

BIDDING DOCUMENTS

PROJECT MANUAL AND PLANS

City of Madison
Police Training Office
Roof Replacement

CONTRACT# 8609
MUNIS # 13342

LOCATION OF WORK:
5702 Femrite Drive

April 29th, 2021



CONTACTS:

CITY CONSTRUCTION MANAGER:
Engineering Division
City-County Building, Room 118
Mike Schuchardt
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Madison, WI 53703
(608) 261-9249

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ROOFING

**City of Madison
Police Training Office
Roof Replacement**

CONTRACT# 8609
MUNIS # 13342

LOCATION OF WORK:
5702 Femrite Drive

SCOPE OF WORK AND GENERAL CONDITIONS

1. SCOPE OF WORK

a. The intent of this project is to replace the existing 4,000 ft² (contractor to verify area) ballasted rubber roofing system for the City of Madison Police Training Center Office at 5702 Femrite Drive. All metal flashing and coping will be replaced unless otherwise noted. Existing insulation will be replaced as needed due to water saturation or deterioration on a unit cost basis. All existing roof blocks to be replaced with rubber surface mounted blocks (furnish and install by contractor)

2. WORK TO BE DONE BY OWNER

a. The owner's intent is to assist the contractor with a limited amount of specialized electrical work that will facilitate the installation within a timely manner. This work typically includes disconnecting and reconnecting the electrical for any rooftop units and lighting. Surface mounted radio dishes shall be carefully relocated and reconnected by City Staff. A minimum of 24 hour notice is required. Schedule all requests through the City Construction Manager.

3. SPECIAL SITE CONDITIONS

a. Contractor to remove existing hatch door as shown on plans. Infill wood decking and insulation to match existing conditions.
b. Contractor to remove unused PVC vents as shown on plans. Infill wood decking and insulation to match existing conditions.

SCOPE OF WORK AND GENERAL CONDITIONS (continued)

- c. Parking, on-site vehicle parking available for the Contractor's use. The Contractor may utilize parking spaces in parking lot and along Femrite Drive.
- d. Normal Hours of Work, unless otherwise noted, construction operations shall be limited to the hours between 7:30 a.m. and 6:00 p.m., Mondays through Fridays, except for holidays. A request must be made to the owner forty-eight hours in advance for approval of work days or hours other than those stated.
- e. Noise, Madison General Ordinance 24.08 does not allow the use of any equipment used in construction between the hours of 7:00 p.m. and 7:00 a.m. in such a manner as to unreasonably interfere with the peace, comfort and quality of life of the neighboring persons of ordinary sensibilities.
- f. Barriers, the building and site may be occupied during construction hours. Perform contract so as to minimize disruption of the operation of the building and personnel. Contractors shall take particular care to avoid disturbance and disruption to the existing building structure and to the ongoing

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 and Division 01 Specification Sections, apply to this Section

1.2 SUMMARY

- A. FURNISH AND INSTALL ELASTOMERIC SHEETING ROOFING SYSTEM, EPDM, INCLUDING:
 - 1. Roofing manufacturer's requirements for the specified warranty
 - 2. Preparation of roofing substrates.
 - 3. Wood nailers and blocking for roofing attachments as required by manufacturer.
 - 4. Insulation; inspect and reuse existing, replace any deteriorated or water saturation insulation as required.
 - 5. Elastomeric EPDM membrane roofing.
 - 6. Metal roof edging and coping. The intent of this contract is to use similar detailing as existing. The contractor is responsible for providing detailing to meet or exceed the specified warranty.
 - 7. Scupper and reuse of existing drains.
 - 8. Flashings.
 - 9. Other roofing –related items specified or indicated on the drawings or otherwise necessary to provide a complete weatherproof roofing system.
- B. Disposal of demolition debris and construction waste is the responsibility of the contractor. Perform disposal in a manner complying with all applications of federal, state, local regulations and sections within this project manual.
- C. Comply with the published recommendations and instruction of the roofing membrane manufacturer to obtain specified warranty.
- D. Commence of work by the contractor shall constitute acknowledgement by the contractor that this specification can be satisfactorily executed, under the project conditions and with all necessary prerequisites for warranty acceptance by roofing membrane manufacturer. Any modification of the Contract Sum will be made in accordance with the stipulations of the contract Documents stated elsewhere.
- E. RELATED REQUIREMENTS:
 - 1. Not Applicable.

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

1.3 DEFINITIONS

- A. Roofing Terminology: Definitions in ASTM D 1079 and glossary of NRCA's "The NRCA Roofing Manual: Membrane Roof Systems" apply to work of this Section.

1.4 PRE-BID AND PRE-INSTALLATION MEETINGS

- A. Pre-bid, refer to SECTION D for pre-bid meeting.
- B. Project meeting, SECTION 01 31 19 for pre-installation and project meetings.

1.5 ACTION SUBMITTALS

- A. Product Data Sheets: Provide membrane manufacturer's product data sheets for all components of the roofing system, including insulation and fasteners, comply with the specific requirements with the membrane manufacturer's requirements and recommendations for the system type specified; including data for each product used in conjunction with the roofing membrane.
- B. Installation instructions: Provide manufacturer's instruction to installer, marked up to show exactly how all components will be installed; where instructions allow installer options, clearly indicate which option will be used.
- C. Shop Drawings: Include roof plans, sections, details, and attachments to other work, including the following:
 - 1. Base flashings, membrane terminations, expansion joints, scupper and drain details.
 - 2. Flashing details at penetrations, wall and parapets.
 - 3. Any non-standard detailing.
- D. Samples for Verification: For the following products:
 - 1. Metal flashing.

1.6 INFORMATIONAL SUBMITTALS :

- A. Qualification Data: For Installer and Manufacturer.
- B. Manufacturer Certificates:
 - 1. Performance Requirement Certificate: Signed by roof membrane manufacturer, certifying that roofing system complies with requirements specified in "Performance Requirements" Article.
 - a. Submit evidence of complying with performance requirements.
 - 2. Special Warranty Certificate: Signed by roof membrane manufacturer, certifying that all materials supplied under this Section are acceptable for special warranty.
- C. Sample Warranties: For manufacturer's special warranties.

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

1.7 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For roofing system to include in maintenance manuals.
 - 1. Submittals
 - 2. Warranties
 - 3. Include in electronic format as specified under Section 01 78 23 Operation and Maintenance Data.
- B. Certified statement from existing roof membrane manufacturer stating that existing roof warranty has not been affected by Work performed under this Section.

1.8 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified firm that is approved, authorized, or licensed by roofing system manufacturer to install manufacturer's product and that is eligible to receive manufacturer's special warranty. The warranty shall be provided by the primary roofing contractor, not a subcontractor of the primary roofing contractor.

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 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 FIELD CONDITIONS

- A. Special Warranty: Manufacturer agrees to repair or replace components of roofing system that fail in materials or workmanship within specified warranty period.
 - 1. Special warranty includes roof membrane, base flashings, and other installed components of roofing system with a wind speed coverage rating of 55 mph.

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

- a. Limits of liability: No dollar limitation.
 - b. Scope of Coverage: Repair leaks in the roofing system caused by:
 - i. Ordinary wear and tear on the elements.
 - ii. Manufacturing defect in Manufacturer brand materials.
 - iii. Defective workmanship used to install these materials.
 - iv. Damage due to winds up to 55 mph.
 - c. Not Covered
 - i. Damage due to winds in excess of 55 mph.
 - ii. Damage due to hurricanes or tornados.
 - iii. Hail
 - iv. Intentional damage
 - v. Unintentional damage due to normal rooftop inspections, maintenance, or service.
2. Warranty Period: 20 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 the Work of this Section, including all components of roofing system such as roof membrane, base flashing, roof insulation, fasteners, roof pavers, for the following warranty period:
1. Warranty Period: Two (2) years from Date of Substantial Completion.

PART 2 – PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. General Performance: Installed roofing system 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. Roofing and flashings shall remain watertight.
1. Accelerated Weathering: Roof membrane shall withstand 2000 hours of exposure when tested according to ASTM G 152, ASTM G 154, or ASTM G 155.
 2. Impact Resistance: Roof membrane shall resist impact damage when tested according to ASTM D 3746, ASTM D 4272, or the Resistance to Foot Traffic Test in FM Approvals 4470.
- B. Material Compatibility: Roofing materials shall be compatible with one another and adjacent materials under conditions of service and application required, as demonstrated by roof membrane manufacturer based on testing and field experience.

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- C. Wind Uplift Resistance: Design roofing system to resist the following wind uplift pressures when tested according to FM Approvals 4474, UL 580, or UL 1897:
 - 1. Zone 1 (Roof Area Field): 10 lbs/square foot
 - 2. Zone 2 (Roof Area Perimeter): 12 lbs /square foot
 - a. Location: From roof edge to 12.0 feet inside roof edge.
 - 3. Zone 3 (Roof Area Corners): 12 lbs /square foot
 - a. Location: 12.0 feet in each direction from building corner
- D. Exterior Fire-Test Exposure: ASTM E 108 or UL 790, Class A

2.2 ETHYLENE-PROPYLENE-DIENE-TERPOLYMER (EPDM) ROOFING

- A. EPDM Sheet: ASTM D 4637/D 4637M, Type I, non-reinforced EPDM sheet with factory-applied seam tape.
 - 1. Approved Manufacturers:
 - a. Carlisle SynTec Incorporated, PO Box 7000, Carlisle, PA 17013-0925, (800) 479-6832
 - b. Firestone Building Products, 200 4th Avenue South, Nashville TN (800) 428-4442
 - c. Versico Roofing Systems, P.O. Box 1289, Carlisle, PA 17013, (800) 992-7663
 - d. Genflex Roofing Systems, 200 4th Avenue South, Nashville, TN 37201 (800) 443-4272
 - e. John Manville, P. O. Box 5108, Denver, CO 80217-5108 (303) 978.2000
 - 2. Thickness: **60 nominal.**
 - 3. Exposed Face Color: **black**
 - 4. Source Limitations: Obtain components for roofing system from roof membrane manufacturer or manufacturers approved by roof membrane manufacturer.

2.3 AUXILIARY ROOFING MATERIALS

- A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with other roofing components.
 - 1. Adhesive and Sealants: Comply with VOC limits of authorities having jurisdiction.
- B. Sheet Flashing: 60-mil thick EPDM, partially cured or cured, according to application.
- C. Slip Sheet: Manufacturer's standard, of thickness required for application.
- D. Prefabricated Pipe Flashings: As recommended by roof membrane manufacturer.
- E. Roof Vents: As recommended by roof membrane manufacturer.
 - 1. Size: Not less than 4-inch diameter.
- F. Pourable Sealer: Two-part polyurethane, two-color for reliable mixing; Pourable Sealer by manufacturer.

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- G. Bonding Adhesive: Manufacturer's standard.
- H. Seaming Material: Single-component, butyl splicing adhesive and splice cleaner or Manufacturer's standard, synthetic-rubber polymer primer and 3-inch wide minimum, butyl splice tape with release film or Factory-applied seam tape, width as recommended by manufacturer.
- I. Lap Sealant: Manufacturer's standard, single-component sealant, colored to match membrane roofing.
- J. Water Cutoff Mastic: Manufacturer's standard butyl mastic sealant.
- K. Metal Termination Bars: Manufacturer's standard, predrilled stainless steel or aluminum bars, approximately 1 by 1/8 inch thick; with anchors.
- L. Metal Battens: Manufacturer's standard, aluminum-zinc-alloy-coated or zinc-coated steel sheet, approximately 1 inch wide by 0.05 inch thick, pre-punched.
- M. Ballast Retaining Bar: Perimeter securement system consisting of a slotted extruded-aluminum retention bar with an integrated compression fastening strip.
 - 1. Fasteners: 1-1/2-inch (38-mm) stainless steel fasteners with neoprene washers.
- N. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening components to substrate, and acceptable to roofing system manufacturer.
- O. Sheet Metal Accessories
 - 1. Parapet Copings: Formed metal coping with galvanized steel anchor/support cleats for capping any parapet wall; watertight, maintenance free, without exposed fasteners; butt type joints with concealed splice plates; mechanically fastened as indicated; Firestone UNA-CLAD™ or manufacturer's equivalent.
 - a. Wind Performance:
 - i. At least the minimum required when tested in accordance with ANSI/SPRI ES-1 Test Method RE-3, current edition.
 - b. Description: Coping sections allowed to expand and contract freely while locked in place on anchor cleats by mechanical pressure from hardened stainless steel springs factory attached to anchor cleats; 8 inch wide splice plates with factory applied dual non-curing sealant strips capable of providing watertight seal.
 - c. Material and Finish: 24 gage, 0.024 inch (0.06 mm) thick galvanized steel with Kynar 500 finish in manufacturer's standard color; matching concealed joint splice plates; factory-installed protective plastic film.
 - d. Dimensions:
 - i. Wall Width: Varies, as field measured by the contractor.

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- ii. Piece Length: Minimum 144 inches.
- e. Fasteners: Factory-furnished; electrolytically compatible; minimum pull out resistance of 240 pounds for actual substrate used; no exposed fasteners.

P. ACCESSORY MATERIALS

- 1. Wood Nailers: PS 20 dimension lumber, Structural Grade No. 2 or better Southern Pine, Douglas Fir; or PS 1, APA Exterior Grade plywood; pressure preservative treated.
 - a. Width: 3-1/2 inches nominal minimum, as determined during demolition, as indicated on plans or as wide as the nailing flange of the roof accessory to be attached to it.
 - b. Thickness: Same as thickness of roof insulation, as determined during demolition or as indicated on plans.
- 2. Roof Drains: Reuse existing cast iron drains.
- Q. Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, molded pipe boot 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.

2.4 ROOF INSULATION

- A. General: Preformed roof insulation boards. **(Applies to replacement of water saturated EPS only)**
- B. Molded (Expanded) Polystyrene Board Insulation: ASTM C 578, Type VIII,
 - 1. Minimum density: 1.15-lb/ft³.
 - 2. Minimum Compressive Strength: 20 psi.
 - 3. Size: 48 by 96 inches.
- C. Thickness:
 - 1. Add 1.5" of insulation.
 - 2.

2.5 INSULATION ACCESSORIES

- A. General: Roof insulation accessories recommended by insulation manufacturer for intended use and compatibility with other roofing system components.

2.7 WALKWAYS

- A. ~~Replace at existing locations.~~
- B. ~~Walkway Roof Pavers: Heavyweight, hydraulically pressed concrete units, square edged, factory cast for use as roof pavers; absorption not greater than 5 percent, ASTM C 140/C 140M; no breakage and maximum 1 percent mass loss when tested for freeze-thaw resistance, ASTM C 67; and as follows:~~
 - 1. ~~Size: 24 by 24 inches. Manufacture pavers to dimensional tolerances of plus or minus 1/16 inch in length, height, and thickness.~~
 - 2. ~~Weight: 18 lb. /sq. ft.~~
 - 3. ~~Compressive Strength: 7500 psi, minimum.~~
 - 4. ~~Colors and Textures: Match existing.~~

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions for compliance with manufacturer's requirements and other conditions affecting performance of the Work.
 - 1. Verify that roof openings and penetrations are sound/in place, curbs are set and braced, and roof-drain bodies are securely clamped in place. **Any repairs to the venting piping will be performed by the in-house maintenance staff.**
 - 2. Verify that wood blocking, curbs, and nailers are sound and securely anchored to roof deck at penetrations and terminations and that nailers match thicknesses of insulation.

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

4. Inspect existing EPS insulation to be in a sound and dry condition. Infill any openings in the insulation with new. **Replace any wet/water saturated insulation with new.** Mop up any standing water on substrate below insulation (existing pitch built up roofing system) and allow to dry.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.
- C. Reports any needed repairs to the City Project Manager.

3.2 PREPARATION

- A. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing system 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.

3.3 ROOFING INSTALLATION, GENERAL

- A. Install roofing system according to roofing system manufacturer's written instructions, FM Approvals' RoofNav assembly requirements, and FM Global Property Loss Prevention Data Sheet 1-29.
- B. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at end of workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.

3.4 INSULATION INSTALLATION

- A. Coordinate installing roofing system components so insulation is not exposed to precipitation or left exposed at end of workday.
- B. Comply with roofing system and insulation manufacturer's written instructions for installing roof insulation.
- C. Installation: Any deteriorated or water saturated insulation shall be replaced with new.
 1. **Replace only water saturated insulation.**
 2. Replace in the same orientation as existing conditions.
 3. Infill any holes or gaps in insulation.

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3.6 BASE FLASHING INSTALLATION

- A. Install sheet flashings and preformed flashing accessories, and adhere to substrates according to 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.

3.7 FIELD QUALITY CONTROL

- A. Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation on completion, in presence of City Project Manager, and to prepare inspection report.
- B. Repair or remove and replace components of roofing system where inspections indicate that they do not comply with specified requirements.

3.8 PROTECTING AND CLEANING

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

3.9 MANUFACTURER'S WARRANTY

- A. Provide manufacturer's 15 year warranty as stated above.

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

3.10 ROOFING INSTALLER'S WARRANTY

- A. WHEREAS _____ of _____, herein called the "Roofing Installer," has performed roofing and associated work ("work") on the following project:
1. Owner: City of Madison
 2. Address: 210 Martin Luther King Jr. Blvd. Madison WI 53703
 3. Building Name/Type: Police Training Facility
 4. Area of Work Address: 5702 Femrite Drive, Madison WI 53703
 5. Area of Work: EPDM Roofing System, Approx. 4,000 sq. ft.
 6. Acceptance Date:
 7. Warranty Period 2 years.
 8. Expiration Date:
- 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,
- C. NOW THEREFORE Roofing Installer hereby warrants, subject to terms and conditions herein set forth, that during Warranty Period Roofing Installer will, at Roofing Installer's 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;
 - 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 roofing; and
 - g. Activity on roofing by others, including construction contractors, maintenance personnel, other persons, and animals, whether authorized or unauthorized by Owner.

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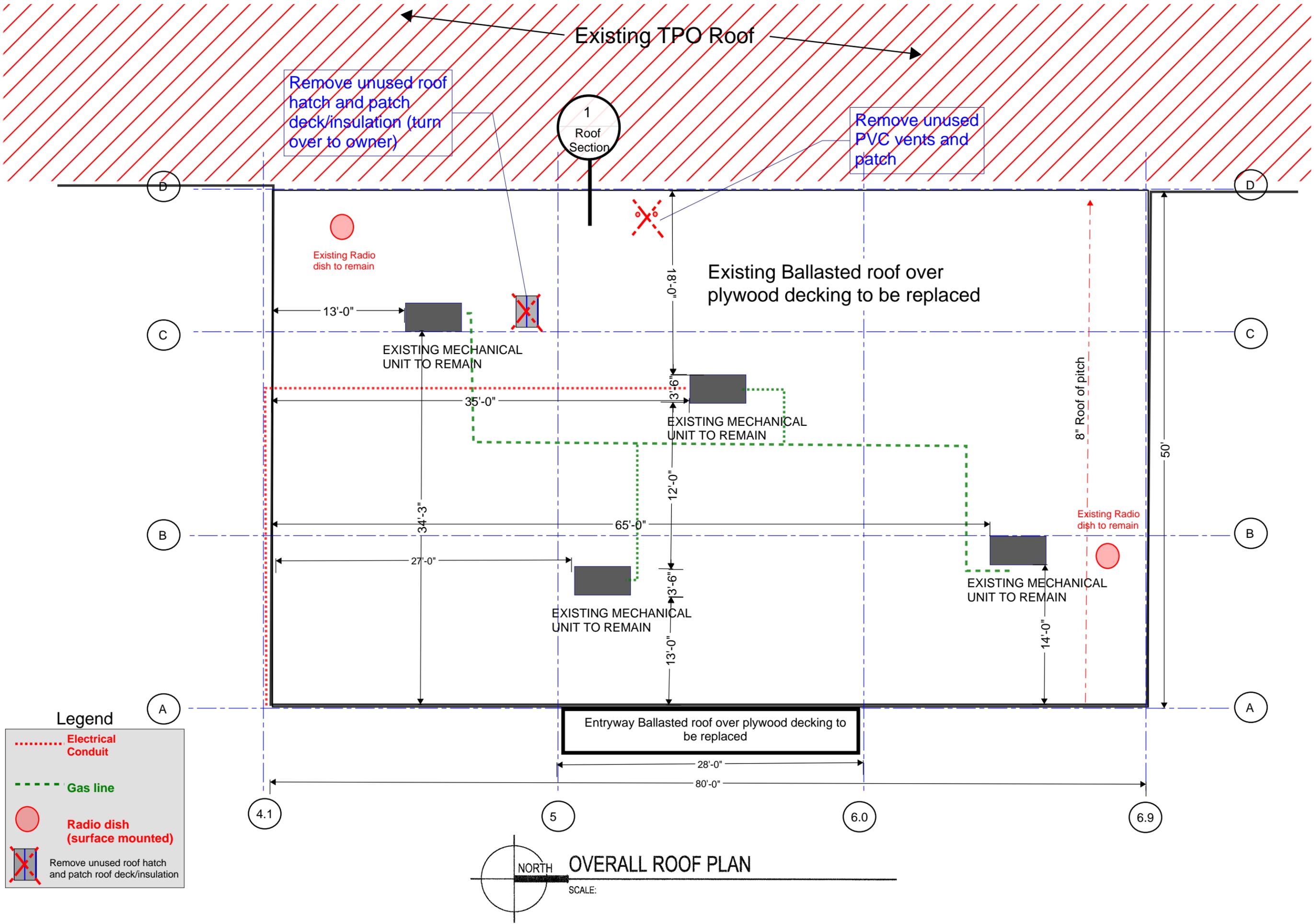
2. When work has been damaged by any of foregoing causes, Warranty shall be null and void until such damage has been repaired by Roofing Installer and until cost and expense thereof have been paid by Owner or by another responsible party so designated.
3. Roofing Installer is responsible for damage to work covered by this Warranty but is not 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.

E. IN WITNESS THEREOF, this instrument has been duly executed this _____ day of _____, _____.

1. Authorized Signature: _____.
2. Name: _____.
3. Title: _____.

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

END OF SECTION 075323

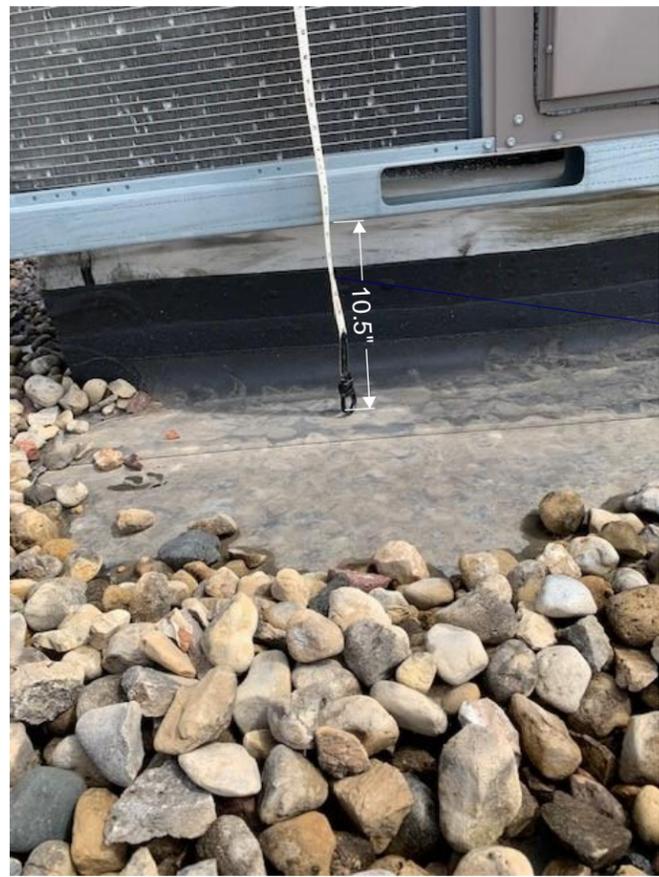


Madison Police Training Center
 Office Roof Replacement
 5702 Femrite Drive
 City of Madison

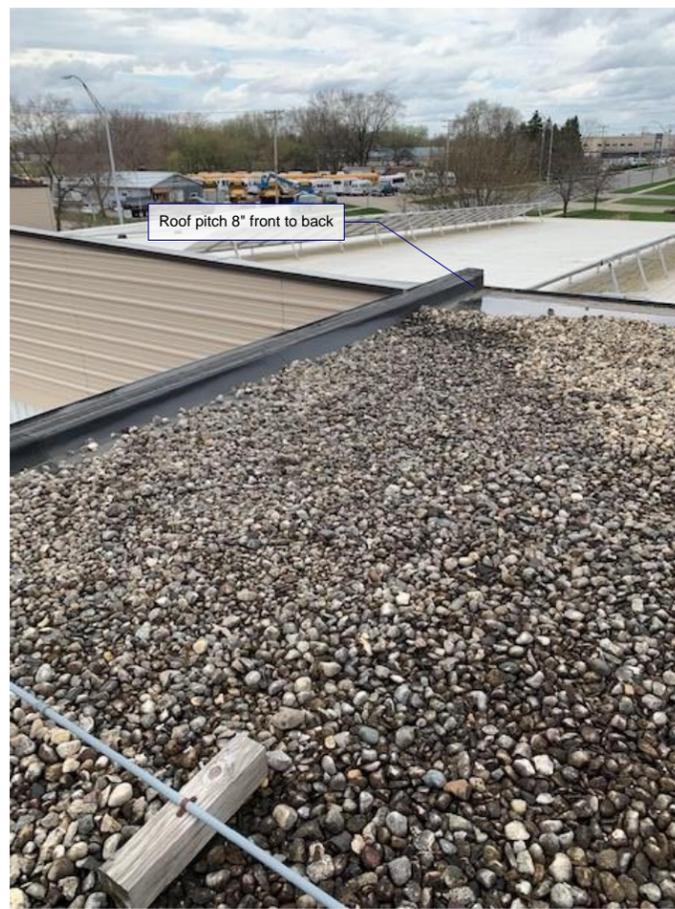


Revision:
3.25.22

Office roof
Plan



Typical curb HT 10.5"



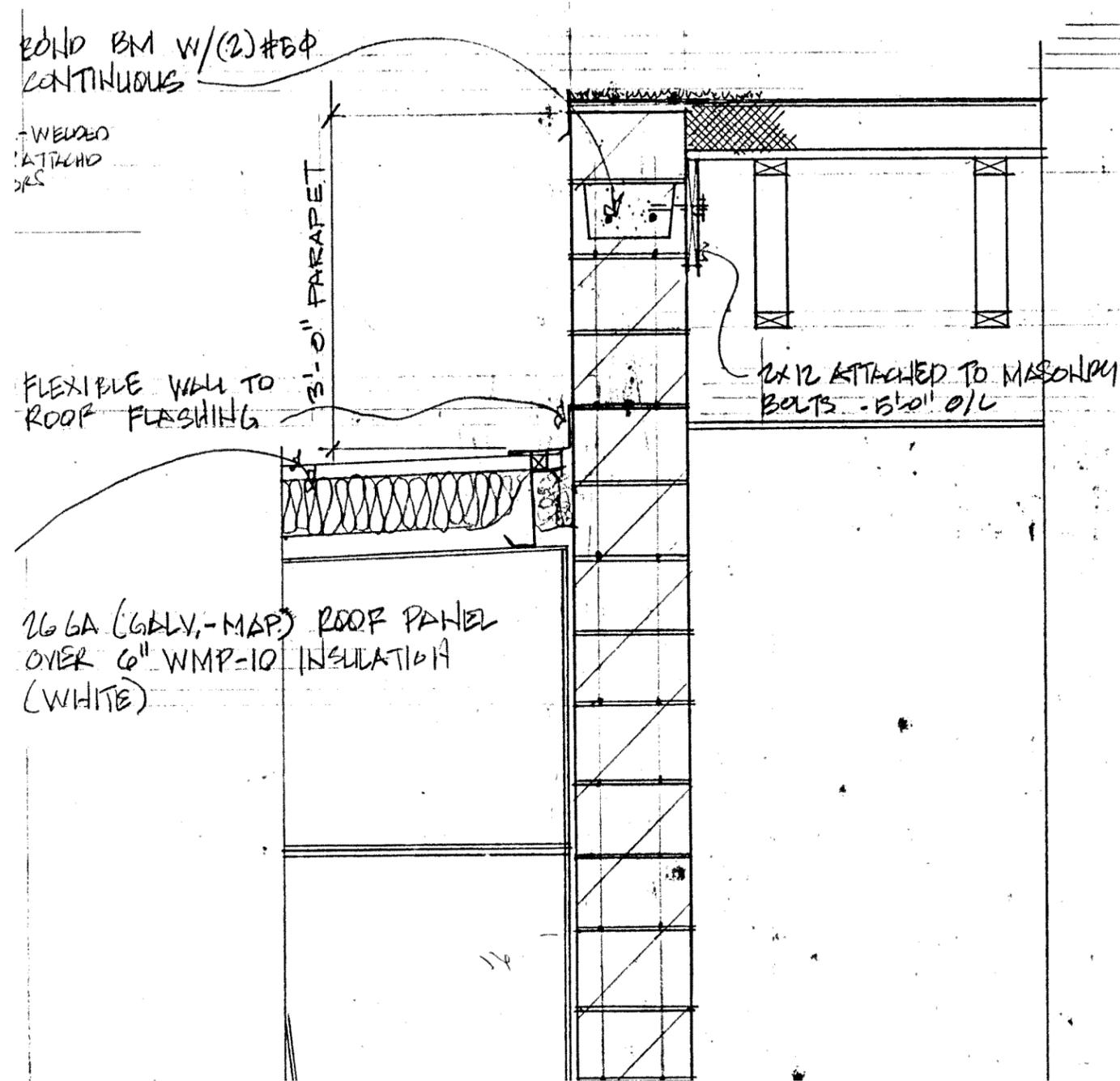
Roof pitch 8" front to back



Typical metal fascia 7.5"



Roof connection



Typical section at existing roof.

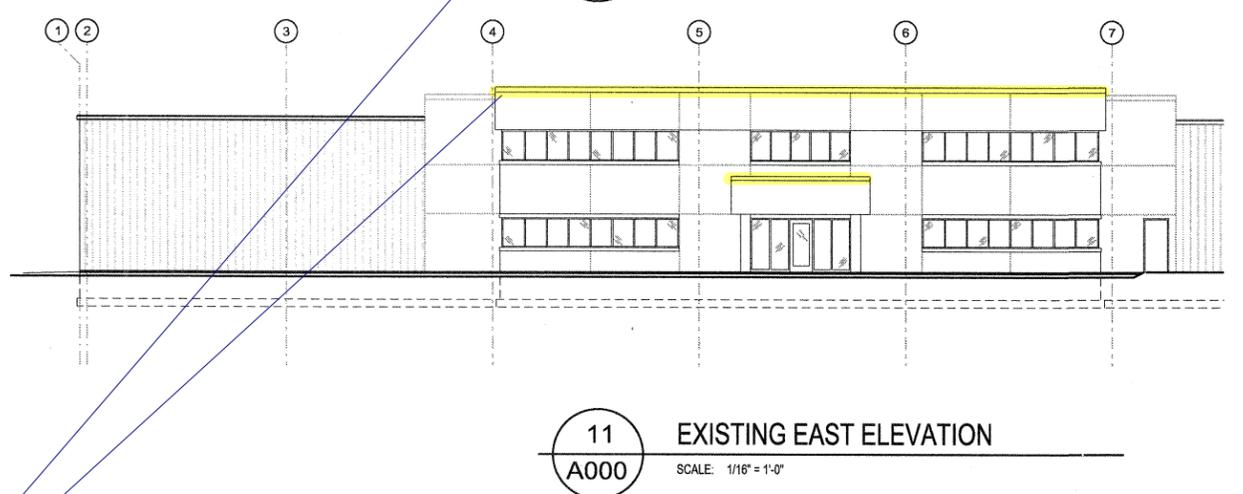
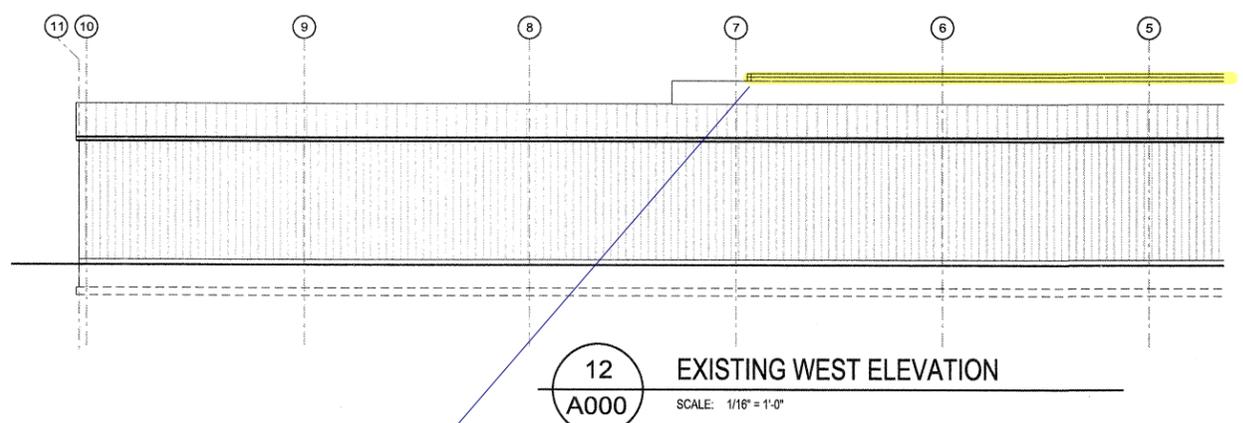
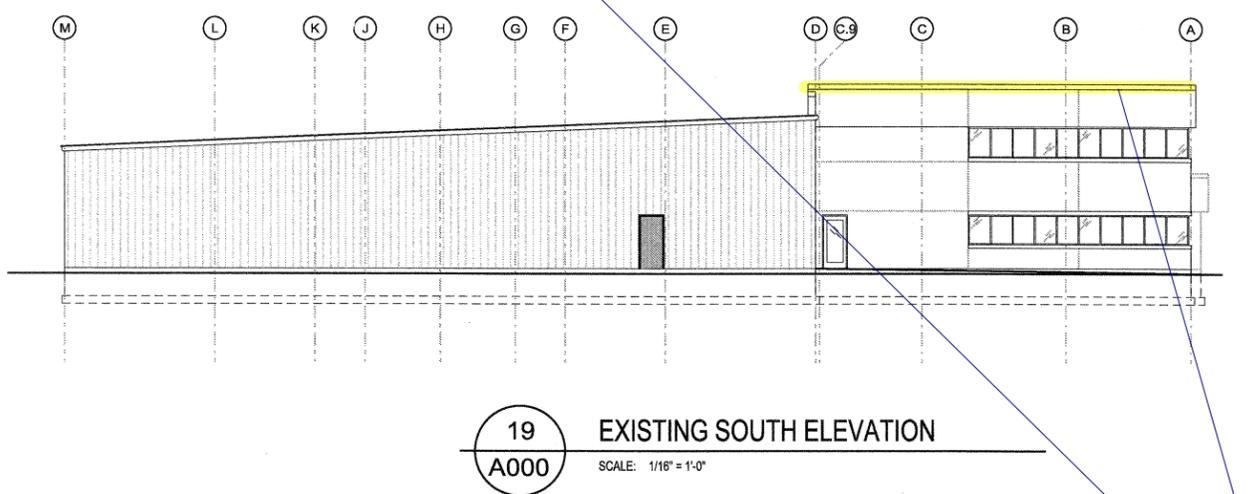
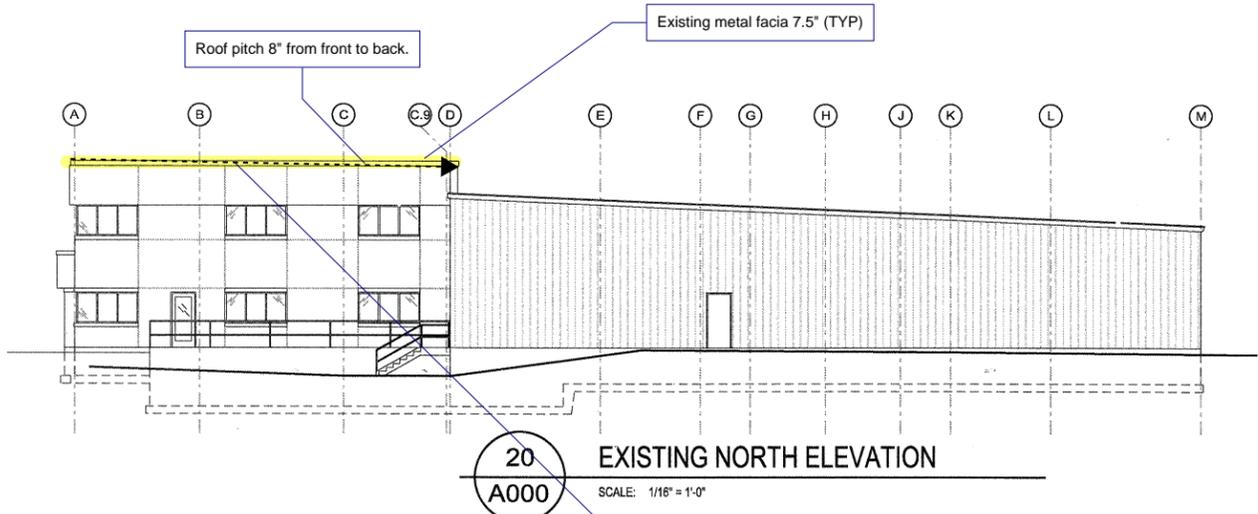


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Office Roof Replacement
5702 Femrite Drive
City of Madison



Revision:
3.25.22

Office roof
Section



Area of
Roof/flashing
Replacement

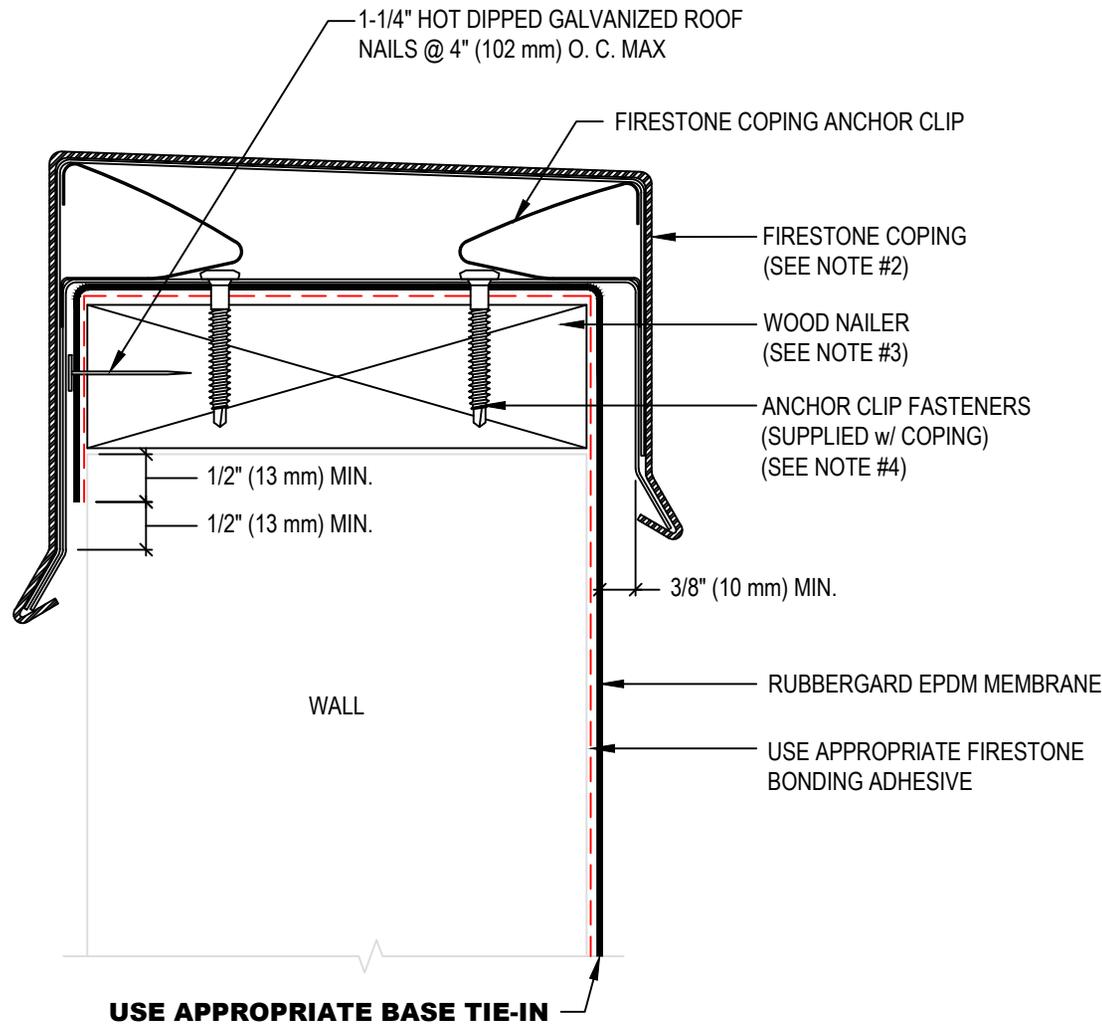


Madison Police Training Center
Office Roof Replacement
5702 Femrite Drive
City of Madison



Revision:
3.25.22

Office roof
Elevations



NOTE:

1. REFER TO FIRESTONE WEBSITE FOR MOST CURRENT INFORMATION.
2. NON-FIRESTONE METAL COPING IS ACCEPTABLE FOR THE USE IN THIS DETAIL PROVIDED FABRICATION AND INSTALLATION IS IN ACCORDANCE WITH CURRENT SMACNA RECOMMENDATIONS. HOWEVER, WATERTIGHT INTEGRITY OF WALL AND NON-FIRESTONE METAL COPING SHALL BE ENSURED BY OTHERS AND EXCLUDED FROM WARRANTY COVERAGE.
3. WOOD NAILER MUST BE INSTALLED TO MEET APPLICABLE BUILDING CODES OR 200 LB PER LINEAR FOOT IN ANY GIVING DIRECTION.
4. FASTEN COPING CLEAT AS PER SUPPLIED INSTRUCTIONS.

Firestone
Firestone Building Products

**TERMINATION AT TOP OF WALL
WITH FIRESTONE COPING**

MAXIMUM WARRANTY: 20 Years

RUBBERGARD™ EPDM

ACCEPTABLE SYSTEMS: **ALL**

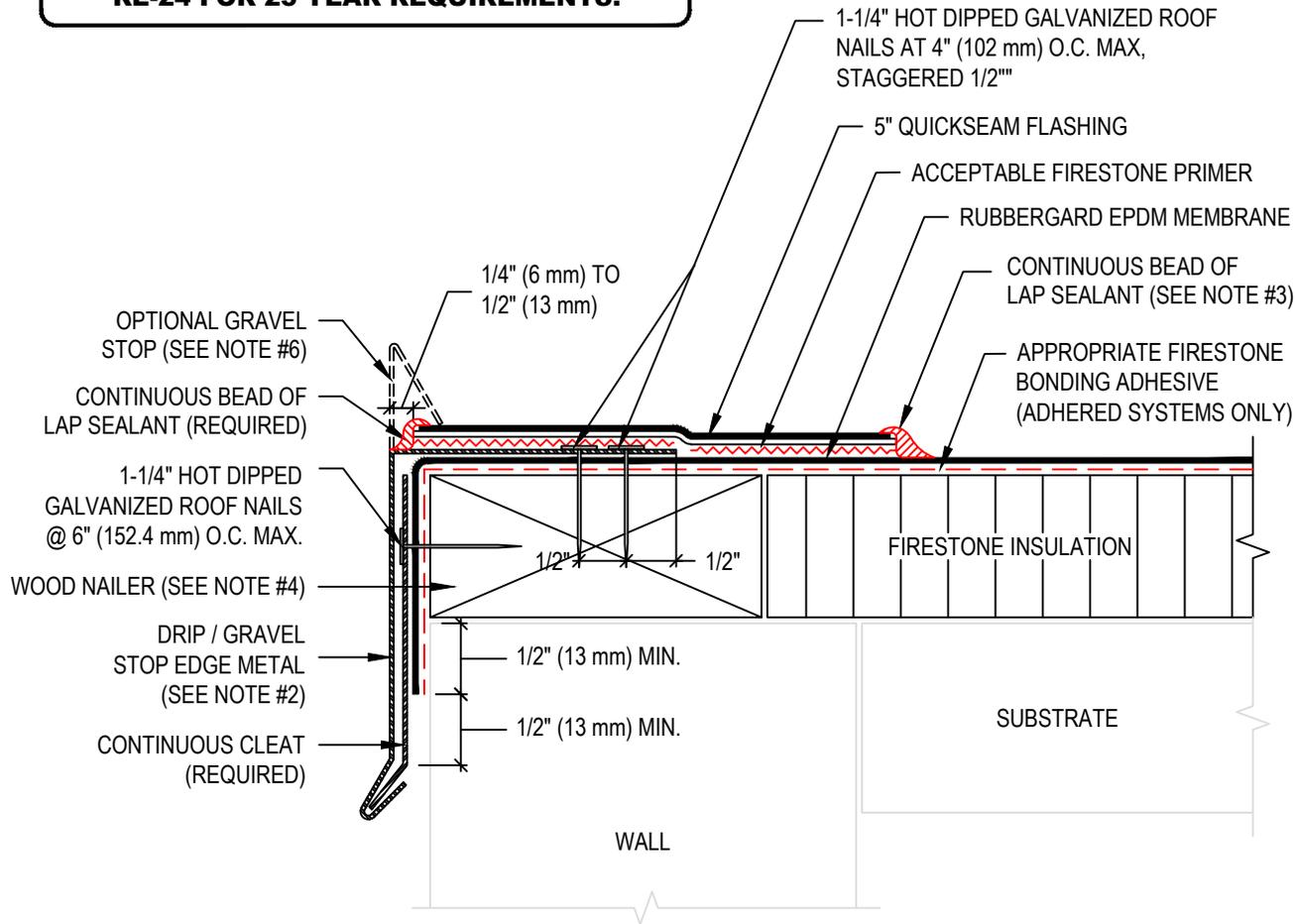
ISSUE / REVISION
DATE:

09/24/2018

DETAIL NO.

T-12

**THIS DETAIL IS ACCEPTABLE FOR
MAXIMUM OF 20 YEARS. REFER TO DETAIL
RE-24 FOR 25 YEAR REQUIREMENTS.**



NOTE:

1. REFER TO FIRESTONE WEBSITE FOR THE MOST CURRENT INFORMATION.
2. INSTALL METAL WORK TO MANUFACTURER'S REQUIREMENTS OR SMACNA RECOMMENDATIONS. IF SHOP FABRICATED METAL EDGE IS USED IT MUST MEET ANSI/SPRI ES-1 OR A FM STANDARD.
3. LAP SEALANT IS REQUIRED ALONG ENTIRE UPSLOPE EDGE OF QUICKSEAM FLASHING WHEN ROOF SLOPE IS 1" (25.4 mm) PER FOOT OR GREATER. REFER TO LS-9 FOR SEAM EDGE TREATMENT.
4. WOOD NAILER MUST BE INSTALLED TO MEET APPLICABLE BUILDING CODES OR 200 LB PER LINEAR FOOT MINIMUM IN ANY GIVEN DIRECTION.
5. FLANGE OF METAL MUST BE FULLY SUPPORTED BY WOOD AND TERMINATED AT LEAST 1/2" (13 mm) FROM EDGE OF WOOD.
6. ON BALLASTED ROOFS, GRAVEL STOP HEIGHT MUST MEET OR EXCEED BALLAST OR PAVER HEIGHT 2" (51 mm) MIN. ABOVE ROOF SURFACE.
7. IF THE FLANGE OF THE METAL EDGE IS NOT COMPLETELY COVERED WITH QUICKSEAM FLASHING, THEN AN ADDITIONAL PIECE OF QUICKSEAM FLASHING SHALL BE INSTALLED AT ALL METAL SPLICES. REFER TO RE-28.
8. MECHANICALLY ATTACHED SYSTEMS MUST INCLUDE A CONTINUOUS ROW OF MEMBRANE SECUREMENT WITHIN 12" (305 mm) OF DRIP EDGE. SEE DETAIL B-8.

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**ROOF EDGE WITH
FASCIA METAL BY OTHERS**

RUBBERGARD™ EPDM

ACCEPTABLE SYSTEMS:

ALL

MAXIMUM WARRANTY: 20 Years

ISSUE / REVISION
DATE:

09/24/2018

DETAIL NO.

RE-23