

March 25, 2024

Addendum 2

TO: All Prospective Offerors

FROM: Scott Bachtell, Supervisor of Purchasing

REF: RFQ 2024-06 Roof Replacement at Smithsburg Middle School

REVISED BID DUE DATE: by April 2, 2024, at 11:00 AM

Please note Washington County Public Schools is closed Friday, March 29 and Monday, April 1

A. GENERAL/CLARIFICATION

- 2.1 Pre-Bid Meeting Minutes, dated March 14, 2024. (Attachment No. 2.1 of this Addendum).
- 2.2 Walk pads: Pads are only needed at roof hatches, at doors, at top and bottom of ladders, and around mechanical equipment at Roof Areas A and D.
- 2.3 Revised Form of Proposal to provide area for Notary Stamp. (Attachment No. 2.4 of this Addendum).

B. CONTRACTOR QUESTIONS

- 2.4 **Question:** Summary of Work 01 01 00-5, Item #8: Note states there is existing slope and maintain minimum 1/4" per foot slope. Item C states to provide 1/4" tapered insulation. Roof and Deck Insulation 07 22 20-6, Item 3.4.B.1: Install tapered polyisocyanurate with ¼" per foot slope except where 1/8" per foot slope is shown. Roof B is the only area showing a 1/8" slope. Does Roof B get a 1/8" tapered insulation and all the other areas receiving a ¼" slope?
Response: For Roof Area 'B' with the existing 1/8" slope in the existing roof deck – Contractor has option to use 1/8" or 1/4" tapered insulation thickness. The minimum roof slope shall be 1/4" at completion of project.
- 2.5 **Question:** Summary of Work 01 01 00-6 Item #17: Please provide a detail on the rework/raising of the through wall flashing.
Response: This occurs only at Roof Area 'A'. See Detail 9/A1.3.
(see revised Specification Section 01 01 00 in section 2.14B below)
- 2.6 **Question:** Roof and Deck Insulation 07 22 20 5, 3.4A: *Are all roof sections to have a minimum thickness of 2" at the drains or may the minimum thickness at the drains be adjusted in meeting the average minimum R Value of R=30 per area?*
Response: Delete minimum 2" thickness. However, there shall be no less than 1" of insulation at

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drains. (see revised Specification Section 07 22 20, 3.4.A.1A in Item 2.15 part B below).

2.7 **Question:** Thermoplastic Membrane Roofing 07 54 10-4, Item 1.11B4 Warranty: *May the Annual Manufacturer Inspection and Preventive Maintenance* requirements be deleted.

Response: Yes, Delete. (see revised Specification Section 07 54 10 in Item 2.16 below).

2.8 **Question:** Please clarify if the canopy roof is in the base bid or an alternate bid. Bid sheet does not have any alternate bids but the drawings show Alternate #3 for the canopy.

Response: There are NO Alternates, the canopy shall be part of the Base Bid. Delete references to alternative on sheet A1.2 details 3, 4, and 6. (see revisions to Drawing A1.2 in Item 2.18 below).

2.9 **Question:** Roof Plan A1.0 - Single Ply Roofing Note 26 Walk Pads and Summary of Work No. 14: Would it be possible to get a roof plan on the locations of the wall pads?

Response: No. Provide at top and bottom of the access ladders, at hatches, doors, and around all mechanical equipment in Roof Areas A and D.

2.10 **Question:** Are there crickets between the scupper boxes on the canopy roof?

Response: Yes, provide to direct drainage to the scuppers/drains at canopy.

2.11 **Question:** Summary of Work 01 01 00-4, 7.a: Please verify that a Self-Adhered VapAir Seal 725TR base sheet adhered directly to the tectum deck after priming the surface is an acceptable vapor barrier in lieu of a 2-ply (slip sheet and base sheet) vapor barrier.

Response: Yes, as long as roofing system manufacturer has approved for use in the system. (see revised Specification Section 01 01 00, in Item 2.14 below).

2.12 **Question:** Section 07 54 10.2.02.A.5: Confirm that IKO is an acceptable TPO system manufacturer. Product data attached.

Response: The use of a 60 mil IKO TPO membrane is acceptable.

2.13 **Question:** Section 07 54 10.1.11.B.4: Can the Roof Manufacturer's Inspections and Preventive Maintenance work for years 2, 5, 10, 15 and 20 be deleted?

Response: See Item 2.7.

C. SPECIFICATION REVISIONS

2.14 SECTION 01 01 00 – SUMMARY OF WORK; REVISE as follows:

A. Article 1.05.C.7; ADD the following paragraph

“With the manufacturers approval, the self-adhered vapor barrier can be used in lieu of the nailed 2-ply membrane.”

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- B. Article 1.05.C.17; NOTE this only occurs in Roof Area 'A'.
 - C. Article 1.05.C.30: "30. At Roof Area A – Area with 4 RTU's – this roof area shall be refurbished in lieu of replacement. Work shall include removing the loose aggregate, coating roof with a leveling coat, then apply a Fluid-applied Membrane roof system per Section 07 54 51."

2.15 SECTION 07 22 20 – ROOF AND DECK INSULATION; REVISE as follows;

- A. Article 2.3.A.3; DELETE the following: "... x minimum 2-inch thickness"
- B. Article 3.4.A.1.a; ADD the following sentence "Minimum 1" insulation at drains with remaining base layers at 2", 4 ft beyond drain sumps."

2.16 SECTION 07 54 10 – THERMOPLASTIC MEMBRANE ROOFING;

- A. Article 1.11; DELETE Paragraph B.4 in its entirety.
- B. Article 2.1.A.6. ADD Paragraph 6 as follows: "6. IKO"

2.17 SECTION 07 54 51 – FLUID-APPLIED MEMBRANE ROOFING AND FLASHINGS; DELETE this Section in its entirety and INSERT the revised Section 07 54 51 included in this addendum per attachment no.1, dated March 22, 2024.

D. DRAWING UPDATES

2.18 DRAWING A1.2 – ENLARGED ROOF PLANS; REVISE as follows:

- A. Detail 3/A1.3; DELETE reference to "per Alt #1" at note for metal mansard.
- B. Detail 4/A1.3; REVISE as follows:
 - 1) DELETE reference to "Alternate #3" in detail title.
 - 2) Indicate crickets to direct drainage to the scupper boxes.
- C. Detail 6/A1.3; DELETE reference to "Alternate #3" in detail title.

2.19 DRAWING A1.1 – ROOF PLAN; REVISE as follows: At Roof Area A – Note the following: "Remove existing gravel, clean roof surface, provide a leveling coat, install fluid-applied membrane coating with base coat, embedded mesh and top coat. Provide thermal scan of the area prior to work, replace any wet insulation and patch with BUR to match existing roof system." See Sketch SKA1.1-01 per Attachment 2.3 include in this addendum for location.

Attachments:

- No. 2.1 Pre-Bid Meeting Minutes – Dated March 14, 2024 (3 pages)
- No. 2.2 Revised Section 07 54 51 – Fluid-Applied Membrane Roofing and Flashing, Dated March 20, 2024 (11 pages)
- No. 2.3 Sketch SKA1.1-01 – Detail – Partial Roof Plan – Roof Area A, Dated March 22, 2024 (1 page)
- No. 2.4 Revised Form of Proposal (5 pages)

End of Addendum Narrative



PRE-BID MEETING

March 14, 2024

Re: WCPS: Smithsburg Middle School
Roof Replacement
PSC #: 21.008.23SR
WCPS Bid No. 2024-06

File: 22055 / DP-15

Date: March 14, 2024

473 NORTH POTOMAC STREET
HAGERSTOWN, MARYLAND 21740
301.733.5600
www.bfmarchitects.com

BRENT A. FEIGHT, AIA
PRESIDENT
AARON K. HOUSE, AIA
VICE PRESIDENT
NORMAN E. MORIN, JR., R.A
PRINCIPAL

ATTENDANCE:

Name	Representing	Telephone No.	E-Mail
Scott Bachtell	WCPS – Supervisor of Purchasing	301-766-2842	BachtSco@wcps.k12.md.us
David Campbell	WCPS	301-766-2864	campdav@wcps.k12.md.us
David Smith	Black Stone Roofing	540-931-5266	dave@blackstoneroofing.com
Chad Johnson	Citiroof	301-784-3293	chad@citiroof.com
Fitzroy Marshall	First Line	347-781-9408	mike@firstlinegc.com
John Kakonikos	Island Contracting	347-287-7982	jkakonikos@islandcontractinginc.net
Jon Salguero	Patuxent Roofing	301-575-4859	jsalguero@patuxentroofing.com
Sha Johnson	RCS Plumbing	443-392-0317	sha.rcsplumbing@gmail.com
Anthony Granges	St. Mary’s Roofing	240-538-2207	mike@stmarysroofing.com
Kelsey Mohamed	Soltera Roofing	301-412-5569	info@solterorg.com
Eric Wiegand	Tecta America	443-677-3357	ewiegand@tectaamerica.com
Michael Gehr	BFM Architects	301-733-5600	mgehr2@bfmarchitects.com

PRE-BID COMMENTS:

- PB.01 Michael Gehr, BFM, opened the meeting and introduced team members.
- PB.02 For bid inquiries, contact Scott Bachtell, Supervisor of Purchasing at 301-766-2842 or email BachtSco@wcps.k12.md.us and copy David Campbell via email Campbdav@wcps.k12.md.us. Check website for documents and addendum information. Note: Specs are on website, drawings must be requested and google link will be sent to bidder. The link will provide access to all documents including addendum as they are posted. Bidder must request the link.
- PB.03 Bids are due Thursday, March 28, 2024, at 11:00 AM at WCPS Center for Education Services. WCPS is looking to have Board approval at their April 2024 meeting. Electronic submission of bids is NOT permitted and will not be accepted. Bids must be formally submitted to the BOE office. Please submit Proposal Form, Bid Affidavit, and Bid Bond as part of your bid packet. Prequalification is required, this process can take a while for approval. Bidders need to verify they are prequalified. Refer to Page 11 of the Invitation to Bidders, the renewal is a little bit shorter process.
- PB.04 The work shall be substantially complete work this summer by August 16, 2024.
- PB.05 Deadline for questions about this Bid Solicitation is March 20, 2024 @ 1:00 PM. Email all questions to both D. Campbell and S. Bachtell. All questions will be answered via addendum only. All questions shall be in writing, including those from today.
- PB.06 The project is state funded; therefore, Prevailing Wage Rates are required.

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WCPS: Smithsburg Middle School

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- PB.07 This is an MBE project. The goal is 17%, there are no sub goals. Please pay attention to Section #2 of MBE form. Please provide Attachment A and B with your bid packet completely filled out with items totaled correctly or bid will be considered non-responsive.
- PB.08 Provide Bid Security Bond in the amount of 5% of the total cost of the bid with the bid.
- PB.09 Provide insurance certificates per the stated contract requirements upon award. Performance and Payment Bond for 100% of contract value will be required within ten (10) days of Notice of Award of the Contract.
- PB.10 Liquidated Damages in the amount of \$500.00 per calendar day will be charged if work extends beyond the contracted completion date. The project shall be substantially complete by August 16, 2024, with final completion by September 13, 2024 (4 weeks). Any work after August 16, 2024, will need to be done after normal school operating hours.
- PB.11 WCPS will apply for the general building permit. The Bidder / Contactor will need to apply for any, and all trades permits needed.
- PB.12 Construction can start on or about June 16, 2024, after school ends for the summer, which is currently set for June 11, 2024, for students, June 12, 2024, for teachers. Staging ahead of time can be requested, but no formal response will be provided until a staging diagram is provided, and safety provisions are vetted to determine the impact on daily and special activities of the facility.
- PB.13 WCPS has summer hours working Monday to Thursday 6:00 AM to 4:30 PM at this facility. If the Contractor needs to access the building interior on Fridays or the weekends, please coordinate with WCPS to get access. There is a fee of \$25/hr. with a 4 hr min.
- PB.14 It is not anticipated to have summer programs at the facility, but with the high school next door there will be activities on the site.
- PB.15 Project Description:
a. This project will be replacing all the BUR roof areas of approx. 99,147 sf. Base Bid condition is to remove all roofing to the supporting roof deck. Install new vapor barrier. Install new insulation, cover board, and single ply membrane including trench drain. Roof edge metal work to be replaced to match the existing color at low slope roof areas. Replace all roof drains. Note: Some drains may be relocated to align with tapered plan. Add roof access ladders and install new expansion joints. Replace existing roof hatches. The existing mansard metal roof system to be replaced. there is some existing slope in the Gym roof structure, provide minimum 1/8" tapered, other locations to get 1/4" per foot slope tapered system. Provide non-penetrating guardrail systems as required where noted. Wall panel to be replaced.
b. There are 4-Unit Costs, 0 Alternates, and no Allowances at this time.
- PB.16 If a Bidder wishes to re-visit the site please contact David Campbell, provide at least 24 hr. notice to schedule with the custodial staff. Visits would need to occur after 3:30 PM or before 8:00 AM.
- PB.17 This is a school site so Contractors will be required to provide documentation of background checks of the employees that will be working on site.
- PB.18 All bidders need to be pre-qualified, which is good for a 3-year period. Pre-Qualifications can take days to months, contact Bev Bergen at WCPS Purchasing Department.
- PB.19 Staff will be in the building during the week including office admin and custodians. Coordinate with the summer cleaning activities as required.
- PB.20 WCPS is not aware of any hazardous materials at this time that would affect the roof work.

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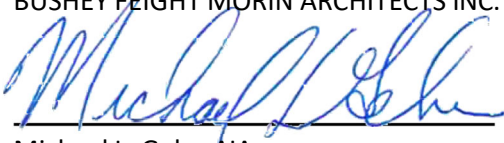
PB.21 It is WCPS' intention to have manufacturers roof inspections at 50% and 100% at minimum.

PC.22 Walked roof area.

The above documents our understanding of the items discussed, and decisions reached at the subject meeting. Unless we are advised of comments or corrections within five (5) days of the issue date, we shall conclude that these minutes are accurate and complete.

Sincerely,

BUSHEY FEIGHT MORIN ARCHITECTS INC.



Michael L. Gehr, AIA

MLG/wlt

PART 1 GENERAL

1.1 SUMMARY

- A. This Section includes fluid-applied polyurethane coating at Roof Area A or as noted on drawings.
 - 1. Roof membrane coating preparation.
 - 2. Application of reinforced fluid-applied roof membrane flashings.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Related Requirements:
 - 1. Section 01 01 00 Summary of Work
 - 2. Section 05 50 00 Metal Fabrication
 - 3. Section 06 11 40 Wood Blocking and Curbing
 - 4. Section 07 22 20 Roof and Deck Insulation
 - 5. Section 07 54 10 Thermoplastic Membrane Roofing
 - 6. Section 07 62 00 Sheet Metal Flashing and Trim
 - 7. Section 07 90 00 Joint Sealers
 - 8. Section 09 90 00 Paints and Coatings
 - 9. Division 22 - Plumbing
 - 10. Division 23 - HVAC

1.3 PERFORMANCE REQUIREMENTS

- A. General: Provide roofing membrane and base flashings that remain watertight; do not permit the passage of water; and resist specified uplift pressures, thermally induced movement, and exposure to weather without failure.
- B. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing manufacturer based on testing and field experience.
- C. FM Approvals Listing: Provide fluid-applied roofing, base flashings, and component materials that comply with requirements in FM Approvals 4450 and FM Approvals 4470 as part of a fluid-applied hybrid roofing system, and that are listed in FM Approvals' "RoofNav" for Class 1 or noncombustible construction, as applicable. Identify materials with FM Approvals markings.
- D. Flashings: Comply with requirements of 07 62 00 Sheet Metal Flashings and Trim. Provide base flashings, perimeter flashings, detail flashings and component materials that comply with requirements and recommendations of the following:
 - 1. FMG 1-49 Loss Prevention Data Sheet for Perimeter Flashings.
 - 2. FMG 1-29 Loss Prevention Data Sheet for Above Deck Roof Components.
 - 3. NRCA Roofing Manual (Sixth Edition) for construction details and recommendations.
 - 4. SMACNA Architectural Sheet Metal Manual (Seventh Edition) for construction details.

- E. Exterior Fire-Test Exposure: ASTM E 108, Class A; for application and roof slopes indicated, as determined by testing identical membrane roofing materials by a qualified testing agency. Materials shall be identified with appropriate markings of applicable testing agency.
- F. Fire-Resistance Ratings: Where indicated, provide fire-resistance-rated roof assemblies identical to those of assemblies tested for fire resistance per ASTM E 119 by a qualified testing agency. Identify products with appropriate markings from an applicable testing agency.
- G. Solar Reflectance Index: Not less than 78 when calculated according to ASTM E 1980 based on testing identical products by a qualified testing agency.

1.4 DEFINITIONS

- A. Roofing Terminology: Refer to ASTM D 1079 and glossary in NRCA's "The NRCA Roofing and Waterproofing Manual" for definition of terms related to roofing work in this Section.
- B. Roofing Coating Preparation: Existing roofing that is to remain and be prepared to accept restorative coating application.
- C. Patching: Removal of a portion of existing membrane roofing system from deck or removal of selected components and accessories from existing membrane roofing system and replacement with similar materials.
- D. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and reinstalled.
- E. Existing to Remain: Existing items of construction that are not indicated to be removed.

1.5 MATERIALS OWNERSHIP

- A. Demolished materials shall become Contractor's property and shall be removed from Project site.

1.6 SUBMITTALS

- A. Product Data:
 1. For each type of product specified
 2. Contractor's Product Certificate: Submit notarized certificate, indicating products intended for Work of this Section, including product names and numbers and manufacturers' names, with statement indicating that products to be provided meet the requirements of the Contract Documents. Provide Factory Mutual Global assembly compliance and UL listing.
- B. Shop Drawings: Include details and attachments to other work for Base flashings and terminations indicating details meeting requirements of NRCA and FMG required by this Section.
- C. Samples for Verification: 8-by-10-inch square of fluid-applied hybrid roofing materials, including base sheet, and flashing sheet, of color specified.
- D. Product Test Reports: Based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency, for components of roofing system.

- E. Warranties: Unexecuted sample copies of special warranties. And upon completion executed copies of approved warranty forms
- F. Maintenance Data: To include in maintenance manuals.
- G. Inspection Reports: Provide for each inspection. Include weather conditions, description of work performed, tests performed, defective work observed, and corrective actions required and carried out. Submit final copy at final completion.

1.7 QUALITY ASSURANCE

- A. Installer Qualifications: An employer of workers trained and certified by manufacturer, including a full-time on-site supervisor with a minimum of three years' experience installing products comparable to those specified, able to communicate verbally with Contractor, Architect, and employees, and the following:
 - 1. Qualified by the manufacturer to install manufacturer's product and furnish warranty of type specified.
- B. Manufacturer Qualifications: Approved manufacturer listed in this Section with UL listed and FM Global approved products, with minimum five years' experience in manufacture of specified products in successful use in similar applications.
- C. Roofing Inspector Qualifications: A technical representative of manufacturer not engaged in the sale of products and experienced in the installation and maintenance of the specified roofing system, qualified to perform roofing observation and inspection specified in Field Quality Control Article, to determine Installer's compliance with the requirements of this Project, and approved by the manufacturer to issue warranty certification. The Roofing Inspector shall be an authorized full-time technical employee of the manufacturer.
- D. Roofing Pre-installation Conference: Conduct conference at Project site to comply with requirements of this system and review methods and procedures related to roofing system.
 - 1. Meet with Owner; roofing materials manufacturer's representative; roofing Installer including project manager and foreman; and installers whose work interfaces with or affects roofing including installers of roof accessories and roof-mounted equipment requiring removal and replacement as part of the Work.
 - 2. Review methods and procedures related to preparation, including membrane roofing system manufacturer's written instructions.
 - 3. Review temporary protection requirements for existing roofing system that is to remain, during and after installation.
 - 4. Review base flashings, special roofing details, drainage, penetrations, equipment curbs, and condition of other construction that will affect coating.
 - 5. Review HVAC shutdown and sealing of air intakes.
 - 6. Review shutdown of fire-suppression, -protection, and -alarm and -detection systems.
 - 7. Review governing regulations and requirements for insurance and certificates if applicable.
 - 8. Review existing conditions that may require notification of Owner before proceeding.

1.8 PROJECT CONDITIONS

- A. Owner will occupy portions of building immediately below roofing area. Conduct roofing so Owner's operations will not be disrupted. Provide Owner with not less than 72 hours' notice of activities that may affect Owner's operations.
- B. Protect building, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from roofing operations.
- C. Weather Limitations: Proceed with coating preparation work only when existing and forecasted weather conditions permit Work to proceed without water entering into existing roofing system or building.
 - 1. Store all materials prior to application at temperatures between 60 and 90 deg. F.
 - 2. Apply coatings within range of ambient and substrate temperatures recommended by manufacturer. Do not apply materials when air temperature is below 50 or above 110 deg. F.
 - 3. Do not apply roofing in snow, rain, fog, or mist.

1.9 WARRANTY

- A. Manufacturer's Warranty: Written warranty in which Manufacturer agrees to repair roof installations that fail due to defects in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Membrane failures including rupturing, cracking, or puncturing due to a manufacturing or installation defect.
 - b. Deterioration of membranes, coatings, metals, metal finishes, and other associated materials beyond normal weathering.
 - 2. Limit of Warranty Coverage: Not to exceed original purchase price of manufacturer's materials, except that manufacturer may elect to apply the limit amount toward the purchase of replacement application within the first 5 years following completion of roofing work.
 - 3. Qualified Installer Warranty Requirement: Installer must meet requirements of Quality Assurance Article.
 - 4. Installation Inspection Warranty Requirement: By Roofing Inspector in accordance with requirements of Article 3.9 below.
 - 5. Warranty Period: 20 years from date of completion of roofing work.
- B. Installer's Warranty: Submit roofing Installer's warranty covering the Work of this Section and related Sections indicated above, including all components of the roofing system such as roofing membrane, base flashing, roof insulation, fasteners, cover boards, substrate boards, vapor retarders, and walkway products for the following warranty period: 2 years from date of Substantial Completion.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. A fluid applied membrane roofing and flashing system must be compatible with and approved by the roofing system manufacturers requirements.
- B. The fluid applied membrane flashing system shall be compatible with and follow requirements based on Tremco's Product: AlphaGrade System as noted below.

2.2 MATERIALS

- A. General: Roofing materials recommended by roofing system manufacturer for intended use and compatible with components of existing membrane roofing system. (Maintain membrane color.)
- B. Temporary Roofing Materials: Selection of materials and design of temporary roofing is responsibility of Contractor.
- C. Adhesives: Provide adhesive and sealant materials recommended by roofing manufacturer for intended use and compatible with built-up roofing.

2.3 ROOF MEMBRANE PLY

- A. Non-perforated, asphalt-coated, polyester/fiberglass/polyester reinforced sheet, dusted with fine mineral surfacing on both sides and meets the requirements of ASTM D 4601, Type II tri-laminate ply of polyester/fiberglass/polyester. Sheet must be a waterproof sheet.
 - 1. One (1) plies.
 - 2. Properties:

a. Weight	31 lbs per SQ	ASTM D 228-90a (1996)
b. Thickness	51 mils	ASTM D 146-97
c. Tensile Strength	303 lbf/in MD	ASTM D 5147 (@ 77°F)
	287 lbf/in XMD	
d. Elongation	5.9 % lbf/in MD	ASTM D 5147 (@ 77°F)
	6.6 % lbf/in XMD	
e. Asphalt	10.0 lb/SQ	ASTM D 228-90a
f. Tear Strength	480 lbf MD	ASTM D 5147 (@ 77°F)
	458 lbf XMD	

2.4 ROOF INSULATION & COVER BOARD

- A. Gypsum-Based Cover Board: Per Section 07 22 20.
- B. Insulation: Preformed roof insulation boards manufactured or approved by roofing system manufacturer, selected from manufacturer's standard sizes suitable for application, of thickness to match the existing conditions where wet insulation was removed.

2.5 FLUID-APPLIED MEMBRANE ROOFING SYSTEM

- A. Polyurethane Elastomeric Fluid-Applied System: Three-component reinforced fluid-applied roofing membrane formulated for application over prepared existing roofing substrate.
- B. Leveling Coat : Two-component, bio-based polyurethane leveling coat for Gravel Surfaced BUR.
 - 1. Dynamic Puncture Resistance, ASTM D5635, 32.5J
 - 2. Elongation, ASTM D412, 89%
 - 3. Low Temperature Crack Bridging, ASTM C836, Pass
 - 4. Static Puncture Resistance, ASTM 5602, 20 lbf.
 - 5. Tensile Strength, ASTM D412, 122 psi
 - 6. Water Absorption, ASTM D95, 0.0%
 - 7. Volume Solids, ASTM D2697, 100%

8. Weight Solids, ASTM D1644, 100%
- C. Polyurethane Roof Coating Base Coat: Two-component polyurethane base coating formulated for direct application and for use with fiber reinforcement in conjunction with a compatible top coat.
1. Dynamic Puncture Resistance, ASTM D5635, 32.5J
 2. Elongation, ASTM D412, 159.8%
 3. Low Temperature Crack Bridging, ASTM C836, Pass
 4. Static Puncture Resistance, ASTM 5602, 20 lbf.
 5. Tensile Strength, ASTM D412, 193 psi
 6. Water Absorption, ASTM D95, 1.0%
 7. Percent solids, by volume, ASTM D 2697: 100%
 8. Percent solids, by weight, ASTM D 1644: 100%
- D. Polyurethane Roof Coating Top Coat: Two-component bio-based polyurethane roof top coating formulated for direct application over compatible reinforced base coat.
1. Dynamic Puncture Resistance, ASTM D5635, 32.5J
 2. Elongation, ASTM D412, 130%
 3. Low Temperature Crack Bridging, ASTM C836, Pass
 4. Static Puncture Resistance, ASTM 5602, 20 lbf.
 5. Tensile Strength, ASTM D412, 274 psi
 6. Water Absorption, ASTM D95, 1.0%
 7. Percent solids, by volume, ASTM D 2697: 100%
 8. Percent solids, by weight, ASTM D 1644: 100%
- E. Polyester Reinforcing Fabric: PermaFab - 100 percent stitch-bonded mildew-resistant polyester fabric intended for reinforcement of compatible fluid-applied membranes and flashings.
1. Tensile Strength, ASTM D 5034. MD 55 lbs, XMD 60 lbs
 2. Elongation, ASTM D 5034. Not less than 60 percent. MD 25%, XMD 100%
 3. Tear Strength, ASTM D 5587. MD 20 lbs, XMD 20 lbs
 4. Thickness, ASTM D1777, .018 in
 5. Ball Burst, ASTM D3787, 90 lbs

2.6 AUXILIARY ROOFING MEMBRANE MATERIALS

- A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with existing roofing system and fluid-applied roofing system.
- B. Structural Concrete/Masonry Primer: Two-component, 100 percent solids, epoxy penetrating primer for concrete deck surfaces.
- C. Metal Surface Primer: Single-component, water-based primer to promote adhesion of base coat to metal surfaces.
- D. Asphaltic Surfaces Primer: Single-component, multi-substrate primer to promote adhesion of base coat to surfaces recommended by manufacturer.
- E. Single-Ply Membrane Primer: Single-component primer designed to promote adhesion of urethane to cured urethane products to existing membrane surfaces. Equal to GeoGuard Primer.
- F. Joint Sealant: Single component, high solids, moisture curing polyurethane sealant recommended by coating manufacturer.

- G. Miscellaneous Accessories: Provide miscellaneous accessories recommended by roofing system manufacturer.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with the following requirements and other conditions affecting performance of fluid-applied flashings and new roofing systems:
 - 1. Prepare written report listing detrimental conditions to performance of the flashing system.
 - 2. Verify compatibility with and suitability of substrates.
 - 3. Verify that substrates are visibly dry and free of moisture.
 - 4. Verify that roofing membrane surfaces have adequately aged to enable proper bond with base coat.
 - 5. Verify that roofing membrane is free of blisters, splits, open laps, indications of shrinkage, and puncture damage or other indications of impending roof system failure.
 - 6. Application of fluid-applied flashings indicates acceptance of the surfaces and conditions.

3.2 PREPARATION

- A. Remove loose aggregate from roof surface.
- B. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing installation according to roofing manufacturer's written instructions. Remove sharp projections.
- C. Provide thermal scan to determine if there are areas of wet or saturated insulation.
- D. Remove wet and saturated existing roofing areas, infill with new dry materials to rebuild the existing system per Sections 07 22 20 and this section.
- E. Protect existing roofing system that is indicated to remain, and adjacent portions of building and building equipment.
 - 1. Comply with warranty requirements of existing roof membrane manufacturer.
 - 2. Mask surfaces to be protected. Seal joints subject to infiltration by coating materials.
 - 3. Limit traffic and material storage to areas of existing roofing membrane that have been protected.
 - 4. Maintain temporary protection and leave in place until replacement roofing has been completed.
- F. Shut down air intake equipment in the vicinity of the Work in coordination with the Owner. Cover air intake louvers before proceeding with re-coating work that could affect indoor air quality or activate smoke detectors in the ductwork.
 - 1. Verify that rooftop utilities and service piping affected by the Work have been shut off before commencing Work.
- G. Maintain roof drains in functioning condition to ensure roof drainage at end of each workday. Prevent debris from entering or blocking roof drains and conductors. Use

roof-drain plugs specifically designed for this purpose. Remove roof-drain plugs at end of each workday, when no work is taking place, or when rain is forecast.

1. Do not permit water to enter into or under existing membrane roofing system components that are to remain.

3.3 ROOF REPAIR

A. Insulation & Cover Board Installation

1. Install insulation board in accordance with Section 07 22 20.
2. Apply one (1) layer of ¼” Dens Deck roof board adhered to insulation board.
3. Set in insulation adhesive.

B. Membrane Repair Installation

1. Install membrane plies starting at low point of roofing. Align base sheet without stretching. Shingle side laps of base a minimum of 4 inches. Shingle in direction to shed water. Extend plies over edges and terminate above cants.
 - a. Embed plies in solvent free cold-applied membrane adhesive applied at rate required by roofing manufacturer, to form a uniform membrane without ply sheets touching.
2. Extend base flashing up walls or parapets a minimum of 8 inches above roofing and 6 inches onto field of roofing.
3. Install stripping according to roofing manufacturer's written instructions where metal flanges and edgings are set on roofing.
 - a. Flashing Sheet Stripping: Install flashing sheet stripping in specified cold adhesive and extend onto roofing membrane.

C. Membrane Surface Preparation:

1. Remove blisters, ridges, buckles, roofing membrane fastener buttons projecting above the membrane, and other substrate irregularities from existing roofing membrane that would inhibit application of uniform, waterproof coating.
2. Repair membrane at locations where irregularities have been removed.
3. Broom clean existing substrate.
4. Substrate Cleaning: Clean substrate of contaminants such as dirt, debris, oil, and grease that can affect adhesion of coating by power washing at maximum 2,000 psi. Allow to dry thoroughly.

3.4 FLUID-APPLIED MEMBRANE ROOFING INSTALLATION, GENERAL

A. Install roofing membrane according to roofing manufacturer's written instructions.

1. Commence installation of roofing in presence of manufacturer's technical personnel.

B. Coordinate installation of roofing so insulation and other components of roofing not permanently exposed are not subjected to precipitation or left uncovered at the end of the workday or when rain is forecast.

1. Provide tie-offs at end of each day's work to cover exposed roofing sheets and insulation with a course of coated felt set in roofing cement with joints and edges sealed.
2. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing.
3. Remove and discard temporary seals before beginning work on adjoining roofing.

- C. Substrate-Joint Penetrations: Prevent fluid-applied materials and adhesives from penetrating substrate joints, entering building, or damaging built-up roofing components or adjacent building construction.
- D. Ensure deck is in sound condition, free of grease, oils, coatings, dust, curing compounds and other contaminants.
 - 1. Remove oil, grease, and asphalt residue with trisodium phosphate. Use steam for oil contaminated surfaces in conjunction with a strong emulsifying detergent. Rinse thoroughly.
- E. Flashing and Detail Preparation: Repair existing / install new flashings, gravel stops, copings, and other roof-related sheet metal and trim elements. Reseal joints, replace loose or missing fasteners, and replace components where required to leave in a watertight condition.
 - 1. Do not damage metal counterflashings that are to remain. Replace metal counterflashings damaged during removal with counterflashings of same metal, weight or thickness, and finish.
 - 2. Roof Drains: Remove drain strainer and clamping ring. Grind metal surfaces down to clean, bare, metal.
 - 3. Broom clean existing substrate.
 - 4. Substrate Cleaning: Clean substrate of contaminants such as dirt, debris, oil, and grease that can affect adhesion of coating by power washing at maximum 2,000 psi. Allow to dry thoroughly.
 - 5. Verify that existing substrate is dry before proceeding with application of coating. Spot check substrates with an electrical capacitance moisture-detection meter.
 - 6. Verify adhesion of new products.

3.5 FLUID-APPLIED LEVELING COAT

- A. Repair any flashings, defects, breaks, and other weak areas with base and cap sheet plies by using adhesives per manufacturer recommendations.
- B. Apply leveling coat in accordance with manufacturers installation instructions.
- C. Mix the 2-part components in accordance with manufacturer's instructions.

3.6 FLUID-APPLIED MEMBRANE APPLICATION

- A. Base Coat: Apply coating base coat to asphaltic base sheet surfaces in accordance with manufacturer's written instructions.
 - 1. Apply base coat on prepared and primed surfaces and spread coating evenly.
 - 2. Back roll to achieve minimum wet mil coating thickness of 48 mils unless otherwise recommended by manufacturer; verify thickness of base coat as work progresses.
 - 3. Embed fabric reinforcement into wet base coat. Lap adjacent fabric reinforcement minimum 3 inches along edges and 6 inches at end laps.
 - 4. Roll surface of fabric reinforcing to completely embed and saturate fabric. Leave finished base coat with fabric free of pin holes, voids, or openings.
 - 5. Allow base coat to cure prior to application of topcoat.
 - 6. Following curing of base coat and prior to application of topcoat, sand raised or exposed edges of fiberglass reinforcement.

- B. Topcoat: Apply top coat uniformly in a complete continuous installation to flashings and field of roof.
 - 1. Prime base coat prior to application of topcoat if top coat is not applied within 72 hours of the base coat application, using manufacturer's recommended primer.
 - 2. Apply topcoat to flashings extending coating up vertical surfaces and out onto horizontal surfaces (min. 4 inches). Install topcoat over field base coat and spread coating evenly.
 - 3. Back roll to achieve wet mil thickness of 32 mils unless otherwise recommended by manufacturer.
 - 4. Avoid foot traffic on new fluid-applied membrane for a minimum of 24 hours.

3.7 FLUID-APPLIED FLASHING APPLICATION

- A. Fluid-Applied Flashing and Detail Base Coat Application: Complete base coat and fabric reinforcement at parapets, curbs, penetrations, and drains prior to application of field of fluid-applied membrane. Apply base coat in accordance with manufacturer's written instructions.
 - 1. Extend coating minimum of 8 inches up vertical surfaces and 4 inches onto horizontal surfaces.
 - 2. Back roll to achieve minimum wet mil coating thickness of 48 mils unless otherwise recommended by manufacturer; verify thickness of base coat as work progresses.
 - 3. Embed fabric reinforcement into wet base coat. Lap adjacent flashing pieces of fabric minimum 3 inches along edges and 6 inches at end laps.
 - 4. Roll surface of fabric reinforcing to completely embed and saturate fabric. Leave finished base coat with fabric free of pin holes, voids, or openings.
 - 5. Roof Drains: Install base coat onto surrounding membrane surface and metal drain bowl flange. Install target piece of fabric reinforcement immediately into wet base coat and roll to fully embed and saturate fabric. Reinstall clamping ring and strainer following application of top coat. Replace broken drain ring clamping bolts.
 - 6. Allow base coat to cure prior to application of top coat.
 - 7. Following curing of base coat and prior to application of top coat, sand raised or exposed edges of fabric reinforcement.
- B. Fluid-Applied Flashing and Detail Top Coat Application: Apply top coat uniformly in a complete installation to flashings.
 - 1. Prime base coat prior to application of top coat if top coat is not applied within 72 hours of the base coat application, using manufacturer's recommended primer.
 - 2. Apply top coat to flashings extending coating up vertical surfaces and out onto horizontal surfaces 4 inches. Install top coat over field base coat and spread coating evenly.
 - 3. Back roll to achieve wet mil thickness of 32 mils unless otherwise recommended by manufacturer.
 - 4. Avoid foot traffic on new fluid-applied membrane for a minimum of 24 hours.

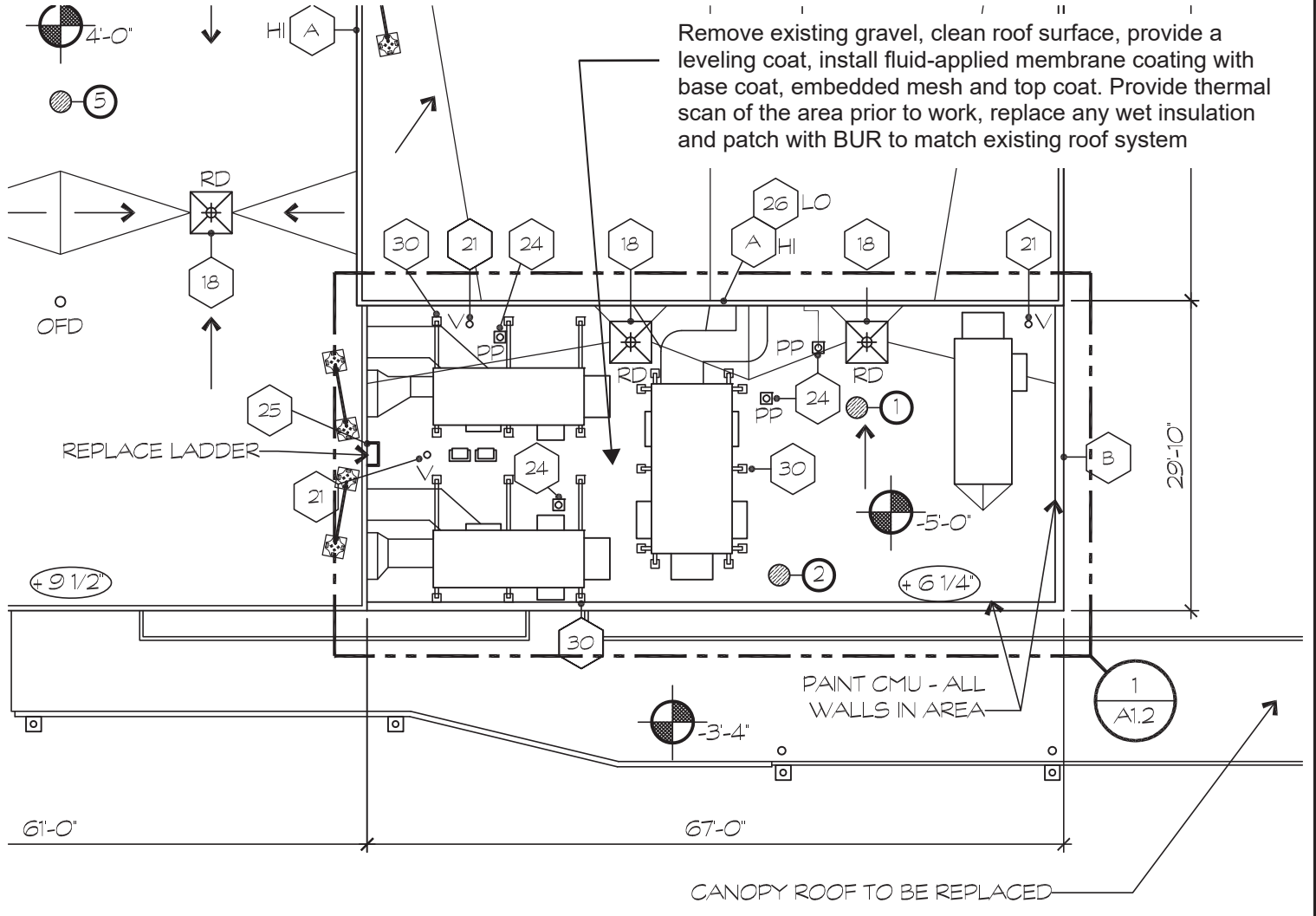
3.8 FIELD QUALITY CONTROL

- A. Roof Inspection: Contractor shall engage roofing system manufacturer's technical personnel to inspect roofing installation and submit report to the Architect. Notify

Architect or Owner 48 hours in advance of dates and times of inspections. Inspect work as follows:

1. Upon completion of preparation of first component of work, prior to application of re-coating materials.
 2. Following application of re-coating to flashings and application of base coat to field of roof.
 3. Upon completion of re-coating but prior to re-installation of other roofing components.
- B. Repair fluid-applied membrane where test inspections indicate that they do not comply with specified requirements.
- C. Arrange for additional inspections, at Contractor's expense, to verify compliance of replaced or additional work with specified requirements.
- 3.9 PROTECTING AND CLEANING
- A. Protect roofing system from damage and wear during remainder of construction period.
- B. Correct deficiencies in or remove coating that does not comply with requirements, repair substrates, and reapply coating.
- C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION



DETAIL - PARTIAL ROOF PLAN - ROOF AREA A

N.T.S.

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A1.1

ADDENDUM NO. 2, ATTACHMENT NO 2.3, MARCH 22, 2024



BUSHEY FEIGHT MORIN ARCHITECTS
 473 NORTH POTOMAC STREET, HAGERSTOWN, MD 21740
 BFMARCHITECTS.COM • 301-733-5600 • FAX 301-733-5612
 2022 , BUSHEY FEIGHT MORIN ARCHITECTS, INC.

BFM # 22055 WCPS: SMITHSBURG HIGH SCHOOL
 ROOF REPLACEMENT BID NO. 2024-06

DATE:
3 / 22 / 24

SCALE:
N.T.S

DRAWING No.
SK.A1.1-01

REFERENCE DRAWING
A1.1

WASHINGTON COUNTY PUBLIC SCHOOLS

Hagerstown, Maryland

Smithsburg Middle School Roof Replacement

REVISED FORM OF PROPOSAL – BID 2024-06

Proposal of _____

(Corporation, a partnership, or an individual hereinafter called "Bidder") organized and doing business and existing under the laws of the state of _____.

I/We as the Bidder, in compliance with the Invitation to Bid for the selected contract package included herein, have examined the Bidding Documents, and have become familiar with all the conditions surrounding the construction of the proposed project, including the availability of materials and labor, hereby propose to furnish all labor, materials, services and equipment necessary to properly complete the Work in accordance with the Contract Documents and Addenda, and at the prices stated below. These prices are to cover all expenses incurred in performing the Work required under the Contract Documents, of which this Proposal is a part.

All prices include all applicable sales and/or use taxes; include all insurance premiums required and include all premiums for a Performance Bond and a Labor and Material Payment Bond in the sum of one hundred percent (100%) of the Contract price. A five percent (5%) Bid Bond shall be attached to the Proposal. The Bid Bond amount shall be computed on the Lump Sum Total Price inclusive of Alternate Values; shall be submitted with the Washington County Board of Education as the sole obligee and shall be issued for a minimum period of ninety (90) calendar days from the receipt of Bids.

PREQUALIFICATION

The solicitation document is available for viewing and download from the WCPS Purchasing Web site: www.wcpspurchasing.com. The bid solicitation document is made available to any person or company who chooses to obtain it from the website. To submit a bid, prequalification is a requirement. All contractors who have obtained a copy of the document from the website or by other means may not be eligible to be awarded. Only the WCPS Purchasing Department can grant pre-qualification approval. Only pre-qualified contractors are eligible to be awarded this project. Registration via the WCPS website is mandatory and is a two-step process. Approval at step one only of the application is not sufficient for bidding construction work. WCPS Purchasing Department will notify each contractor in writing upon approval of the pre-qualification application.

COMPLETION TIME – SCHEDULE OF WORK

I/We as the Bidder, agree to begin to perform the Work at the time stated in the "Notice of Award/Notice to Proceed" and to substantially complete the entire work in accordance with the provisions of the Contract Documents. If this work is not completed within the time period specified, I/we will be liable for Liquidated Damages of \$500.00 per calendar day.

Substantial Completion: 8/16/2024

Final Completion: 9/13/2024

BASE BID (Include Prevailing Wage Rates)

BID 2024-06

00 20 00 - 1
BID FORM

Smithsburg Middle School Roof Replacement

Bidders furnish all labor, materials, services, and equipment necessary to properly complete the Work required for the project in strict accordance with the Contract Documents for the following lump sum total:

Lump Sum Total:

_____ DOLLARS \$ _____
(Paying Wage Rate) (Amount in words) (Amount in numbers)

Unit Prices (Include Prevailing Wage Rates/Davis-Bacon Wage Rates)

Bidders shall furnish all labor, materials, equipment, and services necessary for the unit price incidental to, the preparation of, and the installation of materials to properly complete the work required in strict accordance with the aforesaid documents, specifically Specification section 01 20 00, for the following sum on the basis of unit prices quoted herein.

- 1) Unit Price No. 1 – Repair/Replace Cementitious Wood Fiber Deck: Includes material and labor to replace existing cementitious wood fiber deck per section 03 51 10 as deemed necessary by the Owner/Architect. Based on this Unit Price, include a quantity of 100 SF of Cementitious Wood Fiber Deck Repair Replacement within the BASE BID cost as an allowance.**

Unit Pricing is Per SF:

_____ DOLLARS \$ _____
(Paying Prevailing Wage) (Amount in words) (Amount in numbers)

- 2) Unit Price No. 2- Blocking: Includes material and labor and all other costs for 2X8 blocking due to deterioration or damage or additional blocking that would be required that is not specifically called for on the Drawings and Specifications. Based on this Unit Price, include a quantity of 200 LF of Blocking within the BASE BID cost as an allowance.**

Unit Pricing is Per LF:

_____ DOLLARS \$ _____
(Paying Prevailing Wage) (Amount in words) (Amount in numbers)

- 3) Unit Price No. 3 – Repointing Masonry: Includes material and labor and all other costs to repoint masonry in wall areas above the roof line that is not specifically called for in the specifications. Based on this Unit Price, include a quantity of 1,000 SF of Masonry Repointing within the BASE BID cost as an allowance.**

Unit Pricing is Per SF:

_____ DOLLARS \$ _____
(Paying Prevailing Wage) (Amount in words) (Amount in numbers)

Smithsburg Middle School Roof Replacement

- 4) **Unit Price 4 - Additional Roof Drain (No Allowance):** Includes material and labor and all other costs for roof drain with strainer installation. Include the cost of connection to the existing storm drain system at nearest accessible location.

Unit Price is Per Each:

DOLLARS \$ _____

(Paying Prevailing Wage) (Amount in words) (Amount in numbers)

ADDENDA

The following Addenda have been received and reviewed and all Work therein is incorporated in the Bid Form of Proposal:

(If none please write "NONE"):

Addendum No.	Date
_____	_____
_____	_____
_____	_____
_____	_____

ATTACHMENTS

The following items are **mandatory** and are to be included with the Bid Form of Proposal and shall be completed by the Bidder:

1. WCPS Bid/Proposal Affidavit
2. Bid Security – See Section 00 43 13 – AIA Document A310 -2010 Bid Bond
3. MBE Attachment A – See Section 00 43 39 – Minority Business Enterprise Procedures
4. MBE Attachment B – See Section 00 43 39 – Minority Business Enterprise Procedures

REPRESENTATIONS

I/We as the Bidder, have reviewed the complete AIA Document A701 – 2018 “Instructions to Bidders,” as modified by the Washington County Board of Education, and agree with the terms and conditions specified therein and submit this Bid Proposal in accordance.

The Owner reserves the right to reject any or all Bids. The Owner shall have the right to waive informalities and irregularities in the bids and in the bidding process and to accept the Bid which, in the Owner’s judgment, is in the Owner’s own best interests. A Bid not accompanied by a required bid security, or by other data required by the Bidding Documents, or a Bid which is in any way incomplete or irregular, is subject to rejection.

No Bidder shall withdraw, modify, or cancel his bid, or any part thereof, for a minimum of ninety (90) calendar

Smithsburg Middle School Roof Replacement

days after the receipt of bids. The undersigned shall complete the total Work within the timeframe previously stated once the Owner indicates acceptance of this Bid Proposal by way of a written "Notice of Award" or

"Letter of Intent" within this minimum ninety (90) day time period, or any time thereafter before the Bid is withdrawn.

I/We certify that this Bid is made without previous understanding, agreement, or connection with any person, firm or corporation submitting a bid for the same items and/or services and is, in all respects fair and without collusion or fraud; that none of this company's officers, directors or its employees have been convicted of bribery, attempted bribery, or conspiracy to bribe under the laws of any state or federal government; and that no member of the Board of Education of Washington County, administrative or supervisory personnel or other employees of Washington County Public Schools have any interest in the bidding company except as follows: (complete if applicable)

Respectfully submitted,

By _____
(Company)

(Signature) (Date)

(Printed Name) (Title)

(Business Address) (Phone)

(e-mail address)

(SEAL) If bid is by Corporation

I/we the bidder represent, and agree that it is a precedent to acceptance of this bid, that the bidder has not been a party to any agreement to bid of fixed or uniform price.

(Signature of Office & Title) (SEAL)

Smithsburg Middle School Roof Replacement

SUBSCRIBED AND SWORN to before me, a Notary Public in the State of _____, County of _____ this _____ day of _____, 20____.

Notary Public Signature _____

My commission Expires: _____

Stamp:

NOTICE: The Washington County Board of Education reserves the right to award any, all, or none due to budgetary constraints.

END OF FORM OF PROPOSAL 00 20 00