof Edge Termination of Single-Ply Roofing Membranes: The fascia system shall be tested to secure the membrane to minimum of 100 lbs./ft. in accord with the ANSI/SPRI ES-1 Test Method RE-1.
 - b. ANSI/SPRI ES-1 Test Method RE-2 Pull-Off Test for Fascia: The fascia system shall be tested in accord with the ANSI/SPRI ES-1 Test Method RE-2.
 - c. The fascia product shall be listed in current FM Approval Standards.
2. Subject to compliance with requirements, products that may be incorporated in the Work include, but are not limited to the following:
- a. Approved manufactured equivalent (acceptable to, or recommended by, the roof system manufacturer).
 - b. Shop-fabricated equivalent, substantially identical in configuration, size and type/gauge of materials.

2.03 ACCESSORIES

- A. Sealant: Type polyurethane, as specified in *Section 07 90 05 - "Joint Sealers"*.

2.04 FINISHES

- A. PVDF (Polyvinylidene Fluoride) Coating: Superior Performance Organic Finish, AAMA 2605; multiple coats, thermally cured fluoropolymer finish system; color as selected by Owner.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify that deck, insulation, wood blocking, roof membrane, base flashings, fascia, and all other items affecting work of this Section are in place and positioned correctly.

3.02 INSTALLATION

- A. Install components in accordance with manufacturer's instructions.
- B. Coordinate installation of components of this section with installation of roofing membrane and base flashings.
- C. Coordinate installation of sealants with work of this section to ensure water tightness.

END OF MANUFACTURED GRAVEL STOPS AND FASCIAE

SECTION 07 72 00 – ROOF ACCESSORIES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This section covers acceptable manufacturers and products of miscellaneous roof accessories to be installed in conjunction with the new roofing system.

PART 2 - PRODUCTS

2.01 ACCEPTABLE PRODUCTS

- A. Conduit line supports:
1. Small diameter conduit (less than 1-inch):
 - a. C-Port Model C610, by Clearline Technologies, Inc., Winnepeg, MB; c-port.net.
 - b. Pipe Pier Classic, by Pipe Pier Support Systems, Hamel, MN; pipepier.com.
 2. Medium diameter conduit (1.5 inches to 2.5 inches):
 - a. Shall be prefabricated system with height adjustable base to accommodate threaded rods and channel/strut support with required by number and size of lines:
 - 1) Model 20-Base, by Miro Industries, Inc., Heber City, UT; miroind.com.
 - 2) Model PP10 with channel, by PHP Systems/Design, Houston, TX; phpsd.com.
 3. Large diameter conduit (greater than 3 inches):
 - a. Single line conduit line supports shall be prefabricated system with height adjustable base to accommodate threaded rods, horizontal channel/strut and stirrup support hangers for up to two lines:
 - 1) Model 5-SB-H (P), by Miro Industries, Inc., Heber City, UT; miroind.com.
 - 2) Model PP10 with channel and stirrup hanger(s), by PHP Systems/Design, Houston, TX; phpsd.com.
 - b. Multiple line conduit line supports shall be prefabricated system with height adjustable drainage grooved base to to accommodate uni-strut tube frame as required to support number and size of conduit piping to be supported.
 - 1) Model 8-H-SB (P), by Miro Industries, Inc., Heber City, UT; miroind.com.
 - 2) Model PSE-2-2 with stirrup hangers, by PHP Systems/Design, Houston, TX; phpsd.com.
- B. Gas Line Supports:
1. Single gas line - small diameter (less than 1.5 inches):
 - a. Shall be prefabricated system with base to accommodate height adjustable threaded rods and roller support:
 - 1) Model 5 RAH-7, by Miro Industries, Inc., Heber City, UT; miroind.com.
 - 2) Model PP10 with roller, by PHP Systems/Design, Houston, TX; phpsd.com.

2. Single gas line (greater than 1.5 inches):
 - a. Gas line supports shall be prefabricated system with drainage grooved base to accommodate height adjustable threaded rods and horizontal channel/strut support with roller hangers:
 - 1) Model 5-SB-H with roller hangers, by Miro Industries, Inc., Heber City, UT; miroind.com.
 - 2) Model PP10 with channel and roller hanger, by PHP Systems/Design, Houston, TX; phpsd.com.
 3. Multiple gas lines:
 - a. Gas line supports shall be prefabricated system with bases to accommodate uni-strut tube frame as required to support number and size of piping to be supported.
 - 1) Model 8-H-SB(P) with roller hangers, by Miro Industries, Inc., Heber City, UT; miroind.com.
 - 2) Model PSE-2-2 with roller hangers, by PHP Systems/Design, Houston, TX; phpsd.com.
- C. Duct supports:
1. Shall be prefabricated system with bases to accommodate uni-strut tube frame as required to support exact ductwork sizes and equipment to be installed.
 - a. Model No.8-DS-SB(P), by Miro Industries, Inc., Heber City, UT; miroind.com.
 - b. Model PPH-D, by PHP Systems/Design, Houston, TX; phpsd.com.
- D. Pipe portal curbs:
1. Curb and portal for pipe penetrations:
 - a. Pipe Portal System with Model RC-2A curb and EPDM boot to match penetrations, by Portals Plus, Inc. division of Hart & Cooley, Inc., Grand Rapids, MI; portalsplus.com.
 2. Curb and portal box for AC condensor connections:
 - a. Small /Medium Sigrist Pipe Chase Housing, Model AL161010/AL201412 with a 14-inch high base/curb sized to match number of penetrations, by Alta Products, LLC; altaproductsllc.com.
 - 1) Provide optional power outlet box cut-out, and;
 - 2) Optional hose bibb cut-out.
 - b. Sigrist PVC Exit Seals:
 - 1) Injection molded weather tight PVC seal for vertical surface penetrations with integral EDPM rubber gasket, model number as required by penetration.
- E. AC condensor supports:
1. Shall be prefabricated system with bases to accommodate uni-strut tube frame with extended leg for electrical disconnect placement. Six inches larger on all sides as required

to support AC condensor equipment to be installed. Provide minimum twenty-four (24) inches between adjacent units for proper airflow.

- a. Custom designed Mechanical Support-HD with fiberglass grating and attachment clips, by Miro Industries, Inc., Heber City, UT; miroind.com.
- b. Model RTU-20 center and corner supports, with 1/2-inch threaded rod cross connections and fiberglass grating and attachment clips, by PHP Systems/Design, Houston, TX; phpsd.com.
- c. Fiberglass-reinforced plastic grating: molded fiberglass grating made with select general purpose polyester and ultraviolet (UV) inhibitors. Standard for Specification: CC-Grate, 1.5-inch x 1.5-inch square mesh by 1-inch thick, by Century Composites, Inc. Tyrone, GA; century-composites.com.
 - 1) Substitutions: See Section 01 60 00 - "Product Requirements".
 - 2) Color shall be Grey.

PART 3 - EXECUTION

3.01 ROOF SYSTEM PROTECTION INSTALLATION

- A. Secure membrane walkpads to the installed roof system in accordance with the roof system manufacturer's published instructions.
 1. At roof access hatches, walkpads shall be installed on three (3) sides of the opening, a minimum 30-inches wide.
 2. At serviceable equipment, walkpads shall be installed in continuous fashion on all sides of the unit, a minimum of 30-inches wide.
 3. At support bases, splashblocks and pavers, walkpads shall be a minimum of six (6) inches wider than the support base on all sides.

3.02 SUPPORT INSTALLATION

- A. Pipe Support Installation:
 1. Spacing:
 - a. Small conduit, condensate or gas pipe less than 2-inch outside diameter: 6-feet on center.
 - b. Medium sized conduit greater than 2.25-inch outside diameter: 7-feet on center.
 - c. Medium sized condensate piping greater than 2.25-inch outside diameter: 10-feet on center.
 - d. Medium or large gas piping or cooling water line supports: 10-feet on center.
 - e. Spacing shall not exceed 10-foot centers.
 2. Prepare the roof surface as described in *Roof System Protection Installation* as forth above.

3. Center the pipe support over the walkway pad beneath the pipe support so that the the pipe(s) rests squarely over the strut or through the roller structure or clevis hanger of the the pipe support.
 4. Set the pipe(s) in the pipe support without dropping or causing undue impact. Care should be taken to install each pipe support so it supports a proportional and equal amount of weight at each pipe support.
 5. Adjust the pipe support to the desired height and even load with other pipe supports. Make certain the horizontal support strut is level.
 6. Extend threaded support rods above horizontal channel/strut support and install secondary tightening nut soundly to adjustment nut and torque into place.
 7. After adjustment, cut and remove unnessesaary threaded rod to a maximum of 2-inches above the torque nut.
 8. Install pipe restraints on roller supports.
- B. Duct Support and Cable Tray Installation:
1. Install supports in accordance with manufacturer's recommendations.
 2. Prepare the roof substrate as described in *Roof System Protection Installation* as forth above.
 3. Center the duct or cable tray support over the dimpled drainage mat beneath the pipe support so that the the duct rests squarely over the strut of the the duct support.
 4. Adjust the duct support to the desired height and even load with other duct supports. Make certain the horizontal support strut is level.
 - a. Install each duct support so it supports a proportional and equal amount of weight at each support.
- C. AC Condensor Support Installation:
1. Install supports in accordance with manufacturer's recommendations.
 2. Determine the dimension and location of the support unit(s) upon the roof and the desired height.
 - a. Coordinate with mechanical and electrical trades for reconnection routing.
 - b. The support(s) should be spaced at intervals so as to allow proper installation of the mechanical units or devices and so as not to exceed recommended weight bearing upon rooftop materials not exceed two pounds per square inch.
 3. Prepare the roof substrate as described in *Roof System Protection Installation* as forth above.
 4. Place the support(s) in the approximate positions so as to allow the mechanical unit(s) or device(s) to sit with a minimum of 6-inches from the perimeter edge of the grating system and allowing sufficent spacing between units for servicing and proper air flow.

5. Take final measurements and adjust the support for an even load to be distributed throughout the grating system to ensure that an even of load is placed upon each leg and base support,
 - a. Adjust height by moving the framing system up and down the leg of the support by adjusting the brackets.
6. Install grating and mechanically attach to the support frame.

END OF ROOF ACCESSORIES

SECTION 07 92 00 – JOINT SEALANTS

PART 1 - GENERAL

1.01 SCOPE

- A. Work required under this Section shall include the installation of sealants at locations as detailed on the Drawings or specified herein.

1.02 SUBMITTALS

- A. Product Data: Submit specifications and general recommendations from manufacturers of masonry waterproofing materials.
- B. Package and Labels: Deliver materials in sealed cans or packages with the manufacturer's original labels thereon. Do not remove labels until the Consultant inspects and approves them.
- C. Color Selection: Submit sealant color charts for Consultant's review and selection.

1.03 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Sealants shall be delivered to the building site in manufacturer's original sealed packages. Sealants and accessories shall be stored at a minimum temperature of 60 degrees F for a minimum of 48 hours prior to use. Storage conditions and useful shelf life shall be as recommended by the sealant manufacturer.

1.04 HEALTH AND SAFETY

- A. Material Safety Data Sheets:
 - 1. Contractor/Applicator shall obtain and become fully familiar with manufacturer's material safety data sheets that comply with OSHA 29 CFR 1910.1200.
 - 2. Data sheets shall be posted at work area. Data sheets shall be submitted to Owner prior to beginning masonry cleaning work.
- B. Workers: All workers shall be thoroughly experienced in the particular class of work employed on this project. All work shall be done in accordance with these specifications and shall meet the approval in the field of the Owner's Representative and the Consultant. The Contractor's Representative or Job Superintendent shall have a complete copy of specifications and drawings on the job site at all times.
- C. The Contractor shall plan and conduct the operations of the work so that each section started on one day is complete and thoroughly protected before the close of the day.

- D. The Contractor shall provide all barricades, caution signs and other temporary measures necessary to protect persons and property from injury and damage during the execution of work under this contract and upon completion of the work, remove all such barricades, caution signs and other temporary measures of every nature. The Contractor shall be responsible for any and all damages to existing work caused by him or his employees during the execution of Work under this Contract.
- E. The Contractor shall inform the Consultant of their proposed methods of protection and obtain his concurrence as to the minimum acceptable requirements. The Contractor shall not however, be relieved of his responsibility for the adequacy of protection.

1.05 QUALITY ASSURANCE

- A. Manufacturer shall provide qualified technical representatives as required for purposes of advising Installer of procedures and precautions for use of sealant materials.

1.06 MANUFACTURER

- A. Manufacturer shall provide qualified technical representatives as required for purposes of advising Installer of procedures and precautions for use of sealant materials.
- B. Manufacturer shall provide qualified technical representatives as required for purposes of sealant joint adhesion testing as required to ensure proper installation and product to substrate compatibility.

1.07 INSTALLER

- A. A firm with not less than ten (10) years successful experience in installation of sealant joints. Experience shall relate to all other related work and accessories associated with the exterior restoration work. Contractor must be able to document the Project Foreman's experience with the application of sealant joints.

1.08 WRITTEN GUARANTEE

- A. Prime contractor shall furnish a two (2) year warranty on all sealant joint work.
- B. Manufacturer shall provide a minimum five (5) year warranty on sealant joint material unless otherwise noted.
 - 1. Silicone sealants used in masonry applications shall require a Twenty Year (20) manufacturer's warranty on sealant joint material.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Sealants shall be supplied to match the color of adjacent materials. Obtain sealant materials from a single manufacturer for each different product required. Do not mix products of multiple manufacturers.

B. Roofing:

1. Sealants

- a. Sealants shall be used as indicated on the Drawings or specified herein.
 - i. Heat Resistant Sealant (Roofing curbs as required-heat exhaust, etc.).
 - ii. Sealant for use for high temperature applications shall be a one-part non-sag silicone base heat resistant sealant. Sealant shall be Dow Corning 736 Heat Resistant Sealant as manufactured by Dow Corning Corporation of Midland, Michigan, or equal. Sealant shall not be painted or used in contact with masonry surfaces.
- b. Urethane Sealant – Roofing Sheet Metal.
 - i. Urethane sealant shall be a one-part gun grade elastomeric joint sealant, moisture cured, non-sag, meeting Federal Specification TT-S-00230C Type II Class A. Sealant shall be Sikaflex-1a as manufactured by Sika Corporation of Lyndhurst, New Jersey, or equal.
 - ii. Urethane sealant shall be used for roofing.
 - (a) Tremco Vulkem 116.
 - iii. Sheet metal components such as term bars and counter flashings, and all applications where a specific sealant type is not otherwise noted.
- c. Primers for Urethane Sealant.
 - i. Primers for use with urethane sealant shall be by the manufacturer of the sealant used. Primers shall be used where required or recommended by the sealant manufacturer or where field-testing shows a need for priming. Primer for use on masonry and wood shall be Sikaflex #429 Polyurethane Primer, or equal and primer for Plastics and fluorocarbon paint finishes shall be Sikaflex #449 primer or equal, both as manufactured by Sika Corporation, Lyndhurst, New Jersey.

C. Joint Bond Breaks

- 1. Joint bond breaks where required by the sealant manufacturer shall be polyethylene sheets or polyethylene backed tapes.

D. Backer Rod: Closed Cell Expanded Polyethylene

1. Manufacturers and Products:

- a. Williams Products, Closed Cell Backer Rod.
- b. Or approved equal.

PART 3 – EXECUTION

3.01 PREPARATION

- A. Sealant shall be applied at all joints as detailed on the Drawings, stipulated in the Specifications, or required by project conditions to provide a complete, weatherproof joint between materials. Where conditions exist, not specifically detailed on the Drawings, the Contractor shall contact the Consultant for a determination of the type of sealant to be used.

- B. Preparatory Work (Cleaning): Surface to receive sealant must be structurally sound, dry, clean, free of dirt, moisture, loose particles, oil, grease, asphalt, tar, paint, wax, rust, waterproofing, curing and parting compounds, membrane materials, etc.
- C. Masonry: Concrete, stone and other masonry must be cleaned where necessary by grinding, sandblasting, or wire brushing to expose sound surface free of contamination and laitance.
- D. Glass: All oil and grease shall be removed by using toluol or xylol; then wiped clean and dry until no solvent film or fingerprints remain.
- E. Metal: Scale, rust and coatings must be removed to expose bright metal. Protective coatings shall be removed with solvent and all chemical residue or film removed. A variety of protective coatings or finishes are frequently specified for metals that could interfere with the bond (adhesion) of the sealant. Sealant manufacturer should be consulted for proper surface preparation requirements and primer recommendations prior to the installation of the sealant.
- F. Fabricate sheet metal components to allow installation of sealant. Sealants shall be concealed whenever possible.
- G. Blow joints out just prior to sealant installation.

3.02 MOCK-UP

- A. Contractor shall install approximately ten foot of sealant joint for Consultant's review and approval. Contractor shall not install sealant joints unless authorized to proceed, in writing, by the Consultant.

3.03 INSTALLATION

- A. Application shall be made in accordance with manufacturer's recommendations and best trade practices. Surfaces to receive sealants shall be dry.
- B. Prime all surfaces before installation of sealant when recommended by the manufacturer.
 - 1. Shake or stir primer well before using.
 - 2. Prime all joints substrates with a brush, covering entire joint surface.
 - 3. Allow primer to dry adequately, 1-8 hours.
- C. Furnish and install backer rod and bond breaks in accordance with manufacturer's recommendations and best trade practices. Punctured backer rod shall be removed and replaced. Sealant shall not be installed over punctured backer rod.
 - 1. Install backer rod into all joints and set to a maximum sealant joint of ½ inch.
 - 2. Utilize masking tape as necessary to protect and keep clean surrounding joint substrates.

D. Tool joint to assure correct bead configuration, a neat joint and maximum adhesion to the sides of the joint. Mask areas along sealant joints to prevent sealants from contaminating adjacent materials and to provide a neat, finished appearance.

1. Install sealant into prepared joints. Fill all joints and avoid air entrapments.
2. Tool all sealant joints in to achieve proper joint size and adhesion.

3.04 INTENT OF SPECIFICATIONS

A. It is the intent of these specifications to call out the performance criteria desired for the sealant joints. It is the Contractor's responsibility to make all measurements and supply materials as specified including all changes made in writing prior to the bid.

END OF JOINT SEALANTS

SECTION 22 14 26 – ROOF DRAINS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. The roofing and plumbing subcontractors shall refer to the General Requirements of the Specifications, General Conditions, Special Conditions and Temporary Services that also pertain to work in this Section.
- B. All local, cities, state or other codes required for work in this Section shall apply.

1.02 SCOPE OF WORK

- A. Drain Component Repair/ Replacement: Repair/replace drain bowl and drain components including domes, securement bolts, and compression rings in the base bid as detailed on the roof drawings and within the contract documents.
 - 1. See Section 01 21 00 Allowance Schedule for exact quantities.
 - a. If there are discrepancies between the actual field conditions and the contract documents, the contractor shall be responsible to notify the Owner and Consultant prior to the submission of contractor (s) bid.
 - b. If no discrepancies are noted, it is understood the contractor shall remove and replace all roof drains specified by the contract documents.
- B. New Drain Assembly: Provide new drains at all locations per specifications. Provide all necessary cutting, plumbing hook-up, support bracing, and necessary drain components to complete the new drain assembly.
- C. Provide all necessary cutting, plumbing hook-up, support bracing, and necessary drain components to complete the drain assembly.
- D. Defective Drains: Contractor shall replace defective drain as required with new drain units.
- E. Drain Cleaning: Provide adequate equipment and experienced manpower to mechanically clean all roof drains on each roof section as needed after the new roof system has been installed.
 - 1. Each existing drain is to be checked and verified to be free, clear and draining properly. Work is limited to the drains within all areas in the field of new roofing.
 - 2. Contractor to survey all roof drains prior to roofing construction and provide a report to the Engineer/ Consultant of all roof drain lines that are plugged or draining inefficiently.
- F. Where drain assemblies are not being replaced: Remove and replace with new all drain clamping rings and bolts. Replace drain strainers as needed.
- G. Drain bowl insulation: All removal and reinstallation of under deck insulation shall be included in base bid.
 - 1. Contractor shall include any and all abatement labor and material costs in base bid as needed for each roof drain and each roof area.

1.03 DRAWINGS

- A. Roof drawings show the approximate location of the existing roof drains. It is the intent that all roof drains be replaced and cleaned.

1.04 CLEANING OF DRAINS

- A. All existing roof drains are to be cleaned by means of a high-pressure wash or mechanical auger prior to new roof installation.
- B. Drains shall be cleaned to the point of the lower clean-out.
- C. The Contractor shall bring any drain with an un-clearable blockage to the Consultant's attention.
- D. Prior to the start of work, the Contractor shall submit a plan for accomplishing the work.
- E. The method to be used for approval by the Owner and Consultant. The Owner shall not be held responsible for any delay to the roofing contractor as a result of additional plumbing work that may be required.

1.05 REPAIR/ REPLACEMENT – DRAIN COMPONENTS

- A. Remove and replace all existing roof drain bowls.
- B. Replace all drain components to include drain strainers, securement bolts, and drain ring seals as part of the base bid with new steel accessories.

PART 2 – PRODUCTS

2.01 DRAIN PRODUCTS

- A. Insert drains for replacement/retrofitting of existing roof drains: Hercules Retrodrain with Aluminum Superdome Strainer, by OMG Inc., Agawam, MA; www.olyfast.com.
 - 1. Outlet tube diameter: Shall be determined by Contractor to fit properly in existing drainage piping, in accordance with manufacturer's recommendations, approximately 3/8-inch less than drainage piping diameter.
 - 2. Outlet tube length: Twelve (12) inch, minimum.
 - 3. Cast aluminum drain strainer dome (plastic will not be acceptable).
 - 4. Cast aluminum clamping ring.
 - 5. Mechanical seal between outlet tube and existing drainage piping.

- B. Dura-Coated cast iron body with combined membrane flashing clamp/gravel stop and Cast-Dome, 4-inch bottom outlet inside calk connection complete with under deck clamp and sump receiver by Zurn Industries, Inc.
 - 1. Acceptable Manufacturers:
 - a. Zurn
 - b. Smith
 - c. Josam
 - d. Wade
- C. Outlet size to match existing drain piping.
- D. Metal flashing: ASTM B 29-79 (1984), 4-pound sheet lead.
- E. Pipe and fittings: ASTM D 2564-88, Polyvinyl Chloride (PVC) drain, waste and vent (DWV) pipe and fittings, Schedule 40, five-inch diameter minimum. Larger diameter pipe may be required by applicable Plumbing Code depending upon horizontal slope and whether pipe services more than one drain.
- F. Solvent cement: ASTM D 2564-88.
- G. Saddles and hangers: 14-gauge galvanized steel, 12 inches long; 180-degree arc; 3/4-inch bearing surface.
- H. Pipe Insulation: ASTM C 547-77 Class I, preformed 1-inch thick ASJ/SSL-II pipe insulation with double self-sealing lap to fit piping by Owens-Corning Fiberglass, Toledo, Ohio. Provide mitered sections of same material with jointing tape to cover fittings.

PART 3 EXECUTION

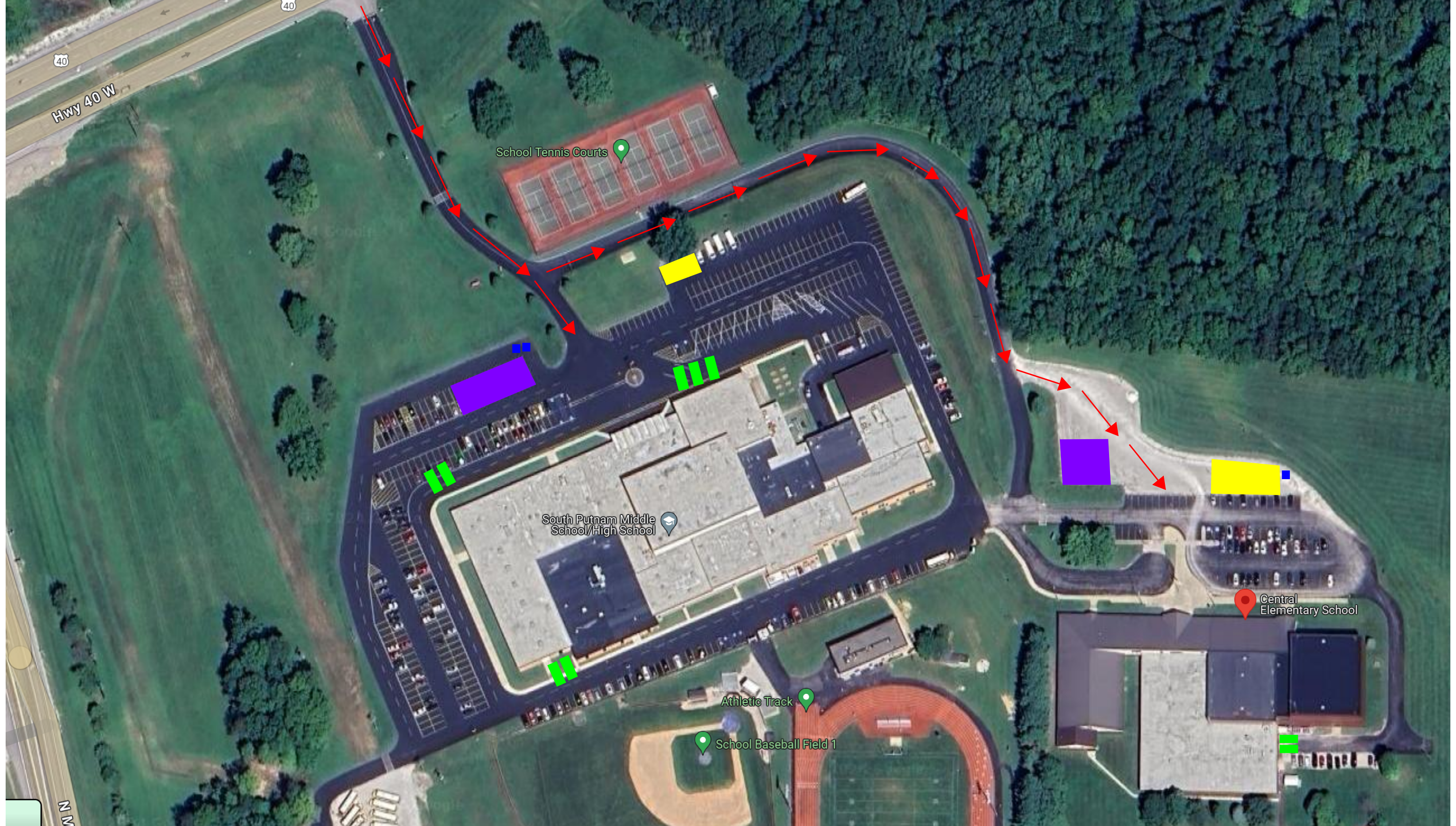
3.01 INSTALLATION

- A. All work is to be coordinated with the appropriate trade by the Roofing Contractor. New piping shall be PVC complete with all necessary fittings and accessories for the tie-in to the existing plumbing.






3.02 INTENT OF SPECIFICATIONS

- A. It is the intent of these Specifications that all drains be assured to be free and in operation prior to installation of new roofing. Contractors shall employ all reasonable methods to clean the drains and remove any blockage short of any dismantling of interior plumbing. Any drain that cannot be unplugged by the contractor shall be charted on the shop drawings and noted by the Consultant.

END OF ROOF DRAINS



LEGEND

-  Port A Johns
-  Construction Delivery Traffic
-  Dumpsters
-  Material Laydown
-  Contractor Parking



Jobsite Address
1780 US-40, Greencastle, IN 46135

Primary Work Hours
7:30 am to 4:00 pm

Delivery Hours
9:00 am to 2:00 pm

Required Safety Gear
Hi-Vis, Hard Hats
Boots, Safety Glasses

Superintendent

Project Manager



South Putnam HS & Central ES Roof Replacement – Prebid Meeting Agenda

Location: South Putnam HS, enter through Door 1.

When: Thursday, April 11, 2024 at 11:00 a.m.

PRE CONSTRUCTION TEAM

- SPCSC
 - Dr Corey Smith
 - Tona Gardner
 - Troy Burgess
 - Jared Hutcheson
 - Dr Brandon Penrod
- Fanning Howey
 - David Roan
- Technical Assurance
 - Eric Summers
- Michael Kinder and Sons, Inc.
 - Doug Kinder
 - Larry Easterday

HIGH LEVEL OVERVIEW

- Project has one bid package – Can be found in Div 01 – Section 01 12 00 Contract Summary
 - Bid Package 07a
- Scope of Work
 - Replace 68,000 SF of roof on the High School
 - Replace 26,000 SF of roof on Central ES
 - Review bid breakdown
 - Review bid package
 - Review Allowances
 - Review Unit Prices
 - Review Alternates
- Project is IN sales tax exempt.

DRAWINGS & SPECIFICATIONS

- 1 set of drawings
- 1 set of specifications
- Addenda will be distributed as needed.
- Eastern Engineering, BX Ohio, Construct Connect and Dodge Room Plan Rooms
- Send email to leasterday@kinderandsons.com for a link to the documents.

ALTERNATES

- Will be reviewed in Scope of Work

SAFETY

- MKS safety director will conduct routine site visits.



BIDS DUE

WHEN

- APRIL 25, 2024 AT 2 P.M. LOCAL

WHERE

- See Section 00 11 16 for the location to send your bid forms.

INCLUDE WITH BID

- See Section 00 41 13 for all forms required
- State Bid Form 96
- Financial Statement
- 5% Bid Bond included on AIA Form 310 or Certified check payable to owner
- Include all allowances from 01 21 00 in your bid. A bid form for allowances will be issued with Addendum 1.
- Unit price bid form from 01 22 00
- Alternate bid form in 00 41 13
- Performance and Payment Bond included in Base Bid

QUESTIONS AND CLARIFICATIONS

- SEND TO leasterday@kinderandsons.com
- WHEN SUBMITTING QUESTIONS, BE SURE TO INDICATE SPECIFIC DRAWING, SPECIFICATION SECTION, ETC. WITH YOUR QUESTION.

ADDENDA/RFI

ADDENDUM #1 – WILL BE ISSUED APRIL 15, 2024

ADDENDUM #2 – CUTOFF FOR QUESTIONS IS APRIL 19TH AT THE END OF THE DAY.

ADDENDUM #2 – WILL BE ISSUED APRIL 22, 2024

WALK THROUGH OF EXISTING – AFTER THIS MEETING

QUESTIONS

Q How will warranty be handled if there are multiple contractors?

A Areas of work are separated by roof height and there should be no confusion on warranties.

Q Who controls the allowances?

A SPCSC controls the allowances. Contracts are between the owner and the prime contractor. MKS will advise and write change orders for the owner's review to release allowance funds.

Q How does a prime contractor handle bidding unit prices?

A Prime contractor is to include unit prices on unit price bid form (found in section 01 22 00) and submit in bid envelope. If a unit price changes for location (Base Bid 01, Base Bid 02 or Base Bid 03), include a unit price bid for each Base Bid.



Q How does the prime contractor bid Alternate 13?

A MKS will revise bid form to include Alternate 13A, 13B and 13C for each Base Bid.

Q How do Prime contractors handle rutted grass, broken sidewalks, parking lots?

A Any damage created by the Prime contractor is to be repaired by the Prime contractor. MKS suggests taking several pictures, before and after.

Q Can additional dumpsters be placed to limit travel across the roof with debris carts?

A MKS revised the logistics plan and will be flexible on locations of dumpsters except at Central ES.

THANK YOU



SPCSC – South Putnam HS & Central ES Roofing Replacement

Pre Bid Meeting Sign In Sheet

DATE: 04/11/2024

TIME: 11:00 am

LOCATION: HS Meeting Room

NAME	COMPANY	EMAIL
Larry Easterday	MKS	leasterday@kinderandsons.com
David Roan	Fanning Howey	droan@fhai.com
Dr Corey Smith	SPCSC	
Tona Gardner	SPCSC	
ANDY GARDNER	FH	AGARDNER@FHAI.COM
Brendan Scales	B.A.I	bscales@buildingassociates.com
Shawn Zgaj	Buildingassociates	szgaj@buildingassociates.com
JULIE SMILEY	Foster	julie@fostercontracting.net
Kyle Clemens	B&L	kclemens@Tectaamerica.com
Mike Russell	Skyline Roofing	mrussell@skylineroofing.net
Robert Cleere	Technical Assurance	rcleere@technicalassurance.com
Eric Summers	Technical Assurance	esummers@technicalassurance.com
CHRIS BUCK	AMOS EXTERIORS	CBUCK@AMOSEXTERIORS.COM
Cliff Whitman	JORDAN SCOTT CONTRACTING	cliff@jordan-scott-contracting.com
Scott Price	AAA RFG	sprice@aaa-roofing-company.com
Mike Brand	ARP	mbrand@arpinc.com
Tom Coyle	ARP	tcoyle@arpinc.com
Zach Winnik	SPG Roofing	zachw@spgroof.com