



Department of Administration  
Purchasing Division  
2019 Washington Street East  
Post Office Box 50130  
Charleston, WV 25305-0130

# State of West Virginia Purchase Order

Order Date: 12-10-2021

CORRECT ORDER NUMBER MUST APPEAR  
ON ALL PACKAGES, INVOICES, AND  
SHIPPING PAPERS. QUESTIONS  
CONCERNING THIS ORDER SHOULD BE  
DIRECTED TO THE DEPARTMENT  
CONTACT.

Order Number:	CPO 0211 4034 GSD2200000010 1	Procurement Folder:	945534
Document Name:	Building 34 (Weirton) Roof Replacement	Reason for Modification:	Award of CRFQ GSD2200000017
Document Description:	Building 34 (Weirton) Roof Replacement		
Procurement Type:	Central Purchase Order		
Buyer Name:	Melissa Pettrey		
Telephone:	(304) 558-0094		
Email:	melissa.k.pettrey@wv.gov		
Shipping Method:	Best Way	Effective Start Date:	
Free on Board:	FOB Dest, Freight Prepaid	Effective End Date:	

VENDOR	DEPARTMENT CONTACT																				
Vendor Customer Code: 000000201279 N F MANSUETTO & SONS INC 116 WOOD ST  MARTINS FERRY OH 43935 US Vendor Contact Phone: 999-999-9999 Extension: Discount Details: <table><thead><tr><th></th><th>Discount Allowed</th><th>Discount Percentage</th><th>Discount Days</th></tr></thead><tbody><tr><td>#1</td><td>No</td><td>0.0000</td><td>0</td></tr><tr><td>#2</td><td>Not Entered</td><td></td><td></td></tr><tr><td>#3</td><td>Not Entered</td><td></td><td></td></tr><tr><td>#4</td><td>Not Entered</td><td></td><td></td></tr></tbody></table>		Discount Allowed	Discount Percentage	Discount Days	#1	No	0.0000	0	#2	Not Entered			#3	Not Entered			#4	Not Entered			Requestor Name: William D Pate Requestor Phone: 304-352-5487 Requestor Email: william.d.pate@wv.gov  <b>22</b> FILE LOCATION _____
	Discount Allowed	Discount Percentage	Discount Days																		
#1	No	0.0000	0																		
#2	Not Entered																				
#3	Not Entered																				
#4	Not Entered																				

INVOICE TO	SHIP TO
DEPARTMENT OF ADMINISTRATION GENERAL SERVICES DIVISION 112 CALIFORNIA AVENUE, 5TH FLOOR CHARLESTON WV 25305 US	DEPARTMENT OF ADMINISTRATION GENERAL SERVICES DIVISION BLDG 34 100 MUNICIPAL PLAZA WEIRTON WV 26062 US

Total Order Amount: \$375,900.00

Purchasing Division's File Copy

ENTERED

PURCHASING DIVISION AUTHORIZATION DATE: 12/14/21 ELECTRONIC SIGNATURE ON FILE	ATTORNEY GENERAL APPROVAL AS TO FORM DATE: 12/15/21 ELECTRONIC SIGNATURE ON FILE	ENCUMBRANCE CERTIFICATION DATE: 12/16/21 ELECTRONIC SIGNATURE ON FILE
-------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------	-----------------------------------------------------------------------------

**Extended Description:**

Central Purchase Order  
One-Time Purchase

The Vendor, N F Mansuetto & Sons, Inc. of Martins Ferry ,OH agree to enter into this One-Time Purchase contract with the General Services Division ("the Agency")for roof work on Building 34, a 2-story structure housing offices, located at 100 Municipal Plaza, Weirton, WV 26062, per the attached bid requirements, specifications, terms and conditions, project plans, Addendum No. 1 dated 11/09/2021, Addendum No. 2 dated 02/15/2019 and the Vendors submitted bid dated 11/16/2021 incorporated herein by reference and made a part hereof.

Line	Commodity Code	Quantity	Unit	Unit Price	Total Price
1	72152601	0.00000		0.000000	375900.00
Service From	Service To	Manufacturer	Model No		

**Commodity Line Description:** Building 34 (Weirton) Roof Replacement

**Extended Description:**

Building 34 (Weirton) Roof Replacement

## **GENERAL TERMS AND CONDITIONS:**

**1. CONTRACTUAL AGREEMENT:** Issuance of an Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance by the State of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid, or on the Contract if the Contract is not the result of a bid solicitation, signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

**2. DEFINITIONS:** As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.

**2.1. "Agency" or "Agencies"** means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

**2.2. "Bid" or "Proposal"** means the vendors submitted response to this solicitation.

**2.3. "Contract"** means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.

**2.4. "Director"** means the Director of the West Virginia Department of Administration, Purchasing Division.

**2.5. "Purchasing Division"** means the West Virginia Department of Administration, Purchasing Division.

**2.6. "Award Document"** means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.

**2.7. "Solicitation"** means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

**2.8. "State"** means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

**2.9. "Vendor" or "Vendors"** means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

**3. CONTRACT TERM; RENEWAL; EXTENSION:** The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

☐ **Term Contract**

**Initial Contract Term:** This Contract becomes effective on \_\_\_\_\_ and the initial contract term extends until \_\_\_\_\_.

**Renewal Term:** This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be delivered to the Agency and then submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Unless otherwise specified below, renewal of this Contract is limited to \_\_\_\_\_ successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed the total number of months available in all renewal years combined. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

☐ **Alternate Renewal Term** – This contract may be renewed for \_\_\_\_\_ successive \_\_\_\_\_ year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

**Delivery Order Limitations:** In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

☒ **Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within Seventy Five (75) days.

☐ **Fixed Period Contract with Renewals:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within \_\_\_\_\_ days. Upon completion of the work covered by the preceding sentence, the vendor agrees that maintenance, monitoring, or warranty services will be provided for \_\_\_\_\_ year(s) thereafter.

☐ **One Time Purchase:** The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.

☐ **Other:** See attached \_\_\_\_\_  
Revised 07/01/2021



**4. AUTHORITY TO PROCEED:** Vendor is authorized to begin performance of this contract on the date of encumbrance listed on the front page of the Award Document unless either the box for “Fixed Period Contract” or “Fixed Period Contract with Renewals” has been checked in Section 3 above. If either “Fixed Period Contract” or “Fixed Period Contract with Renewals” has been checked, Vendor must not begin work until it receives a separate notice to proceed from the State. The notice to proceed will then be incorporated into the Contract via change order to memorialize the official date that work commenced.

**5. QUANTITIES:** The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

☐ **Open End Contract:** Quantities listed in this Solicitation/Award Document are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

☐ **Service:** The scope of the service to be provided will be more clearly defined in the specifications included herewith.

☒ **Combined Service and Goods:** The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

☐ **One Time Purchase:** This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General’s office.

**6. EMERGENCY PURCHASES:** The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute a breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.

**7. REQUIRED DOCUMENTS:** All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.

☒ **BID BOND (Construction Only):** Pursuant to the requirements contained in W. Va. Code § 5-22-1(c), All Vendors submitting a bid on a construction project shall furnish a valid bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.

☒ **PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of 100% of the contract. The performance bond must be received by the Purchasing Division prior to Contract award.

☒ **LABOR/MATERIAL PAYMENT BOND:** The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be delivered to the Purchasing Division prior to Contract award.

In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under \$100,000. Personal or business checks are not acceptable. Notwithstanding the foregoing, West Virginia Code § 5-22-1 (d) mandates that a vendor provide a performance and labor/material payment bond for construction projects. Accordingly, substitutions for the performance and labor/material payment bonds for construction projects is not permitted.

☒ **MAINTENANCE BOND:** The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.

☐ **LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section of the General Terms and Conditions entitled Licensing, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits upon request and in a form acceptable to the State. The request may be prior to or after contract award at the State's sole discretion.

☐☐☐☐

The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications regardless of whether or not that requirement is listed above.

**8. INSURANCE:** The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below and must include the State as an additional insured on each policy prior to Contract award. The insurance coverages identified below must be maintained throughout the life of this contract. Thirty (30) days prior to the expiration of the insurance policies, Vendor shall provide the Agency with proof that the insurance mandated herein has been continued. Vendor must also provide Agency with immediate notice of any changes in its insurance policies, including but not limited to, policy cancelation, policy reduction, or change in insurers. The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether that insurance requirement is listed in this section.

Vendor must maintain:

☒ **Commercial General Liability Insurance** in at least an amount of: \$1,000,000.00 per occurrence.

☒ **Automobile Liability Insurance** in at least an amount of: \$1,000,000.00 per occurrence.

☐ **Professional/Malpractice/Errors and Omission Insurance** in at least an amount of: \_\_\_\_\_ per occurrence. Notwithstanding the forgoing, Vendor's are not required to list the State as an additional insured for this type of policy.

☒ **Commercial Crime and Third Party Fidelity Insurance** in an amount of: \$100,000.00 per occurrence.

☐ **Cyber Liability Insurance** in an amount of: \_\_\_\_\_ per occurrence.

☐ **Builders Risk Insurance** in an amount equal to 100% of the amount of the Contract.

☐ **Pollution Insurance** in an amount of: \_\_\_\_\_ per occurrence.

☐ **Aircraft Liability** in an amount of: \_\_\_\_\_ per occurrence.

☐☐☐☐

Notwithstanding anything contained in this section to the contrary, the Director of the Purchasing Division reserves the right to waive the requirement that the State be named as an additional insured on one or more of the Vendor's insurance policies if the Director finds that doing so is in the State's best interest.

**9. WORKERS' COMPENSATION INSURANCE:** Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.

**10. [Reserved]**

**11. LIQUIDATED DAMAGES:** This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy. Vendor shall pay liquidated damages in the amount specified below or as described in the specifications:

☐ \_\_\_\_\_ for \_\_\_\_\_.

☒ Liquidated Damages Contained in the Specifications.

☐ Liquidated Damages Are Not Included in this Contract.

**12. ACCEPTANCE:** Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.

**13. PRICING:** The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification. Notwithstanding the foregoing, Vendor must extend any publicly advertised sale price to the State and invoice at the lower of the contract price or the publicly advertised sale price.

**14. PAYMENT IN ARREARS:** Payments for goods/services will be made in arrears only upon receipt of a proper invoice, detailing the goods/services provided or receipt of the goods/services, whichever is later. Notwithstanding the foregoing, payments for software maintenance, licenses, or subscriptions may be paid annually in advance.

**15. PAYMENT METHODS:** Vendor must accept payment by electronic funds transfer and P-Card. (The State of West Virginia's Purchasing Card program, administered under contract by a banking institution, processes payment for goods and services through state designated credit cards.)

**16. TAXES:** The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

**17. ADDITIONAL FEES:** Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia, included in the Contract, or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.

**18. FUNDING:** This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available. If that occurs, the State may notify the Vendor that an alternative source of funding has been obtained and thereby avoid the automatic termination. Non-appropriation or non-funding shall not be considered an event of default.

**19. CANCELLATION:** The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-5.2.b.

**20. TIME:** Time is of the essence regarding all matters of time and performance in this Contract.

**21. APPLICABLE LAW:** This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code, or West Virginia Code of State Rules is void and of no effect.

**22. COMPLIANCE WITH LAWS:** Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.

**SUBCONTRACTOR COMPLIANCE:** Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to comply with all applicable laws, regulations, and ordinances. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

**23. ARBITRATION:** Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

**24. MODIFICATIONS:** This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.

**25. WAIVER:** The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.

**26. SUBSEQUENT FORMS:** The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.

**27. ASSIGNMENT:** Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments.

**28. WARRANTY:** The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

**29. STATE EMPLOYEES:** State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.

**30. PRIVACY, SECURITY, AND CONFIDENTIALITY:** The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/default.html>.

**31. YOUR SUBMISSION IS A PUBLIC DOCUMENT:** Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

**DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.**

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

**32. LICENSING:** In accordance with West Virginia Code of State Rules § 148-1-6.1.e, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

**SUBCONTRACTOR COMPLIANCE:** Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to be licensed, in good standing, and up-to-date on all state and local obligations as described in this section. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

**33. ANTITRUST:** In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.



**34. VENDOR CERTIFICATIONS:** By signing its bid or entering into this Contract, Vendor certifies (1) that its bid or offer was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid or offer for the same material, supplies, equipment or services; (2) that its bid or offer is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this Solicitation in its entirety; understands the requirements, terms and conditions, and other information contained herein.

Vendor's signature on its bid or offer also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency. The individual signing this bid or offer on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or offer or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

**35. VENDOR RELATIONSHIP:** The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

**36. INDEMNIFICATION:** The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

**37. PURCHASING AFFIDAVIT:** In accordance with West Virginia Code §§ 5A-3-10a and 5-22-1(i), the State is prohibited from awarding a contract to any bidder that owes a debt to the State or a political subdivision of the State, Vendors are required to sign, notarize, and submit the Purchasing Affidavit to the Purchasing Division affirming under oath that it is not in default on any monetary obligation owed to the state or a political subdivision of the state.

**38. CONFLICT OF INTEREST:** Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.

**39. REPORTS:** Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

☒ Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

☐ Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at [purchasing.division@wv.gov](mailto:purchasing.division@wv.gov).

**40. BACKGROUND CHECK:** In accordance with W. Va. Code § 15-2D-3, the State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check. Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

**41. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS:** Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.

b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more of such operations, from steel made by the open hearth, basic oxygen, electric furnace, Bessemer or other steel making process. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:

c. The cost for each contract item used does not exceed one tenth of one percent (.1%)

of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or

- d. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

**42. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL:** In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a “substantial labor surplus area”, as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

**43. INTERESTED PARTY SUPPLEMENTAL DISCLOSURE:** W. Va. Code § 6D-1-2 requires that for contracts with an actual or estimated value of at least \$1 million, the vendor must submit to the Agency a supplemental disclosure of interested parties reflecting any new or differing interested parties to the contract, which were not included in the original pre-award interested party disclosure, within 30 days following the completion or termination of the contract. A copy of that form is included with this solicitation or can be obtained from the Revised 07/01/2021

WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.

**44. PROHIBITION AGAINST USED OR REFURBISHED:** Unless expressly permitted in the solicitation published by the State, Vendor must provide new, unused commodities, and is prohibited from supplying used or refurbished commodities, in fulfilling its responsibilities under this Contract.

**45. VOID CONTRACT CLAUSES** – This Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

## **ADDITIONAL TERMS AND CONDITIONS (Construction Contracts Only)**

**1. CONTRACTOR'S LICENSE:** Until June 15, 2021, West Virginia Code § 21-11-2, and after that date, § 30-42-2, requires that all persons desiring to perform contracting work in this state be licensed. The West Virginia Contractors Licensing Board is empowered to issue the contractor's license. Applications for a contractor's license may be made by contacting the West Virginia Contractor Licensing Board.

The apparent successful Vendor must furnish a copy of its contractor's license prior to the issuance of a contract award document.

**2. DRUG-FREE WORKPLACE AFFIDAVIT:** W. Va. Code § 21-1D-5 provides that any solicitation for a public improvement contract requires each Vendor that submits a bid for the work to submit an affidavit that the Vendor has a written plan for a drug-free workplace policy. If the affidavit is not submitted with the bid submission, the Purchasing Division shall promptly request by telephone and electronic mail that the low bidder and second low bidder provide the affidavit within one business day of the request. Failure to submit the affidavit within one business day of receiving the request shall result in disqualification of the bid. To comply with this law, Vendor should complete the enclosed drug-free workplace affidavit and submit the same with its bid. Failure to submit the signed and notarized drugfree workplace affidavit or a similar affidavit that fully complies with the requirements of the applicable code, within one business day of being requested to do so shall result in disqualification of Vendor's bid. Pursuant to W. Va. Code 21-1D-2(b) and (k), this provision does not apply to public improvement contracts the value of which is \$100,000 or less or temporary or emergency repairs.

**2.1. DRUG-FREE WORKPLACE POLICY:** Pursuant to W. Va. Code § 21-1D-4, Vendor and its subcontractors must implement and maintain a written drug-free workplace policy that complies with said article. The awarding public authority shall cancel this contract if: (1) Vendor fails to implement and maintain a written drug-free workplace policy described in the preceding paragraph, (2) Vendor fails to provide information regarding implementation of its drug-free workplace policy at the request of the public authority; or (3) Vendor provides to the public authority false information regarding the contractor's drug-free workplace policy.

Pursuant to W. Va. Code 21-1D-2(b) and (k), this provision does not apply to public improvement contracts the value of which is \$100,000 or less or temporary or emergency repairs.

**3. DRUG FREE WORKPLACE REPORT:** Pursuant to W. Va. Code § 21-1D-7b, no less than once per year, or upon completion of the project, every contractor shall provide a certified report to the public authority which let the contract. For contracts over \$25,000, the public authority shall be the West Virginia Purchasing Division. For contracts of \$25,000 or less, the public authority shall be the agency issuing the contract. The report shall include:

- (1) Information to show that the education and training service to the requirements of West Virginia Code § 21-1D-5 was provided;
- (2) The name of the laboratory certified by the United States Department of Health and Human Services or its successor that performs the drug tests;
- (3) The average number of employees in connection with the construction on the public improvement;
- (4) Drug test results for the following categories including the number of positive tests and the number of negative tests: (A) Pre-employment and new hires; (B) Reasonable suspicion; (C) Post-accident; and (D) Random.

Vendor should utilize the attached Certified Drug Free Workplace Report Coversheet when submitting the report required hereunder. Pursuant to W. Va. Code 21-1D-2(b) and (k), this provision does not apply to public improvement contracts the value of which is \$100,000 or less or temporary or emergency repairs.

**4. AIA DOCUMENTS:** All construction contracts that will be completed in conjunction with architectural services procured under Chapter 5G of the West Virginia Code will be governed by the attached AIA documents, as amended by the Supplementary Conditions for the State of West Virginia, in addition to the terms and conditions contained herein.

**4A. PROHIBITION AGAINST GENERAL CONDITIONS:** Notwithstanding anything contained in the AIA Documents or the Supplementary Conditions, the State of West Virginia will not pay for general conditions, or winter conditions, or any other condition representing a delay in the contracts. The Vendor is expected to mitigate delay costs to the greatest extent possible and any costs associated with Delays must be specifically and concretely identified. The state will not consider an average daily rate multiplied by the number of days extended to be an acceptable charge.

**5. GREEN BUILDINGS MINIMUM ENERGY STANDARDS:** In accordance with § 22-29-4, all new building construction projects of public agencies that have not entered the schematic design phase prior to July 1, 2012, or any building construction project receiving state grant funds and appropriations, including public schools, that have not entered the schematic design phase prior to July 1, 2012, shall be designed and constructed complying with the ICC International Energy Conservation Code, adopted by the State Fire Commission, and the ANSI/ASHRAE/IESNA Standard 90.1-2007: Provided, That if any construction project has a commitment of federal funds to pay for a portion of such project, this provision shall only apply to the extent such standards are consistent with the federal standards.

**6. LOCAL LABOR MARKET HIRING REQUIREMENT:** Pursuant to West Virginia Code §21-1C-1 et seq., Employers shall hire at least seventy-five percent of employees for public improvement construction projects from the local labor market, to be rounded off, with at least two employees from outside the local labor market permissible for each employer per project.

Any employer unable to employ the minimum number of employees from the local labor market shall inform the nearest office of Workforce West Virginia of the number of qualified employees needed and provide a job description of the positions to be filled.

If, within three business days following the placing of a job order, Workforce West Virginia is unable to refer any qualified job applicants to the employer or refers less qualified job applicants than the number requested, then Workforce West Virginia shall issue a waiver to the employer stating the unavailability of applicant and shall permit the employer to fill any positions covered by the waiver from outside the local labor market. The waiver shall be in writing and shall be issued within the prescribed three days. A waiver certificate shall be sent to both the employer for its permanent project records and to the public authority.

Any employer who violates this requirement is subject to a civil penalty of \$250 per each employee less than the required threshold of seventy-five percent per day of violation after receipt of a notice of violation.

Any employer that continues to violate any provision of this article more than fourteen calendar days after receipt of a notice of violation is subject to a civil penalty of \$500 per each employee less than the required threshold of seventy-five percent per day of violation.

The following terms used in this section have the meaning shown below.

(1) The term “construction project” means any construction, reconstruction, improvement, enlargement, painting, decorating or repair of any public improvement let to contract in an amount equal to or greater than \$500,000. The term “construction project” does not include temporary or emergency repairs;

(2) The term “employee” means any person hired or permitted to perform hourly work for wages by a person, firm or corporation in the construction industry; The term “employee” does not include:(i) Bona fide employees of a public authority or individuals engaged in making temporary or emergency repairs;(ii) Bona fide independent contractors; or(iii) Salaried supervisory personnel necessary to assure efficient execution of the employee's work;

(3) The term “employer” means any person, firm or corporation employing one or more employees on any public improvement and includes all contractors and subcontractors;

(4) The term “local labor market” means every county in West Virginia and any county outside of West Virginia if any portion of that county is within fifty miles of the border of West Virginia;

(5) The term “public improvement” includes the construction of all buildings, roads, highways, bridges, streets, alleys, sewers, ditches, sewage disposal plants, waterworks, airports and all other structures that may be let to contract by a public authority, excluding improvements funded, in whole or in part, by federal funds.



## 7. DAVIS-BACON AND RELATED ACT WAGE RATES:

- ☐ The work performed under this contract is federally funded in whole, or in part. Pursuant to \_\_\_\_\_, Vendors are required to pay applicable Davis-Bacon wage rates.
- ☒ The work performed under this contract is not subject to Davis-Bacon wage rates.

**8. SUBCONTRACTOR LIST SUBMISSION:** In accordance with W. Va. Code § 5-22-1, the apparent low bidder on a contract valued at more than \$250,000.00 for the construction, alteration, decoration, painting or improvement of a new or existing building or structure shall submit a list of all subcontractors who will perform more than \$25,000.00 of work on the project including labor and materials. (This section does not apply to any other construction projects, such as highway, mine reclamation, water or sewer projects.) The subcontractor list shall be provided to the Purchasing Division within one business day of the opening of bids for review. If the apparent low bidder fails to submit the subcontractor list, the Purchasing Division shall promptly request by telephone and electronic mail that the low bidder and second low bidder provide the subcontractor list within one business day of the request. Failure to submit the subcontractor list within one business day of receiving the request shall result in disqualification of the bid.

If no subcontractors who will perform more than \$25,000.00 of work are to be used to complete the project, the apparent low bidder must make this clear on the subcontractor list, in the bid itself, or in response to the Purchasing Division's request for the subcontractor list.

a. Required Information. The subcontractor list must contain the following information:

- i. Bidder's name
- ii. Name of each subcontractor performing more than \$25,000 of work on the project.
- iii. The license number of each subcontractor, as required by W. Va. Code § 21-11-1 et. seq.
- iv. If applicable, a notation that no subcontractor will be used to perform more than \$25,000.00 of work. (This item iv. is not required if the vendor makes this clear in the bid itself or in documentation following the request for the subcontractor list.)

b. Subcontractor List Submission Form: The subcontractor list may be submitted in any form, including the attached form, as long as the required information noted above is included. If any information is missing from the bidder's subcontractor list submission, it may be obtained from other documents such as bids, emails, letters, etc. that accompany the subcontractor list submission.

c. Substitution of Subcontractor. Written approval must be obtained from the State Spending Unit before any subcontractor substitution is permitted. Substitutions are not permitted unless:

- i. The subcontractor listed in the original bid has filed for bankruptcy;
- ii. The subcontractor in the original bid has been debarred or suspended; or
- iii. The contractor certifies in writing that the subcontractor listed in the original bid fails, is unable, or refuses to perform his subcontract.

**Subcontractor List Submission (Construction Contracts Only)**

**Bidder's Name:** N.F. Mansuetto & Sons, Inc.



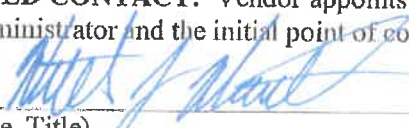
Check this box if no subcontractors will perform more than \$25,000.00 of work to complete the project.

[illegible]

Attach additional pages if necessary

Revised 07/01/2021

**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

  
(Name, Title)

Matthew Mansuetto, President

(Printed Name and Title)

116 Wood Street Martins Ferry, OH 43935

(Address)

740-633-7320 740-633-7322

(Phone Number) / (Fax Number)

matt@mansuettoroofing.com

(email address)

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

*By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.*

N.F. Mansuetto & Sons, Inc.

(Company)

  
(Authorized Signature) (Representative Name, Title)

Matthew Mansuetto President

(Printed Name and Title of Authorized Representative)

November 16, 2021

(Date)

740-633-7320 740-633-7322

(Phone Number) (Fax Number)

REQUEST FOR QUOTATION  
**Building 34 Roof Replacement Project**

---

**GENERAL CONSTRUCTION SPECIFICATIONS (No AIA Documents)**

- 1. PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids on behalf of the General Services Division (“the Agency”) to establish a contract for roof work on Building 34, a 2-story structure housing offices, located at 100 Municipal Plaza, Weirton, WV 26062, as follows: Replace existing adhered EPDM (ethylene propylene diene monomer) roof system in its entirety (see attached drawing, Exhibit D) to include post and safety rails around the perimeter. The Vendor shall furnish any incidental work, materials (including delivery), labor, and equipment that are necessary to complete the Construction Services, even if such incidental work is not explicitly included in the Project Plans.
- 2. DEFINITIONS:** The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in section 2 of the General Terms and Conditions and in the Project Plans as defined below.
  - 2.1 “Construction Services”** means providing all labor, materials and equipment necessary to replace the roof system of Building 34.
  - 2.2 “Pricing Page”** means the pages contained in wvOASIS, attached hereto as Exhibit A, or included in the Project Plans upon which Vendor should list its proposed price for the Construction Services.
  - 2.3 “Solicitation”** means the official notice of an opportunity to supply the State with Construction Services that is published by the Purchasing Division.
  - 2.4 “Project Plans”** means documents developed by an architect, an engineer, the Agency, or another design professional, which are attached hereto as Exhibits B-H, that provide detailed instructions on how the Construction Services are to be performed. If Project Plans contain drawings or other documents too large to attach in Exhibits B-H, Vendors can obtain copies in accordance with Section 9 of these Specifications.
- 3. ORDER OF PRECEDENCE:** This General Construction Specifications document will have priority over, and supersede, anything contained in the Project Plans.
- 4. QUALIFICATIONS:** Vendor, or Vendor’s staff if requirements are inherently limited to individuals rather than corporate entities, shall have the following minimum qualifications:
  - 4.1 Experience:** Vendor, or Vendor’s supervisory staff assigned to this project, must have successfully completed at least three (3) projects that involved work similar to that described in these specifications or the Project Plans. Compliance with this experience requirement will be determined prior to contract award by the State through references

REQUEST FOR QUOTATION  
**Building 34 Roof Replacement Project**

---

provided by the Vendor upon request, through knowledge or documentation of the Vendor's past projects, through confirmation of experience requirements from the architect assisting the State in this project, or some other method that the State determines to be acceptable. Vendor must provide any documentation requested by the State to assist in confirmation of compliance with this provision. References, documentation, or other information to confirm compliance with this experience requirement may be requested after bid opening and prior to contract award.

5. **CONTRACT AWARD:** The Contract is intended to provide Agency with a purchase price for the Construction Services. The Contract will be awarded to the lowest qualified responsible bidder meeting the required specifications. If the Pricing Pages contain alternates/add-ons, the Contract will be awarded based on the grand total of the base bid and any alternates/add-ons selected.
6. **SELECTION OF ALTERNATES:** Pursuant to W. Va. Code § 5-22-1(e), if the Pricing Pages contain alternates/add-ons, there must be no more than seven listed, and the alternates/add-ons will be selected in the order of priority listed on the Pricing Pages. The first alternate/add-on must be selected before the second alternate/add-on can be selected and so on. Provided, that Agency may accept an alternate out of the listed order if acceptance would not affect determination of the lowest qualified responsible bidder. Any unaccepted alternate contained within a bid shall expire one hundred fifty days after the date of the opening of bids for review.
7. **PERFORMANCE:** Vendor shall perform the Construction Services in accordance with this document and the Project Plans.
8. **SUBSTITUTIONS:** Any substitution requests must be submitted in accordance with the official question and answer period described in the INSTRUCTIONS TO VENDORS SUBMITTING BIDS, Paragraph 4. Vendor Question Deadline. Vendors submitting substitution requests should submit product brochures and product specifications during the official question and answer period.
9. **PROJECT PLANS:** The checked box will apply to Project Plans for this solicitation.
  - X **No Additional Project Plan Documents:** There are no additional Project Plans other than those attached hereto as Exhibits B-H or any subsequent addenda modifying Exhibits B-H.
  - ☐ **Additional Project Plan Documents:** There are additional Project Plan documents other than those attached as Exhibit B. Copies of the additional Project Plan documents not attached as Exhibit B can be obtained by contacting the entity identified below.

N/A

REQUEST FOR QUOTATION  
Building 34 Roof Replacement Project

---

**10. CONDITIONS OF THE WORK**

**10.1 Permits:** The Vendor shall procure all necessary permits and licenses to comply with all applicable Federal, State, or Local laws, regulations and ordinances of any regulating body.

**10.2 Existing Conditions:** If discrepancies are discovered between the existing conditions and those noted in the specifications, Vendor must immediately notify the Agency's representative. Vendor must also immediately notify the Agency if suspected hazardous materials are encountered.

**10.3 Standard Work Hours:** The standard hours of work for this Contract will be Monday through Friday, from 7:00am to 5:00pm, excluding holidays recognized by the State of West Virginia. Any work outside of the standard hours of work must be approved in advance at the Agency's sole discretion. Authorization of work outside of the standard hours of work will not entitle Vendor to additional compensation.

**10.4 Project Closeout:** Project Closeout shall include the following:

**10.4.1 Final Cleanup:** Vendor shall perform the final cleanup activities normally associated with the work performed under this Contract, prior to final inspection.

**10.4.2 Final Inspection:** Vendor shall participate in a final inspection with the Agency's project manager. The purpose of the final inspection will be to identify deficiencies that need to be remedied prior to Agency's final acceptance of the work. Vendor shall always be obligated to perform in accordance with the Contract and must take all actions necessary to ensure that work complies with requirements of Contract prior to final acceptance. Final acceptance does not waive or release Vendor from its obligation to ensure that work complies with the Contract requirements. Vendor shall submit any warranty documents to the Agency project manager at final inspection.

**10.5 Payment:**

**10.5.1** Agency shall pay flat fee as shown on the Pricing Pages, for all Contract Services performed and accepted under this Contract. Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia.

**10.5.2** Invoices shall be submitted for payment (in arrears) and must include the following information:



**REQUEST FOR QUOTATION  
Building 34 Roof Replacement Project**

---

**10.5.2.1** Invoice must include, at a minimum, invoice date, FEIN number, complete address of vendor and Contract number.

**10.5.2.2** Invoices shall be mailed to the following address:

General Services Division  
Attn: Business Manager  
Building 4, Fifth Floor  
112 California Avenue  
Charleston, WV 25305

**10.5.2.3** Or, emailed to GSDInvoices@wv.gov

**11 FACILITIES ACCESS:** Performance of Contract Services may require access cards and/or keys to gain entrance to Agency's facilities. If access cards and/or keys are required:

**11.1** Vendor must identify principal service personnel which will be issued access cards and/or keys to perform service.

**11.2** Vendor will be responsible for controlling cards and keys and will pay replacement fee, if the cards or keys become lost or stolen.

**11.3** Vendor shall notify Agency immediately of any lost, stolen, or missing card or key.

**11.4** Anyone performing under this Contract will be subject to Agency's security protocol and procedures.

**11.5** Vendor shall inform all staff of Agency's security protocol and procedures.

**12 MISCELLANEOUS:**

**12.1 Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

**Contract Manager:** \_\_\_\_\_

**Telephone Number:** \_\_\_\_\_

**Fax Number:** \_\_\_\_\_

**Email Address:** \_\_\_\_\_

REQUEST FOR QUOTATION  
Building 34 Roof Replacement Project  
CRFQ GSD2200000017

---

**12 MISCELLANEOUS:**

**12.1 Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

**Contract Manager:** Geno Ochap

**Telephone Number:** 740-633-7320

**Fax Number:** 740-633-7322

**Email Address:** geno@mansuettoroofing.com

REQUEST FOR QUOTATION  
**Building 34 Roof Replacement Project**

---

**EXHIBIT B – PROJECT PLANS**

**1 GENERAL REQUIREMENTS:**

**1.1 Demolition Work**

Exterior demolition shall include the removal of all of the existing EPDM roof system. Remove all existing roof drains and associated hardware and prepare to replace with stainless steel drain inserts and fittings. Prepare concrete deck prior to installing new EPDM roof system. It is possible that another roofing material exists under the visible roofing. Contractor should plan accordingly. The contractor is responsible for verifying all existing conditions to include dimensions, materials and locations. Complete verification of the existing decking and insulation was not possible for this solicitation.

**1.2 Architectural Finish Work**

Prepare concrete deck per roofing manufacturer's recommendations prior to installing new EPDM roof system. Install new fully adhered 90-mil EPDM roof membrane on ½" recovery board on 3" of rigid insulation. Slope insulation to the existing drains at 1/8" per foot minimum. Submit manufacturer shop drawing depicting sloped insulation layout for proper drainage prior to commencing work. Replace all existing roof drains with stainless steel drain inserts and fittings; exterior strainer dome for drain shall be epoxy painted cast iron. The contractor is responsible for proper drainage with no ponding areas. At raised parapet cover with powder-coated (painted finish) metal parapet cap to match existing profile. Coordinate paint color with GSD Project Manager. Install new 24" X 24" walkway pads with 6" between each pad location (path shown on attached drawing, Exhibit D). Install walkway pads directly under all existing supply line supports over new EPDM roof installation. Add powder-coated (painted finish) steel OSHA compliant post and rail safety barriers. Coordinate paint color with GSD Project Manager. Attach the post and rail safety barriers to the inside vertical surface of parapet walls – typical at all four (4) sides of the roof level; top of railing shall measure 39" minimum height to 45" maximum height above finished roof. Use post-installed anchors Type 304 stainless-steel fasteners with chemical anchors (see photos for existing conditions). The contractor shall submit manufacturer shop drawings (for approval) depicting railing layout dimensions and connection details. The contractor is responsible for verifying all existing conditions to include dimensions, materials and locations. Complete verification of the existing decking and insulation was not possible for this solicitation.

REQUEST FOR QUOTATION  
**Building 34 Roof Replacement Project**

---

### **1.3 Roof Replacement and Associated Work**

All Construction Services must comply with the specifications in the following Exhibits:

Exhibit C: Photos of existing conditions

Exhibit D: Existing Roof Plan – Drawing A1.03

Exhibit E: Section 055213- Pipe and Tube Railings

Exhibit F: Section 070150- Preparation for Re-roofing

Exhibit G: Section 075323- Ethylene-Propylene-Diene-Monomer (EPDM) Roofing

Exhibit H: Section 076200- Sheet Metal Flashing and Trim

Any reference to manufacturer or brand names in the technical specifications section is not meant to limit competition but only to establish a basis for design of the roofing systems and should be considered to be followed by the words “or equal” (if not present). All products provided from the listed or alternative manufacturers must meet all of the material and performance specifications included in the technical specifications or elsewhere in the solicitation.

**2 PERFORMANCE:** Vendor and Agency shall agree upon a schedule for performance of Contract Services and Contract Services Deliverables, unless such a schedule is already included herein by Agency. If this Contract is designated as an open-end contract, Vendor shall perform in accordance with the release orders that may be issued against this Contract.

**2.1** Vendor and Agency shall agree upon a schedule for performance of Contract Services and Contract Services Deliverables, unless such a schedule is already included herein by Agency.

**2.2** The Vendor shall provide the Agency Project Manager with an overall project schedule within **seventy-two (72) hours** of Award of the Contract. The proposed project schedule shall indicate areas to be worked. Where coordination or disruption of adjacent workspaces or occupants may be required, provide at least one week’s advance notice prior to conducting work in those areas. Vendor shall adhere to schedule provided and coordinate through the Agency Project Manager.

**2.3** Work shall be conducted as a single project. The work schedule shall be reviewed and approved by the Agency Project Manager prior to commencement of the work. The Vendor shall coordinate the schedule around the Agency’s work requirements

REQUEST FOR QUOTATION  
**Building 34 Roof Replacement Project**

---

**3 TRAVEL:** Vendor shall be responsible for all mileage and travel costs, including travel time, associated with performance of this Contract. Any anticipated mileage or travel costs may be included in the Vendor's bid, but such costs will not be paid by the Agency separately.

**4 PROJECT SPECIFIC CONDITIONS OF THE WORK:**

**4.1 Limits of Work**

**4.1.1** Work areas will be limited to those spaces required for access to the jobsites. The State Agencies will be responsible for clearing work areas of furniture and property prior to work commencement per the work schedule.

**4.1.2** Some interior space may be utilized for temporary (overnight) storage of equipment and tools. Coordinate storage needs with the Agency Project Manager.

**4.1.3** Agency facilities shall remain in use during this contract. Contractor shall work with the Building Manager to coordinate the temporary access to work areas and otherwise provide for the Contractor needs to complete work. Contractor shall minimize disruption to building work areas and loading dock access. Contractor shall be permitted reasonable use of building utilities including power, water and sanitary sewage disposal as required for conducting the work. Contractor shall coordinate the location of service connections or use of receptacles with the Building Manager to avoid overloading existing circuits

**4.2 Contractor Visitor Badges**

Contractor shall provide a list of all personnel working on this project within the Buildings. This list shall include a copy of a valid driver's license or other legal identification and include date of birth and cell phone number. Workers shall carry valid Contractor Photo ID Badges to be worn when working in the buildings. Under no circumstances shall a worker be assigned to this project without the validation first being submitted to the General Services Division and approval given.

**4.3 Work Restrictions**

Access to the buildings shall be coordinated with the Owner. Contractor shall not leave open doors unattended and shall close doors when not in use.

These are non-smoking buildings. Smoking is not permitted within the buildings or near entrances, operable windows or outdoor air intakes.

**4.4 Parking**

Some parking is available on the project sites. Parking in non-designated areas is not permitted. Parking is the responsibility of the contractor. With prior approval, contractor's vehicles may be brought on-site for loading & unloading or to provide equipment necessary for conducting the work.

REQUEST FOR QUOTATION  
**Building 34 Roof Replacement Project**

---

Use of loading dock areas or sidewalk areas for parking is strictly prohibited. The tenant Agency and others have assigned parking on all 3 state-owned sides of the building; Vendor must coordinate with the Agency on how best to minimize disruption of employee parking during the execution of the work.

**4.5 Codes**

All work is to be performed in compliance with applicable Federal and State codes including but not limited to the International Building Code, International Mechanical Code, Life Safety Code, NEC, OSHA, UL, ANSI, ASME and related standards.

**4.6 Safety**

All applicable local safety and OSHA rules and guidelines shall be met by the Contractor. Work shall be subject to verification and inspection by GSD Safety representatives. Such verification shall not relieve the Contractor from meeting all applicable safety regulations and inspection by other agencies.

**4.7 Hot Work Permit**

Contractor shall obtain Owner's permission prior to performing any work that requires an open flame, creates sparks, use's equipment that creates combustible temperatures, or performs any work that could result in a fire hazard. Owner will review work area and issue a 'Hot Work Permit' prior to Contractor commencing work. Note that the Contractor must take proper precautions and may be required to provide a Fire Watch as a condition of the permit.

**4.8 Workmanship**

Contractor shall complete all work in a neat and workmanlike manner. All work shall be done using new materials in a manner that meets commercial quality standards. Work shall be neat, true, plumb and square, as applicable. Contractor shall verify all dimensions.

**4.9 General Services Division Jobsite Safety Handbook**

Prior to beginning any work covered by the Contract, Vendor shall have read, reviewed and acknowledged in writing the attached Jobsite Safety Handbook(Exhibit I).

**4.10 Warranty**

Agency requires both a roofing system manufacturer's and a roofing installer's warranty – See Section 075323 (Exhibit G) of the attached specifications. Agency requires a sheet metal finish warranty – See Section 076200 (Exhibit H) of the attached specifications.



Department of Administration  
Purchasing Division  
2019 Washington Street East  
Post Office Box 50130  
Charleston, WV 25305-0130

State of West Virginia  
Centralized Request for Quote  
Construction

Proc Folder: 945534

Doc Description: Add. No. 1 Building 34 (Weirton) Roof Replacement

Reason for Modification:  
Addendum No. 1

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2021-11-09	2021-11-16 13:30	CRFQ 0211 GSD2200000017	2

**BID RECEIVING LOCATION**

BID CLERK  
DEPARTMENT OF ADMINISTRATION  
PURCHASING DIVISION  
2019 WASHINGTON ST E  
CHARLESTON WV 25305  
US

**VENDOR**

Vendor Customer Code:

Vendor Name :

Address :

Street :

City :

State :

Country :

Zip :

Principal Contact :

Vendor Contact Phone:

Extension:

**FOR INFORMATION CONTACT THE BUYER**

Melissa Pettrey  
(304) 558-0094  
melissa.k.pettrey@wv.gov

Vendor  
Signature X

FEIN#

DATE

All offers subject to all terms and conditions contained in this solicitation



**ADDITIONAL INFORMATION**

Addendum No. 1 is issued to publish and distribute the attached information to the vendor community.

Request for Quotation  
Construction

The West Virginia Purchasing Division is soliciting bids on behalf of the General Services Division to establish a contract for roof work on Building 34, a 2-story structure housing offices, located at 100 Municipal Plaza, Weirton, WV 26062, per the specifications, Project Manual, drawings, and terms and conditions as attached hereto.

INVOICE TO		SHIP TO	
DEPARTMENT OF ADMINISTRATION GENERAL SERVICES DIVISION 112 CALIFORNIA AVENUE, 5TH FLOOR CHARLESTON WV US		DEPARTMENT OF ADMINISTRATION GENERAL SERVICES DIVISION BLDG 34 100 MUNICIPAL PLAZA WEIRTON WV US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Building 34 (Weirton) Roof Replacement				

Comm Code	Manufacturer	Specification	Model #
72152601			

**Extended Description:**

Building 34 (Weirton) Roof Replacement

**SCHEDULE OF EVENTS**

Line	Event	Event Date
1	Mandatory Pre-bid 11:00 AM	2021-11-02
2	Q&A deadline 3:00 PM	2021-11-05

# SOLICITATION NUMBER: CRFQ GSD2200000017

## Addendum Number: 1

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

### Applicable Addendum Category:

- ☐ Modify bid opening date and time
- ☒ Modify specifications of product or service being sought
- ☒ Attachment of vendor questions and responses
- ☒ Attachment of pre-bid sign-in sheet
- ☐ Correction of error
- ☐ Other

### Description of Modification to Solicitation:

1. To publish Vendor questions and Agency responses.
2. To publish updates and revisions.
3. To publish pre-bid sign-in sheet.

No other changes.

**Additional Documentation:** Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

### Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

# Pre-Bid Sign-In Sheet


Solicitation Number: CRFQ GSD220000017

Date of Pre-Bid Meeting: November 2, 2021

Location of Prebid Meeting: Bldg 34, 100 Municipal Plaza, Weirton, WV, 26062

## Please Note:

Vendors must sign-in on this sheet to verify attendance at the Pre-Bid meeting. Failure to legibly sign in may be grounds for declaring a vendor ineligible to bid. For further verification, please also provide a business card if possible.

Firm Represented:*	Rep Name (Printed):	Firm Address:	Telephone #:	Fax #:	Email:
<p>Since 1923</p>  <p>TRI-STATE Roofing &amp; Sheet Metal Company</p> <p>1651 Blue Horizon Dr., Morgantown, WV 26501 PO Box 4255, Morgantown, WV 26504 Office: 304-328-5244 Cell: 304-216-7781 Fax: 304-328-5248 E-mail: jbornak@tri-stateservice.com www.tri-stateservice.com</p>	<p><b>JON BORNAK</b> Vice President</p>				
KURTZ CONSTRUCTION	ISAAC KURTZ	2468 Dudley Hill Rd Middlebourne WV 26149	<del>304-398-5173</del> 304-398-5173		KURTZ CONSTRUCTION company@gmail.com
KARRELLTH ROOFING AND SHEET METAL	CURIS BARCUS	53-1414 STREET WHEELERS, WV 26003	(740) 381-5712		estimatingwv@krsa.net
Manguelto Roofing	Mark Speirs	116 Wood Street Martins Ferry, OH 43935	740-633-7320	740-633-7322	mark@mansvetorroofing.com

\*One Vendor Per Representative - No one individual is permitted to represent more than one vendor at the pre-bid meeting. Any individual that does attempt to represent two or more vendors will be required to select one vendor to which the individual's attendance will be attributed. The vendors not selected will be deemed to have not attended the pre-bid meeting unless another individual attended on their behalf.

**CRFQ GSD2200000017**  
**Vendor questions and responses.**

**Q1. Will the "Fixed Period of Contract" of "Seventy-Five (75)" days be removed? Material procurement could be an issue.**

**A1. No, the date will not be removed. That is the date from the notice to proceed. The agency will not issue the notice before the materials are received for the roof.**

**Q2. Please clarify insulation thickness and tapered plan. It was discussed during the pre-bid meeting that the specified 3" base layer be changed to a 2" minimum at the drains plus the 1/8" per foot tapered insulation over top, please specify.**

**A2. Yes, change the specification to a 2" minimum at the drains plus 1/8" per foot tapered insulation over the top.**

**Q3. Due to the current volatility of the materials market, it was discussed at the pre-bid meeting that provisions be made post contract to allow for material escalation in the form of an allowance carried in the overall base bid price. Will this provision be possible, and if not, now should price increases be addressed?**

**A3. No, bids must be fixed in price. It is not the Agencies responsibility to speak on how vendors should bid in regard to pricing.**

**Q4. It was discussed at the pre-bid meeting to specify a ballasted guardrail system around the upper roof perimeter with a 3' set back. Can you please provide a specification for this handrail system and clarify the set back dimension from the roof edge? Also, please specify guardrail color/finish desired.**

**A4. Delete the following from Section 1.2 of Exhibit B; " Add powder-coated (painted finish) steel OSHA compliant post and rail safety barriers. Coordinate paint color with GSD Project Manager. Attache the post and sides of the roof level; top of railing shall measure 39" minimum height to 45" maximum height above finished roof. Use post-installed anchors Type 304 stainless-steel fasteners with chemical anchors."**

**Replace the above with; "Add powder-coated, OSHA compliant ballasted post and rail safety system in accordance with specifications provided in Exhibit E, Section 007720. Color is specified to be RAL 8016 'Mahogany Brown'".**

**Also note that Exhibit E, Section 055213 has been replaced with Exhibit E, Section 007720.**

**Q5. Regarding the Fixed Period Contract (75) days: We concerns over material lead time issues throughout the industry that our beyond our control. If the NTP is issued "once we confirm delivery of materials to site", will a purchase order be issued upon award in order to begin the process of procuring materials? Please clarify in detail how the process will be executed. The roofing system can be installed within (75) days of having materials on site. If the NTP is issued upon award of contract, we cannot meet your Fixed Period Contract requirement.**

**A5. A Purchase order will be issued, then Change Order to the contract will be issued for the Notice to Proceed (NTP). The Agency will not issue the NTP until we have set date the materials will be available for the project. Once materials have been received, then the Agency shall issue the Notice to Proceed.**

**Q6. Please confirm this project is Tax Exempt.**

**CRFQ GSD2200000017**  
**Vendor questions and responses.**

**A6.** That is correct. The State of West Virginia does not pay taxes.

**Q7. Drawing Supplied:** Could a clearer drawing be provided for A1.03? Once printed we cannot read all of the detail information.

**A7.** The drawing has been updated to reflect the additional specifications, but there is not a more legible copy available.

**Q8. Pipe and Tube Railing System:** What is the setback of the railing from the roof edge? Can a sketch/layout be provided showing where railing is required so proper material quantities are included? Is railing required on the (2) lower canopy roofs as well? What is the finish color desired? What is the preferred method of anchoring the system?

**A8.** Setback from the edge of the roof to the middle of the decorative half-moons on the front of the building, and this distance should be maintained around the perimeter (see Dimension A on the roof drawing, Exhibit D). The drawing now includes a layout of the railing system location. No railing is required on the lower canopy roofs. Finish is powder coated RAL 8016 "Mahogany Brown". The specified system is a ballasted safety rail system as specified in Exhibit E, Section 007720.

**Q9. Roofing System:** The specifications indicate a fully adhered .090 EPDM system over ½" recovery board over 3" insulation. Includes tapered insulation at 1/8" per foot. General requirements state this is a concrete deck yet the drawing provided indicates a metal deck. Please clarify.

**A9.** The deck is metal and the ½" recovery board is not required.

**Q10. Soffit, Fascia/Fascia Extenders:** While new coping/gravel stop is within our scope of work, please confirm the soffit (at canopies), fascia and fascia extenders are to remain in place and tied into.

**A10.** The coping is to be replaced and tied into the existing fascia and fascia extenders.

**Q11.** It was mentioned during the pre-bid that additional walk pads may be desired. Please provide a sketch indicating the quantity of desired additional walk pads.

**A11.** The additional walk pads have been included on the updated drawing, Exhibit D.

**Q12. Roof Hatch:** Please confirm the existing roof hatch with ladder and railing is to remain and NOT be replaced.

**A12.** The existing roof hatch and ladder will remain.

**Q13. Equipment Supports:** It was discovered at the Pre-Bid that there are 4x4 wooden sleepers under some pieces of roof top equipment. Please verify these are to remain and be reused.

**A13.** The sleepers are to be replaced with like-size 4" x 4" treated lumber.

**Q14.** Who is responsible for repositioning the satellite and antenna on the roof once the new roofing is installed?

**A14.** GSD will be responsible for repositioning the satellite and antenna.

**CRFQ GSD2200000017**  
**Vendor questions and responses.**

**Q15. The specifications call for 3" min insulation at the drain; however, the existing construction roof plan indicates 2". Please confirm the thickness of the roof insulation at the roof drain?**

**A15. A minimum of 2" of insulation at the drains.**

**Q16. Will the upper most section of the metal fascia be the only metal replaced?**

**A16. Yes, only the upper most section of the metal fascia will be replaced.**

**Q17. Can the new safety railing be non-penetrating with weighted bases?**

**A17. Yes, per the revised Exhibit E, Section 007720.**

**Q18. What do you want the color of the new railing to be?**

**A18. RAL 8016 "Mahogany Brown"**

**Q19. Is a building permit required from the City of Weirton?**

**A19. Vendors will need to check with the City of Weirton for permitting and B&O tax issues.**

**Q20. The original construction drawings do not show a gypsum substrate board. Is a substrate board required?**

**A20. No substrate board is required.**

**Q21. Are we to replace the existing wood sleepers under all the HVAC split units?**

**A21. Yes, with like-size, treated, 4" x 4" lumber.**

**Q22. The existing pipe portals to all the HVAC split units are in horrible condition. We recommend providing and install new pipe portals. This would require disconnecting and reconnecting the refrigerant lines to facilitate the new pipe portal. Is this something you would like to include in the bid?**

**A22. As part of this contract, the vendor shall provide and install the new pipe portals, and GSD will be responsible for disconnecting and reconnecting the refrigerant lines.**

**Q23. Due to the shortage in raw materials in the roofing insulation industry, leads times are 5-8 months from placement of order. Because of these long lead times, pricing it not finalized until the time of shipment. Which means we pay what ever the cost of the roofing insulation is at the time of shipment and there is no way of knowing what these costs will be. We would only be able to quote this project with current (today's) pricing. We recommend having an allowance or some other means in the contract to cover the difference in the cost of the insulation at the time of shipment. If you would like to discuss this further, please feel free to contact me.**

**A23. We will not be doing allowances for this project.**

**REQUEST FOR QUOTATION  
Building 34 Roof Replacement Project**

---

**GENERAL CONSTRUCTION SPECIFICATIONS (No AIA Documents)**

- 1. PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids on behalf of the General Services Division ("the Agency") to establish a contract for roof work on Building 34, a 2-story structure housing offices, located at 100 Municipal Plaza, Weirton, WV 26062, as follows: Replace existing adhered EPDM (ethylene propylene diene monomer) roof system in its entirety (see attached drawing, Exhibit D) to include post and safety rails around the perimeter. The Vendor shall furnish any incidental work, materials (including delivery), labor, and equipment that are necessary to complete the Construction Services, even if such incidental work is not explicitly included in the Project Plans.
- 2. DEFINITIONS:** The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in section 2 of the General Terms and Conditions and in the Project Plans as defined below.
  - 2.1 "Construction Services"** means providing all labor, materials and equipment necessary to replace the roof system of Building 34; also including replacing roof drains and walkway pads; and providing and installing parapet wall safety barrier guardrail per the attached drawing, Exhibit D, and noted photos depicting actual conditions, as more fully described in the Project Plans.
  - 2.2 "Pricing Page"** means the pages contained in wvOASIS, attached hereto as Exhibit A, or included in the Project Plans upon which Vendor should list its proposed price for the Construction Services.
  - 2.3 "Solicitation"** means the official notice of an opportunity to supply the State with Construction Services that is published by the Purchasing Division.
  - 2.4 "Project Plans"** means documents developed by an architect, an engineer, the Agency, or another design professional, which are attached hereto as Exhibits B-H, that provide detailed instructions on how the Construction Services are to be performed. If Project Plans contain drawings or other documents too large to attach in Exhibits B-H, Vendors can obtain copies in accordance with Section 9 of these Specifications.
- 3. ORDER OF PRECEDENCE:** This General Construction Specifications document will have priority over, and supersede, anything contained in the Project Plans.
- 4. QUALIFICATIONS:** Vendor, or Vendor's staff if requirements are inherently limited to individuals rather than corporate entities, shall have the following minimum qualifications:

**REQUEST FOR QUOTATION**  
**Building 34 Roof Replacement Project**

---

- 4.1 Experience:** Vendor, or Vendor's supervisory staff assigned to this project, must have successfully completed at least three (3) projects that involved work similar to that described in these specifications or the Project Plans. Compliance with this experience requirement will be determined prior to contract award by the State through references provided by the Vendor upon request, through knowledge or documentation of the Vendor's past projects, through confirmation of experience requirements from the architect assisting the State in this project, or some other method that the State determines to be acceptable. Vendor must provide any documentation requested by the State to assist in confirmation of compliance with this provision. References, documentation, or other information to confirm compliance with this experience requirement may be requested after bid opening and prior to contract award.
- 5. CONTRACT AWARD:** The Contract is intended to provide Agency with a purchase price for the Construction Services. The Contract will be awarded to the lowest qualified responsible bidder meeting the required specifications. If the Pricing Pages contain alternates/add-ons, the Contract will be awarded based on the grand total of the base bid and any alternates/add-ons selected.
- 6. SELECTION OF ALTERNATES:** Pursuant to W. Va. Code § 5-22-1(e), if the Pricing Pages contain alternates/add-ons, there must be no more than seven listed, and the alternates/add-ons will be selected in the order of priority listed on the Pricing Pages. The first alternate/add-on must be selected before the second alternate/add-on can be selected and so on. Provided, that Agency may accept an alternate out of the listed order if acceptance would not affect determination of the lowest qualified responsible bidder. Any unaccepted alternate contained within a bid shall expire one hundred fifty days after the date of the opening of bids for review.
- 7. PERFORMANCE:** Vendor shall perform the Construction Services in accordance with this document and the Project Plans.
- 8. SUBSTITUTIONS:** Any substitution requests must be submitted in accordance with the official question and answer period described in the INSTRUCTIONS TO VENDORS SUBMITTING BIDS, Paragraph 4. Vendor Question Deadline. Vendors submitting substitution requests should submit product brochures and product specifications during the official question and answer period.
- 9. PROJECT PLANS:** The checked box will apply to Project Plans for this solicitation.
- X No Additional Project Plan Documents:** There are no additional Project Plans other than those attached hereto as Exhibits B-H or any subsequent addenda modifying Exhibits B-H.



**REQUEST FOR QUOTATION**  
**Building 34 Roof Replacement Project**

---

- **Additional Project Plan Documents:** There are additional Project Plan documents other than those attached as Exhibit B. Copies of the additional Project Plan documents not attached as Exhibit B can be obtained by contacting the entity identified below.

N/A

Copies of project plans can be examined at the following locations

N/A

## **10. CONDITIONS OF THE WORK**

- 10.1 Permits:** The Vendor shall procure all necessary permits and licenses to comply with all applicable Federal, State, or Local laws, regulations and ordinances of any regulating body.

- 10.2 Existing Conditions:** If discrepancies are discovered between the existing conditions and those noted in the specifications, Vendor must immediately notify the Agency's representative. Vendor must also immediately notify the Agency if suspected hazardous materials are encountered.

- 10.3 Standard Work Hours:** The standard hours of work for this Contract will be Monday through Friday, from 7:00am to 5:00pm, excluding holidays recognized by the State of West Virginia. Any work outside of the standard hours of work must be approved in advance at the Agency's sole discretion. Authorization of work outside of the standard hours of work will not entitle Vendor to additional compensation.

- 10.4 Project Closeout:** Project Closeout shall include the following:

- 10.4.1 Final Cleanup:** Vendor shall perform the final cleanup activities normally associated with the work performed under this Contract, prior to final inspection.

- 10.4.2 Final Inspection:** Vendor shall participate in a final inspection with the Agency's project manager. The purpose of the final inspection will be to identify deficiencies that need to be remedied prior to Agency's final acceptance of the work. Vendor shall always be obligated to perform in accordance with the Contract and must take all actions necessary to ensure that work complies with requirements of Contract prior to final acceptance. Final acceptance does not waive or release Vendor from its obligation to ensure that work complies with the Contract requirements. Vendor shall

**REQUEST FOR QUOTATION**  
**Building 34 Roof Replacement Project**

---

submit any warranty documents to the Agency project manager at final inspection.

**10.5 Payment:**

**10.5.1** Agency shall pay flat fee as shown on the Pricing Pages, for all Contract Services performed and accepted under this Contract. Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia.

**10.5.2** Invoices shall be submitted for payment (in arrears) and must include the following information:

**10.5.2.1** Invoice must include, at a minimum, invoice date, FEIN number, complete address of vendor and Contract number.

**10.5.2.2** Invoices shall be mailed to the following address:

General Services Division  
Attn: Business Manager  
Building 4, Fifth Floor  
112 California Avenue  
Charleston, WV 25305

**10.5.2.3** Or, emailed to [GSDInvoices@wv.gov](mailto:GSDInvoices@wv.gov)

**11 FACILITIES ACCESS:** Performance of Contract Services may require access cards and/or keys to gain entrance to Agency's facilities. If access cards and/or keys are required:

**11.1** Vendor must identify principal service personnel which will be issued access cards and/or keys to perform service.

**11.2** Vendor will be responsible for controlling cards and keys and will pay replacement fee, if the cards or keys become lost or stolen.

**11.3** Vendor shall notify Agency immediately of any lost, stolen, or missing card or key.

**11.4** Anyone performing under this Contract will be subject to Agency's security protocol and procedures.

**11.5** Vendor shall inform all staff of Agency's security protocol and procedures.

**REQUEST FOR QUOTATION  
Building 34 Roof Replacement Project**

---

**EXHIBIT B – PROJECT PLANS**

**1 GENERAL REQUIREMENTS:**

**1.1**

**Demolition Work**

Exterior demolition shall include the removal of all of the existing EPDM roof system. Remove all existing roof drains and associated hardware and prepare to replace with stainless steel drain inserts and fittings. Prepare concrete deck prior to installing new EPDM roof system. It is possible that another roofing material exists under the visible roofing. Contractor should plan accordingly. The contractor is responsible for verifying all existing conditions to include dimensions, materials and locations. Complete verification of the existing decking and insulation was not possible for this solicitation.

**1.2 Architectural Finish Work (Revised per Technical Questions)**

Prepare concrete deck per roofing manufacturer's recommendations prior to installing new EPDM roof system. Install new fully adhered 90-mil EPDM roof membrane on ½" recovery board on 3" of rigid insulation. Slope insulation to the existing drains at 1/8" per foot minimum. Submit manufacturer shop drawing depicting sloped insulation layout for proper drainage prior to commencing work. Replace all existing roof drains with stainless steel drain inserts and fittings; exterior strainer dome for drain shall be epoxy painted cast iron. The contractor is responsible for proper drainage with no ponding areas. At raised parapet cover with powder-coated (painted finish) metal parapet cap to match existing profile. Coordinate paint color with GSD Project Manager. Install new 24" X 24" walkway pads with 6" between each pad location (path shown on attached drawing, Exhibit D). Install walkway pads directly under all existing supply line supports over new EPDM roof installation. Add powder-coated, OSHA compliant ballasted post and rail safety system in accordance with specifications provided in Exhibit E, Section 007720. Color is specified to be RAL 8016 "Mahogany Brown" (see photos for existing conditions). The contractor shall submit manufacturer shop drawings (for approval) depicting railing layout dimensions and connection details. The contractor is responsible for verifying all existing conditions to include dimensions, materials and locations. Complete verification of the existing decking and insulation was not possible for this solicitation.

**REQUEST FOR QUOTATION**  
**Building 34 Roof Replacement Project**

---

**1.3 Roof Replacement and Associated Work**

All Construction Services must comply with the specifications in the following Exhibits:

Exhibit C: Photos of existing conditions

Exhibit D: Existing Roof Plan – Drawing A1.03

Exhibit E: Section 007720- Ballasted Safety Pipe and Tube Railing System

Exhibit F: Section 070150- Preparation for Re-roofing

Exhibit G: Section 075323- Ethylene-Propylene-Diene-Monomer (EPDM) Roofing

Exhibit H: Section 076200- Sheet Metal Flashing and Trim

Any reference to manufacturer or brand names in the technical specifications section is not meant to limit competition but only to establish a basis for design of the roofing systems and should be considered to be followed by the words “or equal” (if not present). All products provided from the listed or alternative manufacturers must meet all of the material and performance specifications included in the technical specifications or elsewhere in the solicitation.

**2 PERFORMANCE:** Vendor and Agency shall agree upon a schedule for performance of Contract Services and Contract Services Deliverables, unless such a schedule is already included herein by Agency. If this Contract is designated as an open-end contract, Vendor shall perform in accordance with the release orders that may be issued against this Contract.

**2.1** Vendor and Agency shall agree upon a schedule for performance of Contract Services and Contract Services Deliverables, unless such a schedule is already included herein by Agency.

**2.2** The Vendor shall provide the Agency Project Manager with an overall project schedule within seventy-two (72) hours of Award of the Contract. The proposed project schedule shall indicate areas to be worked. Where coordination or disruption of adjacent workspaces or occupants may be required, provide at least one week’s advance notice prior to conducting work in those areas. Vendor shall adhere to schedule provided and coordinate through the Agency Project Manager.

**2.3** Work shall be conducted as a single project. The work schedule shall be reviewed and approved by the Agency Project Manager prior to commencement of the work. The Vendor shall coordinate the schedule around the Agency’s work requirements

**REQUEST FOR QUOTATION  
Building 34 Roof Replacement Project**

---

**3 TRAVEL:** Vendor shall be responsible for all mileage and travel costs, including travel time, associated with performance of this Contract. Any anticipated mileage or travel costs may be included in the Vendor's bid, but such costs will not be paid by the Agency separately.

**4 PROJECT SPECIFIC CONDITIONS OF THE WORK:**

**4.1 Limits of Work**

**4.1.1** Work areas will be limited to those spaces required for access to the jobsites. The State Agencies will be responsible for clearing work areas of furniture and property prior to work commencement per the work schedule.

**4.1.2** Some interior space may be utilized for temporary (overnight) storage of equipment and tools. Coordinate storage needs with the Agency Project Manager.

**4.1.3** Agency facilities shall remain in use during this contract. Contractor shall work with the Building Manager to coordinate the temporary access to work areas and otherwise provide for the Contractor needs to complete work. Contractor shall minimize disruption to building work areas and loading dock access. Contractor shall be permitted reasonable use of building utilities including power, water and sanitary sewage disposal as required for conducting the work. Contractor shall coordinate the location of service connections or use of receptacles with the Building Manager to avoid overloading existing circuits

**4.2 Contractor Visitor Badges**

Contractor shall provide a list of all personnel working on this project within the Buildings. This list shall include a copy of a valid driver's license or other legal identification and include date of birth and cell phone number. Workers shall carry valid Contractor Photo ID Badges to be worn when working in the buildings. Under no circumstances shall a worker be assigned to this project without the validation first being submitted to the General Services Division and approval given.

**4.3 Work Restrictions**

Access to the buildings shall be coordinated with the Owner. Contractor shall not leave open doors unattended and shall close doors when not in use.

These are non-smoking buildings. Smoking is not permitted within the buildings or near entrances, operable windows or outdoor air intakes.

**4.4 Parking**

Some parking is available on the project sites. Parking in non-designated areas is not permitted. Parking is the responsibility of the contractor. With prior approval, contractor's vehicles may be brought on-site for loading & unloading or to provide equipment necessary for conducting the work.

**REQUEST FOR QUOTATION**  
**Building 34 Roof Replacement Project**

---

Use of loading dock areas or sidewalk areas for parking is strictly prohibited. The tenant Agency and others have assigned parking on all 3 state-owned sides of the building; Vendor must coordinate with the Agency on how best to minimize disruption of employee parking during the execution of the work.

**4.5 Codes**

All work is to be performed in compliance with applicable Federal and State codes including but not limited to the International Building Code, International Mechanical Code, Life Safety Code, NEC, OSHA, UL, ANSI, ASME and related standards.

**4.6 Safety**

All applicable local safety and OSHA rules and guidelines shall be met by the Contractor. Work shall be subject to verification and inspection by GSD Safety representatives. Such verification shall not relieve the Contractor from meeting all applicable safety regulations and inspection by other agencies.

**4.7 Hot Work Permit**

Contractor shall obtain Owner's permission prior to performing any work that requires an open flame, creates sparks, use's equipment that creates combustible temperatures, or performs any work that could result in a fire hazard. Owner will review work area and issue a 'Hot Work Permit' prior to Contractor commencing work. Note that the Contractor must take proper precautions and may be required to provide a Fire Watch as a condition of the permit.

**4.8 Workmanship**

Contractor shall complete all work in a neat and workmanlike manner. All work shall be done using new materials in a manner that meets commercial quality standards. Work shall be neat, true, plumb and square, as applicable. Contractor shall verify all dimensions.

**4.9 General Services Division Jobsite Safety Handbook**

Prior to beginning any work covered by the Contract, Vendor shall have read, reviewed and acknowledged in writing the attached Jobsite Safety Handbook.

**4.10 Warranty**

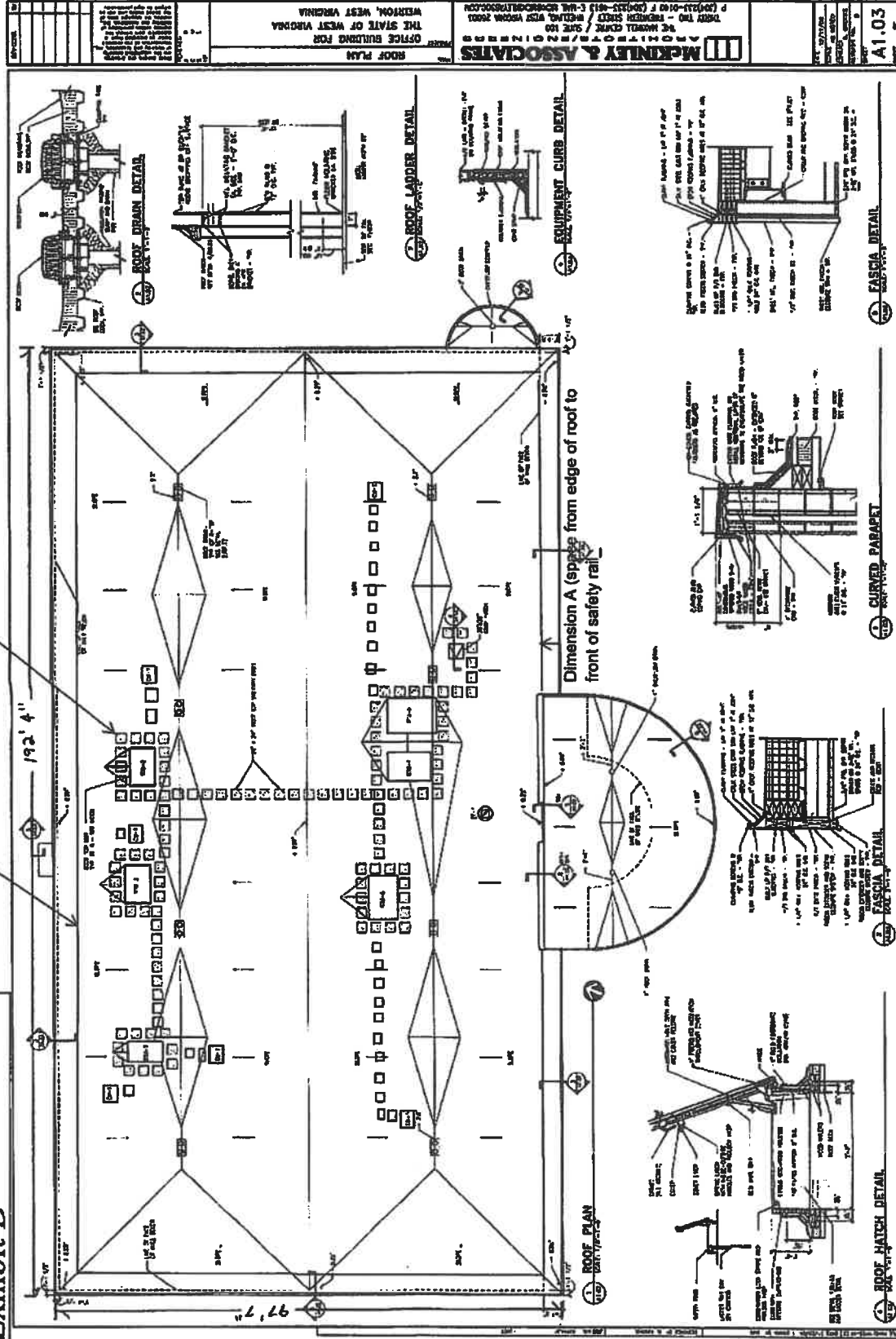
Agency requires both a roofing system manufacturer's and a roofing installer's warranty – See Section 075323 (Exhibit G) of the attached specifications. Agency requires a sheet metal finish warranty – See Section 076200 (Exhibit H) of the attached specifications.

Revised 11/09/2021

# Building 34 Roof Plan Exhibit D

1. Install safety rail around roof perimeter

2. Install new walkpads per diagram



**BUILDING 34 ROOF REPLACEMENT  
SECTION 007720 – BALLASTED SAFETY PIPE AND TUBE RAILING SYSTEMS**

**EXHIBIT E**

**SECTION 007720 – BALASTED SAFETY PIPE AND TUBE RAILING SYSTEMS**

**PART I – GENERAL**

**1.1 Summary**

Provide and install freestanding KeeGuard® Roof Edge Protection System, including pipe railings, uprights, bases, counterweights, fittings and delivery to site.

**Related Sections**

1. Section 05500 - Metal Fabrications: Associated metal supports.
2. Section 07400 - Membrane Roofing: Coordination of roof edge protection installation.

**1.2 References**

1. American National Standards Institute (ANSI) - A21.1 Safety Requirements for Floor and Wall Openings, Railings and Toe Boards.
2. American National Standards Institute (ANSI) - A58.1 Minimum Design Loads in Buildings and Other Structures.
3. American National Standards Institute (ANSI) - A117.1 Accessible and Usable Buildings and Facilities.
4. American Society of Testing and Materials (ASTM) A47 - Standard Specification for Ferrite Malleable Iron Castings.
5. American Society of Testing and Materials (ASTM) A53 - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
6. American Society of Testing and Materials (ASTM) A153 - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
7. American Society of Testing and Materials (ASTM) A500 - Standard Specification for cold-formed welded and seamless carbon steel structural tubing.
8. Occupational Safety & Health Administration (OSHA): 1910.23 - Guarding Floor and Wall Openings and Holes.

**1.3 Submittals**

1. Manufacturer's data sheets on each product to be used, including:
  - a. Preparation instructions and recommendations.
  - b. Shop Drawings: Indicate profiles, sizes, connections, size and type of fasteners and accessories.
  - c. Field Measurements: Verify field measurements prior to assembly and/or ordering.  
Storage and handling requirements and recommendations.
  - d. Installation Instruction.
2. Shop Drawings: Drawings showing fabrication and installation of handrails and guardrails including plans, elevations, sections, details of components, anchor details, and attachment to adjoining units of work



**BUILDING 34 ROOF REPLACEMENT  
SECTION 007720 – BALLASTED SAFETY PIPE AND TUBE RAILING SYSTEMS**

**EXHIBIT E**

3. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns. Initial sample should include RAL 8016 "Mahogany Brown" for review.

**1.4 Quality Assurance**

1. Railings Structural Requirements:
  - a. Handrail, wall rail and guardrail assemblies and attachments shall withstand a minimum concentrated load of 200 pounds (90719 g) applied in any direction on the top rail.
  - b. Infill area of guardrail system capable of withstanding a horizontal concentrated load of 200 pounds (90719 g) applied to one square foot (8165 g/sm) at any point in the system. Load not to act concurrently with loads on top rail of system in determining stress on guardrail.

**1.5 Delivery, Storage, and Handling**

1. Materials to be delivered to the job site in good condition and adequately protected against damage as handrails are a finished product.
2. Store products in manufacturer's unopened packaging until ready for installation.

**1.6 Project Conditions**

1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside the manufacturer's absolute limits.
2. Field Measurements: Where handrails and railings are indicated to fit to other construction, check actual dimensions of other construction by accurate field measurements before fabrication; show recorded measurements on final shop drawings.
  - a. Where field measurements cannot be made without delaying the railing fabrication and delivery, obtain guaranteed dimensions in writing by the Contractor and proceed with fabrication of products to not delay fabrication, delivery, and installation.
3. Coordinate fabrication and delivery schedule of handrails with construction progress and sequence to avoid delay of railing installation.

**PART II - PRODUCTS**

**2.1 Manufacturer**

1. Kee Safety, Inc., Buffalo, NY, USA  
Model: KeeGuard Roof Edge Fall Protection System.
2. Substitutions: Other similar systems may be considered providing they meet the specification listed in Section 1.4.a and b.

**2.2 Systems**

1. Provide pipe or tubing, fittings, and accessories as indicated or required to match design indicated on the Drawings.
  - a. Fittings: Cast iron.
  - b. Handrail Tubing, 12 gauge, Size
    - i. 1-1/2 inches - 1.90 inches O D.
    - ii. 1-1/4 inches - 1.660 inches O D.
  - c. Handrail Pipe, Schedule 40, Size:
    - i. 1-1/2 inches - 1.90 inches (48 mm) O D.
    - ii. 1-1/4 inches - 1.660 inches (38 mm) O D.
  - d. Infill Panels: As indicated. Refer to Drawings.

**SECTION 007720 – BALLASTED SAFETY PIPE AND TUBE RAILING SYSTEMS**

2. Roof Edge Protection: Provide freestanding KeeGuard Roof Edge Protection System, including pipe railings, uprights, bases, counterweights and fittings.
  - a. Freestanding counterweighted guardrail system with 42 inches (1067 mm) minimum height to provide a pedestrian egress barrier on the roof to withstand a minimum load of 200 lb (90719 g) in any direction to the top rail per OSHA Regulation 29 CFR 1910.23.
  - b. Pipe: Steel, 1-1/2 inches (48 mm) schedule 40, galvanized.
  - c. Tube: Galvanized tube, 12 gauge, 1-1/2 inches, 1.90 inches (48 mm) OD.
  - d. Rails and Posts: Galvanized Tube, 12 gauge, 1-1/2 inches 1.90 inches (38 mm) diameter.
  - e. Counterweight Levers: Galvanized Tube, 12 gauge, 1-1/4 inches 1.660 inches (38 mm) diameter.
  - f. Mounting Bases: Steel bases are galvanized and are supplied with a rubber pad on underside of the component.
  - g. Counterweights: Molded recycled PVC with one fixing collar per counterbalance.
  - h. Fasteners: stainless steel or galvanized.
3. Custom Design: Provide pipe, fittings, and accessories as indicated or required by Drawings to match design indicated

**2.3 Materials**

1. Pipe:
  - a. Steel Pipe: Steel, 1-1/2 inches (38 mm) schedule 40, galvanized.
  - b. Tube: Galvanized tube, 12 gauge, 1-1/2 inches, 1.90 inches (48 mm) OD.
2. Fittings, Including Elbows, Crossovers, Wall flanges, Tees, Couplings:
  - a. Galvanized Malleable Cast Iron: Kee Klamp structural pipe fittings, ASTM A447 with ASTM A153 galvanizing.
3. Finish: Polyester factory applied spray coating.
4. Fasteners: Type 304 or 305 stainless steel or galvanized.

**2.4 Fabrication**

1. Fit and shop assemble components in largest practical sizes for delivery to site.
2. Upright tops shall be plugged with weather and light resistant material.
3. Assemble components with joints tightly fitted and secured. Accurately form components to suit installation.

**PART III - EXECUTION****3.1 Preparation**

1. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result.

**3.2 Installation**

1. Install in accordance with manufacturer's instructions.
2. Fit exposed connections accurately together to form tight joints. For all connections with Kee Klamp fittings, each set screw is to be tightened to 29 foot pounds (39 N-m) of torque.
3. Perform cutting, and fitting required for installation of handrails. Set handrails and accurately in location, alignment, and elevation, measured from established lines and levels.

**3.3 Protection**

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

**BUILDING 34 ROOF REPLACEMENT  
SECTION 007720 – BALLASTED SAFETY PIPE AND TUBE RAILING SYSTEMS**

**EXHIBIT E**

**END OF SECTION 007720**

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: CRFQ GSD2200000017**

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

**Addendum Numbers Received:**

(Check the box next to each addendum received)

<input checked="" type="checkbox"/> Addendum No. 1	<input type="checkbox"/> Addendum No. 6
<input type="checkbox"/> Addendum No. 2	<input type="checkbox"/> Addendum No. 7
<input type="checkbox"/> Addendum No. 3	<input type="checkbox"/> Addendum No. 8
<input type="checkbox"/> Addendum No. 4	<input type="checkbox"/> Addendum No. 9
<input type="checkbox"/> Addendum No. 5	<input type="checkbox"/> Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

N.F. Mansuetto & Sons, Inc.

\_\_\_\_\_  
Company

\_\_\_\_\_  
Authorized Signature

November 16, 2021

\_\_\_\_\_  
Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.

REQUEST FOR QUOTATION  
Building 34 Roof Replacement Project  
CRFQ GSD2200000017

---

EXHIBIT A – Pricing Page

Please use this for vendors who do not submit via wvOasis.

DATE: November 16, 2021

NAME OF VENDOR: N.F. Mansuetto & Sons, Inc.

The aforementioned, hereinafter called Vendor, being familiar with and understanding the Bidding Documents and also having examined the site and being familiar with all local conditions affecting the project hereby proposes to furnish all labor, material, equipment, supplies and transportation and to perform all Work in accordance with the Bidding Documents within the time set forth for the sum of:

**BASE BID: Replacement of Building 34 Roof, with all associated work, per the specifications herein.**

For the sum of: Three hundred seventy five thousand nine hundred dollars and no cents  
(\$ 375,900.00)

\_\_\_\_\_)  
(Show amount in both words and numbers)

**BUILDING 34 ROOF REPLACEMENT EXHIBIT C**  
**PHOTOS OF EXISTING ROOF**



**PHOTO 1**



**PHOTO 2**



**BUILDING 34 ROOF REPLACEMENT EXHIBIT C**  
**PHOTOS OF EXISTING ROOF**



**PHOTO 3**



**PHOTO 4**

**BUILDING 34 ROOF REPLACEMENTEXHIBIT C**  
**PHOTOS OF EXISTING ROOF**



**PHOTO 5**



**PHOTO 6**



**BUILDING 34 ROOF REPLACEMENT EXHIBIT C**  
**PHOTOS OF EXISTING ROOF**



**PHOTO 7**

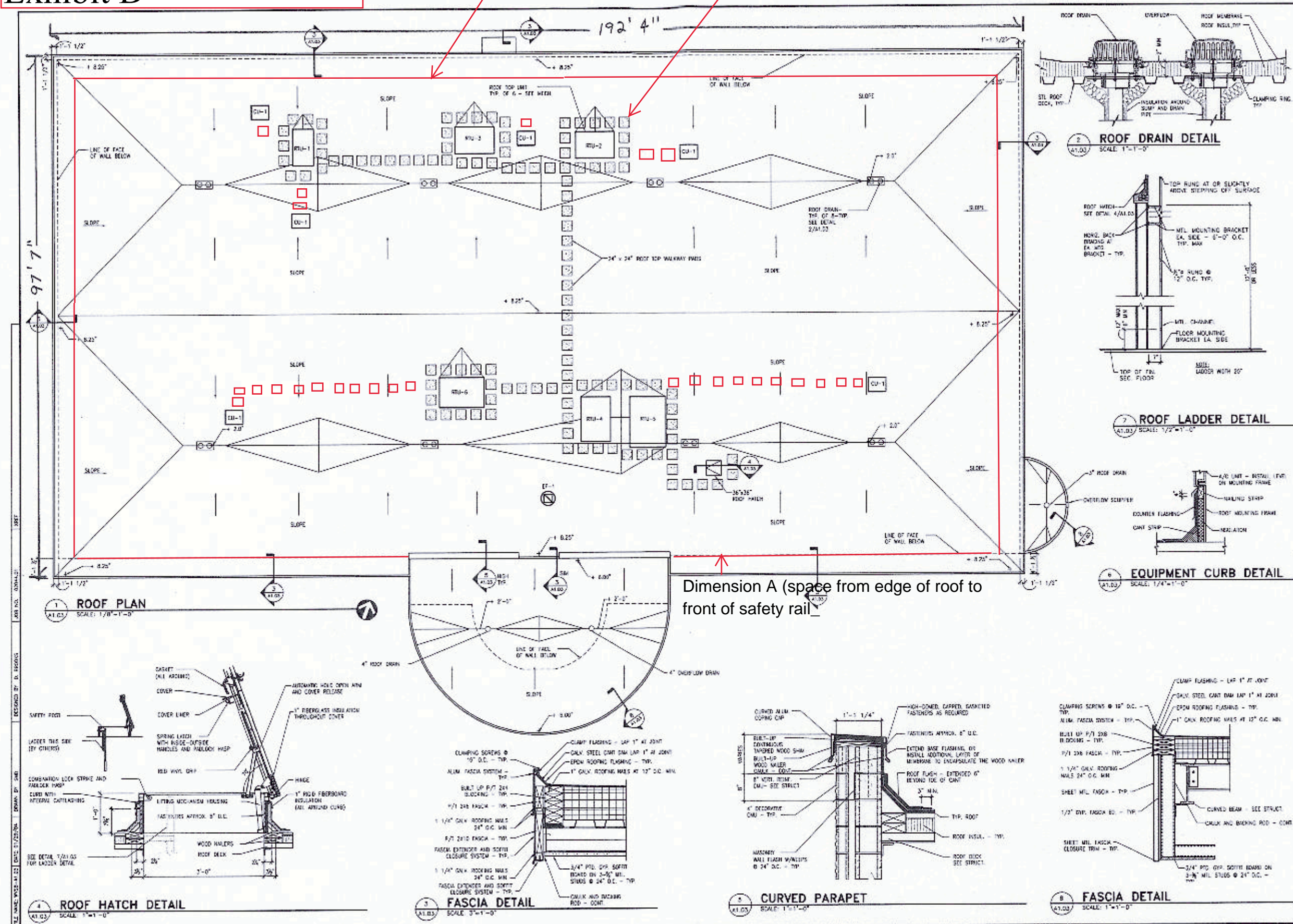


**PHOTO 8**




# Building 34 Roof Plan Exhibit D

1. Install safety rail around roof perimeter
2. Install new walkpads per diagram



Dimension A (space from edge of roof to front of safety rail) \_\_\_\_\_

 <b>McKINLEY &amp; ASSOCIATES</b> ARCHITECTS/ENGINEERS THE MAXWELL CENTRE / SUITE 100 THIRTY TWO - TWENTIETH STREET / WHEELING, WEST VIRGINIA 26003 P (304)233-0140 F (304)233-4613 E-MAIL: MCK@MCKINLEYASSOC.COM		TITLE: ROOF PLAN PROJECT: OFFICE BUILDING FOR THE STATE OF WEST VIRGINIA WEIRTON, WEST VIRGINIA		DATE: 12/17/08 SCALE: AS NOTED COMPA: 3 SHEETS REVISION: No. 0 SHEET: <b>A1.03</b> SHEET: OK		THESE SHEETS ARE PART OF A PROJECT OF THE STATE OF WEST VIRGINIA, AND ARE NOT TO BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.		REVISIONS:		BY:	
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	-------------------------------------------------------------------------------------------------------	--	-------------------------------------------------------------------------------------------------------------	--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	------------	--	-----	--

SECTION 055213 - PIPE AND TUBE RAILINGS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Steel pipe and tube railings.

1.2 PERFORMANCE REQUIREMENTS

A. Delegated Design: Design railings, including comprehensive engineering analysis by a qualified professional engineer, using performance requirements and design criteria indicated.

B. Structural Performance: Railings shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:

1. Handrails and Top Rails of Guards:

- a. Uniform load of 50 lbf/ ft. (0.73 kN/m) applied in any direction.
- b. Concentrated load of 200 lbf (0.89 kN) applied in any direction.
- c. Uniform and concentrated loads need not be assumed to act concurrently.

2. Infill of Guards:

- a. Concentrated load of 50 lbf (0.22 kN) applied horizontally on an area of 1 sq. ft. (0.093 sq. m).
- b. Infill load and other loads need not be assumed to act concurrently.

C. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

1.3 ACTION SUBMITTALS

A. Product Data: For the following:

1. Manufacturer's product lines of mechanically connected railings.
2. Railing brackets.
3. Grout, anchoring requirements, and paint products.



- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
- C. Samples: For each type of exposed finish required.
- D. Delegated-Design Submittal: For installed products indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

#### 1.4 INFORMATIONAL SUBMITTALS

- A. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, according to ASTM E 894 and ASTM E 935.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, **but are not limited to**, the following:

- 1. Steel Pipe and Tube Railings:

- a. ATR Technologies, Inc.
- b. Blum, Julius & Co., Inc.
- c. Braun, J. G., Company; a division of the Wagner Companies.
- d. CraneVeyor Corp.
- e. Hollaender Manufacturing Company.
- f. Kee Industrial Products, Inc.
- g. Moultrie Manufacturing Company.
- h. Pisor Industries, Inc.
- i. SimplifiedSafety.com
- j. Sterling Dula Architectural Products, Inc.; Div. of Kane Manufacturing.
- k. Tri Tech, Inc.
- l. Wagner, R & B, Inc.; a division of the Wagner Companies.
- m. Zoro.com

#### 2.2 METALS, GENERAL

- A. Brackets, Flanges, and Anchors: Cast or formed metal of same type of material and finish as supported rails unless otherwise indicated.

**2.3 STEEL AND IRON**

- A. Tubing: **ASTM A 500 (cold formed) or ASTM A 51.**
- B. Pipe: ASTM A 53/A 53M, Type F or Type S, Grade A, Standard Weight (Schedule 40), unless another grade and weight are required by structural loads.
- C. Plates, Shapes, and Bars: ASTM A 36/A 36M.
- D. Cast Iron: Either gray iron, ASTM A 48/A 48M, or malleable iron, ASTM A 47/A 47M, unless otherwise indicated.

**2.4 MISCELLANEOUS MATERIALS**

- A. Fasteners: Provide the following:
  - 1. For powder coat painted galvanized-Steel Railings, use post-Installed Anchors: Type 304 stainless-steel fasteners with chemical anchors capable of sustaining, without failure, a load equal to six times the load imposed when installed in unit masonry and four times the load imposed when installed in concrete, as determined by testing according to ASTM E 488, conducted by a qualified independent testing agency
- B. Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.
- C. Low-Emitting Materials: Paints and coatings shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers.
- D. Epoxy Zinc-Rich Primer: Complying with MPI#20 and compatible with topcoat.
- E. Epoxy Intermediate Coat: Complying with MPI #77 and compatible with primer and topcoat.
- F. Polyurethane Topcoat: Complying with MPI #72 and compatible with undercoat.
- G. Non-shrink, Nonmetallic Grout: Factory-packaged, non-staining, noncorrosive, nongaseous grout complying with ASTM C 1107. Provide grout specifically recommended by manufacturer exterior applications.

**2.5 FABRICATION**

- A. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch (1 mm) unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.
- B. Form work true to line and level with accurate angles and surfaces.
- C. Welded Connections: Cope components at connections to provide close fit, or use fittings designed for this purpose. Weld all around at connections, including at fittings.
  - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
  - 2. Obtain fusion without undercut or overlap.
  - 3. Remove flux immediately.
  - 4. At exposed connections, finish exposed surfaces smooth and blended so no roughness shows after finishing and welded surface matches contours of adjoining surfaces.
- D. Non-welded Connections: Connect members with concealed mechanical fasteners and fittings. Fabricate members and fittings to produce flush, smooth, rigid, hairline joints.
- E. Form changes in direction by inserting prefabricated elbow fittings.
- F. Close exposed ends of railing members with prefabricated end fittings.
- G. Provide wall returns at ends of wall-mounted handrails unless otherwise indicated.
- H. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, flanges, miscellaneous fittings, and anchors to interconnect railing members to other work unless otherwise indicated.

## 2.6 STEEL AND IRON FINISHES

- A. Preparation for Shop Priming: Prepare uncoated ferrous-metal surfaces to comply with [SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning", requirements indicated below:
- B. Primer Application: Apply shop primer to prepared surfaces of railings unless otherwise indicated. Comply with requirements in SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting.
- C. High-Performance Coating: Apply epoxy intermediate and polyurethane topcoats to prime-coated surfaces. Comply with coating manufacturer's written instructions and with requirements in SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting. Apply at spreading rates recommended by coating manufacturer.
  - 1. Color: coordinate with GSD Project manager.

- D. Dull Satin Finish: No. 6.

### **PART 3 - EXECUTION**

#### **3.1 INSTALLATION**

- A. Set railings accurately in location, alignment, and elevation; measured from established lines and levels and free of rack.
  - 1. Do not weld, cut, or abrade surfaces of railing components that have been coated or finished after fabrication and that are intended for field connection by mechanical or other means without further cutting or fitting.
  - 2. Set posts plumb within a tolerance of 1/16 inch in 3 feet (2 mm in 1 m).
  - 3. Align rails so variations from level for horizontal members and variations from parallel with rake of steps and ramps for sloping members do not exceed 1/4 inch in 12 feet (5 mm in 3 m).
- B. Anchor posts in concrete by inserting into anchored preset metal pipe sleeves and grouting annular space.
- C. Anchor posts to metal surfaces with oval flanges.
- D. Anchor railing ends at walls with round flanges anchored to wall construction.
- E. Anchor railing ends to metal surfaces with flanges bolted to metal surfaces.
- F. Secure wall brackets and railing end flanges to building construction as follows:
  - 1. For concrete and solid masonry anchorage, use drilled-in chemical anchors with stainless steel lag bolts.

#### **3.2 ADJUSTING AND CLEANING**

- A. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.

**END OF SECTION 055213**

**SECTION 070150 - PREPARATION FOR RE-ROOFING**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.

**1.2 SUMMARY**

A. Section Includes:

1. Roof tear-off.
2. Roof re-cover preparation.
3. Removal of base flashings.

**1.3 MATERIALS OWNERSHIP**

A. Except for items or materials indicated to be reused, reinstalled, or otherwise indicated to remain Owner's property, demolished materials shall become Contractor's property and shall be removed from Project site.

**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. Existing Roofing System: Foam roof insulation, coated surfacing, and components or accessories between concrete deck and existing roofing.

C. Roof Tear-Off: Removal of existing EPDM roofing system from deck.

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 ACTION SUBMITTALS**

A. Product Data: For each type of product indicated.



## **1.6 INFORMATIONAL SUBMITTALS**

- A. Qualification Data: For Installer and is approved by warrantor of new roof system.
- B. Photographs: Show existing conditions of adjoining construction and site improvements, including exterior and interior finish surfaces that might be misconstrued as having been damaged by reroofing operations. Submit before work begins.

## **1.7 QUALITY ASSURANCE**

- A. Installer Qualifications: Installer of new membrane roofing system shall be approved by warrantor to install proposed roofing as outlined in these specifications.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before beginning membrane roofing removal. Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Reroofing Conference: Conduct conference at Project site.
  - 1. Meet with Owner; Architect if applicable; Owner's insurer if applicable; testing and inspecting agency representative; roofing system manufacturer' representative; deck Installer; roofing Installer including project manager, superintendent, and foreman; and installers whose work interfaces with or affects reroofing including installers of roof accessories and roof-mounted equipment.
  - 2. Review methods and procedures related to roofing system tear-off and replacement including, but not limited to, the following:
    - a. Reroofing preparation, including membrane roofing system manufacturer's written instructions.
    - b. Temporary protection requirements for existing roofing system that is to remain during and after installation.
    - c. Existing roof drains and roof drainage during each stage of reroofing, and roof drain plugging and plug removal requirements.
    - d. Construction schedule and availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
    - e. Existing deck preparation procedures and Owner notifications.
    - f. Condition and acceptance of existing roof deck and base flashing substrate for reuse.
    - g. Structural loading limitations of deck during reroofing.
    - h. Base flashings, special roofing details, drainage, penetrations, equipment curbs, and condition of other construction that will affect reroofing.

- i. HVAC shutdown and sealing of air intakes. Coordinate required shutdowns and resets as needed with GSD Project Manager and GSD Maintenance, if applicable.
- j. Shutdown of fire-suppression, protection, and alarm and detection systems if applicable. Coordinate required resets as needed with GSD Project Manager and GSD Maintenance, if applicable.
- k. Governing regulations and requirements for insurance and certificates if applicable.
- l. Existing conditions that may require notification of GSD Project Manager before proceeding.

## **1.8 PROJECT CONDITIONS**

A. Owner will occupy portions of building immediately below reroofing area. Conduct Re-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.

- 1. Coordinate work activities daily with Owner so Owner can place protective dust or water leakage covers over sensitive equipment or furnishings, shut down HVAC and fire-alarm or -detection equipment if needed, and evacuate occupants from below the work area.
- 2. Before working over structurally impaired areas of deck, notify Owner to evacuate occupants from below the affected area. Verify that occupants below the work area have been evacuated before proceeding with work over the impaired deck area.

B. Protect building to be reroofed, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from reroofing operations.

C. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.

D. Conditions existing at time of inspection for bidding will be maintained by Owner as far as practical.

- 1. Construction Drawings for existing and proposed roofing system are provided for Contractor's reference. Contractor is responsible for conclusions derived from existing documents.

E. Limit construction loads on roof to rooftop equipment wheel loads and for uniformly distributed loads.

F. Weather Limitations: Proceed with reroofing preparation only when existing and forecasted weather conditions permit Work to proceed without water entering existing roofing system or building.

G. Hazardous Materials: It is not expected that hazardous materials such as asbestos containing materials will be encountered in the Work.

## **1.9 WARRANTY**

A. Existing Warranties: There are no existing roof warranties at this time.

## **PART 2 - EXECUTION**

### **2.1 PREPARATION**

A. Coordinate with Owner to shut down air-intake equipment in the vicinity of the Work. Cover air-intake louvers before proceeding with reroofing work that could affect indoor air quality or activate smoke detectors in the ductwork.

B. During removal operations, have sufficient and suitable materials on-site to facilitate rapid installation of temporary protection in the event of unexpected rain.

C. 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. If roof drains are temporarily blocked or unserviceable due to roofing system removal or partial installation of new membrane roofing system, provide alternative drainage method to remove water and eliminate ponding.

D. Verify that rooftop utilities and service piping have been shut off before beginning the Work.

### **2.2 ROOF TEAR-OFF**

A. Roof Tear-Off: Remove existing foam roof and other coated roofing system components down to the deck.

1. Remove existing gravel ballast covering existing EPDM roof system.
2. Cut out seam overlaps along with all metal objects, fasteners, walk ways, tarred or patched materials. These items are to be placed in an onsite dumpster or hauled away daily via dump truck.
3. Remove existing roof materials by means of a dumpster chute and/or crane assisted basket or secured tarp.

B. Roof Tear-Off: Remove existing foam roof and other coated roofing system components down to the concrete deck.

1. Remove roof insulation and substrate boards, if applicable.
2. All insulation and coating to be discarded in a site dumpster.
3. Remove any additional coatings or existing roof materials from concrete deck. A maximum of 15 lb/100 sq. ft. (0.72 kg/sq. m) of asphalt is permitted to remain on steel decks.
4. Remove fasteners from deck.

## **2.3 DECK PREPARATION**

- A. Inspect deck after tear-off of existing roofing system.
- B. Verify that concrete roof deck is visibly dry and free of moisture.

## **2.4 ROOF RE-COVER PREPARATION**

- A. Remove blisters, ridges, buckles, mechanically attached roofing membrane fastener buttons projecting above the membrane, and other substrate irregularities from existing roofing that inhibit new recover boards from conforming to substrate.
  1. Scarify the surface concrete deck as necessary to achieve a sufficiently uniform plane to receive new 3” foam insulation and ½” recover boards.
  2. Broom clean existing substrate.
  3. Verify that existing substrate is dry before proceeding with installing the new insulation and recover boards. Spot check substrates with an electrical capacitance moisture-detection meter.
  4. Remove materials that are wet or damp.

## **2.5 EXISTING BASE FLASHINGS**

- A. Remove existing base flashings around parapets, curbs, walls, and penetrations.
  1. Clean substrates of contaminants such as asphalt, sheet materials, dirt, and debris.
- B. Replace metal counter-flashings with counter-flashings of same metal, weight of thickness, and finish.
- C. Inspect parapet for deterioration and damage. If parapet has deteriorated, immediately notify GSD Project Manager.
- D. Remove existing parapet roof covering and related materials as necessary for installation of new EPDM roofing system.

**2.7 DISPOSAL**

A. Collect demolished materials and place in containers. Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.

1. Storage or sale of demolished items or materials on-site is not permitted.

B. Transport and legally dispose of demolished materials away from Owner's property.

END OF SECTION 070150

**SECTION 075323 – ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING**

**SECTION 075323 - ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.

**1.2 SUMMARY**

A. Section Includes:

1. Adhered EPDM membrane roofing system.
2. Recover board.
3. Roof insulation.

B. Related Sections:

1. Section 070150 "Preparation for Re-roofing" and Section 076200 "Sheet Metal Flashing and Trim" for metal roof penetration flashings, flashings, and counter-flashings.

**1.3 DEFINITIONS**

A. Roofing Terminology: See ASTM D 1079 and glossary of NRCA's "The NRCA Roofing and Waterproofing Manual" for definitions of terms related to roofing work in this Section.

**1.4 PERFORMANCE REQUIREMENTS**

A. General Performance: Installed membrane roofing and base flashings shall withstand specified uplift pressures, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Membrane roofing and base flashings shall remain watertight.

B. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by membrane roofing manufacturer based on testing and field experience.

C. FM Approvals Listing: Provide membrane roofing, base flashings, and component materials that comply with requirements in FM Approvals 4450 and FM Approvals 4470 as part of a membrane roofing system, and that are listed in FM Approvals' "RoofNav" for Class 1 or noncombustible construction, as applicable. Identify materials with FM Approvals' markings.

1. Fire/Windstorm Classification: Class 1A-90.

**SECTION 075323 – ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING**

D. Energy Performance: Provide roofing system that is listed on the DOE's ENERGY STAR "Roof Products Qualified Product List" for low-slope roof products.

**1.5 ACTION SUBMITTALS**

A. Product Data: For each type of product indicated.

B. Shop Drawings: For roofing system. Include plans, elevations, sections, details, and attachments to other work.

1. Base flashings and membrane terminations.
2. Tapered insulation, including slopes.
3. Roof plan showing orientation of concrete roof deck and orientation of membrane roofing.
4. Insulation fastening patterns for corner, perimeter, and field-of-roof locations.

C. Samples for Verification: For the following products, in manufacturer's standard sizes:

1. EPDM roofing, black, including T-shaped side and end lap seam.
2. Roof insulation.
3. Walkway pads.
4. Termination bars.
5. Metal parapet cap and color chart.

**1.6 INFORMATIONAL SUBMITTALS**

A. Qualification Data: For qualified Installer and manufacturer.

B. Manufacturer Certificate: Signed by roofing manufacturer certifying that membrane roofing system complies with requirements specified in "Performance Requirements" Article.

1. Submit evidence of complying with performance requirements.

C. Product Test Reports: Based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency, for components of membrane roofing system.

D. Research/Evaluation Reports: Evidence of roofing system's compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.

E. Warranties: Sample of special warranties.

**SECTION 075323 – ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING****1.7 CLOSEOUT SUBMITTALS**

A. Maintenance Data: For membrane roofing system to include in maintenance manuals.

**1.8 QUALITY ASSURANCE**

A. Manufacturer Qualifications: A qualified manufacturer that is FM Approvals approved for membrane roofing system identical to that used for this Project.

B. Installer Qualifications: A qualified firm that is approved, authorized, or licensed by membrane roofing system manufacturer to install manufacturer's product and that is eligible to receive manufacturer's special warranty.

C. Source Limitations: Obtain components including roof insulation, recovery board and products required for fully adhered membrane roofing system from same manufacturer as membrane roofing or approved by membrane roofing manufacturer.

D. Exterior Fire-Test Exposure: ASTM E 108, Class A; for application and roof slope as 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.

E. Pre-installation Roofing Conference: Conduct conference at Project site.

1. Meet with Owner, Owner's insurer if applicable, testing and inspecting agency representative, roofing Installer, roofing system manufacturer's representative, deck Installer, and installers whose work interfaces with or affects roofing, including installers of roof accessories and roof-mounted equipment.
2. Review methods and procedures related to roofing installation, including manufacturer's written instructions.
3. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
4. Examine deck substrate conditions and finishes for compliance with requirements, including flatness and fastening.
5. Review structural loading limitations of roof deck during and after roofing.
6. Review base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect roofing system.
7. Review governing regulations and requirements for insurance and certificates if applicable.
8. Review temporary protection requirements for roofing system during and after installation.
9. Review roof observation and repair procedures after roofing installation.



**SECTION 075323 – ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING****1.9 DELIVERY, STORAGE, AND HANDLING**

A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, approval or listing agency markings, and directions for storing and mixing with other components.

B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.

1. Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.

C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store materials in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.

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

**1.10 PROJECT CONDITIONS**

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.

**1.11 WARRANTY**

A. Special Warranty: Manufacturer's standard or customized form, without monetary limitation, in which manufacturer agrees to repair or replace components of membrane roofing system that fail in materials or workmanship within specified warranty period.

1. Special warranty includes membrane roofing, base flashings, roof insulation, fasteners, cover boards, substrate board, roofing accessories, roof walk pads, and other components of membrane roofing system.

2. Warranty Period: 30 years from date of Substantial Completion.

B. Special Project Warranty: Submit roofing Installer's warranty, on warranty form at end of this Section, signed by Installer, covering Work of this Section, including all components of membrane roofing system such as membrane roofing, base flashing, roof insulation, fasteners, cover boards, substrate boards, vapor retarders, and walk pad products, for the following warranty period:

1. Warranty Period: Two years from date of Substantial Completion.

## **PART 2 - PRODUCTS**

### **2.1 EPDM MEMBRANE ROOFING**

A. EPDM: ASTM D 4637, Type II, non-reinforced, uniform, flexible EPDM sheet.

1. Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

- a. Carlisle SynTec Incorporated.
- b. ER Systems.
- c. Firestone Building Products.
- d. GAF Materials Corporation.
- e. GenFlex Roofing Systems.
- f. International Diamond Systems.
- g. Johns Manville.
- h. Mule-Hide Products Co., Inc.
- i. Protective Coatings, Inc.
- j. Roofing Products International, Inc.
- k. StaFast Building Products.
- l. Versico Incorporated.
- m. Thickness: 90 mil (2.3 mm), nominal.
- n. Exposed Face Color: Black.

### **2.2 AUXILIARY MEMBRANE ROOFING MATERIALS**

A. General: Auxiliary membrane roofing materials recommended by roofing system manufacturer for intended use and compatible with membrane roofing.

1. Liquid-type auxiliary materials shall comply with VOC limits of authorities having jurisdiction.

2. Adhesives and sealants that are not on the exterior side of weather barrier shall comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24):

- a. Plastic Foam Adhesives: 50 g/L.
- b. Gypsum Board and Panel Adhesives: 50 g/L.
- c. Multipurpose Construction Adhesives: 70 g/L.
- d. Fiberglass Adhesives: 80 g/L.
- e. Single-Ply Roof Membrane Adhesives: 250 g/L.
- f. Single-Ply Roof Membrane Sealants: 450 g/L.
- g. Non-membrane Roof Sealants: 300 g/L.
- h. Sealant Primers for Nonporous Substrates: 250 g/L.
- i. Sealant Primers for Porous Substrates: 775 g/L.

**SECTION 075323 – ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING**

j. Other Adhesives and Sealants: 250 g/L.

3. Adhesives and sealants that are not on the exterior side of weather barrier shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

B. Sheet Flashing: 90-mil (2.3-mm) thick, nominal EPDM, partially cured or cured, according to application.

C. Bonding Adhesive: Manufacturer's standard.

D. Seaming Material: Manufacturer's standard, synthetic-rubber polymer primer and 3 inch (75-mm) wide minimum, butyl splice tape with release film.

E. Lap Sealant: Manufacturer's standard, single-component sealant, colored to match membrane roofing.

F. Water Cutoff Mastic: Manufacturer's standard butyl mastic sealant.

G. Metal Termination Bars: Manufacturer's standard, predrilled stainless-steel or aluminum bars, approximately 1 by 1/8 inch (25 by 3 mm) thick; with anchors.

H. Metal Battens: Manufacturer's standard, aluminum-zinc-alloy-coated or zinc-coated steel sheet, approximately 1 inch wide by 0.05 inch thick (25 mm wide by 1.3 mm thick), pre-punched.

I. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening membrane to substrate, and acceptable to roofing system manufacturer.

J. Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, preformed inside and outside corner sheet flashings, reinforced EPDM securement strips, T-joint covers, in-seam sealants, termination reglets, cover strips, and other accessories.

## **2.3 ROOF INSULATION**

A. General: Preformed roof insulation boards manufactured or approved by EPDM membrane roofing manufacturer, selected from manufacturer's standard sizes suitable for application, of thicknesses indicated and that produce FM Approvals-approved roof insulation.

B. Polyisocyanurate Board Insulation (3"): ASTM C 1289, Type II, felt or glass-fiber mat facer on both major surfaces.

**SECTION 075323 – ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING**

C. Tapered Insulation: Provide factory-tapered insulation boards fabricated to slope to the existing drains at 1/8" per foot minimum.

D. Provide preformed saddles, crickets, tapered edge strips, and other insulation shapes As required for sloping to drain. Fabricate to drains indicated on attached roof plan.

**2.4 INSULATION ACCESSORIES**

A. General: Furnish roof insulation accessories recommended by insulation manufacturer for intended use and compatibility with membrane roofing.

B. Fasteners: Factory recommended and approved adhesive designed for fastening roof insulation to concrete decking, and acceptable to roofing system manufacturer.

**2.5 SUBSTRATE BOARD**

A. Substrate Board: ASTM C 1177/C 1177M, glass-mat, water-resistant gypsum substrate, 1/2 inch (13 mm) thick.

1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
  - a. CertainTeed Corporation; [GlasRoc Sheathing] [GlasRoc Sheathing Type X].
  - b. Georgia-Pacific Corporation; [Dens Deck] [Dens Deck DuraGuard] [Dens Deck Prime].
  - c. National Gypsum Company; Gold Bond EXP Extended Exposure Sheathing.
  - d. Temple-Inland, Inc.; GreenGlass Exterior Sheathing.
  - e. USG Corporation; Securock Glass Mat Roof Board.

**2.6 WALKWAYS**

A. Flexible Walkways: Factory-formed, nonporous, heavy-duty, solid-rubber, slip resisting, surface-textured walkway pads, approximately 24" X 24" X 3/16 inch (5 mm) thick, and acceptable to membrane 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 roofing system:

**SECTION 075323 – ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING**

1. Verify that roof openings and penetrations are in place and curbs are set and braced and that roof drain bodies are securely clamped in place.
2. Verify that wood blocking, curbs and nailers are securely anchored to roof deck at penetrations and terminations and that nailers match thicknesses of insulation.
3. Verify that surface plane flatness of existing concrete roof deck complies with roofing manufacturer's requirements.
4. Verify that existing concrete decking is visibly dry and free of moisture.
5. Verify existing foam insulation compounds that will impair adhesion of roofing components to roof deck have been removed.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

**3.2 PREPARATION**

A. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing installation according to roofing system manufacturer's written instructions. Remove sharp projections.

B. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.

C. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at the end of the workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.

**3.3 INSULATION INSTALLATION**

A. Coordinate installing membrane roofing system components so insulation is not exposed to precipitation or left exposed at the end of the workday.

B. Comply with membrane roofing system and insulation manufacturer's written instructions for installing roof insulation.

C. Install tapered insulation under area of roofing to conform to slopes indicated.

D. Install insulation under area of roofing to achieve required thickness. Where overall insulation thickness is 2.7 inches (68 mm) or greater, install two or more layers with joints of each succeeding layer staggered from joints of previous layer a minimum of 6 inches (150 mm) in each direction.

1. Where installing composite and non-composite insulation in two or more layers, install non-composite board insulation for bottom layer and intermediate layers, if applicable, and install composite board insulation for top layer.

**SECTION 075323 – ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING**

E. Trim surface of insulation where necessary at roof drains so completed surface is flush and does not restrict flow of water.

F. Install insulation with long joints of insulation in a continuous straight line with end joints staggered between rows, abutting edges and ends between boards. Fill gaps exceeding 1/4 inch (6 mm) with insulation.

1. Cut and fit insulation within 1/4 inch (6 mm) of nailers, projections, and penetrations.

**3.4 ADHERED MEMBRANE ROOFING INSTALLATION**

A. Adhere membrane roofing over area to receive roofing according to membrane roofing system manufacturer's written instructions. Unroll membrane roofing and allow to “relax” before installing.

B. Start installation of membrane roofing in presence of membrane roofing system manufacturer's technical personnel.

C. Accurately align membrane roofing and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.

D. Bonding Adhesive: Apply to substrate and underside of membrane roofing at rate required by manufacturer and allow to partially dry before installing membrane roofing. Do not apply to splice area of membrane roofing.

E. In addition to adhering, mechanically fasten membrane roofing securely at terminations, penetrations, and perimeters.

F. Apply membrane roofing with side laps shingled with slope of roof deck where possible.

G. Adhesive Seam Installation: Clean both faces of splice areas, apply splicing cement, and firmly roll side and end laps of overlapping membrane roofing according to manufacturer's written instructions to ensure a watertight seam installation. Apply lap sealant and seal exposed edges of membrane roofing terminations.

1. Apply a continuous bead of in-seam sealant before closing splice if required by membrane roofing system manufacturer.

H. Tape Seam Installation: Clean and prime both faces of splice areas, apply splice tape, and firmly roll side and end laps of overlapping membrane roofing according to manufacturer's written instructions to ensure a watertight seam installation. Apply lap sealant and seal exposed edges of membrane roofing terminations.

**SECTION 075323 – ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING**

- I. Repair tears, voids, and lapped seams in roofing that does not comply with requirements.
- J. Spread sealant or mastic bed over deck drain flange at roof drains and securely seal membrane roofing in place with clamping ring.

**3.5 BASE FLASHING INSTALLATION**

- A. Install sheet flashings and preformed flashing accessories and adhere to substrates according to membrane roofing system manufacturer's written instructions.
- B. Apply bonding adhesive to substrate and underside of sheet flashing at required rate and allow to partially dry. Do not apply to seam area of flashing.
- C. Flash penetrations and field-formed inside and outside corners with cured or uncured sheet flashing.
- D. Clean splice areas, apply splicing cement, and firmly roll side and end laps of overlapping sheets to ensure a watertight seam installation. Apply lap sealant and seal exposed edges of sheet flashing terminations.
- E. Terminate and seal top of sheet flashings and mechanically anchor to substrate through termination bars.

**3.6 WALKWAY INSTALLATION**

- A. Flexible Walkways: Install walkway products in locations indicated. Adhere walkway products to substrate with compatible adhesive according to roofing system manufacturer's written instructions.

**3.7 FIELD QUALITY CONTROL**

- A. Testing Agency: Engage a qualified independent testing agency to perform inspections.
- B. Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation on completion.
- C. Repair or remove and replace components of membrane roofing system where inspections indicate that they do not comply with specified requirements.
- D. Additional inspections, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

**3.8 PROTECTING AND CLEANING**

- A. Protect membrane roofing system from damage and wear during remainder of construction period. When remaining construction will not affect or endanger roofing, inspect roofing for deterioration and damage, describing its nature and extent in a written report, with copies to Owner.
- B. Correct deficiencies in or remove membrane roofing system that does not comply with requirements, repair substrates and repair or reinstall membrane roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

**3.9 ROOFING INSTALLER'S WARRANTY**

- A. WHEREAS the winning vendor (contractor), herein called the "Roofing Installer," has performed roofing and associated work on the Building 4 Roof Replacement Project.
- B. AND WHEREAS Roofing Installer has contracted (either directly with Owner or indirectly as a subcontractor) to warrant said work against leaks and faulty or defective materials and workmanship for designated Warranty Period of (2) years.
- C. NOW THEREFORE Roofing Installer hereby warrants, subject to terms and conditions herein set forth, that during Warranty Period he will, at his own cost and expense, make or cause to be made such repairs to or replacements of said work as are necessary to correct faulty and defective work and as are necessary to maintain said work in a watertight condition.
- D. This Warranty is made subject to the following terms and conditions:
  - 1. Specifically excluded from this Warranty are damages to work and other parts of the building, and to building contents, caused by:
    - a. Lightning;
    - b. Peak gust wind speed exceeding 55 mph (3 second peak gust speeds of fifty-five mph or higher measured at 10 meters above ground).
    - c. Fire;
    - d. Failure of roofing system substrate, including cracking, settlement, excessive deflection, deterioration, and decomposition;
    - e. Faulty construction of parapet walls, copings, chimneys, skylights, vents, equipment supports, and other edge conditions and penetrations of the work;
    - f. Vapor condensation on bottom of roof decking; and



**SECTION 075323 – ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING**

g. Activity on roofing by others, including construction contractors, maintenance personnel, other persons, and animals, whether authorized or unauthorized by Owner.

2. When work has been damaged by any of foregoing causes, Warranty shall be null and void until such damage has been repaired by Roofing Installer and until cost and expense thereof have been paid by Owner or by another responsible party so designated.

3. Roofing Installer is responsible for damage to work covered by this Warranty and is liable for consequential damages to building or building contents resulting from leaks or faults or defects of work.

4. During Warranty Period, if Owner allows alteration of work by anyone other than Roofing Installer, including cutting, patching, and maintenance in connection with penetrations, attachment of other work, and positioning of anything on roof, this Warranty shall become null and void on date of said alterations, but only to the extent said alterations affect work covered by this Warranty. If Owner engages Roofing Installer to perform said alterations, Warranty shall not become null and void unless Roofing Installer, before starting said work, shall have notified Owner in writing, showing reasonable cause for claim, that said alterations would likely damage or deteriorate work, thereby reasonably justifying a limitation or termination of this Warranty.

5. During Warranty Period, if original use of roof is changed and it becomes used for, but was not originally specified for, a promenade, work deck, spray-cooled surface, flooded basin, or other use or service more severe than originally specified, this Warranty shall become null and void on date of said change, but only to the extent said change affects work covered by this Warranty.

6. Owner shall promptly notify Roofing Installer of observed, known, or suspected leaks, defects, or deterioration and shall afford reasonable opportunity for Roofing Installer to inspect work and to examine evidence of such leaks, defects, or deterioration.

7. This Warranty is recognized to be the only warranty of Roofing Installer on said work and shall not operate to restrict or cut off Owner from other remedies and resources lawfully available to Owner in cases of roofing failure. Specifically, this Warranty shall not operate to relieve Roofing Installer of responsibility for performance of original work according to requirements of the Contract Documents, regardless of whether Contract was a contract directly with Owner or a subcontract with Owner's General Contractor.

END OF SECTION 075323

**SECTION 076200 - SHEET METAL FLASHING AND TRIM**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.

**1.2 SUMMARY**

A. Section Includes:

1. Manufactured Products:

- a. Manufactured counter-flashing.
- b. Manufactured reglets and counter-flashing.

2. Formed Products:

- a. Formed roof drainage sheet metal fabrications.
- b. Formed low-slope roof sheet metal fabrications.
- c. Formed wall sheet metal fabrications.

B. Related Sections:

- 1. Division 07 Section "EPDM Membrane" for installing sheet metal flashing and trim integral with membrane roofing.

**1.3 PERFORMANCE REQUIREMENTS**

A. General: Sheet metal flashing and trim assemblies as indicated shall withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Completed sheet metal flashing and trim shall not rattle, leak, or loosen, and shall remain watertight.

B. Fabricate and install roof edge flashing and copings capable of resisting the following forces according to recommendations in FMG Loss Prevention Data Sheet 1-49:

- 1. Wind Zone 3: For velocity pressures of 46 to 104 lbf/sq. ft. (2.20 to 4.98 kPa): 208-lbf/sq. ft. (9.96-kPa) perimeter uplift force, 312-lbf/sq. ft. (14.94-kPa) corner uplift force, and 104-lbf/sq. ft. (4.98-kPa) outward force.

C. Thermal Movements: Provide sheet metal flashing and trim that allows for thermal movements from ambient and surface temperature changes.

1. Temperature Change (Range): 120 degrees F, ambient; 180 degrees F material surfaces.

#### 1.4 ACTION SUBMITTALS

A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each manufactured product and accessory.

B. Shop Drawings: Show fabrication and installation layouts of sheet metal flashing and trim, including plans, elevations, expansion-joint locations, and keyed details. Distinguish between shop and field-assembled work. Include the following:

1. Identification of material, thickness, weight, and finish for each item and location in Project.
2. Details for forming sheet metal flashing and trim, including profiles, shapes, seams, and dimensions.
3. Details for joining, supporting, and securing sheet metal flashing and trim, including layout of fasteners, cleats, clips, and other attachments. Include pattern of seams.
4. Details of termination points and assemblies, including fixed points.
5. Details of expansion joints and expansion-joint covers, including showing direction of expansion and contraction.
6. Details of edge conditions, including eaves, ridges, valleys, rakes, crickets, and counter-flashings as applicable.
7. Details of special conditions.
8. Details of connections to adjoining work
9. Contractor to submit shop drawing of each roof curb and roof penetration condition for owner approval prior to installation.
10. Detail formed flashing and trim at a scale of not less than 1-1/2 inches per 12 inches (1:10).

C. Samples for Verification: For each type of sheet metal flashing, trim, and accessory indicated with factory-applied color finishes involving color selection.

#### 1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For qualified fabricator.

B. Warranty: Sample of special warranty.

## **1.6 CLOSEOUT SUBMITTALS**

A. Maintenance Data: For sheet metal flashing, trim, and accessories to include in maintenance manuals.

## **1.7 QUALITY ASSURANCE**

A. Fabricator Qualifications: Shop that employs skilled workers who custom fabricate sheet metal flashing and trim similar to that required for this Project and whose products have a record of successful in-service performance.

B. Sheet Metal Flashing and Trim Standard: Comply with SMACNA's "Architectural Sheet Metal Manual" unless more stringent requirements are specified or shown on drawings.

C. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for fabrication and installation.

1. Build onsite mockup of typical roof parapet cap including, fascia, fascia trim and apron flashing approximately 10 feet (3.0 m) long, including supporting construction cleats, seams, attachments, underlayment, and accessories.
2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Owner specifically approves such deviations in writing.
3. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

D. Pre-installation Conference: Conduct conference at Project site.

1. Meet with Owner, Owner's insurer if applicable, Installer, and installers whose work interfaces with or affects sheet metal flashing and trim including installers of roofing materials, roof accessories, unit skylights, and roof-mounted equipment.
2. Review methods and procedures related to sheet metal flashing and trim.
3. Examine substrate conditions for compliance with requirements, including flatness and attachment to structural members.
4. Review special roof details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect sheet metal flashing.
5. Document proceedings, including corrective measures and actions required, and furnish copy of record to each participant.

## **1.8 DELIVERY, STORAGE, AND HANDLING**

A. Do not store sheet metal flashing and trim materials in contact with other materials that might cause staining, denting, or other surface damage.

B. Protect strippable protective covering on sheet metal flashing and trim from exposure to sunlight and high humidity, except to the extent necessary for the period of sheet metal flashing and trim installation.

## **1.9 WARRANTY**

A. Special Warranty on Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace sheet metal flashing and trim that shows evidence of deterioration of factory-applied finishes within specified warranty period.

1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:

- a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
- b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
- c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.

2. Finish Warranty Period: 10 years from date of Substantial Completion.

## **PART 2 - PRODUCTS**

### **2.1 SHEET METALS**

A. General: Protect mechanical and other finishes on exposed surfaces from damage by applying a strippable, temporary protective film before shipping.

B. Metallic-Coated Steel Sheet: Restricted flatness steel sheet, metallic coated by the hot-dip process and pre-painted by the coil-coating process to comply with ASTM A 755/A 755M.

1. Zinc-Coated (Galvanized) Steel Sheet: ASTM A 653/A 653M, G90 (Z275) coating designation; structural quality.
2. Aluminum-Zinc Alloy-Coated Steel Sheet: ASTM A 792/A 792M, Class AZ50 coating designation, Grade 40 (Class AZM150 coating designation, Grade 275); structural quality.
3. Surface: Smooth, flat and with manufacturer's standard clear acrylic coating on both sides.
4. Exposed Coil-Coated Finish:
  - a. Three-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in both color coat and clear topcoat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

5. Color: To be coordinated with GSD Project Manager.
6. Concealed Finish: Pretreat with manufacturer's standard white or light-colored acrylic or polyester backer finish, consisting of prime coat and wash coat with a minimum total dry film thickness of 0.5 mil (0.013 mm).

## **2.2 MISCELLANEOUS MATERIALS**

A. General: Provide materials and types of fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation and recommended by manufacturer of primary sheet metal or manufactured item unless otherwise indicated.

B. Fasteners: Wood screws, annular threaded nails, self-tapping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads and recommended by manufacturer of primary sheet metal or manufactured item.

1. General: Blind fasteners or self-drilling screws, gasketed, with hex-washer head.
  - a. Exposed Fasteners: Heads matching color of sheet metal using plastic caps or factory-applied coating.
  - b. Blind Fasteners: High-strength aluminum or stainless-steel rivets suitable for metal being fastened.

2. Fasteners for Zinc-Coated (Galvanized) and Aluminum-Zinc Alloy-Coated Steel Sheet: Hot-dip galvanized steel according to ASTM A 153/A 153M or ASTM F 2329 or Series 300 stainless steel.

3. Fasteners for Zinc Sheet: Hot-dip galvanized steel according to ASTM A 153/A 153M or ASTM F 2329 or Series 300 stainless steel.

C. Solder:

1. For Zinc-Coated (Galvanized) Steel: ASTM B 32, Grade Sn50, 50 percent tin and 50 percent lead or Grade Sn60, 60 percent tin and 40 percent lead.

D. Sealant Tape: Pressure-sensitive, 100 percent solids, gray polyisobutylene compound sealant tape with release-paper backing. Provide permanently elastic, non-sag, nontoxic, non-staining tape 1/2 inch (13 mm) wide and 1/8 inch (3 mm) thick.

E. Elastomeric Sealant: ASTM C 920, elastomeric polyurethane polymer sealant; low modulus; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain watertight.

F. Butyl Sealant: ASTM C 1311, single-component, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied for hooked-type expansion joints with limited movement.

G. Epoxy Seam Sealer: Two-part, noncorrosive, aluminum seam-cementing compound, Recommended by aluminum manufacturer for exterior nonmoving joints, including riveted joints.

## **2.3 MANUFACTURED SHEET METAL FLASHING AND TRIM**

A. Reglets: Units of type, material, and profile indicated, formed to provide secure interlocking of separate reglet and counter-flashing pieces, and compatible with flashing indicated with interlocking counter-flashing on exterior face, of same metal as reglet.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

- a. Cheney Flashing Company.
- b. Fry Reglet Corporation.
- c. Heckmann Building Products Inc.
- d. Hickman, W. P. Company.
- e. Hohmann & Barnard, Inc.; STF Sawtooth Flashing.
- f. Keystone Flashing Company, Inc.
- g. National Sheet Metal Systems, Inc.
- h. Sandell Manufacturing Company, Inc.

2. Surface-Mounted Type: Provide with slotted holes for fastening to substrate, with neoprene or other suitable weatherproofing washers, and with channel for sealant at top edge.

3. Concrete Type: Provide temporary closure tape to keep reglet free of concrete materials, special fasteners for attaching reglet to concrete forms, and guides to ensure alignment of reglet section ends.

4. Masonry Type: Provide with offset top flange for embedment in masonry mortar joint.

5. Accessories:

- a. Flexible-Flashing Retainer: Provide resilient plastic or rubber accessory to secure flexible flashing in reglet where clearance does not permit use of standard metal counter-flashing or where Drawings show reglet without metal counter-flashing.
- b. Counter-flashing Wind-Restraint Clips: Provide clips to be installed before counter-flashing to prevent wind uplift of counter-flashing lower edge.

6. Finish: Mill.

## **2.4 FABRICATION, GENERAL**

A. General: Custom fabricate sheet metal flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, geometry, metal thickness, and other characteristics of item indicated. Fabricate items at the shop to greatest extent possible.

1. Fabricate sheet metal flashing and trim in thickness or weight needed to comply with performance requirements, but not less than that specified for each application and metal.
2. Obtain field measurements for accurate fit before shop fabrication.
3. Form sheet metal flashing and trim without excessive oil canning, buckling, and tool marks and true to line and levels indicated, with exposed edges folded back to form hems.
4. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces exposed to view.

B. Fabrication Tolerances: Fabricate sheet metal flashing and trim that is capable of installation to a tolerance of 1/4 inch in 20 feet (6 mm in 6 m) on slope and location lines as indicated and within 1/8-inch (3-mm) offset of adjoining faces and of alignment of matching profiles.

C. Sealed Joints: Form non-expansion but movable joints in metal to accommodate elastomeric sealant.

D. Expansion Provisions: Where lapped expansion provisions cannot be used, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with butyl sealant concealed within joints.

E. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal.

F. Seams: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with elastomeric sealant unless otherwise recommended by sealant manufacturer for intended use. Rivet joints where necessary for strength.

## **2.5 LOW-SLOPE ROOF SHEET METAL FABRICATIONS**

A. Roof-Edge Flashing and Fascia Cap: Fabricate in minimum 96-inch- (2400-mm-) long, but not exceeding 10-foot- (3-m-) long, sections. Furnish with 6-inch- (150-mm-) wide, joint cover plates.

1. Joint Style: Butt, with 12-inch- (300-mm-) wide, concealed backup plate.
2. Fabricate from the following materials:



a. Aluminum-Zinc Alloy-Coated Steel: 0.028 inch (0.71 mm) thick.

B. Copings: Fabricate in minimum 96-inch- (2400-mm-) long, but not exceeding 10-foot- (3-m-) long, sections. Fabricate joint plates of same thickness as copings. Furnish with continuous cleats to support edge of external leg and drill elongated holes for fasteners on interior leg. Miter corners, seal, and solder or weld watertight.

1. Coping Profile: SMACNA figure designation 3-4A
2. Joint Style: Butt, with 12-inch- (300-mm-) wide, concealed backup plate.
3. Fabricate from the following materials:

a. Aluminum-Zinc Alloy-Coated Steel: 0.040 inch (1.02 mm) thick.

C. Roof to Wall Transition Expansion-Joint Cover: Fabricate from the following materials:

1. Aluminum-Zinc Alloy-Coated Steel: 0.034 inch (0.86 mm) thick.

D. Base Flashing: Fabricate from the following materials:

1. Aluminum-Zinc Alloy-Coated Steel: 0.028 inch (0.71 mm) thick.

E. Counter-flashing: Fabricate from the following materials:

1. Aluminum-Zinc Alloy-Coated Steel: 0.022 inch (0.56 mm) thick.

F. Flashing Receivers: Fabricate from the following materials:

1. Aluminum-Zinc Alloy-Coated Steel: 0.022 inch (0.56 mm) thick.

G. Roof-Penetration Flashing: Fabricate from the following materials:

1. Aluminum-Zinc Alloy-Coated Steel: 0.028 inch (0.71 mm) thick.

H. Roof-Drain Flashing: Fabricate from the following materials:

1. Zinc-Tin Alloy-Coated Stainless Steel: 0.015 inch (0.38 mm) thick.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

A. Examine substrates, areas, and conditions, with Installer present, to verify actual locations, dimensions and other conditions affecting performance of the Work.

1. Verify compliance with requirements for installation tolerances of substrates.

2. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and securely anchored.

B. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

### **3.2 INSTALLATION, GENERAL**

A. General: Anchor sheet metal flashing and trim and other components of the Work securely in place, with provisions for thermal and structural movement. Use fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required to complete sheet metal flashing and trim system.

1. Install sheet metal flashing and trim true to line and levels indicated. Provide uniform, neat seams with minimum exposure of solder, welds, and sealant.
2. Install sheet metal flashing and trim to fit substrates and to result in watertight performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.
3. Space cleats not more than 12 inches (300 mm) apart. Anchor each cleat with two fasteners. Bend tabs over fasteners.
4. Install exposed sheet metal flashing and trim without excessive oil canning, buckling, and tool marks.
5. Install sealant tape where indicated.
6. Torch cutting of sheet metal flashing and trim is not permitted.

B. Metal Protection: Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with bituminous coating or by other permanent separation as recommended by SMACNA.

1. Coat back side of uncoated aluminum and stainless-steel sheet metal flashing and trim with bituminous coating where flashing and trim will contact wood, ferrous metal, or cementitious construction.

C. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet (3 m) with no joints allowed within 24 inches (600 mm) of corner or intersection. Where lapped expansion provisions cannot be used or would not be sufficiently watertight, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with sealant concealed within joints.

D. Seal joints as shown and as required for watertight construction.

1. Where sealant-filled joints are used, embed hooked flanges of joint members not less than 1 inch (25 mm) into sealant. Form joints to completely conceal

sealant. When ambient temperature at time of installation is moderate, between 40 and 70 deg F, set joint members for 50 percent movement each way. Adjust setting proportionately for installation at higher ambient temperatures. Do not install sealant-type joints at temperatures below 40 deg F.

E. Rivets: Rivet joints where necessary for strength.

### **3.3 ROOF FLASHING INSTALLATION**

A. General: Install sheet metal flashing and trim to comply with performance requirements, sheet metal manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, set units true to line, and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.

B. Roof Edge Flashing: Anchor to resist uplift and outward forces according to recommendations in SMACNA's "Architectural Sheet Metal Manual" and as indicated. Interlock bottom edge of roof edge flashing with continuous cleat anchored to substrate at staggered 3-inch (75-mm) centers.

C. Copings: Anchor to resist uplift and outward forces according to recommendations in SMACNA's "Architectural Sheet Metal Manual" and as indicated.

1. Interlock exterior bottom edge of coping with continuous cleat anchored to substrate at 24-inch (600-mm) centers.
2. Anchor interior leg of coping with washers and screw fasteners through slotted holes at 24-inch (600-mm) centers.

D. Pipe or Post Counter-flashing: Install counter-flashing umbrella with close-fitting collar with top edge flared for elastomeric sealant, extending a minimum of 4 inches (100mm) over base flashing. Install stainless-steel draw band and tighten.

E. Counter-flashing: Coordinate installation of counter-flashing with installation of base flashing. Insert counter-flashing in reglets or receivers and fit tightly to base flashing. Extend counter-flashing 4 inches (100 mm) over base flashing. Lap counter-flashing joints a minimum of 4 inches (100 mm) and bed with sealant. Secure in a waterproof manner by means of interlocking folded seam or blind rivets and sealant.

F. Roof-Penetration Flashing: Coordinate installation of roof-penetration flashing with installation of roofing and other items penetrating roof. Seal with elastomeric sealant and clamp flashing to pipes that penetrate roof.

### **3.6 WALL FLASHING INSTALLATION**

A. General: Install sheet metal wall flashing to intercept and exclude penetrating moisture according to SMACNA recommendations and as indicated. Coordinate installation of

wall flashing with installation of wall-opening components such as windows, doors, and louvers.

### **3.7 ERECTION TOLERANCES**

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

B. Installation Tolerances: Shim and align sheet metal flashing and trim within installed tolerances specified in MCA's "Guide Specification for Residential Metal Roofing."

### **3.9 CLEANING AND PROTECTION**

A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.

B. Clean off excess sealants.

C. Remove temporary protective coverings and strippable films as sheet metal flashing and trim are installed unless otherwise indicated in manufacturer's written installation instructions. On completion of installation, remove unused materials and clean finished surfaces. Maintain in a clean condition during construction.

D. Replace sheet metal flashing and trim that have been damaged or that have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

**END OF SECTION 076200**