

REQUEST FOR PROPOSAL ROOF RECOVERY AND REPLACEMENT

MISSOURI SOUTHERN STATE UNIVERSITY
3950 EAST NEWMAN ROAD

SCOPE OF WORK ROOF RECOVERY AND REPLACEMENT, FINE ARTS COMPLEX

All work shall be in accordance with the scope of work and as defined in the contract documents. The contractor shall provide a single price to complete all work complete as defined in the contract documents.

There will be a pre-bid conference meeting on Thursday October 8th, 2026, at 2PM. Please meet at MSSU Taylor Performing Arts Center, location 27, to review the scope of work and answer any questions at that time. All sealed bids will be due by October 22nd, 2026, at 2pm in Billingsly Student Center Room 356, Location 41. Bids received after 2pm will not be opened or considered. Please see the attached campus map for both the pre-bid and bid opening locations.

1. Contractor shall protect the surrounding area including HVAC condensers, sidewalks, landscape vegetation. The contractor shall maintain a safe work area around the facility and keep all entrances free for use and free of debris.
2. The Contractor shall follow all applicable City, County, State and Federal codes/labor regulations will be responsible for all proper permitting. Safety is a must and will follow all applicable OSHA/Code regulations.
3. Contractor shall perform scope of work and is responsible for the proper disposal and removal from the property with close attention to the removal of roofing related debris from the work areas daily.
4. The scope of work is further clarified under the following and attached supportive specification sections:

GENERAL REQUIREMENTS

BPF	Bid Proposal Form	4 Pages
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DIVISION 1 GENERAL REQUIREMENTS

01000	SUMMARY OF WORK	5 Pages
01031	CONSTRUCTION SAFETY	5 Pages
01900	DEMOLITION	1 Page

DIVISION 5 METALS

05315	STEEL DECK REPAIR/REPLACEMENT	2 Pages
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DIVISION 6 WOOD AND PLASTICS

06100	ROUGH CARPENTRY	2 Pages
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DIVISION 7 THERMAL AND MOISTURE PROTECTION

07530	FULLY ADHERED TPO MEMBRANE ROOFING	11 Pages
07600	FLASHING AND SHEET METAL	3 Pages
07900	SEALANTS	1 Page

5. The scope of work is further clarified under the following and attached supportive drawings Dated 09/03/2026

R-1 Roof Plan

R-2 Roof Plan

R-3 Roof Plan

R-4 Roof Plan

A Roof System Cross Section

B Roof System Cross Section

C Roof System Cross Section

D Roof System Cross Section

E Roof System Cross Section

1 Parapet Wall Flashing Detail

2 Wall Termination Flashing Detail

3 Roof Edge Flashing Detail

4 Expansion Joint Flashing Detail

5 Through Wall Scupper Flashing Detail

6 Roof Drain Flashing Detail

7 Liftable/Non-Liftable Curb Flashing Detail

8 Pipe Penetration Flashing Detail

9 Hot Stack Flashing Detail

10 Pitch Pan Flashing Detail

11 Roof Hatch Flashing Detail

12 Slip Sheet Flashing Detail

13 Roof Edge Flashing Detail

14 Wall Termination Flashing Detail

15 Roof Drain Flashing Detail

16 Liftable/Non-Liftable Curb Flashing Detail

17 Pipe Penetration Flashing Detail

- 18 Hot Stack Flashing Detail
- 19 Slip Sheet Flashing Detail
- 20 Parapet Wall Flashing Detail
- 21 Wall Termination Flashing Detail
- 22 Roof Edge Flashing Detail
- 23 Through Wall Scupper Flashing Detail
- 24 Roof Drain Flashing Detail
- 25 Lifiable/Non-Lifiable Curb Flashing Detail
- 26 Pipe Penetration Flashing Detail
- 27 Hot Stack Flashing Detail
- 28 Roof Hatch Flashing Detail
- 29 Slip Sheet Flashing Detail
- 30 Parapet Wall Flashing Detail
- 31 Wall Termination Flashing Detail
- 32 Roof Edge Flashing Detail
- 33 Roof Drain Flashing Detail
- 34 Lifiable/Non-Lifiable Curb Flashing Detail
- 35 Pipe Penetration Flashing Detail
- 36 Slip Sheet Flashing Detail
- 37 Parapet Wall Flashing Detail
- 38 Wall Termination Flashing Detail
- 39 Roof Edge Flashing Detail
- 40 Through Wall Scupper Flashing Detail
- 41 Roof Drain Flashing Detail
- 42 Lifiable/Non-Lifiable Curb Flashing Detail
- 43 Slip Sheet Flashing Detail

6. The following roofing scope of installation and material provisions are provided for reference:

- A. Base Bid #1: (Roof Recovery and Roof Replacement: Fully Adhered TPO Roof System, Missouri Southern State University – Fine Arts Complex)

Roof Areas A, B, E, F and G (Roof Recovery)

- a. Remove and properly dispose of all existing flashings, dirt and debris down to the surface of the existing modified bitumen roofing and roof manufacturers approved substrate.
- b. Remove and dispose of all existing steel counter flashing, coping cap, pitch pans, edge metal and downspouts as specified.
- c. Remove and properly dispose of all existing perimeter and penetration flashings so as to provide adequate substrate for new flashing installation as specified.
- d. Remove and replace deteriorated/ wet roof insulation upon visual verification and approval by Owner/Owner's Representative via Owner. Include 2,000 square feet of roof insulation replacement within Base Bid #1 scope of work.
- e. Remove all obsolete roof top equipment and infill with new decking as specified and as shown on the drawings.
- f. Remove and replace all deteriorated wood blocking atop parapet walls and at roof edge after approval from Owner/Owner's Representative.
- g. Install new fully adhered .080" TPO fleece back single-ply roof membrane system as specified and as shown on the drawings.
- h. Install new fully adhered .060" TPO single-ply flashings at all perimeters and projections as specified and shown on the drawings.
- i. Install new metal counter flashings as shown on the drawings.
- j. Install new pitch pans as specified and as shown on the drawings.
- k. Install new prefinished steel coping cap at parapet walls as specified.
- l. Install new prefinished steel edge metal at roof edge as specified.
- m. Install new stainless steel draw bands at pipe locations as shown on the drawings and as specified.
- n. Install new wood blocking on slip sheets as shown on the drawings and as specified.
- o. Install new walk pads as specified and at locations as shown on the drawings.
- p. Provide all necessary mechanical and electrical disconnects required for the installation of new roof system.
- q. Ensure that all drains are clear of all debris and function as intended.

Roof Area C and D (Roof Replacement)

- a. Remove and properly dispose of all existing roofing, insulation, flashing, dirt and debris down to the surface of the existing steel deck.
- b. Replace all deteriorated steel deck as specified after approval and confirmation from Owner/Owner's Representative. Include 100 square feet of deteriorated steel deck removal and replacement within Base Bid #1.
- c. Remove and dispose of all existing steel counter flashing, edge metal, coping cap and sheet metal components as specified.
- d. Remove and replace all deteriorated wood blocking at roof edge after approval from Owner/Owner's Representative.
- e. Install new tapered polyisocyanurate roof insulation adhered to the steel deck to provide positive slope to drainage devices as specified and as shown on the drawings.
- f. Install one layer of new ½" high density polyisocyanurate insulation adhered to the underlying insulation as specified and as shown on the drawings.
- g. Install new fully adhered .080" TPO fleece back single-ply roof membrane system as specified and as shown on the drawings.
- h. Install new fully adhered .060" TPO single-ply flashings at all perimeters and projections as specified and shown on the drawings.
- i. Install new metal skirt and counter flashings as shown on the drawings.
- j. Install new prefinished steel edge metal and coping cap at roof edge as specified.
- k. Install new stainless steel draw bands at pipe locations as shown on the drawings and as specified.
- l. Install new wood blocking on slip sheets as shown on the drawings and as specified.
- m. Provide all necessary mechanical and electrical disconnects required for the installation of new roof system.
- n. Install new sealants as specified and as shown on the drawings.

Roof Area H, L and N (Roof Replacement)

- a. Remove and properly dispose of all existing roofing, insulation, flashing, dirt and debris down to the surface of the existing concrete roof deck.
- b. Remove and dispose of all existing steel counter flashing, edge metal, coping cap and sheet metal components as specified.
- c. Remove and replace all deteriorated wood blocking at roof edge after approval from Owner/Owner's Representative.

- d. Install new tapered polyisocyanurate roof insulation adhered to the concrete roof deck to provide positive slope to drainage devices as specified and as shown on the drawings.
- e. Install one layer of new ½" high density polyisocyanurate insulation adhered to the underlying insulation as specified and as shown on the drawings.
- f. Install new fully adhered .080" TPO fleece back single-ply roof membrane system as specified and as shown on the drawings.
- g. Install new fully adhered .060" TPO single-ply flashings at all perimeters and projections as specified and shown on the drawings.
- h. Install new metal skirt and counter flashings as shown on the drawings.
- i. Install new prefinished steel edge metal and coping cap at roof edge as specified.
- j. Install new stainless steel draw bands at pipe locations as shown on the drawings and as specified.
- k. Install new wood blocking on slip sheets as shown on the drawings and as specified.
- l. Provide all necessary mechanical and electrical disconnects required for the installation of new roof system.
- m. Install new sealants as specified and as shown on the drawings.

Roof Area I, M, P, Q, R and T (Roof Replacement)

- a. Remove and properly dispose of all existing roofing, insulation, flashing, dirt and debris down to the surface of the existing gypsum roof deck.
- b. Replace all deteriorated gypsum deck as specified after approval and confirmation from Owner/Owner's Representative. Include 1,000 square feet of deteriorated gypsum deck removal and replacement within Base Bid #1.
- c. Remove and dispose of all existing steel counter flashing, edge metal, coping cap and sheet metal components as specified.
- d. Remove and replace all deteriorated wood blocking at roof edge after approval from Owner/Owner's Representative.
- e. Install new tapered polyisocyanurate roof insulation adhered to the gypsum roof deck to provide positive slope to drainage devices as specified and as shown on the drawings.
- f. Install one layer of new ½" high density polyisocyanurate insulation adhered to the underlying insulation as specified and as shown on the drawings.
- g. Install new fully adhered .080" TPO fleece back single-ply roof membrane system as specified and as shown on the drawings.

- h. Install new fully adhered .060" TPO single-ply flashings at all perimeters and projections as specified and shown on the drawings.
- i. Install new metal skirt and counter flashings as shown on the drawings.
- j. Install new prefinished steel edge metal and coping cap at roof edge as specified.
- k. Install new stainless steel draw bands at pipe locations as shown on the drawings and as specified.
- l. Install new wood blocking on slip sheets as shown on the drawings and as specified.
- m. Provide all necessary mechanical and electrical disconnects required for the installation of new roof system.
- n. Install new sealants as specified and as shown on the drawings.

Roof Areas J, K, O, T, T-1, T-2, T-3, T-4, U, V AND W (Roof Recovery)

- a. Remove and properly dispose of all existing flashings, dirt and debris down to the surface of the existing modified bitumen roofing and roof manufacturers approved substrate.
- b. Replace all deteriorated gypsum deck as specified after approval and confirmation from Owner/Owner's Representative. Include 1,000 square feet of deteriorated gypsum deck removal and replacement within Base Bid #1.
- c. Remove and dispose of all existing steel counter flashing, coping cap, pitch pans, edge metal, guttering and downspouts as specified.
- d. Remove and properly dispose of all existing perimeter and penetration flashings so as to provide adequate substrate for new flashing installation as specified.
- e. Remove all obsolete roof top equipment and infill with new decking as specified and as shown on the drawings.
- f. Remove and replace all deteriorated wood blocking atop parapet walls and at roof edge after approval from Owner/Owner's Representative.
- g. Install new tapered polyisocyanurate insulation in approved adhesive to provide positive slope to drainage devices as shown on the drawings plan and as specified.
- h. Install new wood blocking at perimeter of roof to accommodate height of tapered insulation as specified and shown on the drawings.
- i. Install new fully adhered .080" TPO fleece back single-ply roof membrane system as specified and as shown on the drawings.
- j. Install new fully adhered .060" TPO single-ply flashings at all perimeters and projections as specified and shown on the drawings.
- k. Install new metal counter flashings as shown on the drawings.

- l. Install new pitch pans as specified and as shown on the drawings.
- m. Install new prefinished steel coping cap at parapet walls as specified.
- n. Install new prefinished steel edge metal at roof edge as specified.
- o. Install new prefinished gutter and downspouts at roof edge as specified.
- p. Install new stainless steel draw bands at pipe locations as shown on the drawings and as specified.
- q. Install new wood blocking on slip sheets as shown on the drawings and as specified.
- r. Install new walk pads as specified and at locations as shown on the drawings.
- s. Provide all necessary mechanical and electrical disconnects required for the installation of new roof system.
- t. Ensure that all downspouts are clear of all debris and function as intended.

7. The contractor is required to provide the following Unit Costs as follows:

For changing specified quantities of work from those indicated by the contract drawings and specifications, upon written instructions of the Owner, the following unit prices shall prevail. The unit prices include all labor, overhead, profit, materials, equipment, etc. Only a single unit price shall be given, and it shall apply for more or less than shown on the drawings and are called for in the specifications or included in the Bids. In the event of more or less units than so indicated or included, change orders shall be issued for the increased or decreased amount.

Unit Cost #1 Remove and replace deteriorated wood nailer as specified. \$_____ Per Bd Ft

Unit Cost #2 Remove and replace deteriorated steel decking as specified \$_____ Per Sq Ft

Unit Cost #3 Remove and replace deteriorated gypsum decking as specified \$_____ Per Sq Ft

Unit Cost #4 Remove and replace wet roof insulation as specified \$_____ Per Bd Ft

Start Date: _____ Days till completion: _____

References:

1. Company Name: _____

Business Address: _____

Name & Title of Contact: _____

Email: _____ phone: _____

2. Company Name: _____

Business Address: _____

Name & Title of Contact: _____

Email: _____ phone: _____

3. Company Name: _____

Business Address: _____

Name & Title of Contact: _____

Email: _____ phone: _____

8. Contractor will be responsible for being on site for all supply material handling and offloading to roofs or site locations as approved by Physical Plant Director.
9. No on-site facility restrooms will be allowable for use; contractor will be responsible for providing any porta potty with location being approved by Director of Physical Plant.
10. Roofs must be kept as watertight at all times, and all precautions made to prevent any water intrusion of leaks in implement weather during the roofing project.
11. Contractor responsible for providing all necessary equipment to complete the project.
12. Contractor shall provide a 2-year contractors workmanship warranty and 20 year manufacturers labor and material warranty upon completion of project.
13. Contractor will be responsible for all measurements, and all campus visitations must be approved by Director of Physical Plant.
14. All campus work must be with pre-approved start dates and communication made through each building roof project. On-site work hours may differ pending any campus activity. All days not worked from campus activities or weather shall be documented in writing and the Facilities Director notified. At completion a final roofing inspection and walk through will be with Director of Physical Plant.
15. Contractor recognizes that time is of the essence and if the project is not completed in a timely manner could drastically affect the Universities campus operations. If the Contractor fails to perform the work within the specified completion date set forth the Contractor shall pay the University an inconvenience fee of \$1,000 per each calendar day after specified completion date. That may be deducted from any final invoicing of proposal bid.
16. All proposals meeting the intent of this request for proposal will be considered for award. The university reserves the right to accept or reject all or any part of any proposal and award to the Bidder that proposes the Best in Value to the University.
17. All materials/ supplies proposed shall be new in first-class manufactured conditions. All materials and services shall be subject to Universities approval.

18. The University is State Sales Tax exempt and shall not be included on proposal.

Authorized to Do Business:

If Contractor is a corporation or limited liability company organized in the State of Missouri, Contractor represents that it is in Good Standing with the Missouri Secretary of State. If Contractor is a corporation or limited liability company organized in a state other than Missouri, Contractor represents that it is authorized to do business in the State of Missouri.

Examination of Bid Package:

Before Submitting a Proposal, it is the responsibility of each bidder to:

1. Thoroughly examine this bid package and other related data identified in this bid package.
2. Consider federal, state, and local laws, ordinances, rules and regulations that may in any manner affect cost, progress, performance, and furnishing of the work.
3. Promptly notify the University of all conflicts, errors, ambiguities, or discrepancies which Bidder has discovered in or between the information provided in this bid package and such other related documents.

Insurance

1. The successful contractor shall submit to the University a Certificate of Insurance for all insurance required under this provision. The contractor shall provide and maintain in effect during the life of the project and warranty period the following coverage for which Missouri Southern State University shall be named as "an additional insured"
- a. Workers Compensation Statutory Limits
- b. Comprehensive general liability (including premises-operations; independent contractors' protective; products and completed operations; broad form property damage):
- c. Bodily injury:
- i. Each Occurrence \$500,000
- ii. Aggregate, Products and completed operations \$1,000,000
- d. Property Damage:
- i. Each Occurrence \$500,000
- ii. Aggregate \$1,000,000
- e. Products and completed operations
- i. Insurance shall be maintained for the duration of construction and Contractor shall continue to provide evidence of such coverage to University during the construction period.

- f. Property damage liability insurance
 - i. Shall include coverage for the following hazards:
 - 1. Explosion, Collapse, Underground
- g. Contractual Liability
 - i. Bodily Injury \$500,000
 - ii. Property damage \$500,000
- h. Comprehensive automobile liability:
 - i. Owned, non-owned, and hired
 - 1. Bodily injury:
 - a. Each person \$500,000
 - b. Each accident \$1,000,000
 - c. Property damage \$1,000,000

Prevailing Wages

The Prevailing Wage Law applies to all public works projects constructed by or on behalf of state and local public bodies for Agreements in the amount of seventy-five thousand dollars or more. Not less than the prevailing hourly rate of wages, as set out in the wage order attached to and made part of the specification for work under the contract, shall be paid to all workers performing work under the contract. Section 290.250, RSMo. Please see attachment A – Annual Wage Order No. 33.

The Contractor and each Subcontractor engaged in construction of public works shall keep full and accurate records clearly indicating the names, occupations and crafts of every worker employed by them in connection with the public work together with an accurate record of the number of hours worked by each worker and the actual wages paid, therefore. The payroll records required to be so kept shall be open to inspection by any appointed representative of the contracting public body or of the department at any reasonable time and as often as may be necessary and such records shall not be destroyed or removed from the state for the period of one year following the completion of the public work in connection with which the records are made. Contractors shall submit certified copies of their payrolls to the contracting public body on a monthly basis.

For any construction of public works, each Contractor and Subcontractor shall file with the contracting public body upon completion of the public work and prior to final payment the enclosed wage rate affidavit stating that they have fully complied with the provisions and requirements of this chapter and as set forth in the Department of Labor and Industrial Relations Prevailing Wage Section 290.290, RSMo., and no public body shall be authorized to make final payment until such affidavit is filed therewith in proper form and order.

Each Contractor and Subcontractor engaged in construction of public works for Agreements in the amount of two hundred fifty thousand dollars or more shall have its name, acceptable abbreviation or recognizable logo and the name of the city and state of the mailing address of the principal office of the company, on each motor vehicle and motorized self-propelled piece of equipment which is used in connection with such public works project during the time the Contractor or Subcontractor is engaged on such project. The sign shall be legible from a distance of twenty feet but the size of the letting need not be larger than two inches. In cases where equipment is leased or where affixing a legible sign to the equipment is impractical, the Contractor may place a temporary stationary sign,

with the information required pursuant to this subsection at the main entrance of the construction project in place of affixing the required information on the equipment so long as such sign is not in violation of any state or federal statute, rule or regulation. Motor vehicles which are required to have similar information affixed thereto pursuant to requirements of a regulatory agency of the state of federal government are exempt from the provisions of this subsection

Per Section 290.265, RSMo., a clearly legible statement of all prevailing hourly wage rates to be paid to all workers employed in order to execute the Agreement and employed on the construction of the public works is kept posted in a prominent and easily accessible place at the site thereof by each Contractor and Subcontractor engaged in the public works project under the provisions of this law and such notice shall remain posted during the full time that any worker shall be employed on the public works.

Per section 290.250, RSMo., the Contractor will forfeit a penalty to the contracting public body of \$100 per day (or portion of a day) for each worker that is paid less than the prevailing rate for any work done under the contract by the contractor or by any subcontractor. For detailed information on rules and occupational titles, see 8 CSR 30-3.010 through 3.060. The Owner, and its agents and officers, shall take cognizance of all complaints of all violations of the provisions of Sections 290.210 to 290.340 RSMo. Committed in the course of the execution of the contract, and, when making payments to the contractor becoming due under the contract, shall withhold and retain therefrom all sums and amounts due and owing as a result of any violation of sections 290.210 to 290.340 RSMo.

Required Training:

The contractor and all subcontractors to the contract must require all on-site employees to complete the ten-hour construction safety training program required under Section 292.675, RSMo, unless they have previously completed the program and have documentation of having done so.

The contractor will forfeit a penalty to the contracting public body of \$2500 plus an additional \$100 for each employee employed by the contractor or subcontractor, for each calendar day, or portion thereof, such employee is employed without the required training. Section 292.675 RSMo.

Evaluation Process:

1. Proposals will be competitively evaluated based on the responses to all requirements in this RFP. The evaluation of a Contractor's ability to provide the required services will be based on Contractor's written proposal, and if selected as a finalist, presentation, interviews, visits to Contractor's client reference accounts, and best and final offers. The following is the criteria that will be used as part of the evaluation:

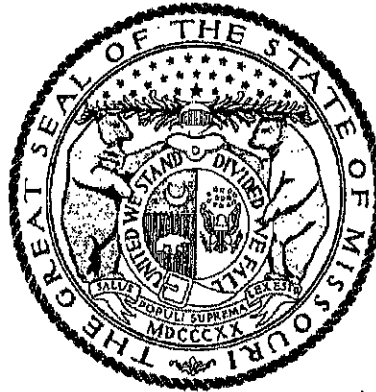
Scoring Criteria	Weight
References/Performance of three previous educational like facilities	15%
Start date/days till completion	20%
Overall Costs	65%
	100

2. When evaluating a proposal, the University reserves the right to consider relevant information and fact, whether gained from a proposal, a Supplier, a Supplier's references, or from any other source. Any information submitted with the proposal, regardless of the format or placement of such information, may be considered in making decisions related to the responsiveness and merit of a proposal and the award of an Agreement.

Missouri

Division of Labor Standards

WAGE AND HOUR SECTION



MIKE KEHOE, Governor

Annual Wage Order No. 33

Section 049 JASPER COUNTY

In accordance with Section 290.262 RSMo 2000, within thirty (30) days after a certified copy of this Annual Wage Order has been filed with the Secretary of State as indicated below, any person who may be affected by this Annual Wage Order may object by filing an objection in triplicate with the Labor and Industrial Relations Commission, P.O. Box 599, Jefferson City, MO 65102-0599. Such objections must set forth in writing the specific grounds of objection. Each objection shall certify that a copy has been furnished to the Division of Labor Standards, P.O. Box 449, Jefferson City, MO 65102-0449 pursuant to 8 CSR 20-5.010(1). A certified copy of the Annual Wage Order has been filed with the Secretary of State of Missouri.

Original Signed by

Logan Hobbs, Director
Division of Labor Standards

Filed With Secretary of State: March 10, 2026

Last Date Objections May Be Filed: April 9, 2026

Prepared by Missouri Department of Labor and Industrial Relations

JASPER COUNTY

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Asbestos Worker	\$36.85
Boilermaker	\$29.74*
Bricklayer - Stone Mason	\$29.74*
Carpenter	\$53.12
Lather	
Linoleum Layers & Cutter	
Millwright	
Pile Driver	
Cement Mason	\$44.79
Plasterer	
Communication Technician	\$29.74*
Electrician (Inside Wireman)	\$53.12
Electrician (Outside Lineman)	\$29.74*
Outside - Groundman	
Outside - Groundman Tree Trimmer	
Outside - Lineman Operator	
Outside - Lineman Tree Trimmer	
Elevator Constructor	\$29.74*
Glazier	\$50.02
Iron Worker	\$70.65
Laborer	\$43.28
Laborer - First Semi-Skilled	
Laborer - General	
Laborer - Second Semi-Skilled	
Laborer - Skilled	
Mason	\$64.98
Marble Finisher	
Marble Mason	
Terrazzo Finisher	
Terrazzo Worker	
Tile Finisher	
Tile Setter	
Operating Engineer	\$68.99
Operating Engineer - Group I	
Operating Engineer - Group II	
Operating Engineer - Group III	
Operating Engineer - Group III - A	
Operating Engineer - Group IV	
Operating Engineer - Group V	
Painter	\$43.57
Plumber	\$57.44
Pipe Fitter	
Roofer/WaterProofer	\$47.05
Sheet Metal Worker	\$59.12
Sprinkler Fitter - Fire Protection	\$29.74*
Truck Driver	\$29.74*
Truck Control Service Driver	
Truck Driver, Teamsters Group I	
Truck Driver, Teamsters Group II	
Truck Driver, Teamsters Group III	
Truck Driver, Teamsters Group IV	

* The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. The public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

**The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title as defined in RSMo Section 290.210.

JASPER COUNTY

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Carpenter	\$29.74*
Millwright	
Pile Driver	
Electrician (Outside Lineman)	\$29.74*
Outside - Groundman	
Outside - Groundman Tree Trimmer	
Outside - Lineman Operator	
Outside - Lineman Tree Trimmer	
Laborer	\$49.11
Laborer - General	
Laborer - Skilled	
Operating Engineer	\$57.27
Operating Engineer - Group I	
Operating Engineer - Group II	
Operating Engineer - Group III	
Operating Engineer - Group IV	
Truck Driver	\$29.74*
Truck Control Service Driver	
Truck Driver, Teamsters Group I	
Truck Driver, Teamsters Group II	
Truck Driver, Teamsters Group III	
Truck Driver, Teamsters Group IV	

Use Heavy Construction Rates on Highway and Heavy construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(3).

Use Building Construction Rates on Building construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(2).

If a worker is performing work on a heavy construction project within an occupational title that is not listed on the Heavy Construction Rate Sheet, use the rate for that occupational title shown on the Building Construction Rate Sheet.

*The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. Public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

**The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title.

OVERTIME and HOLIDAYS

OVERTIME

For all work performed on a Sunday or a holiday, not less than twice (2x) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work.

For all overtime work performed, not less than one and one-half (1½) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work or contractual obligation. For purposes of this subdivision, "**overtime work**" shall include work that exceeds ten hours in one day and work in excess of forty hours in one calendar week; and

A thirty-minute lunch period on each calendar day shall be allowed for each worker on a public works project, provided that such time shall not be considered as time worked.

HOLIDAYS

January first;
The last Monday in May;
July fourth;
The first Monday in September;
November eleventh;
The fourth Thursday in November; and
December twenty-fifth;

If any holiday falls on a Sunday, the following Monday shall be considered a holiday.

BID PROPOSAL FORM

TO: Missouri Southern State University

Name of Bidder: _____

- 1.1 Pursuant to and in compliance with the Invitation to Bid and the proposed Contract Documents relating to the construction of:

ROOF RECOVERY AND REPLACEMENT
FINE ARTS COMPLEX
MISSOURI SOUTHERN STATE UNIVERSITY
3950 EAST NEWMAN ROAD
JOPLIN, MISSOURI
RAMSLLC # 2026039

Including Addendum _____

The undersigned, having become thoroughly familiar with the terms and conditions of the proposed Contract Documents and with local conditions affecting the performance and cost of the work at the place where the work is to be completed and having fully inspected the site in all particulars, hereby proposes and agrees to fully perform the work within the time stated in strict accordance with the proposed Contract Documents, including furnishing any and all labor and materials, and to do all the work required to construct and complete said work in accordance with the Contract Documents, for the following sum of money:

- A. Base Bid #1: (Fully Adhered TPO Roof System) All labor, materials, services, taxes, and equipment necessary for the completion of the work shown on the drawings and in the specifications for Base Bid #1 Scope of Work:

Dollars \$ _____

- B. Unit Pricing

1. For changing specified quantities of work from those indicated by the contract drawings and specifications, upon written instructions of the Owner, the following unit prices shall prevail. The unit prices include all labor, overhead, profit, materials, equipment, etc. Only a single unit price shall be given, and it shall apply for either more or less than shown on the drawings and called for in the specifications or included in the Bids. In the event of more or less units than so indicated or included, change orders shall be issued for the increased or decreased amount.

- a. Unit Cost #1

Remove and replace deteriorated wood nailer as specified. \$ _____
Per Bd. Ft.

- b. Unit Cost #2

Remove and replace deteriorated steel decking as specified. \$ _____
Per Sq. Ft.

- c. Unit Cost #3

Remove and replace deteriorated gypsum decking as specified. \$ _____
Per Sq. Ft.

- d. Unit Cost #4

Remove and replace wet roof insulation as specified. \$ _____
Per Bd. Ft.

BID PROPOSAL FORM-2

C. Performance and Labor and Material Bonds

1. By signing and submitting this bid, the Bidder certifies that he is able to furnish Performance and Labor and Material Payment Bonds in amounts sufficient to cover the total proposed cost of the work. Should the owner require such bonds, the bonds will be added to the Base Bid price at the additional cost as follows:

Performance and Labor and Material Bonds to complete Base Bid #1 Scope of Work

\$ _____

D. Bid Bond

1. AIA Form A310

E. Change Orders

1. The following fees shall be used for lump sum pricing and actual cost pricing of additions and deletions to that work included in the bid.

- a. For any additions to the Work authorized by the Owner:

The Contract Sum shall be revised to include (a) the actual cost of the Work (excluding the cost of insurance and taxes) required for such additions plus __ percent (____%) thereof, and (b) the actual net cost of insurance and taxes, if any, incurred by reason of such additions.

- b. For deletions from the Work authorized by the Owner:

The Contract Sum shall be reduced by (a) an amount equal to the savings in cost of the Work (excluding the cost of insurance and taxes) realized for Work not performed by reason of such deletions plus _____ percent (____%) thereof, and (b) the actual net savings in the cost of insurance and taxes by reason of such deletions.

F. Time of Commencement, Completion and Damages

1. Contractor shall commence work _____ (calendar) days after award and substantially complete work within the calendar days outlined below.

Base Bid #1 Scope of Work _____ Calendar days

2. Time is expressly declared to be of the essence in the completion of the work covered by these Contract Documents, and the Contractor shall be liable for Liquidated Damages for delay in completion of work. Liquidated Damages shall be incurred at a rate of **\$1,000 per calendar day after completion date**. Where under the contract additional time is allowed for the construction of the work, the new time limits will be of the essence of the contract.

G. Subcontractors

1. The following subcontractors/suppliers have agreed to furnish labor and materials for this work for the trades/items indicated. These subcontractors/suppliers shall not be changed without the Owner's written permission.

BID PROPOSAL FORM-3

Subcontractor/Supplier

Trade/Material

- 1.2 The bidder declares that in preparing this bid he has assured himself of the availability of all labor, materials, and products to meet the substantial completion date.
- 1.3 By signing this bid, the Bidder certifies that he does not or will not discriminate against his employees on the basis of sex, race, color, creed, religion, or national origin. He further certifies that the Bidder does not maintain or provide for his employee's facilities that are segregated on any of the above categories.
- 1.4 By signing this bid, each bidder certifies that this bid has been arrived upon independently without consultation, communication, or agreement as to any matter relating to this bid with any other Bidder or with any competitor.
- 1.5 By signing this bid, the Contractor certifies that this bid is in compliance with all local, state, and applicable codes.
- 1.6 I understand that the Owner reserves the right to reject this bid, but that this bid shall not be withdrawn for a period of thirty (30) days from the date prescribed for its opening.
- 1.7 If written notice of the acceptance of this bid is mailed or delivered to the undersigned within 30 days after the date set for the opening of this bid or at any other time thereafter before it is withdrawn, the undersigned shall execute and deliver the Contract Documents to the Owner in accordance with the bid accepted, and shall also furnish and deliver to the Owner any required documents or bonds, and proof of insurance coverage, all within fifteen (15) days after personal delivery or after deposit in the mail of the notification of acceptance of this bid.
- 1.8 Notice of acceptance or requests for additional information may be addressed to the undersigned at the address stated below.
- 1.9 The names of all persons interested in the foregoing bid as principals are:

If bidder or other interested person is a corporation, give the legal name of the corporation, the state where incorporated, and names of the president and secretary; if a partnership, give the name of the firm and names of all individual co-partners composing the firm; if Bidder or other interested person is an individual, give first and last names in full.

Licensed in accordance with an act for the registration of Contractors and with license number _____.

Sign Here:

Signature of Bidder

If Bidder is a corporation, set forth the legal name of the corporation, together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation. If Bidder is a

BID PROPOSAL FORM-4

partnership, set forth the name of the firm, together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership.

Business Address:

Telephone Number:

Facsimile Number:

Date of Bid:

DIVISION 1 – GENERAL REQUIREMENTS
SUMMARY OF WORK - SECTION 01000

1.1 DESCRIPTION

- A. This section is for the convenience of the Contractor only and shall not be considered a complete account of all work to be performed.
- B. The extent of the Scope of Work is indicated on the drawings and as referenced in the specification sections.

1.2 DESCRIPTIVE SUMMARY OF THE WORK

- 1. Base Bid #1: (Roof Recovery and Roof Replacement: Fully Adhered TPO Roof System, Missouri Southern State University – Fine Arts Complex)

Roof Areas A, B, E, F and G (Roof Recovery)

- A. Remove and properly dispose of all existing flashings, dirt and debris down to the surface of the existing modified bitumen roofing and roof manufacturers approved substrate.
- B. Remove and dispose of all existing steel counter flashing, coping cap, pitch pans, edge metal and downspouts as specified.
- C. Remove and properly dispose of all existing perimeter and penetration flashings so as to provide adequate substrate for new flashing installation as specified.
- D. Remove and replace deteriorated/ wet roof insulation upon visual verification and approval by Owner/Owner's Representative via Owner. Include 2,000 square feet of roof insulation replacement within Base Bid #1 scope of work.
- E. Remove all obsolete roof top equipment and infill with new decking as specified and as shown on the drawings.
- F. Remove and replace all deteriorated wood blocking atop parapet walls and at roof edge after approval from Owner/Owner's Representative.
- G. Install new fully adhered .080" TPO fleece back single-ply roof membrane system as specified and as shown on the drawings.
- H. Install new fully adhered .060" TPO single-ply flashings at all perimeters and projections as specified and shown on the drawings.
- I. Install new metal counter flashings as shown on the drawings.
- J. Install new pitch pans as specified and as shown on the drawings.
- K. Install new prefinished steel coping cap at parapet walls as specified.
- L. Install new prefinished steel edge metal at roof edge as specified.
- M. Install new stainless steel draw bands at pipe locations as shown on the drawings and as specified.
- N. Install new wood blocking on slip sheets as shown on the drawings and as specified.
- O. Install new walk pads as specified and at locations as shown on the drawings.
- P. Provide all necessary mechanical and electrical disconnects required for the installation of new roof system.

SUMMARY OF WORK - SECTION 01000-2

- Q. Ensure that all drains are clear of all debris and function as intended.

Roof Area C and D (Roof Replacement)

- A. Remove and properly dispose of all existing roofing, insulation, flashing, dirt and debris down to the surface of the existing steel deck.
- B. Replace all deteriorated steel deck as specified after approval and confirmation from Owner/Owner's Representative. Include 100 square feet of deteriorated steel deck removal and replacement within Base Bid #1.
- C. Remove and dispose of all existing steel counter flashing, edge metal, coping cap and sheet metal components as specified.
- D. Remove and replace all deteriorated wood blocking at roof edge after approval from Owner/Owner's Representative.
- E. Install new tapered polyisocyanurate roof insulation adhered to the steel deck to provide positive slope to drainage devices as specified and as shown on the drawings.
- F. Install one layer of new ½" high density polyisocyanurate insulation adhered to the underlying insulation as specified and as shown on the drawings.
- G. Install new fully adhered .080" TPO fleece back single-ply roof membrane system as specified and as shown on the drawings.
- H. Install new fully adhered .060" TPO single-ply flashings at all perimeters and projections as specified and shown on the drawings.
- I. Install new metal skirt and counter flashings as shown on the drawings.
- J. Install new prefinished steel edge metal and coping cap at roof edge as specified.
- K. Install new stainless steel draw bands at pipe locations as shown on the drawings and as specified.
- L. Install new wood blocking on slip sheets as shown on the drawings and as specified.
- M. Provide all necessary mechanical and electrical disconnects required for the installation of new roof system.
- N. Install new sealants as specified and as shown on the drawings.

Roof Area H, L and N (Roof Replacement)

- A. Remove and properly dispose of all existing roofing, insulation, flashing, dirt and debris down to the surface of the existing concrete roof deck.
- B. Remove and dispose of all existing steel counter flashing, edge metal, coping cap and sheet metal components as specified.
- C. Remove and replace all deteriorated wood blocking at roof edge after approval from Owner/Owner's Representative.
- D. Install new tapered polyisocyanurate roof insulation adhered to the concrete roof deck to provide positive slope to drainage devices as specified and as shown on the drawings.

SUMMARY OF WORK - SECTION 01000-3

- E. Install one layer of new ½" high density polyisocyanurate insulation adhered to the underlying insulation as specified and as shown on the drawings.
- F. Install new fully adhered .080" TPO fleece back single-ply roof membrane system as specified and as shown on the drawings.
- G. Install new fully adhered .060" TPO single-ply flashings at all perimeters and projections as specified and shown on the drawings.
- H. Install new metal skirt and counter flashings as shown on the drawings.
- I. Install new prefinished steel edge metal and coping cap at roof edge as specified.
- J. Install new stainless steel draw bands at pipe locations as shown on the drawings and as specified.
- K. Install new wood blocking on slip sheets as shown on the drawings and as specified.
- L. Provide all necessary mechanical and electrical disconnects required for the installation of new roof system.
- M. Install new sealants as specified and as shown on the drawings.

Roof Area I, M, P, Q, R and T (Roof Replacement)

- A. Remove and properly dispose of all existing roofing, insulation, flashing, dirt and debris down to the surface of the existing gypsum roof deck.
- B. Replace all deteriorated gypsum deck as specified after approval and confirmation from Owner/Owner's Representative. Include 1,000 square feet of deteriorated gypsum deck removal and replacement within Base Bid #1.
- C. Remove and dispose of all existing steel counter flashing, edge metal, coping cap and sheet metal components as specified.
- D. Remove and replace all deteriorated wood blocking at roof edge after approval from Owner/Owner's Representative.
- E. Install new tapered polyisocyanurate roof insulation adhered to the gypsum roof deck to provide positive slope to drainage devices as specified and as shown on the drawings.
- F. Install one layer of new ½" high density polyisocyanurate insulation adhered to the underlying insulation as specified and as shown on the drawings.
- G. Install new fully adhered .080" TPO fleece back single-ply roof membrane system as specified and as shown on the drawings.
- H. Install new fully adhered .060" TPO single-ply flashings at all perimeters and projections as specified and shown on the drawings.
- I. Install new metal skirt and counter flashings as shown on the drawings.
- J. Install new prefinished steel edge metal and coping cap at roof edge as specified.
- K. Install new stainless steel draw bands at pipe locations as shown on the drawings and as specified.
- L. Install new wood blocking on slip sheets as shown on the drawings and as specified.

SUMMARY OF WORK - SECTION 01000-4

- M. Provide all necessary mechanical and electrical disconnects required for the installation of new roof system.
- N. Install new sealants as specified and as shown on the drawings.

Roof Areas J, K, O, T, T-1, T-2, T-3, T-4, U, V AND W (Roof Recovery)

- A. Remove and properly dispose of all existing flashings, dirt and debris down to the surface of the existing modified bitumen roofing and roof manufacturers approved substrate.
- B. Replace all deteriorated gypsum deck as specified after approval and confirmation from Owner/Owner's Representative. Include 1,000 square feet of deteriorated gypsum deck removal and replacement within Base Bid #1.
- C. Remove and dispose of all existing steel counter flashing, coping cap, pitch pans, edge metal, guttering and downspouts as specified.
- D. Remove and properly dispose of all existing perimeter and penetration flashings so as to provide adequate substrate for new flashing installation as specified.
- E. Remove all obsolete roof top equipment and infill with new decking as specified and as shown on the drawings.
- F. Remove and replace all deteriorated wood blocking atop parapet walls and at roof edge after approval from Owner/Owner's Representative.
- G. Install new tapered polyisocyanurate insulation in approved adhesive to provide positive slope to drainage devices as shown on the drawings plan and as specified.
- H. Install new wood blocking at perimeter of roof to accommodate height of tapered insulation as specified and shown on the drawings.
- I. Install new fully adhered .080" TPO fleece back single-ply roof membrane system as specified and as shown on the drawings.
- J. Install new fully adhered .060" TPO single-ply flashings at all perimeters and projections as specified and shown on the drawings.
- K. Install new metal counter flashings as shown on the drawings.
- L. Install new pitch pans as specified and as shown on the drawings.
- M. Install new prefinished steel coping cap at parapet walls as specified.
- N. Install new prefinished steel edge metal at roof edge as specified.
- O. Install new prefinished gutter and downspouts at roof edge as specified.
- P. Install new stainless steel draw bands at pipe locations as shown on the drawings and as specified.
- Q. Install new wood blocking on slip sheets as shown on the drawings and as specified.
- R. Install new walk pads as specified and at locations as shown on the drawings.
- S. Provide all necessary mechanical and electrical disconnects required for the installation of new roof system.
- T. Ensure that all downspouts are clear of all debris and function as intended.

SUMMARY OF WORK - SECTION 01000-5

2. Structural Modification:

- A. Do not alter structural components in any manner. If structural work is required, submit a written request to the Owner/Owner's Representative for approval prior to carrying out structural work.**

END OF SECTION

DIVISION 1 - GENERAL REQUIREMENTS
CONSTRUCTION SAFETY - SECTION 01031

1.1 GENERAL DEFINITIONS

- A. The provisions of this section apply to safety requirements for the project and to ensure the project site is a safe environment for all contractor's, subcontractor's, inspector's and building occupants. Specific requirements in other sections have precedence over general requirements of this section.

1.2 STANDARDS

- A. OSHA – Occupational Safety and Health Act of 1970.
- B. State, County, City and Owner requirements, as applicable.

1.3 QUALITY ASSURANCE

- A. It is the responsibility of the Contractor to maintain the safety of the project site at all times. Contractor shall provide personnel on the project site that possess the authority to make safety related decisions on the Contractor's behalf.

1.4 SUBMITTALS

- A. Contractor shall submit Material Safety Data Sheets (MSDS) for all materials to be used on the project.
- B. One (1) copy of all Material Safety Data Sheets is to be present on the site the entire duration of the project and will be available on demand.

2.1 MATERIALS AND EQUIPMENT

- A. General: Contractor shall supply all necessary materials and equipment required to complete the work in a manner consistent with a safe work site and as required by regulatory agencies.
- B. All equipment used on the project shall be in safe operating condition and shall be maintained in a safe condition for the project duration. Equipment found to be unsafe or in disrepair shall be repaired and made safe or shall be removed from the job site and replaced, if necessary, at no cost to the Owner.
- C. Disposal of any solvents, containers, and other regulated materials shall meet all applicable laws.

3.1 GENERAL

- A. The safety requirements listed here are by design broad in nature. The contractor shall augment as necessary the information contained in this section with more specific information from OSHA and roofing industry requirements.

3.2 CONTRACTOR EMPLOYEE TRAINING

- A. Contractor shall provide adequate training for employees to ensure their safety and the safety of others on the project site. Contractor shall provide instruction in the proper operation of power tools, hoisting equipment, kettles, tankers, and other pieces of equipment employees will be required to use in completion of the work.

CONSTRUCTION SAFETY - SECTION 01031-2

RAMSLLC # 2026039

01031-1

CONSTRUCTION SAFETY - SECTION 01031-2

- B. Contractor shall present a safety and loss prevention orientation program to each new employee before that employee starts work.
- C. Contractor and sub contractors shall inform their employees of all safety and health rules pertaining to their particular job.
- D. Contractor and subcontractors shall inform their employees of location and use of safety devices such as first aid kits, phones, fire extinguishers, etc.
- E. Contractor shall implement a regular system of work inspection to detect and correct hazardous conditions, safety rule violations, and unsafe working practices.

3.3 ACCIDENT REPORTING

- A. The proper reporting and investigating of accidents is necessary for all Contractors and subcontractors. An accident report and investigation shall be immediately made by the foreman in charge, reviewed and approved by the Contractor. Contractor shall provide to the Owner's Representative a copy of the completed Accident Report, Employer's First Report of Injury or Illness, or such other similar reports required by federal, state, county and municipal or local safety laws. All record keeping requirements will be in accordance with OSHA.

3.4 FIRST AID

- A. Contractor and subcontractors shall be responsible for providing first aid and medical treatment for their employees. The names, addresses and telephone numbers of Contractor's and subcontractors' doctors, hospital and ambulance services shall be conspicuously posted, as required by law.
- B. An OSHA approved first aid kit shall be located at all times on the job. It shall be of an appropriate size for the roofing crew.

3.5 INDIVIDUAL CONDUCT AND SAFETY

- A. Contractor's and subcontractors' employees shall be made aware of and comply with the following rules that will be in effect on all job sites.
- B. Alcoholic beverages and illegal drugs will not be permitted. Employees entering job site under the influence or possession of alcohol or drugs will be subject to removal from the job site. The carrying of firearms and all other weapons is prohibited. Fighting, gambling, stealing, soliciting, and horseplay will not be tolerated. Abusive language or disrespectful behavior in public areas will not be tolerated.
- C. Employees shall be made aware of any job site alarm, code signal, appropriate responses, and requirements for actions that will need to be taken.

3.6 PROTECTIVE EQUIPMENT AND CLOTHING

- A. The contractor shall furnish and require the use and wearing of proper protective devices and personal protective equipment by its employees.
- B. Approved eye and face protection is required to be worn when warranted by the exposure. Safety glasses are required in all circumstances where there is an exposure to flying particles. Side shields offer additional protection. Plastic face shields are required to be worn for guarding against flying particles and spraying liquids or corrosives.

CONSTRUCTION SAFETY - SECTION 01031-3

- C. Appropriate clothing and eye protection shall be worn when working with a hot tar kettle, chipping, or tear-offs.
- D. Hard hats must be worn at all times whenever there is a possibility of head injury from impact, flying or falling objects.

3.7 HOUSEKEEPING

- A. The Contractor or subcontractors shall maintain good housekeeping standards at all times as an integral part of his work. Daily cleanup of work, lay-up, and personnel areas is required and must be performed.
- B. Materials shall be piled so that safe clearances are maintained and tipping or movement is prevented. Loose materials on the roof must be secured so that they cannot be blown or bumped off.
- C. Accumulation of material that may create a fire hazard is not permitted. Never store excessive amounts of material in one place to overload roof.
- D. Roof areas are to be "watertight at night" at all times during the job. Contractor's or subcontractors' failure to do so can be grounds for dismissal.

3.8 SIGNS AND BARRICADES

- A. When it is necessary to barricade an area for overhead work, to protect personnel from hazardous operations, or to move equipment or cranes, barricades are to be provided by the Contractor or subcontractors. Barricades must be erected before the work requiring them begins. If the barricades are in the roadway or walkway, blinking lights must be used after dark. When the work is completed, the barricades must be removed from the job site.
- B. Contractor or subcontractors are forbidden to remove posted signs.
- C. A warning line system, as described in 29 CFR 1926 Guarding of Low-Pitched Roof Perimeters, for protection of employees shall be erected by Contractor or subcontractors on roofs with slope less than 4:12, roof height of more than 6 feet, and width of 50 feet or more. The warning line shall consist of rope, wire, or similar material, be flagged with highly visible material at 6 foot intervals, be installed 42 to 45 inches above the roof, and be able to take 16 pounds of pressure against the rope before falling over. Where necessary or prescribed by law, provide worker fall protection.
- D. Inspect all rigging equipment prior to use (chains, ropes, slings, shackles, etc.).
- E. An assured equipment guarding conductor program or ground fault detectors are to be used on all job sites as required by Law, Section 1926-400 (h), (1), (2), and (3).

3.9 LADDERS

- A. Contractor and subcontractors shall provide good ladders on the job. Ladders with split or cracked side rails and damaged rungs shall be removed entirely from the project site. Ladders in doorways, walkways, or other congested areas must be barricaded or guarded.
- B. Ladders shall be of adequate length and must extend at least 3 feet above the upper landing.
- C. Straight ladders shall have non-skid feet and be securely tied off.
- D. Face the ladder and use both hands going up or down.

CONSTRUCTION SAFETY - SECTION 01031-4

- E. Do not climb or descend ladders with tools, equipment, or material in your hands.
- F. Metal ladders must not be used near or for electrical service.

3.10 FIRE PROTECTION

- A. Fire extinguishers must be located at all times on the job site. A fire extinguisher rated not less than 2A shall be provided for each 3,000 square feet of roof area under construction. Travel distance from any point of the protected area to the nearest fire extinguisher shall not exceed 100 feet.
- B. Replace fire extinguishers that are in poor condition, are not an appropriate size, or have been discharged.
- C. Smoking may be prohibited on job site for various reasons. Employees will be expected to obey all "No Smoking" signs.
- D. Store all flammable liquids in approved safe containers. Contents will be described and marked flammable.
- E. Storage in excess of 10 gallons of flammable liquids on the roof is not permitted.
- F. When using flammable liquids to clean, dispose of the rags in OSHA approved containers or remove them from the roof daily to prevent possible spontaneous combustion.
- G. Never store bulk flammable material or liquids closer than 25 feet from kettle or open flames or other source of ignition.

3.11 KETTLE OPERATIONS

- A. Kettles must be in good condition. Kettle equipment will be required to be in working order and reasonably clean to prevent fires. Operation of kettles will be done according to OSHA Publication No. 78-194.

3.12 CRANE AND HOIST

- A. Contractor shall comply with the manufacturer's specifications and limitations. Rated load capacities, recommended operating speeds, and special hazard warnings or instructions shall be conspicuously posted on all equipment. Instructions or warnings shall be visible from the operator's station.
- B. Accessible areas within the swing radius of the rear of the rotating superstructure shall be properly barricaded to prevent the public or employees from being struck or crushed by the crane.
- C. All crawler or truck cranes in use shall meet the requirements as prescribed in the ANSI B30-5-1968 Safety Code for Crawler and Truck Cranes.

3.13 TEAR-OFF CHUTE SET-UP PROCEDURES

- A. No material shall be dropped to any point lying outside the exterior walls of the structure unless the area is effectively protected. Protection shall consist of barriers that will prevent the public or employees from entering the danger zone.
- B. All material chutes or section of chutes at an angle greater than 45° from the horizontal shall be entirely enclosed.
- C. All buildings over two stories high or above 25 feet shall use a fully enclosed trash chute

CONSTRUCTION SAFETY - SECTION 01031-5

according to the referenced specifications.

- D. Chutes may be job fabricated or purchased pre-made. If pre-made chutes are used, manufacturer's set-up and operating instructions shall be followed.
- E. When installing trash chutes, proper counterbalance shall be used to offset the weight and use of the chute. If wood boards or metal struts are used, they shall be set up to prevent a tripping hazard to employees. A safety factor of 5 shall be used to determine counterbalance.
- F. No job site materials shall be used as counterbalance of chute.
- G. Guard rails shall be installed on either side of chute 6 feet from opening. Guard rails shall be installed according to OSHA standards.
- H. A substantial gate shall be installed at each chute at or near the discharge end. A competent person shall be assigned to control the operation of the gate and the disposal of trash down the chute.
- I. Where the material is dumped from mechanical equipment or wheelbarrows, a securely attached toeboard or bumper not less than 4" thick and 6" high shall be provided at each chute.
- J. Chutes shall be designed and constructed of such strength as to eliminate failure due to impact of materials or debris loaded therein.

THE CONTRACTOR SHALL NEED TO KNOW THE WEIGHT OF THE CHUTE TO DETERMINE THE COUNTERBALANCE REQUIREMENTS.

3.14 PUBLIC LIABILITY

- A. Unauthorized persons are not allowed access to the roof at any time. Contractor shall control access to the roof.
- B. Barricades and signs shall be posted on the ground around the work area to warn the public.
- C. Locate air intake ducts, air conditioners, or air pumps. Notify Owner's Representative when dust or fumes may be drawn into the facility so that the unit may be shut down or covered.
- D. At night, lock and secure the lid on kettles, lock trucks, deactivate hoisting equipment, and take down ladders.
- E. Park vehicles so that they do not pose a hazard to other traffic moving around the job site. Trucks and equipment should not block sidewalks or other pedestrian travel ways without providing a clear, well-marked, alternate route of travel.

END OF SECTION

DIVISION 1 - GENERAL REQUIREMENTS
DEMOLITION - SECTION 01900

1.1 DESCRIPTION OF WORK

- A. The location of demolition work is shown on the drawings and relates to finish items or substrate material. No structural revisions are to be made.
- B. Demolition includes the removal of the existing roofing, obsolete penetrations and deteriorated decking and disposal of such materials, as specified and as shown on the Drawings.

1.2 JOB CONDITIONS

- A. The building is to remain in use during the course of the roofing demolition and replacement. Demolition shall be done with minimum of interference and inconvenience to the Owner. The contractor shall clean all debris from occupied spaces on a daily basis to the satisfaction of the tenant.
- B. The Contractor shall be held responsible for any spillage of waste materials and debris onto drives, streets, and thoroughfares, and any damage attributed to such spillage including any bodily and/or property damage it may cause.
- C. Traffic: Conduct demolition operations and the removal of debris to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities.
- D. Protections: Ensure the safe passage of persons around the areas of demolition work. Provide covered protections at walkways & entrances that will remain in use to effect safe passage to and away from work areas. Conduct operations to prevent injury to Contractor's employees and to adjacent facilities, landscaping, and persons.
- E. Damages: Promptly repair all damage caused by demolition operations at no cost to the Owner. Contractor is advised to adequately document all existing damage to building and site prior to start of operations.

1.3 DEMOLITION

- A. Pollution Controls:
 - 1. Use suitable methods to limit the amount of dust and dirt rising and scattering in the air to the lowest practical level.
 - 2. Conform to requirements of Government authorities having jurisdiction over Project Demolition and material removal.

1.4 DISPOSAL OF DEMOLISHED MATERIALS

- A. General
 - 1. In absence of other approved methods, remove from the site daily, debris, rubbish, and other materials resulting from demolition operations.
 - 2. Conform to requirements of Government authorities having jurisdiction over Trash Removal and Disposal.

END OF SECTION

DIVISION 5 - METALS
STEEL DECK REPAIR/REPLACEMENT - SECTION 05315

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. Work includes but is not necessarily limited to: Removal or repair of the existing deteriorated steel deck system. Replace with new steel deck to match existing. (Include 100 square foot of replacement steel deck system within Base Bid #1) All additional/deduction labor and material costs associated with deck replacement is to be under Unit Cost at space provided on Bid Form.

1.2 QUALITY ASSURANCE

- A. Qualifications of Workers: Provide sufficient workers and supervisors who shall be present at all times during execution of this portion of the work and who shall be thoroughly familiar with the type of construction involved and the materials and techniques specified.
- B. Rejections: In the acceptance or rejection of the work, the Owner will make no allowance for lack of skill on the part of workers.

1.3 PRODUCT HANDLING

- A. Deliver materials to the job site in original, unopened containers no sooner than 30 days prior to start of job. Materials are to be stored off the ground with one end elevated to provide drainage and are to be protected from the elements with a waterproof covering ventilated to avoid condensation.
- B. Keep all materials clearly identified with all identifying marks legible. Keep all damaged material clearly identified as damaged and stored separately to prevent its inadvertent use.
- C. Do not allow installation of damaged or otherwise non-complying material.
- D. In the event of damage, immediately make all necessary repairs and replacements subject to the approval of and at no additional cost to the Owner.

PART 2 – PRODUCTS

2.1 STEEL DECK

- A. Steel roof deck shall be prime painted steel decking. Roof deck shall conform to ASTM A-611 Grade C, or equal, having a minimum yield strength of 33,000 psi.
- B. Steel roof deck shall be replaced in full length sheets to match existing deck layout.
- C. New steel deck shall match existing deck profile.
- D. Steel roof deck shall be manufactured by U.S. Steel, Vulcraft, Wheeling, or approved equal.

2.2 PRIMER

- A. Rust inhibitive primer shall be Rust-O-Leum 769 damp-proof red primer or approved equal.

STEEL DECK REPAIR/REPLACEMENT – SECTION 05315-2

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Steel roof deck shall be anchored to the structural members directly through bottom of the rib by using self-drilling screws.
- B. Screws shall be a maximum of 12" o.c. at ends and intermediate supports of each deck sheet.
- C. For spans greater than 5', side laps shall be fastened together not exceeding 3' to center between supports.
- D. Ensure that fasteners do not penetrate conduit or miscellaneous piping located at bottom of the decking.
- E. Place deck in straight alignment with adjoining deck units for entire length of run.
- F. Place deck units flat and square, secured to adjacent framing without warp or excessive deflection.
- G. Cut and neatly fit deck around rooftop projections.

3.2 STEEL DECK REPAIR – SURFACE RUST

- A. Perform all preparation and cleaning procedures in strict accordance with the paint manufacturer's recommendations as approved by the Owner's Representative.
- B. Surface rust areas shall be wire brushed to remove any loose or foreign materials that would adversely affect adhesion or appearance of applied coating.
- C. Stir all materials before application to produce a mixture of uniform density and as required during the application of materials. Do not stir into the material any film that may form on the surface.
- D. Over the prepared surfaces, apply coat of rust-inhibitive primer. Coverage shall be complete and of uniform thickness. Dry coat 1-2 mils thick.

3.3 VERIFICATION

- A. Upon completion of the installation in each area, visually inspect and verify that all components are complete and properly installed. Verify that fasteners are properly located and securely anchored.
- B. Document all deck repair and replacement on a daily basis. Documentation shall include photographic documentation of the decking prior to repair/replacement and square footage documentation after repair/replacement of steel decking.

END OF SECTION

DIVISION 6 – WOOD AND PLASTICS
ROUGH CARPENTRY – SECTION 06100

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Provide all labor, materials, equipment and tools to install and complete all rough carpentry as shown on the drawings.

1.2 QUALITY ASSURANCE

- A. Qualifications of Workers: Provide sufficient workers and supervisors who shall be present at all times during execution of this portion of the work and who shall be thoroughly familiar with the type of construction involved and the materials and techniques specified.

1.3 PRODUCT HANDLING

- A. Store all materials up, off of the roof deck or ground, and covered with a weatherproof covering anchored sufficiently so as to resist wind blow-off.
- B. Keep all materials clearly identified with all grade marks legible. Keep all damaged material clearly identified as damaged and stores separately to prevent its inadvertent use.
- C. Do not allow installation of damaged or otherwise non-complying material.
- D. In the event of damage, immediately make all necessary repairs and replacements to the approval of and at no additional cost to the Owner.

PART 2 - MATERIALS

2.1 PLYWOOD DECKING

- A. Plywood for roof deck construction shall be sound APA 3/4"x4'x8' plywood in strict accordance with local code and governing bodies.

2.2 FASTENERS

- A. All fasteners must be carbon steel with corrosion-resistant coating. Fasteners shall meet FM 4470.

1. Masonry/Concrete Fasteners:

- a. Corrosion-resistant, threaded fastener with low profile head.
- b. Corrosion-resistant, factory-made plate.
- c. Fastener to be Factory Mutual approved.
- d. Approved Products

- 1) Confas by Construction Fasteners
- 2) Tapcon Flat-Head Phillips by Buildex

2. Steel/Wood Fasteners

- a. Corrosion-resistant, self-tapping, self-drilling screw with low profile head.
- b. Screw and plate type fastener to be Factory Mutual approved.

ROUGH CARPENTRY – SECTION 06100-2

- c. Approved Products:
 - 1) Dekfast by Construction Fasteners with Sentri Coating
 - 2) Roof Grip by Buildex with Climaseal Coating
 - 3) Insul Fixx by Fabco with Xylan Coating
- d. Fasteners to be nominal ¼" thickness minimum and of sufficient length to penetrate into steel 1½" and wood 1"

PART 3 – EXECUTION

3.1 PLYWOOD DECKING

- A. End joints of each piece of decking shall be staggered. End joints shall be centered over the roof deck framing supports so as to provide adequate bearing support and facilitate fastening to the framing supports without splitting. All boards shall be attached to intermediate roof deck framing supports 4' o.c. with 8d common nails.
- B. Plywood decking shall be fastened according to Factory Mutual recommendations.

3.2 CLEANUP

- A. Premises are to be kept in a neat and orderly condition.
- B. After installation of all rough carpentry, Contractor is to remove all construction debris and equipment from the job site.

3.3 VERIFICATION

- A. Upon completion of the installation in each area, visually inspect and verify that all components are complete and properly installed. Verify that fasteners are properly located and securely anchored.

END OF SECTION

DIVISION 7 - THERMAL AND MOISTURE PROTECTION
FULLY ADHERED TPO MEMBRANE ROOFING - SECTION 07530

PART 1-GENERAL

1.1 RELATED DOCUMENTS

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

1.2 DESCRIPTION

- A. General: Provide all labor, materials, equipment and tools required to remove the existing roof membrane and install a new single-ply roof system with new materials shown on the Drawings, and as specified. Membrane to be a fully adhered application.
- B. Single-ply membrane classified as TPO in this section consists of calendar inserted 10 X 10 denier polyester scrim permanently bonded in a ethylene propylene membrane. The following manufacturers products are approved for use on this project:

1. Carlisle Syntec Incorporated
2. Elevate Building Products

- C. Work includes, but is not necessarily limited to the following:

1. Base Bid #1: (Roof Recovery and Roof Replacement: Fully Adhered TPO Roof System, Missouri Southern State University – Fine Arts Complex)

Roof Areas A, B, E, F and G (Roof Recovery)

- A. Remove and properly dispose of all existing flashings, dirt and debris down to the surface of the existing modified bitumen roofing and roof manufacturers approved substrate.
- B. Remove and dispose of all existing steel counter flashing, coping cap, pitch pans, edge metal and downspouts as specified.
- C. Remove and properly dispose of all existing perimeter and penetration flashings so as to provide adequate substrate for new flashing installation as specified.
- D. Remove and replace deteriorated/ wet roof insulation upon visual verification and approval by Owner/Owner's Representative via Owner. Include 2,000 square feet of roof insulation replacement within Base Bid #1 scope of work.
- E. Remove all obsolete roof top equipment and infill with new decking as specified and as shown on the drawings.
- F. Remove and replace all deteriorated wood blocking atop parapet walls and at roof edge after approval from Owner/Owner's Representative.
- G. Install new fully adhered .080" TPO fleece back single-ply roof membrane system as specified and as shown on the drawings.
- H. Install new fully adhered .060" TPO single-ply flashings at all perimeters and projections as specified and shown on the drawings.
- I. Install new metal counter flashings as shown on the drawings.
- J. Install new pitch pans as specified and as shown on the drawings.
- K. Install new prefinished steel coping cap at parapet walls as specified.

FULLY ADHERED TPO MEMBRANE ROOFING - SECTION 07530-2

- L. Install new prefinished steel edge metal at roof edge as specified.
- M. Install new stainless steel draw bands at pipe locations as shown on the drawings and as specified.
- N. Install new wood blocking on slip sheets as shown on the drawings and as specified.
- O. Install new walk pads as specified and at locations as shown on the drawings.
- P. Provide all necessary mechanical and electrical disconnects required for the installation of new roof system.
- Q. Ensure that all drains are clear of all debris and function as intended.

Roof Area C and D (Roof Replacement)

- A. Remove and properly dispose of all existing roofing, insulation, flashing, dirt and debris down to the surface of the existing steel deck.
- B. Replace all deteriorated steel deck as specified after approval and confirmation from Owner/Owner's Representative. Include 100 square feet of deteriorated steel deck removal and replacement within Base Bid #1.
- C. Remove and dispose of all existing steel counter flashing, edge metal, coping cap and sheet metal components as specified.
- D. Remove and replace all deteriorated wood blocking at roof edge after approval from Owner/Owner's Representative.
- E. Install new tapered polyisocyanurate roof insulation adhered to the steel deck to provide positive slope to drainage devices as specified and as shown on the drawings.
- F. Install one layer of new ½" high density polyisocyanurate insulation adhered to the underlying insulation as specified and as shown on the drawings.
- G. Install new fully adhered .080" TPO fleece back single-ply roof membrane system as specified and as shown on the drawings.
- H. Install new fully adhered .060" TPO single-ply flashings at all perimeters and projections as specified and shown on the drawings.
- I. Install new metal skirt and counter flashings as shown on the drawings.
- J. Install new prefinished steel edge metal and coping cap at roof edge as specified.
- K. Install new stainless steel draw bands at pipe locations as shown on the drawings and as specified.
- L. Install new wood blocking on slip sheets as shown on the drawings and as specified.
- M. Provide all necessary mechanical and electrical disconnects required for the installation of new roof system.
- N. Install new sealants as specified and as shown on the drawings.

Roof Area H, L and N (Roof Replacement)

- A. Remove and properly dispose of all existing roofing, insulation, flashing, dirt and debris down to the surface of the existing concrete roof deck.

FULLY ADHERED TPO MEMBRANE ROOFING - SECTION 07530-3

- B. Remove and dispose of all existing steel counter flashing, edge metal, coping cap and sheet metal components as specified.
- C. Remove and replace all deteriorated wood blocking at roof edge after approval from Owner/Owner's Representative.
- D. Install new tapered polyisocyanurate roof insulation adhered to the concrete roof deck to provide positive slope to drainage devices as specified and as shown on the drawings.
- E. Install one layer of new ½" high density polyisocyanurate insulation adhered to the underlying insulation as specified and as shown on the drawings.
- F. Install new fully adhered .080" TPO fleece back single-ply roof membrane system as specified and as shown on the drawings.
- G. Install new fully adhered .060" TPO single-ply flashings at all perimeters and projections as specified and shown on the drawings.
- H. Install new metal skirt and counter flashings as shown on the drawings.
- I. Install new prefinished steel edge metal and coping cap at roof edge as specified.
- J. Install new stainless steel draw bands at pipe locations as shown on the drawings and as specified.
- K. Install new wood blocking on slip sheets as shown on the drawings and as specified.
- L. Provide all necessary mechanical and electrical disconnects required for the installation of new roof system.
- M. Install new sealants as specified and as shown on the drawings.

Roof Area I, M, P, Q, R and T (Roof Replacement)

- A. Remove and properly dispose of all existing roofing, insulation, flashing, dirt and debris down to the surface of the existing gypsum roof deck.
- B. Replace all deteriorated gypsum deck as specified after approval and confirmation from Owner/Owner's Representative. Include 1,000 square feet of deteriorated gypsum deck removal and replacement within Base Bid #1.
- C. Remove and dispose of all existing steel counter flashing, edge metal, coping cap and sheet metal components as specified.
- D. Remove and replace all deteriorated wood blocking at roof edge after approval from Owner/Owner's Representative.
- E. Install new tapered polyisocyanurate roof insulation adhered to the gypsum roof deck to provide positive slope to drainage devices as specified and as shown on the drawings.
- F. Install one layer of new ½" high density polyisocyanurate insulation adhered to the underlying insulation as specified and as shown on the drawings.
- G. Install new fully adhered .080" TPO fleece back single-ply roof membrane system as specified and as shown on the drawings.
- H. Install new fully adhered .060" TPO single-ply flashings at all perimeters and projections as specified and shown on the drawings.

FULLY ADHERED TPO MEMBRANE ROOFING - SECTION 07530-4

- I. Install new metal skirt and counter flashings as shown on the drawings.
- J. Install new prefinished steel edge metal and coping cap at roof edge as specified.
- K. Install new stainless steel draw bands at pipe locations as shown on the drawings and as specified.
- L. Install new wood blocking on slip sheets as shown on the drawings and as specified.
- M. Provide all necessary mechanical and electrical disconnects required for the installation of new roof system.
- N. Install new sealants as specified and as shown on the drawings.

Roof Areas J, K, O, T, T-1, T-2, T-3, T-4, U, V AND W (Roof Recovery)

- A. Remove and properly dispose of all existing flashings, dirt and debris down to the surface of the existing modified bitumen roofing and roof manufacturers approved substrate.
- B. Replace all deteriorated gypsum deck as specified after approval and confirmation from Owner/Owner's Representative. Include 1,000 square feet of deteriorated gypsum deck removal and replacement within Base Bid #1.
- C. Remove and dispose of all existing steel counter flashing, coping cap, pitch pans, edge metal, guttering and downspouts as specified.
- D. Remove and properly dispose of all existing perimeter and penetration flashings so as to provide adequate substrate for new flashing installation as specified.
- E. Remove all obsolete roof top equipment and infill with new decking as specified and as shown on the drawings.
- F. Remove and replace all deteriorated wood blocking atop parapet walls and at roof edge after approval from Owner/Owner's Representative.
- G. Install new tapered polyisocyanurate insulation in approved adhesive to provide positive slope to drainage devices as shown on the drawings plan and as specified.
- H. Install new wood blocking at perimeter of roof to accommodate height of tapered insulation as specified and shown on the drawings.
- I. Install new fully adhered .080" TPO fleece back single-ply roof membrane system as specified and as shown on the drawings.
- J. Install new fully adhered .060" TPO single-ply flashings at all perimeters and projections as specified and shown on the drawings.
- K. Install new metal counter flashings as shown on the drawings.
- L. Install new pitch pans as specified and as shown on the drawings.
- M. Install new prefinished steel coping cap at parapet walls as specified.
- N. Install new prefinished steel edge metal at roof edge as specified.
- O. Install new prefinished gutter and downspouts at roof edge as specified.
- P. Install new stainless steel draw bands at pipe locations as shown on the drawings and as specified.

FULLY ADHERED TPO MEMBRANE ROOFING - SECTION 07530-5

- Q. Install new wood blocking on slip sheets as shown on the drawings and as specified.
- R. Install new walk pads as specified and at locations as shown on the drawings.
- S. Provide all necessary mechanical and electrical disconnects required for the installation of new roof system.
- T. Ensure that all downspouts are clear of all debris and function as intended.

1.3 QUALITY ASSURANCE

A. Qualifications of Contractors

1. Contractor shall submit work history data showing a minimum of five (5) years of successful warranted installation experience of system specified, and of being authorized by the roofing system manufacturer to install the specified manufacturer's materials.
2. Contractor shall submit work history data sheet for each worker on the project showing evidence of successful experience installing the specified type of warranted roofing system proposed for use. Only those workers with such qualified experience shall be allowed on project. Work history data sheet shall contain the following information: job name, size of roof, date of project, and responsibility of worker.
3. The Contractor shall use adequate numbers of such pre-qualified workmen with at least one (1) year successful experience with specified product and who are thoroughly trained in the crafts and techniques required to properly install the type of roofing system proposed for use and other work required to complete the work specified.
4. The Contractor shall have an experienced, pre-qualified, thoroughly trained superintendent with three (3) years experience installing the roof system specified who is familiar with the requirements of this project, on the job at all times when roofing work is in progress.
5. Training for Superintendent shall include certification of completion of the manufacturer's in-house training course or on-site training. On-site training shall consist of at least eighty (80) hours of on-site application monitored by a manufacturer representative.

B. Qualifications of Manufacturer

1. Provide primary flexible sheet roofing from a single manufacturer which has successfully manufactured raw materials into the specified products for not less than five (5) years. Provide secondary accessory materials only as recommended and approved by manufacturer of primary materials.
2. Products primary and secondary shall be manufactured in the United States of America.

C. Warranty

1. The Roofing System in this specification shall be defined as those items listed below and shall be included in the Roofing System Manufacturer's Warranty.

FULLY ADHERED TPO MEMBRANE ROOFING - SECTION 07530-6

- a) The roofing system as defined shall meet or exceed every standard or requirement as listed in the roofing system manufacturer's latest printed descriptive product literature.
 - b) The roofing system shall consist of:
 - *Roofing Membrane
 - *Flashing and Counterflashing
 - *Insulation
 - *Adhesives and Sealants
 - *Fasteners
 - *Insulation Plates
 - *Term Bars
 - *All other materials provided by roofing system manufacturer or installed by Roofing Contractor required to make system watertight and complete.
2. The Warranty shall be a twenty (20) year NDL (No dollar limit) warranty covering all materials and labor.
 3. The roofing manufacturer's Warranty shall be properly amended to include liability for damages from all wind gusts up to 70 MPH, 10 meters above the ground with an importance factor in accordance with Building Code and FM wind loss prevention date. Warranty Certificate shall be issued with the Document properly executed, and referenced.
 4. Contractors Concurrent Warranty:
 - a) The Contractor shall provide a concurrent warranty for all materials and workmanship for a period of two (2) years from the date of acceptance of the completed work by the Owner. The Contractor shall correct to the satisfaction of the Owner all defects in materials or workmanship that may develop during the two-year warranty period by repairing or replacing such defects at the Contractors own expense without cost to the Owner.
 - b) Contractors Warranty shall be issued to cover a two- (2) year period from date of completion and shall guarantee replaced roof areas and applied accessories to be in a leak free condition without restrictions.

1.4 SUBMITTALS

- A. General: Comply with the appropriate submittal instructions given in the Special Conditions.
- B. Pullout Test: Perform pullout tests and submit engineering results of manufacturer's random location pull tests. Engineering results shall demonstrate the manufacturers reasons for selection of anchorage, frequency and the patterns. Manufacturer to obtain at least one pull resistance test from the following locations:
 1. One (1) at any location for every 5,000 square feet of roof area.
- C. Membrane Data: Prior to preparation of bid and award of Contract, Contractor shall submit all forms and other required data to system manufacturer for determination or confirmation of perimeter attachment of membrane sheet. Advise Roof Consultant in writing, of any revisions required by manufacturer due to particular job conditions. In the absence of any comments, Contractor shall submit letter to Roof Consultant stating that no revisions are required.
- D. Samples: Submit samples to the Roof Consultant for approval prior to ordering and

FULLY ADHERED TPO MEMBRANE ROOFING - SECTION 07530-7

delivery in a timely manner so as not to delay progress and completion of the work or final inspection. Submit copies of each in compliance with SUBMITTALS.

1. Samples of roofing material to be submitted are as follows:

- *Manufacturer's Technical Brochure for roofing membrane to be used.
- *Sample of membrane material.
- *A lap splice sample.
- *Sample of insulation specified.
- *Mechanical fasteners.
- *Information on specific membrane attachment adhesive.
- *Sample of fastening devices.
- *Sheet metal flashing (as required).
- *Maintenance and repair instructions of the manufacturer.
- *Walk board material.

- E. Shop Drawings: Detail specific layout drawings of similar scale as Contract Documents showing application of materials, direction of layout, insulation attachment locations and methods, pertinent details at all penetrations, application of blocking and flashing.
- F. Warranty: Submit all items to the Owner or the designated representative within ten (10) days of receipt from the manufacturer or within ten (10) days of the final inspection.
- G. Maintenance Instructions: Prior to final acceptance by Owner, deliver to the Roof Consultant for approval, three (3) written copies of manufacturer's maintenance and repair instructions for material installed. Upon approval, Roof Consultant will submit to Owner for record.
 1. Maintenance instructions shall be submitted in a spiral bound binder appropriately indexed and labeled.
- H. Qualifications of all workers to be assigned to project.

1.5 PRODUCT HANDLING

- A. General: Deliver materials and store as required in compliance with the manufacturer's instructions and with the following information:
 1. Name or title of material;
 2. Federal Specifications or ASTM Designation, Factory Mutual or Underwriters Class, as applicable, labels shall be on all packaged materials used on project; and,
 3. Manufacturer's name and brand name.
- B. Delivery and Storage:
 1. Materials shall be delivered in their original unopened containers clearly labeled with above noted information, and such additional information and identifying numbers as are appropriate. All material furnished shall be stored in accordance with manufacture's recommendations. All roofing materials, including insulation shall be kept covered and absolutely dry before, during and after installation. Membrane shall be stored at use temperature and kept absolutely dry prior to use.
 2. Do not allow roofing membrane to come in contact or be exposed to any materials that would be detrimental to or cause degradation of the roofing membrane.

FULLY ADHERED TPO MEMBRANE ROOFING - SECTION 07530-8

3. All hoisting equipment shall bear on solid pad blocking if on roof surface. Pad shall be large enough to evenly distribute the load to avoid crushing insulation and roof system. Pad shall consist of two (2) separate layers of material to eliminate vibration and other movement to directly affect the roofing membrane. Pad shall be of sufficient size to accommodate work tools and weights used around hoist operations.
- C. Weather Precautions: Proceed with roofing work when existing and forecasted weather conditions permit work performance in compliance with manufacturers recommendations. Contractor shall conform to all temperature and weather cautions and bulletins issued by manufacturer for proper application of the specified membrane.
- D. Environmental Conditions: Roofing system shall not be applied when the surrounding air and surface temperature, relative humidity or wind velocity is not within the range acceptable under the manufacturer's recommendations.
- E. Protection: Note that the building is clean and unstained. Protect adjacent surface, exterior walls, copings, parapets and roof penetrations from damage, staining or soiling, resulting from the conduct of work under this section. Pay particular attention where material or workmen are hoisted or permitted access to the roofs. Adjacent roofing material, if installed, is to be protected from traffic and damage due to operations.
- F. Repairs: Clean or repair damaged or soiled surfaces, including lawn areas, floors, walls, stairs, elevators, steps, walks, curbs or other roofs damaged by operations under this Contract to the satisfaction of the Roof Consultant without additional cost to the Owner

PART 2-MATERIALS

2.1 ROOF MEMBRANE

- A. General: The new roofing shall be as follows:
 1. Fully adhered white single ply fleece backed TPO reinforced membrane .080" thickness.
- B. Manufacturer:
 1. The following manufacturers have been approved for this project.
 - a. Carlisle Syntec Incorporated
P.O. Box 7000
Carlisle, PA 17013
 - b. Elevate Products
26 Century Boulevard
Nashville, TN 37214
 2. Fire resistance of reinforced TPO roofing membrane shall meet UL Class A. Also, all packaging of membrane and insulation shall bear UL Class A label. Membrane color shall be white.

2.2 MATERIALS

- B. Insulation
 1. New Insulation;
 - a) Tapered Polyisocyanurate Roof Insulation:

FULLY ADHERED TPO MEMBRANE ROOFING - SECTION 07530-9

Insulation is to be closed-cell, polyisocyanurate foam core with factory laminated facers. Foam core is to have a rated flame spread of 25 or less and compressive strength of 20 psi (ASTM D-1621). Insulation is to conform to federal specification HH-I-1972/2 and UL 1256. Foam is to be manufactured using HCFC blowing agent.

Approved Products:

- 1) E'NRGY 2 by N.R.G. Barriers
- 2) AC Foam II by Atlas Energy Products
- 3) Manufacturer approved Equal

2. ½" High Density Polyisocyanurate Insulation Board:

Insulation is to be closed-cell, polyisocyanurate foam core with factory laminated facers. Foam core is to have a rated flame spread of 25 or less compressive strength of 100 psi (ASTM D 1621). Insulation is to conform to federal specification HH-I-1972/2 and UL 1256. Foam is to be manufactured using HCFC blowing agent.

Approved Products:

- 1) SecurShield HD Plus by Carlisle SynTec Inc
- 2) H-Shield HD 90 by Hunter Panels LLC

B. Accessories: Primary accessories shall be manufactured by or under direction of roofing manufacturer. All others shall be furnished and approved by the roofing manufacturer.

1. Base flashing shall be as specified by manufacturer of roofing membrane except where details and specifications indicate otherwise.
2. Fasteners shall be type of fasteners designed for maximum resistance to pull-out and rust. **Fasteners shall meet all requirements of and be approved by FM and single-ply roofing manufacturer.**
3. All fasteners must be carbon steel with corrosion-resistant coating. Fasteners shall show no more than (15%) red rust corrosion after thirty (30) cycles of Kesternich testing.

C. Walk Pads: Walk pad materials shall consist of 3'-0" wide, continuous roll walkway pad as manufactured by the roofing manufacturer. Walkway pads shall be fully adhered to the roof membrane material.

D. General Flashing: Refer to Section 07600 for general flashing to be used under this section.

E. Pipe Flashings: Use pre-molded pipe flashings approved by membrane manufacturers.

F. Nailers and Blocking: Refer to Section 06100 for wood nailers and blocking to be used under this section.

G. Bonding Adhesive: Use manufacturer recommended solvent-based adhesive.

PART 3-EXECUTION

3.1 PREPARATION OF SURFACES

A. Scheduling: Schedule the roofing work in areas and sections in such a manner as to

RAMSLLC # 2026039

FULLY ADHERED TPO MEMBRANE ROOFING - SECTION 07530-10

keep the new insulation, roofing materials, and building absolutely dry and watertight during new roofing work.

- B. Any damage sustained to the facility or contents as a result of improper scheduling or completion of roofing work shall be the Contractor's responsibility.

3.2 ROOFING

A. Surface Preparation

1. Tear-off, remove and properly dispose of all existing membrane, insulation, and flashings.
2. Deck Repair/Replacement
 - a) Repair/Replace all damaged deck only after approval from Owner/Owner's Representative.
 - b) The total extent of preparation shall include the above and comply with the roofing manufacturer's recommendations.

- B. New Insulation Attachment: All insulation shall be attached under strict conformance with the following substrate criteria.

1. Concrete Deck: Adhere new insulation layers over underlying existing concrete deck in compliance with FM Approved adhesives and adhesive spacing rate data.
2. Steel Deck: Adhere new insulation layers over underlying existing steel deck in compliance with FM Approved adhesives and adhesive spacing rate data.
3. Gypsum Deck: Adhere new insulation layers over underlying existing gypsum deck in compliance with FM Approved adhesives and adhesive spacing rate data.

C. Membrane Application

1. Position roofing membrane loosely on all designed surfaces, allow to relax in place for thirty (30) minutes before use. Install miscellaneous mechanical fastening devices as per specifications and details. Adhere membrane with a 100% continuous coat of bonding adhesive to provide a homogeneous, watertight surface. Position sheet so as to lap the edges no less than two (2) inches, or the minimum required by the manufacturer. Perform tack test on applied bonding adhesive prior to application of the roof membrane.
2. Provisions shall be made to protect the membrane from actual contact with any substance that will be harmful to the membrane.
3. Joining Overlapped Roofing Membrane
 - a. All seams or joints requiring field splicing shall be prepared and made in strict accordance with the roofing manufacturer's specifications and details. Finished seams or joints shall be completely heat welded throughout and have a neat, clean appearance and be totally watertight.
 - b. No work of this nature shall be started until all joints have been

FULLY ADHERED TPO MEMBRANE ROOFING - SECTION 07530-11

properly cleaned in strict accordance with the roofing manufacturer's specifications and details.

D. Perimeter Attachment

1. The membrane shall be mechanically fastened at all perimeters, curbs, walls, penetrations, etc. Membrane shall be mechanically fastened at least twelve inches (12") O.C. through insulation into deck or manufacturers requirements (whichever is more stringent). Fastening shall occur at parapet walls, curbs, and any other roof penetrations that exceed twenty-four inches (24") in any direction.

E. Flashing

1. Perimeter edge detail flashing and flashing around vents, base flashing etc., shall be installed with roofing manufacturer's specified flashing material using the longest pieces practicable.
2. Complete the seaming between the flashing and the main roof membrane before bonding or mechanically fastening the flashing to the vertical surface. The splice must be sealed at least three inches (3") beyond any fasteners.
3. The installed flashing shall be mechanically attached at the top in accordance with project specifications and manufacturers printed details.

- I. Roof Drains: Install new drain flashing as shown on the Drawings, and as specified. Seams shall not run through drain opening. Ensure that existing drain lines function as designed and are clear of debris to the first elbow.

J. Clean-Up

1. Upon completion of the membrane installation, the Contractor shall remove all foreign matter, rubbish and scrap material from the roof. The membrane surface shall be cleaned using cleaners recommended by the membrane manufacturers.

K. Inspection and Warranty

1. Inspection:
 - a) The Contractor shall coordinate all necessary inspections, corrections and re-inspections if any, and certifications with the roofing manufacturer as required, and the roofing manufacturer shall issue an executed copy of the Roofing System Manufacturer's Warranty with any amendment to the Owner upon completion of the work and final inspection by Roof Consultant and manufacturer's representatives.

L. Construction Damage

1. Upon completion of work, repair or replace, as required, all building materials damaged as a result of roofing operations. Match existing materials as close as possible.

END OF SECTION

**DIVISION 7 - THERMAL AND MOISTURE PROTECTION
FLASHING AND SHEET METAL - SECTION 07600**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 DESCRIPTION OF WORK

- A. The extent of each type of flashing and sheet metal work is indicated on the drawings and by provision of this section.
- B. The types of work specified in this section include the following:

1. Miscellaneous sheet metal accessories:

a.	Coping	24 gauge	Prefinished Steel
b.	Continuous Cleat	22 gauge	Galvanized Steel
c.	Pipe Flanges	24 gauge	Galvanized Steel
d.	Skirt Flashing	24 gauge	Galvanized Steel
e.	Expansion Joint Cover	24 gauge	Prefinished Steel
f.	Edge Metal	24 gauge	Prefinished Steel
g.	Scupper Sleeves	24 gauge	Prefinished Steel
h.	Gutter/Downspouts	24 gauge	Prefinished Steel

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's product specifications, installation instructions and general recommendations for each specified sheet material and fabricated product.
- B. Samples: Submit two (2), 8" square samples of specified sheet materials to be exposed as finished surfaces.
- C. Submit two (2), 12" long, completely finished units of specified factory-fabricated products exposed as finished work.
- D. Shop Drawings: Submit shop drawings showing layout, joining, profiles, and anchorage's of fabricated work, including major counter flashings, trim/fascia units, layouts at one-quarter inch (1/4") scale, details at three inch (3") scale.
- E. Coordinate work of this section with interfacing and adjoining work for proper sequencing of each installation. Ensure best possible weather resistance and durability of the work and protection of materials and finishes.

PART 2 - PRODUCTS

2.1 FLASHING AND SHEET METAL MATERIALS

A. Sheet Metal Flashing/Trim

1. All materials shall be as specified under 07600-1, 1.2, B, 1.

B. Fasteners

1. All fasteners must be carbon steel with corrosion-resistant coating. Fasteners shall show no more than fifteen percent (15%) red rust corrosion after 30 cycles of Kesternich testing.

FLASHING AND SHEET METAL - SECTION 07600-2

- a) Fasteners shall be threaded or expansion type as required by site conditions.
- b) Threaded fasteners shall be corrosion-resistant with hex washer head.
- c) Expansion fasteners shall be corrosion-resistant with stainless steel nail and mushroom head.
- d) Corrosion-resistant, watertight, neoprene sealing washer shall be supplied for either threaded or expansion type fasteners.
- e) Fasteners to be Factory Mutual approved.
- f) Approved Products:
 - 1) Tapcon Hex Washer Head by Bulldex with Climaseal Coating
 - 2) Tapcon Hex Washer Head by Elco with Stalgard Coating
 - 3) Zamac Nailin by Rawl
 - 4) Metal Hit Anchor by Hilti
- g) Fasteners to be nominal 1/4" thickness minimum and of sufficient length to penetrate the masonry/concrete one inch (1").

3. Steel/Wood Fasteners

- a) Corrosion-resistant, self-drilling, self-tapping screw with hex washer head for exposed fastening.
- b) Corrosion-resistant, watertight, neoprene sealing washer for exposed fastening.
- c) Approved Products:
 - 1) Tek Screw by Bulldex with Climaseal Coating
 - 2) Tek Screw by Rawl
- d) Fasteners to be nominal 1/4" thickness minimum and of sufficient length to penetrate the steel 1/2" or into wood minimum one inch (1").

2.2 FABRICATED UNITS

A. General Metal Fabrication

- 1. Shop-fabricate work to greatest extent possible. Comply with details shown, and with requirements of SMACNA "Architectural Sheet Metal Manual" and other recognized industry practices. Fabricate for waterproof and weather-resistant performance; with expansion provisions for running work, sufficient to permanently prevent leakage, damage or deterioration of the work. Form work to fit substrates. Comply with material manufacturer instructions and recommendations. Form exposed sheet metal work without excessive oil-

FLASHING AND SHEET METAL - SECTION 07600-3

canning, buckling and tool marks, true to line and levels as indicated, with exposed edges folded back to form hems.

- B. Seams: Fabricate non-moving seams in sheet metal with flat-lock seams. For metal other than aluminum, tin edges to be seamed, form seams and solder. Form aluminum seams with epoxy seam sealer, rivet joints for additional strength where required.
- C. Separations: Provide for separation of metal from non-compatible metal or corrosive substrates by coating concealed surfaces at locations of contact, with bituminous coating or other permanent separation as recommended by manufacturer/fabricator.

PART 3 - EXECUTION

3.1 INSTALLATION REQUIREMENTS

- A. General
 - 1. Except as otherwise indicated, comply with manufacturer's installation instructions and recommendations, and with SMACNA "Architectural Sheet Metal Manual". Anchor units of work securely in place by method indicated, providing for thermal expansion of metal units; conceal fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints and seams which will be permanently watertight and weatherproof.
- B. Cleaning and Protection
 - 1. Clean exposed metal surfaces, removing substances which might cause corrosion of metal or deterioration of finishes.
- C. Protection: Installer shall advise Contractor of required procedures for surveillance and protection of flashings and sheet metal work during construction, to ensure that work will be without damage or deterioration, other than natural weathering, at time of substantial completion.

END OF SECTION

**DIVISION 7 - THERMAL AND MOISTURE PROTECTION
SEALANTS - SECTION 07900**

1. DESCRIPTION

- A. Provide all materials labor, equipment and tools to install complete all joint sealers as shown on the Drawings.
- B. Compatibility: Provide materials selected for compatibility with each other and with substrates in each joint system; confirm with manufacturer.
- C. General Characteristics: Provide type, grade, class, hardness and similar characteristics of material as indicated or, where not indicated, to comply with manufacturer's recommendations relative to exposures, traffic, weather conditions and other factors of the joint system for best possible overall performance. Except as otherwise indicated, joint sealers are required to permanently maintain airtight and waterproof seals, without failures in joint movement accommodation, cohesion, adhesion, migration, staining, and other performances as specified.

2. MATERIALS

A. Caulking

- 1) Caulkings shall be one of the following:

- a) "Sonolastic NP-1," manufactured by Sonneborn; 7711 Computer Avenue; Minneapolis, Minnesota 55435.
- b) "DYmeric," manufactured by Tremco; 10701 Shaker Blvd.; Cleveland, Ohio 44104.

B. Other Materials

- 1) All other materials not specifically described, but required for complete and proper caulking and installation of sealants shall be first quality of their respective kinds, new, and as selected by the Contractor subject to the approval of the Owner.

3. EXECUTION

- A. Weather Conditions: Install exterior elastomeric sealants when temperature is in lower third of temperature range recommended by manufacturer for installation.
- B. Clean joint surfaces and prime or seal as recommended by sealant manufacturer.
- C. Support sealants from back with construction as shown.
- D. Install sealants to size and shape shown, or, if not shown, with "hour-glass" section profile.
- E. Install liquid sealants by proven methods which will ensure complete "wetting" of joint bond surfaces, without gaps or air pockets in beads, slightly concave on surface and slightly below adjoining surfaces, except form slight cove with sealant at inverted corner joints.

END OF SECTION

BASE BID #1 SCOPE OF WORK

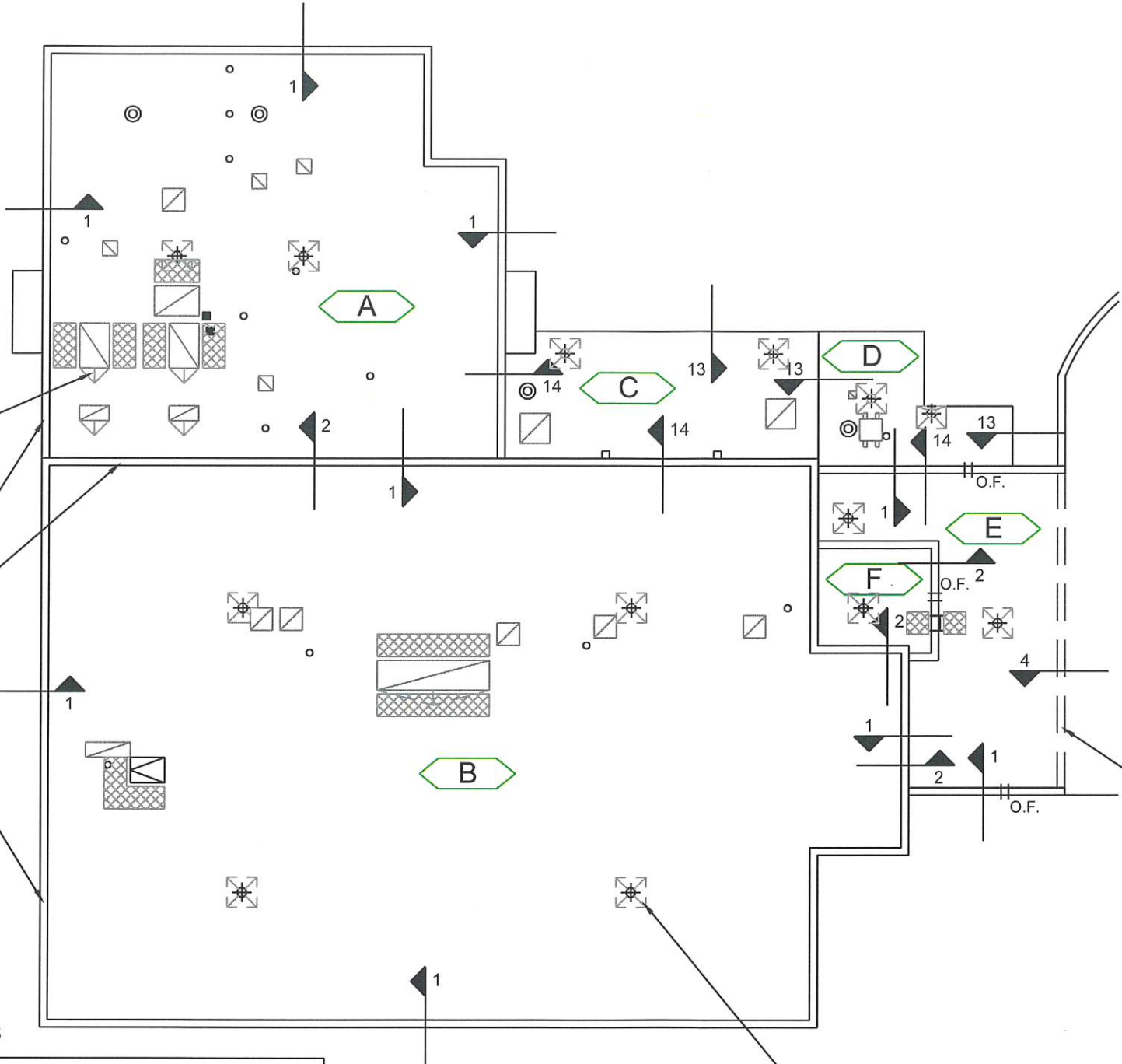
ALL WORK SHOWN ON ROOF PLAN R-1 TO BE COMPLETED UNDER BASE BID #1 SCOPE OF WORK.

INSTALL NEW 1/2" SLOPE TAPERED INSULATION CRICKETS AS SPECIFIED

INSTALL NEW 24 GAUGE PREFINISHED STEEL COPING CAP AS SPECIFIED AND AS SHOWN ON THE DRAWINGS.

ROOF PLAN NOTES

1. THIS DRAWING IS INTENDED FOR ORIENTATION, APPROXIMATE CONFIGURATION AND LOCATION OF DETAILS. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ITEMS FOR BIDDING AND INSTALLATION PURPOSES.
2. CONTRACTOR TO INCLUDE ALL NECESSARY MECHANICAL AND ELECTRICAL DISCONNECTS/ RECONNECTS WITHIN BASE BID SCOPE OF WORK..
3. INSTALL NEW WALKPADS AT LOCATIONS SHOWN ON THE ROOF PLAN.
4. INCLUDE 100 SQ. FT. OF DETERIORATED STEEL DECK REMOVAL AND REPLACEMENT WITHIN BASE BID #1 SCOPE OF WORK.
5. INCLUDE 1,000 SQ. FT. OF DETERIORATED GYPSUM DECK REMOVAL AND REPLACEMENT WITHIN BASE BID #1 SCOPE OF WORK.
6. INCLUDE 2,000 SQ. FT. OF DETERIORATED ROOF INSULATION REMOVAL AND REPLACEMENT WITHIN BASE BID #1 SCOPE OF WORK.
7. REMOVE ALL OBSOLETE ROOF TOP EQUIPMENT AND INFILL WITH NEW STEEL DECKING, INSULATION AND ROOF MEMBRANE.
8. NEW ROOF SYSTEM TO PROMOTE POSITIVE SLOPE TO DRAINAGE DEVICES. PONDING WATER PROHIBITED.



ROOF PLAN LEGEND

- = PARAPET WALL - DETAIL #1, #2, #14
- = ROOF EDGE - DETAIL #13
- = EXPANSION JOINT - DETAIL #4
- = THRU WALL SCUPPER - DETAIL #5
- = THRU WALL SCUPPER OVERFLOW - DETAIL #5
- = ROOF DRAIN - DETAIL #6, #24
- = EQUIPMENT CURB - DETAIL #7, #25
- = PIPE PENETRATION - DETAIL #8, #26
- = HOT STACK - DETAIL #9, #27
- = PITCH PAN - DETAIL #10
- = ROOF HATCH - DETAIL #11, #28
- = EQUIPMENT ON SUPPORTS
- = ACCESS LADDER
- = NEW WALK PADS TO BE INSTALLED
- = NEW 1/2" TAPERED INSULATION CRICKET
- = NEW 4'X4'X1/2" TAPERED INSULATION DRAIN SUMP
- = ROOF AREA DESIGNATION
- = LOCATION OF DETAIL CUT

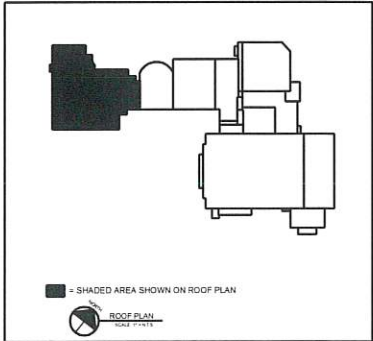
INSTALL NEW 24 GAUGE PREFINISHED STEEL EXPANSION JOINT CAP AS SPECIFIED AND AS SHOWN ON THE DRAWINGS.

INSTALL NEW 4'X4'X1/2" SLOPE TAPERED POLYISOCYANURATE ROOF INSULATION SUMPS AT ALL ROOF DRAIN LOCATIONS AS SPECIFIED AND AS SHOWN ON DRAWINGS.



ROOF PLAN
SCALE: 1" = 40'-0"

SITE PLAN



Roof Asset
Management
Services LLC

ROOF CONSULTANTS/PLANNERS

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

PROJECT NO.
2026039
MANAGER
OATHOUT
NICHOLS
DATE
09/03/2026

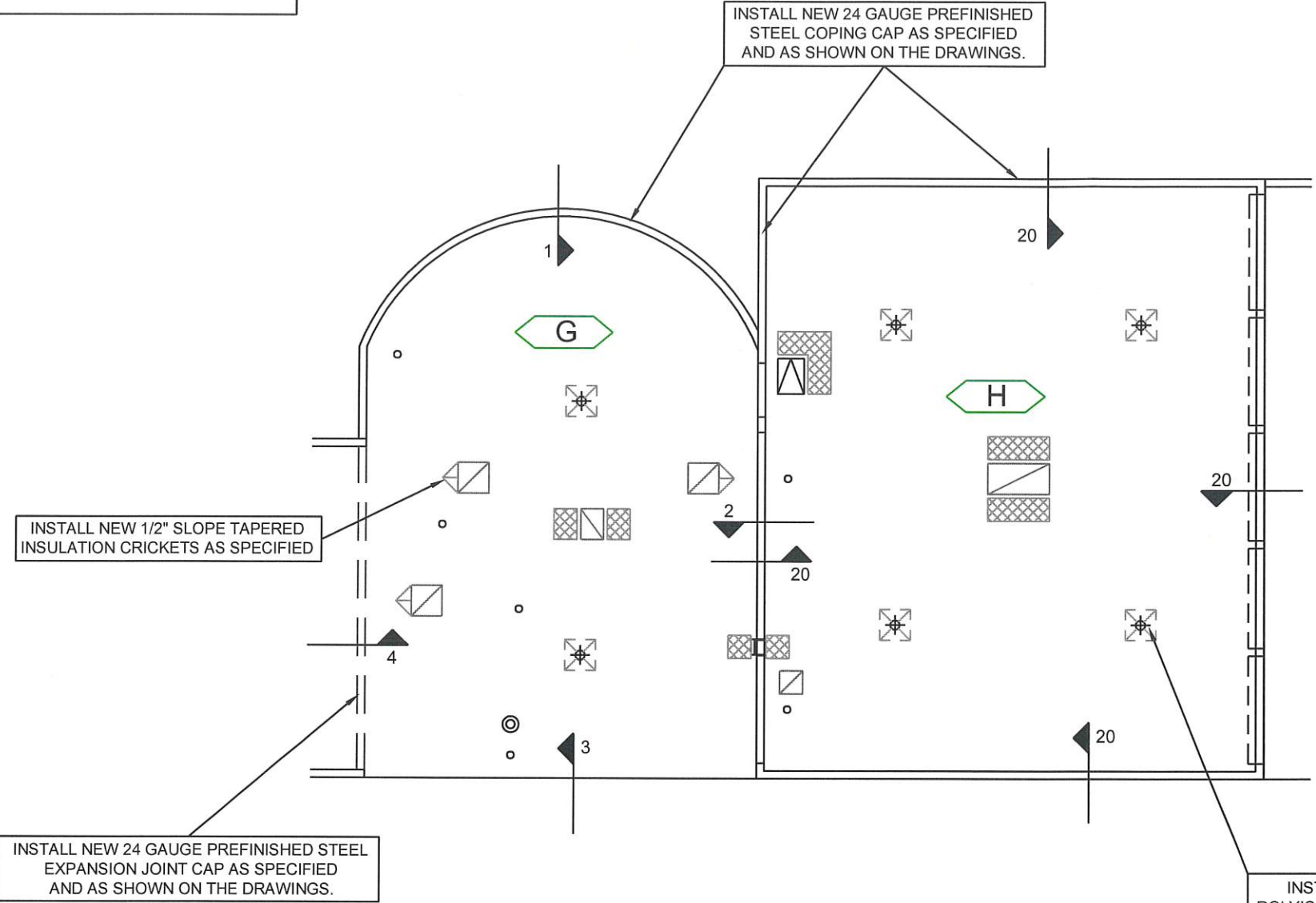
REVIEWED BY
R-1
DRAWING#

R-1

1307 Homestead Dr.
Webb City, Missouri 64870
Phone: 417-673-0147
Fax: 417-673-0148

BASE BID #1 SCOPE OF WORK

ALL WORK SHOWN ON ROOF PLAN R-1 TO BE COMPLETED UNDER BASE BID #1 SCOPE OF WORK.



ROOF PLAN LEGEND

- == = PARAPET WALL - DETAIL #1, #2, #20
- = ROOF EDGE - DETAIL #3
- == = EXPANSION JOINT - DETAIL #4
- ⊕ = ROOF DRAIN - DETAIL #6, #24
- ▣ = EQUIPMENT CURB - DETAIL #7, #25
- = PIPE PENETRATION - DETAIL #8, #26
- ⊙ = HOT STACK - DETAIL #9, #27
- = PITCH PAN - DETAIL #10
- ▤ = ROOF HATCH - DETAIL #11, #28
- = EQUIPMENT ON SUPPORTS
- = ACCESS LADDER
- ▨ = NEW WALK PADS TO BE INSTALLED
- ⤴ = NEW 1/2" TAPERED INSULATION CRICKET
- ⊞ = NEW 4'X4'X1/2" TAPERED INSULATION DRAIN SUMP
- C = ROOF AREA DESIGNATION
- ↖ = LOCATION OF DETAIL CUT

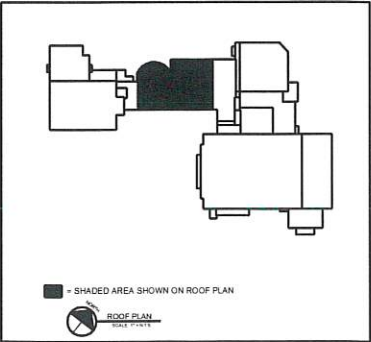
1. THIS DRAWING IS INTENDED FOR ORIENTATION, APPROXIMATE CONFIGURATION AND LOCATION OF DETAILS. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ITEMS FOR BIDDING AND INSTALLATION PURPOSES.
2. CONTRACTOR TO INCLUDE ALL NECESSARY MECHANICAL AND ELECTRICAL DISCONNECTS/ RECONNECTS WITHIN BASE BID SCOPE OF WORK..
3. INSTALL NEW WALKPADS AT LOCATIONS SHOWN ON THE ROOF PLAN.
4. INCLUDE 100 SQ. FT. OF DETERIORATED STEEL DECK REMOVAL AND REPLACEMENT WITHIN BASE BID #1 SCOPE OF WORK.
5. INCLUDE 1,000 SQ. FT. OF DETERIORATED GYPSUM DECK REMOVAL AND REPLACEMENT WITHIN BASE BID #1 SCOPE OF WORK.
6. INCLUDE 2,000 SQ. FT. OF DETERIORATED ROOF INSULATION REMOVAL AND REPLACEMENT WITHIN BASE BID #1 SCOPE OF WORK.
7. REMOVE ALL OBSOLETE ROOF TOP EQUIPMENT AND INFILL WITH NEW STEEL DECKING, INSULATION AND ROOF MEMBRANE.
8. NEW ROOF SYSTEM TO PROMOTE POSITIVE SLOPE TO DRAINAGE DEVICES. PONDING WATER PROHIBITED.



ROOF PLAN

SCALE: 1" = 20'-0"

SITE PLAN



ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

PROJECT NO. 2026039
MANAGER OATHOUT
DRAWN BY NICHOLS
DATE 09/03/2026
REVISIONS
DRAWING # R-2

R-2

**Roof Asset
Management
Services LLC**
ROOF CONSULTANTS/PLANNERS

1307 Homestead Dr.
Webb City, Missouri 64870
Phone: 417-673-0147
Fax: 417-673-0148

BASE BID #1 SCOPE OF WORK

ALL WORK SHOWN ON ROOF PLAN R-1 TO BE COMPLETED UNDER BASE BID #1 SCOPE OF WORK.

INSTALL NEW 4'X4'X1/2" SLOPE TAPERED POLYISOCYANURATE ROOF INSULATION SUMPS AT ALL ROOF DRAIN LOCATIONS AS SPECIFIED AND AS SHOWN ON DRAWINGS.

INSTALL NEW 24 GAUGE PREFINISHED STEEL COPING CAP AS SPECIFIED AND AS SHOWN ON THE DRAWINGS.

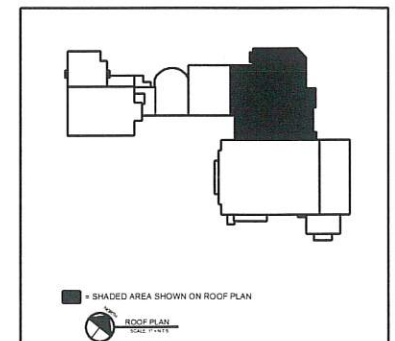
ROOF PLAN LEGEND

- = PARAPET WALL - DETAIL #30, #31, #37, #38
- = ROOF EDGE - DETAIL #21, #22, #31, #32
- = THRU WALL SCUPPER - DETAIL #23
- = ROOF DRAIN - DETAIL #6, #24
- = EQUIPMENT CURB - DETAIL #25, #34, #42
- = PIPE PENETRATION - DETAIL #26, #35
- = HOT STACK - DETAIL #27
- = SATELLITE DISH
- = ACCESS LADDER
- = METAL ROOF (N.I.C.)
- = NEW WALK PADS TO BE INSTALLED
- = NEW 1/2" TAPERED INSULATION CRICKET
- = NEW 4'X4'X1/2" TAPERED INSULATION DRAIN SUMP
- = ROOF AREA DESIGNATION
- = LOCATION OF DETAIL CUT

ROOF PLAN NOTES

1. THIS DRAWING IS INTENDED FOR ORIENTATION, APPROXIMATE CONFIGURATION AND LOCATION OF DETAILS. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ITEMS FOR BIDDING AND INSTALLATION PURPOSES.
2. CONTRACTOR TO INCLUDE ALL NECESSARY MECHANICAL AND ELECTRICAL DISCONNECTS/ RECONNECTS WITHIN BASE BID SCOPE OF WORK..
3. INSTALL NEW WALKPADS AT LOCATIONS SHOWN ON THE ROOF PLAN.
4. INCLUDE 100 SQ. FT. OF DETERIORATED STEEL DECK REMOVAL AND REPLACEMENT WITHIN BASE BID #1 SCOPE OF WORK.
5. INCLUDE 1,000 SQ. FT. OF DETERIORATED GYPSUM DECK REMOVAL AND REPLACEMENT WITHIN BASE BID #1 SCOPE OF WORK.
6. INCLUDE 2,000 SQ. FT. OF DETERIORATED ROOF INSULATION REMOVAL AND REPLACEMENT WITHIN BASE BID #1 SCOPE OF WORK.
7. REMOVE ALL OBSOLETE ROOF TOP EQUIPMENT AND INFILL WITH NEW STEEL DECKING, INSULATION AND ROOF MEMBRANE.
8. NEW ROOF SYSTEM TO PROMOTE POSITIVE SLOPE TO DRAINAGE DEVICES. PONDING WATER PROHIBITED.
9. INSTALL NEW JOSAM CAST IRON DRAIN AND ASSOCIATED LEADERS.

SITE PLAN



ROOF PLAN

SCALE: 1" = 40'-0"

Roof Asset
Management
Services LLC
ROOF CONSULTANTS/PLANNERS

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

PROJECT NO. 2026039
MANAGER OATHOUT
DRAWN BY NICHOLS
DATE 09/03/2026
REVIEWED
DRAWING R-3

R-3

1307 Homestead Dr.
Webb City, Missouri 64870
Phone: 417-673-0147
Fax: 417-673-0148

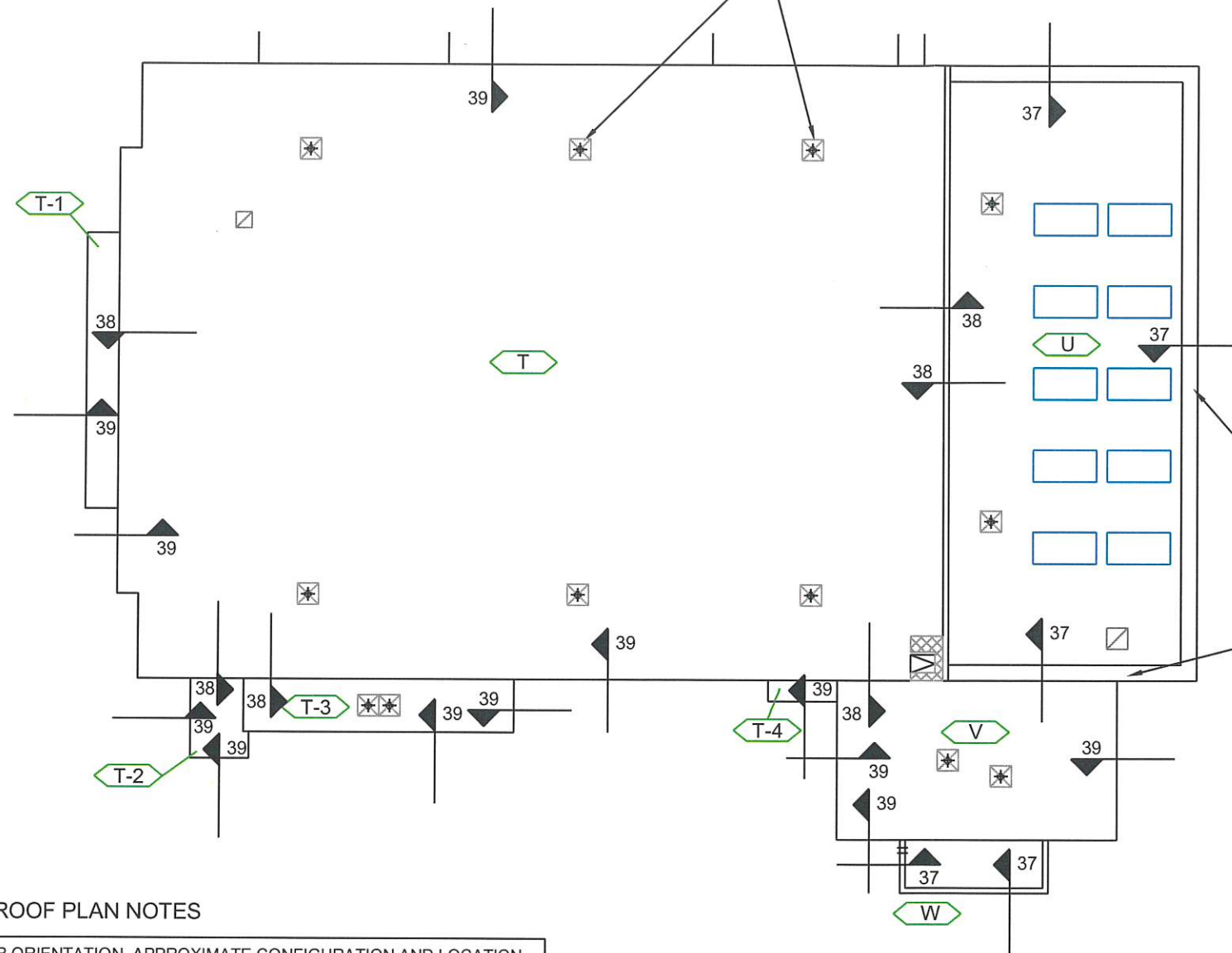
BASE BID #1 SCOPE OF WORK

ALL WORK SHOWN ON ROOF PLAN R-1 TO BE COMPLETED UNDER BASE BID #1 SCOPE OF WORK.

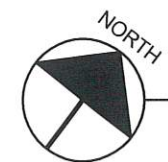
INSTALL NEW 4'X4'X1/2" SLOPE TAPERED POLYISOCYANURATE ROOF INSULATION SUMPS AT ALL ROOF DRAIN LOCATIONS AS SPECIFIED AND AS SHOWN ON DRAWINGS.

ROOF PLAN LEGEND

- = PARAPET WALL - DETAIL #37, #38
- = ROOF EDGE - DETAIL #39
- = THRU WALL SCUPPER - DETAIL #40
- ⊕ = ROOF DRAIN - DETAIL #41
- = EQUIPMENT CURB - DETAIL #42
- = FIRE RELIEF
- ▨ = NEW WALK PADS TO BE INSTALLED
- ↗ = NEW 1/2" TAPERED INSULATION CRICKET
- ⊗ = NEW 4'X4'X1/2" TAPERED INSULATION DRAIN SUMP
- C = ROOF AREA DESIGNATION
- = LOCATION OF DETAIL CUT



INSTALL NEW 24 GAUGE PREFINISHED STEEL COPING CAP AS SPECIFIED AND AS SHOWN ON THE DRAWINGS.

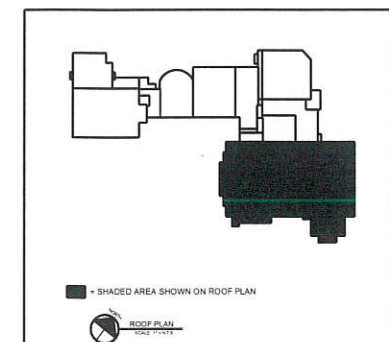


ROOF PLAN
SCALE: 1" = 30'-0"

ROOF PLAN NOTES

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- INCLUDE 100 SQ. FT. OF DETERIORATED STEEL DECK REMOVAL AND REPLACEMENT WITHIN BASE BID #1 SCOPE OF WORK.
- INCLUDE 1,000 SQ. FT. OF DETERIORATED GYPSUM DECK REMOVAL AND REPLACEMENT WITHIN BASE BID #1 SCOPE OF WORK.
- INCLUDE 2,000 SQ. FT. OF DETERIORATED ROOF INSULATION REMOVAL AND REPLACEMENT WITHIN BASE BID #1 SCOPE OF WORK.
- REMOVE ALL OBSOLETE ROOF TOP EQUIPMENT AND INFILL WITH NEW STEEL DECKING, INSULATION AND ROOF MEMBRANE.
- NEW ROOF SYSTEM TO PROMOTE POSITIVE SLOPE TO DRAINAGE DEVICES. PONDING WATER PROHIBITED.

SITE PLAN



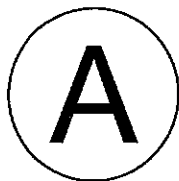
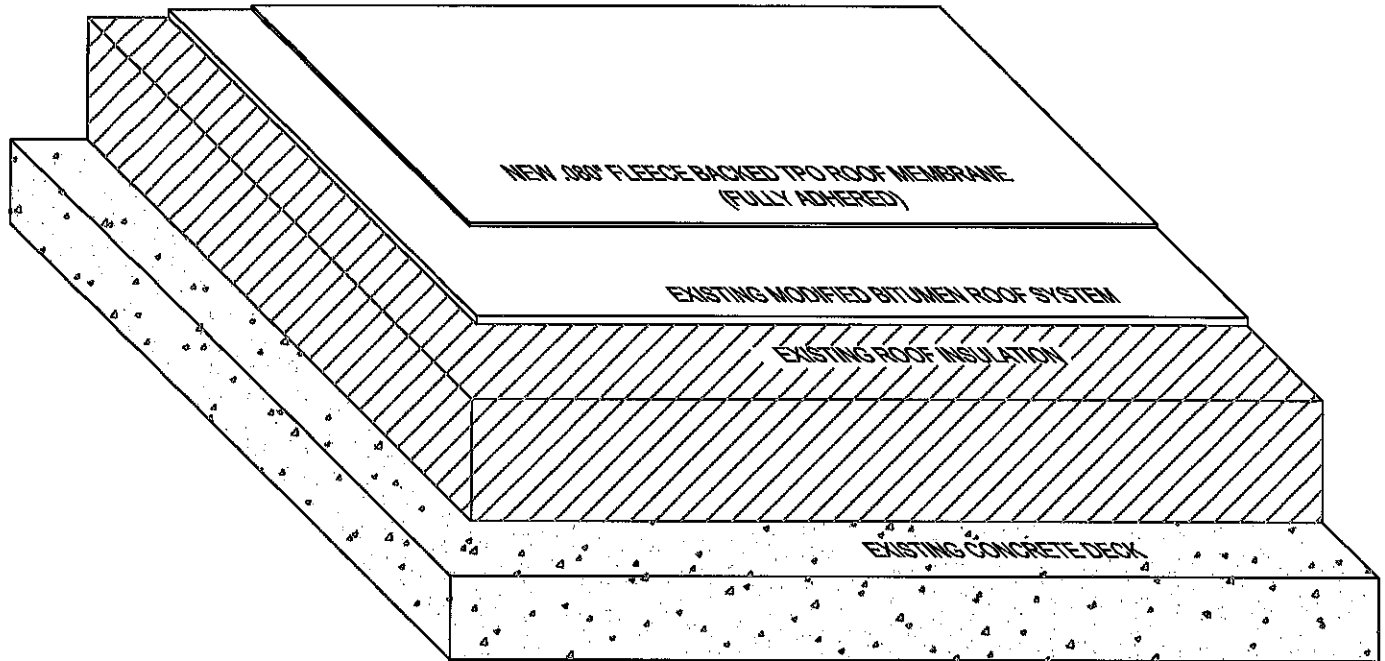
Roof Asset
Management
Services LLC
ROOF CONSULTANTS/PLANNERS

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

PROJECT NO.
2026039
MANAGER
OATHOUT
DATE
09/03/2026
DESIGNED BY
NICHOLS
REVISED BY
DRAWN BY
R-4

R-4

1307 Homestead Dr.
Webb City, Missouri 64870
Phone: 417-673-0147
Fax: 417-673-0148



ROOF SYSTEM CROSS SECTION

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

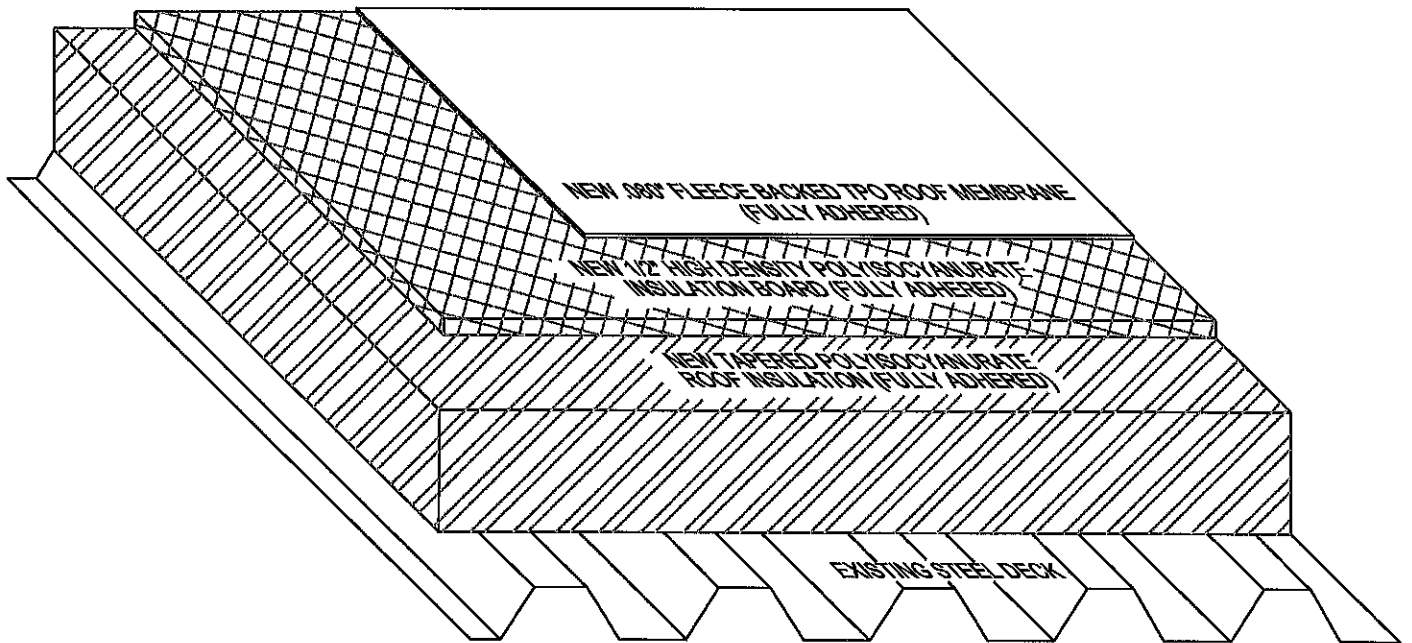
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

A



B

ROOF SYSTEM CROSS SECTION

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

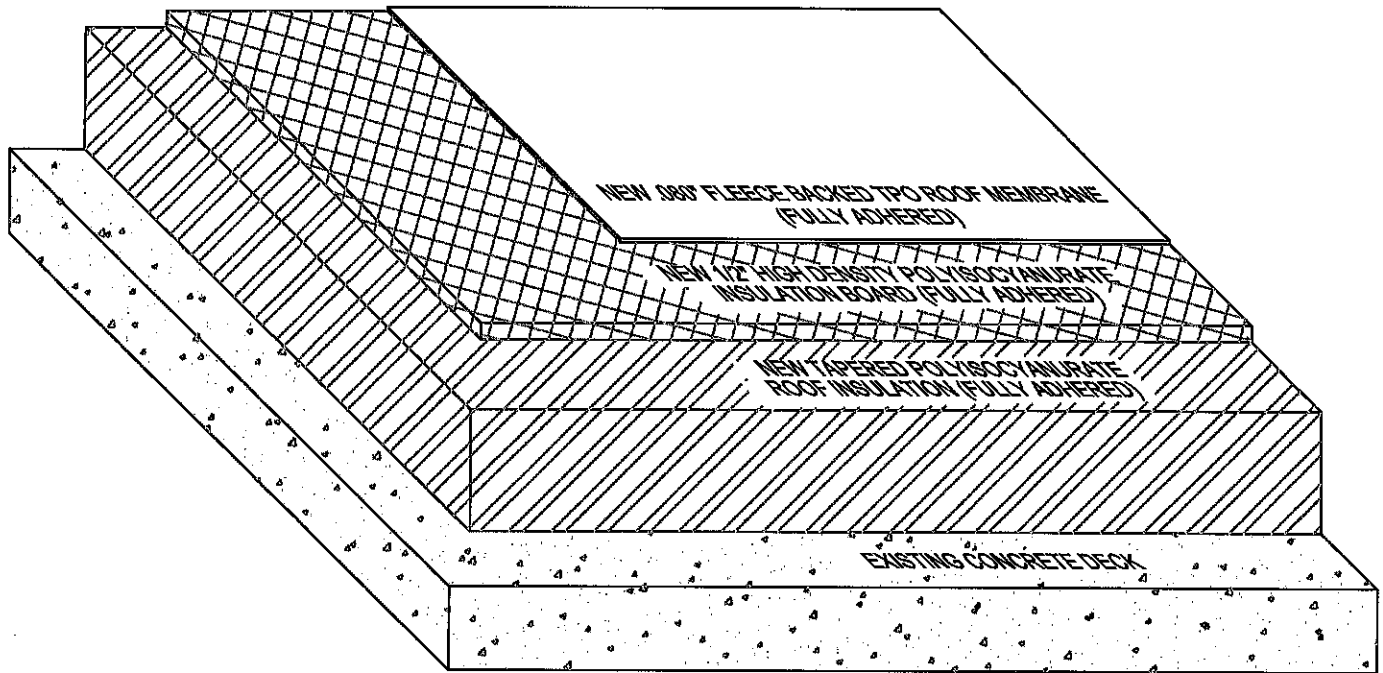
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

B



C

ROOF SYSTEM CROSS SECTION

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

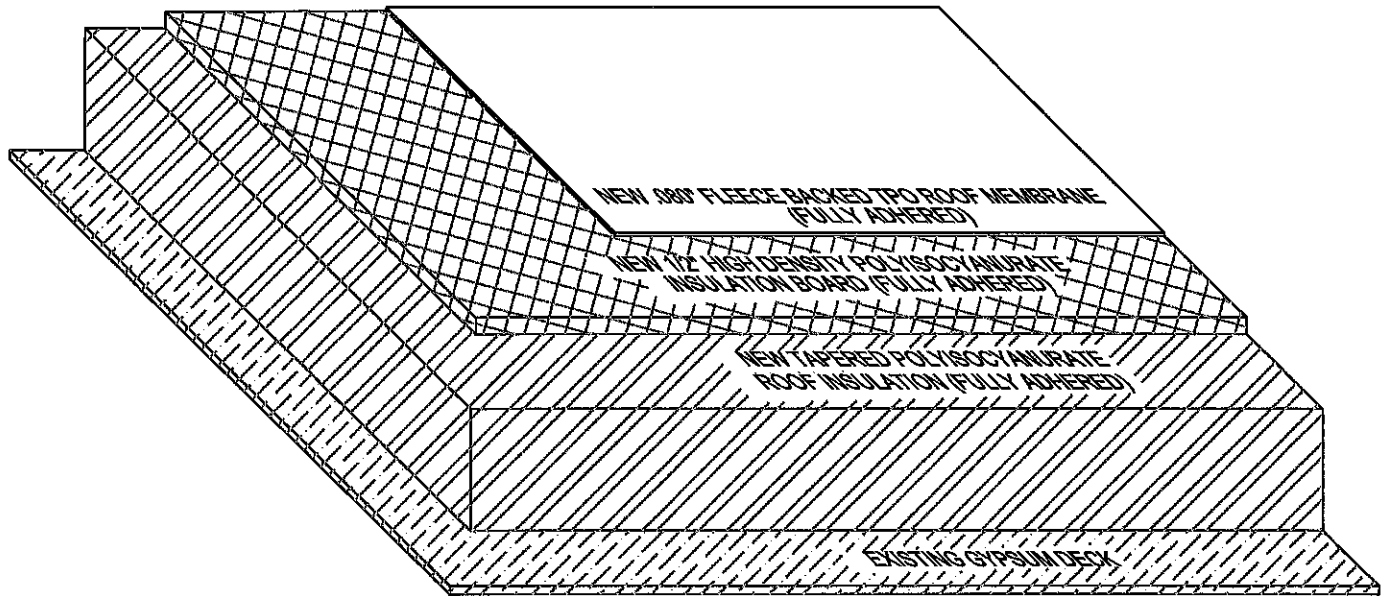
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

C



D

ROOF SYSTEM CROSS SECTION

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

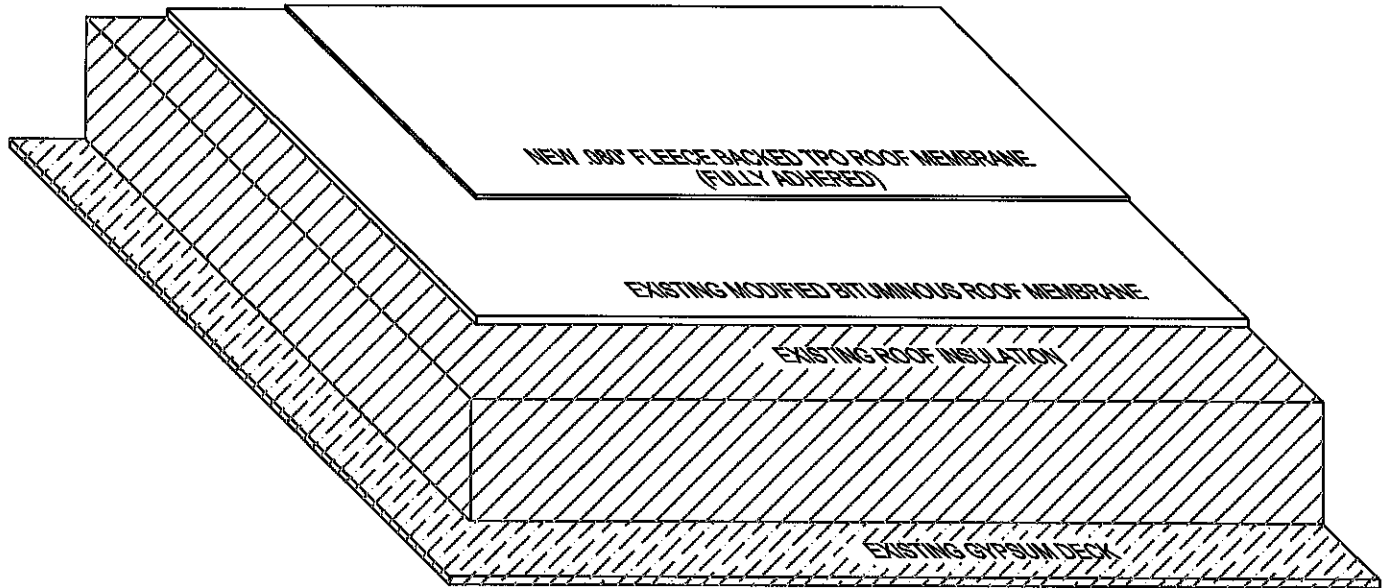
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

D



E

ROOF SYSTEM CROSS SECTION

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

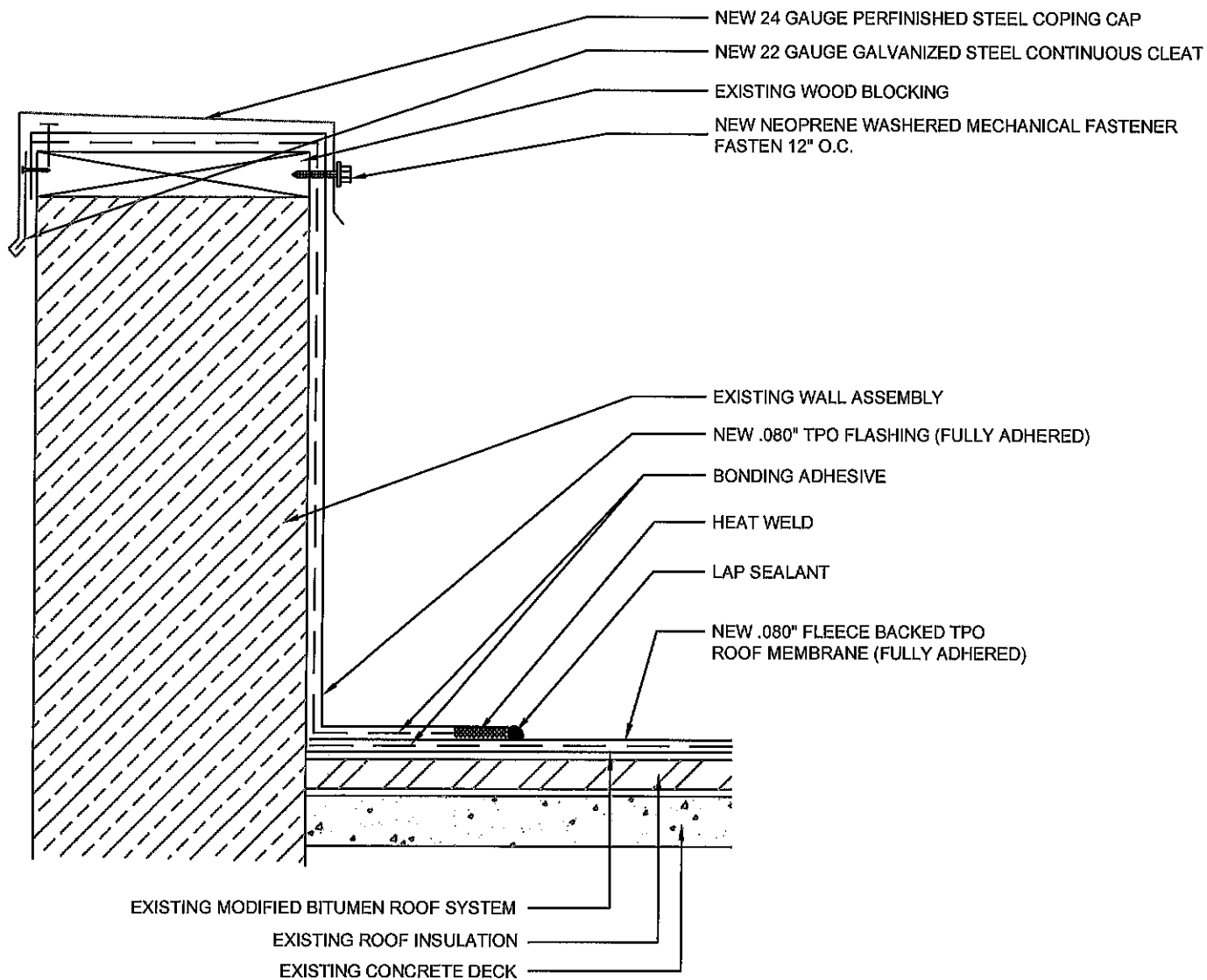
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

E



1

PARAPET WALL FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

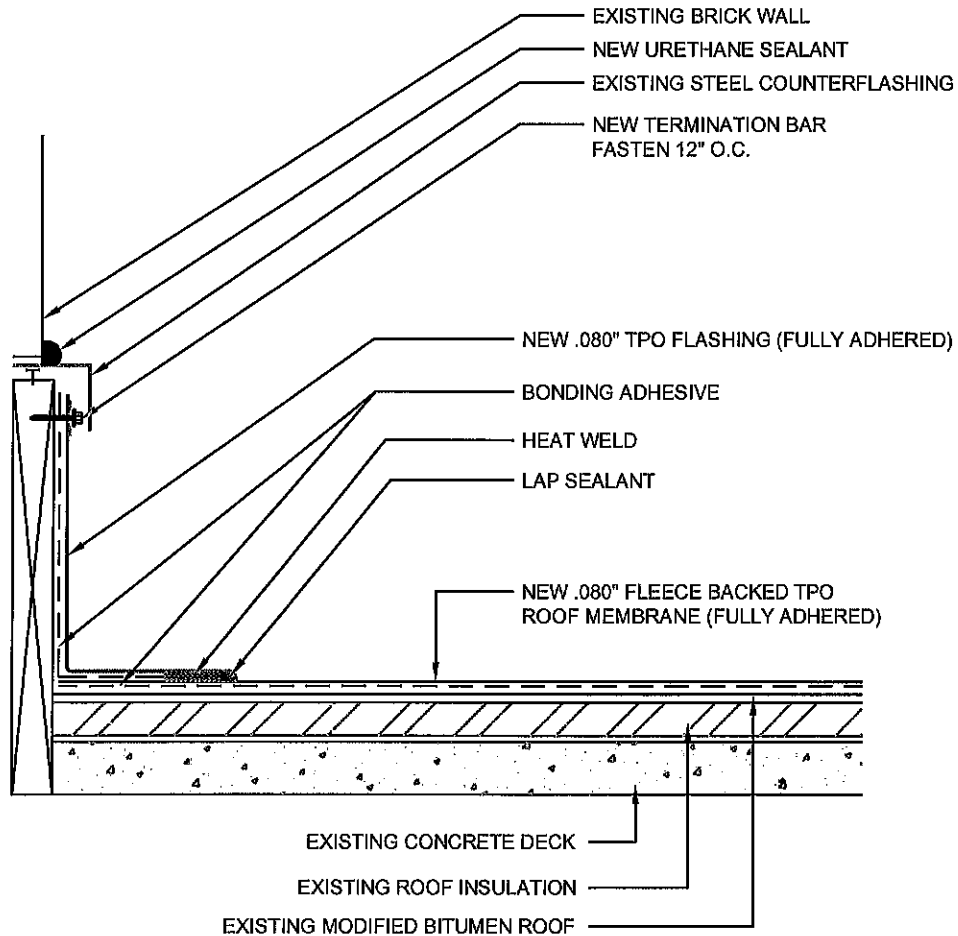
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

1



NOTE:

CUT EXISTING SINGLE-PLY MEMBRANE APPROXIMATELY THREE (3) FEET UP FROM ROOF SURFACE. INSTALL NEW FULLY ADHERED .60" SINGLE-PLY MEMBRANE AS SHOWN ON THE DRAWING.

2

WALL TERMINATION FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

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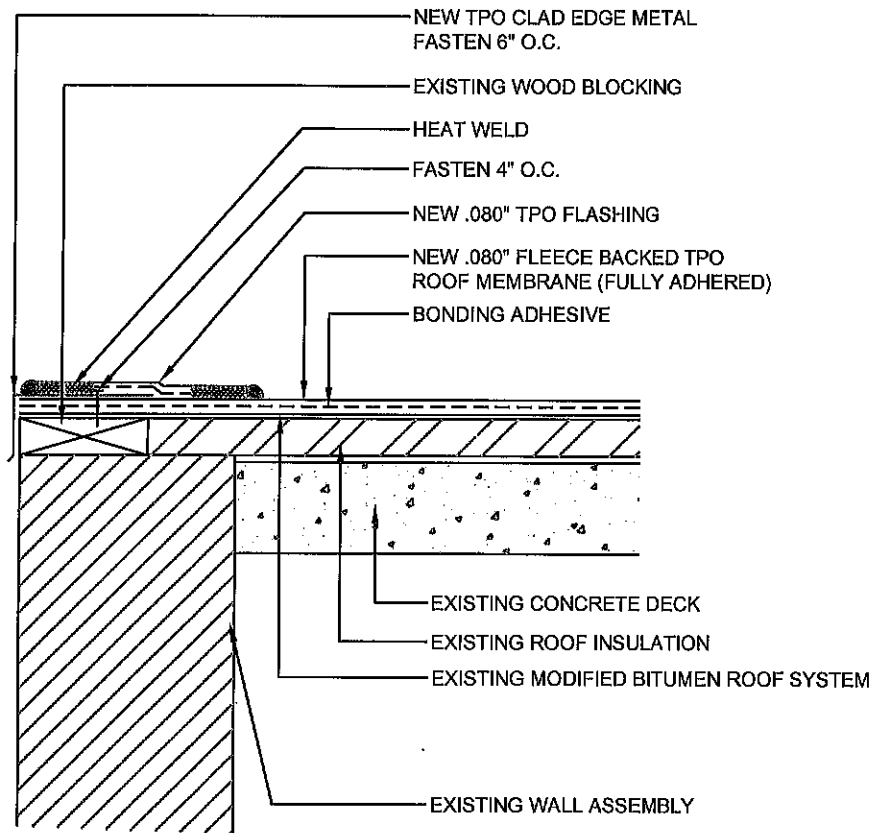
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

2



3

ROOF EDGE FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

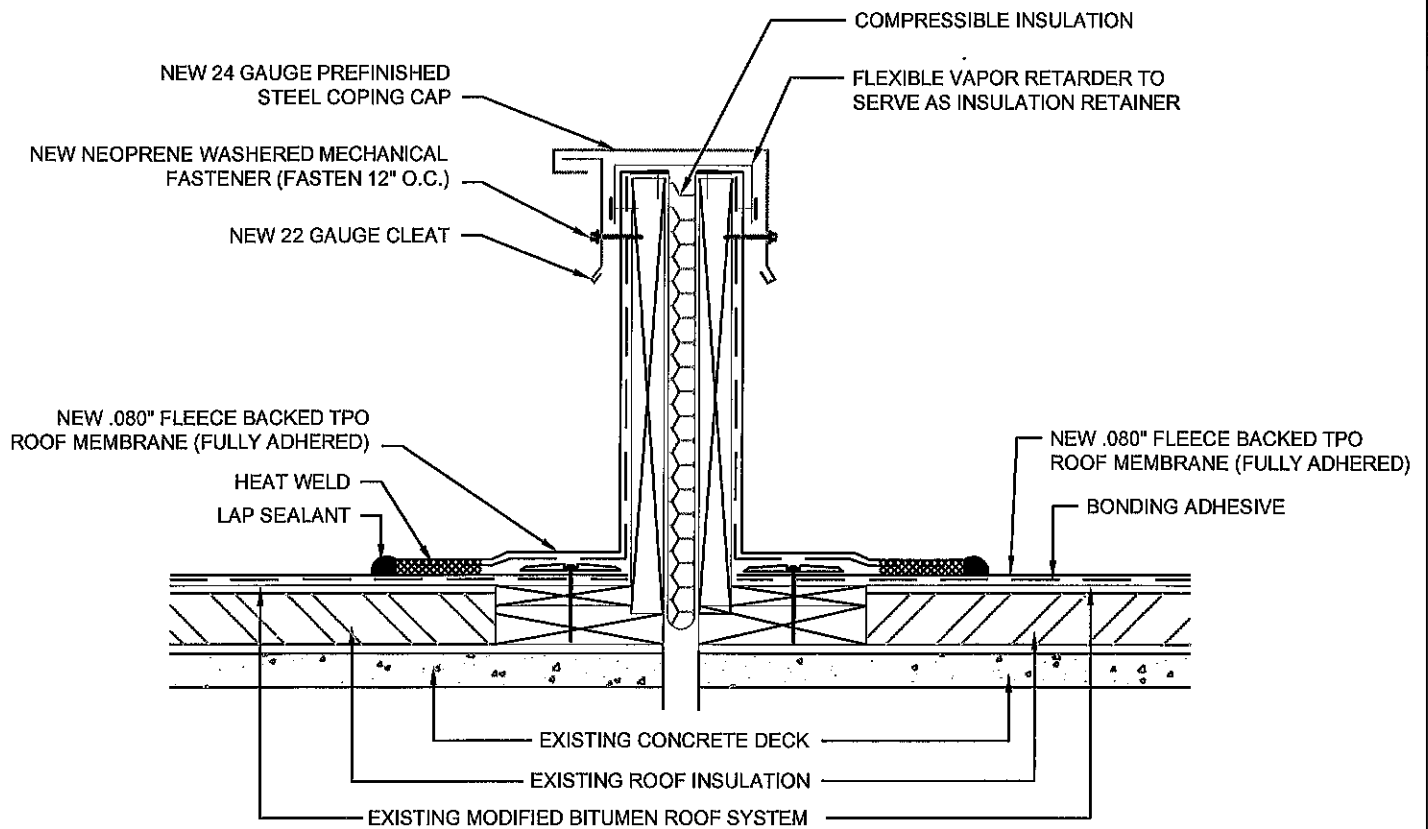
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

3



4

EXPANSION JOINT FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

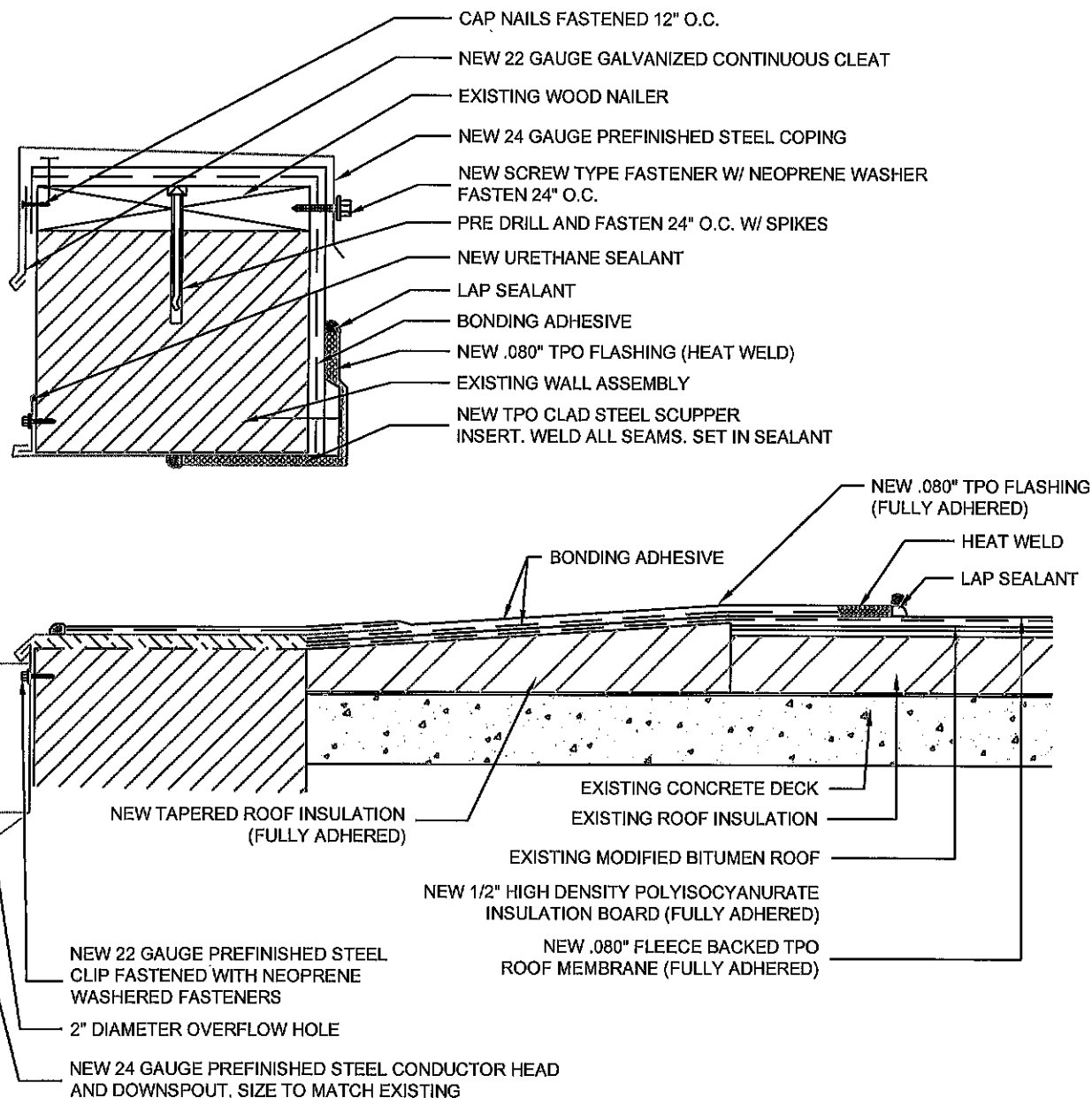
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

4



NOTE

INSTALL NEW 24 GAUGE PREFINISHED STEEL CONDUCTOR HEADS AND DOWNSPOUTS IN ACCORDANCE WITH SMACNA.

5

THROUGH WALL SCUPPER FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

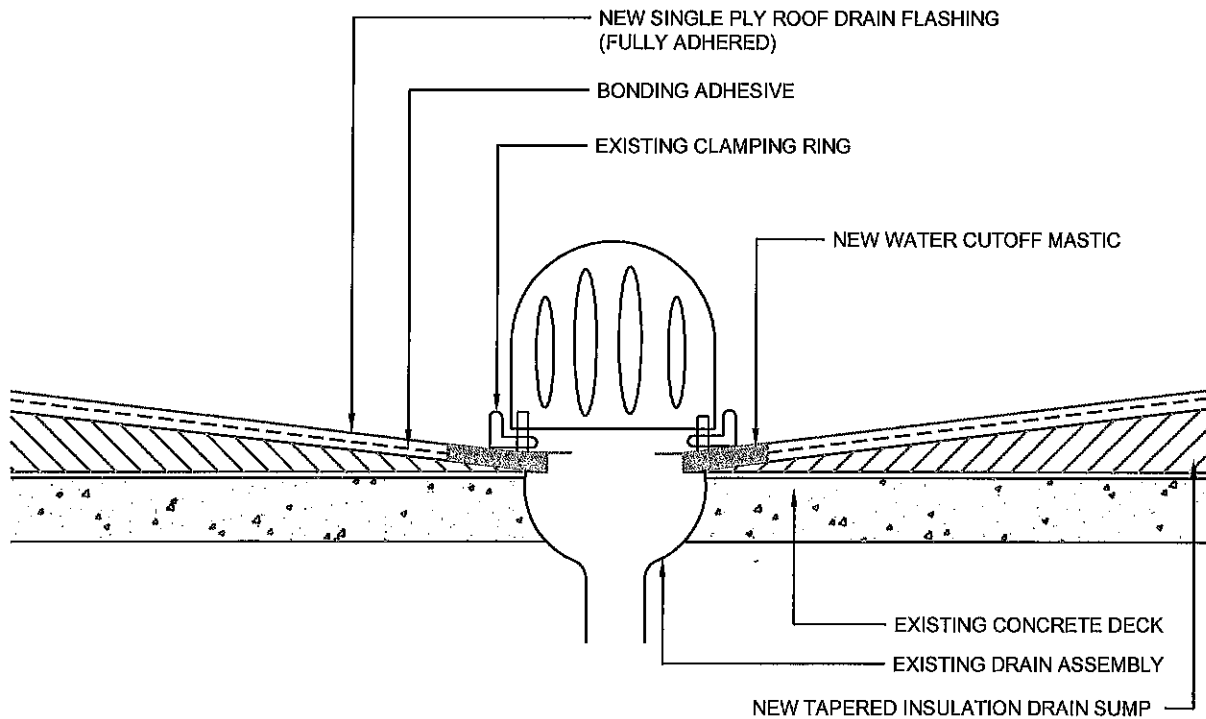
DATE: 09/03/2026

PROJECT#: 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

5



6

ROOF DRAIN FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

DATE: 09/03/2026

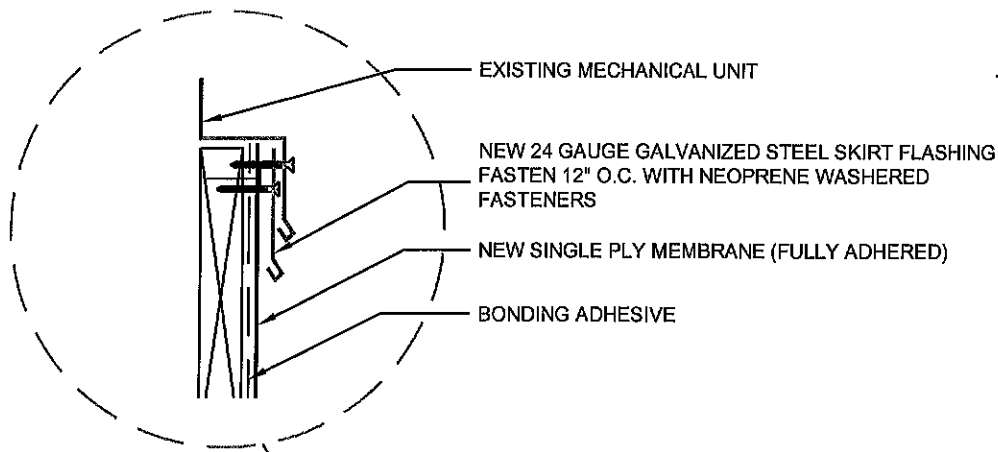
PROJECT# 2026039

DRAWN BY: NICHOLS

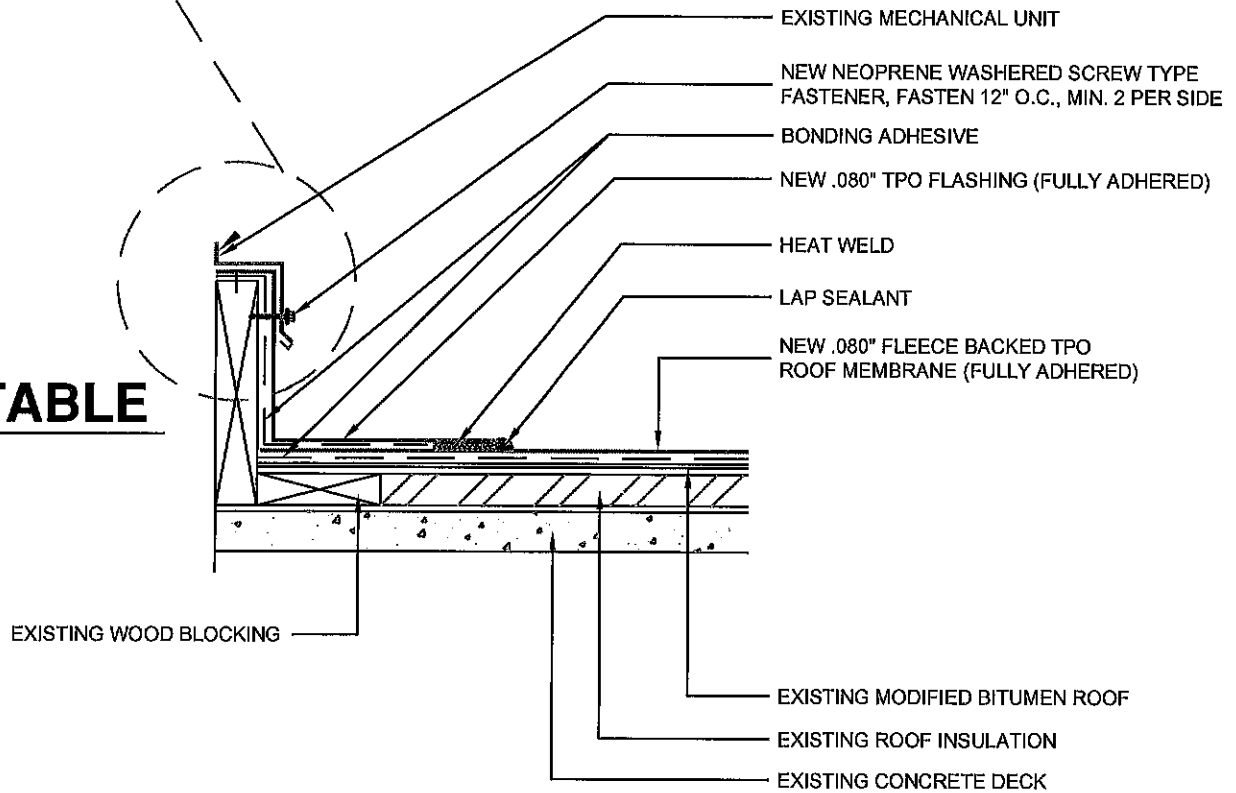
MANAGER: OATHOUT

6

NON-LIFTABLE



LIFTABLE



7

LIFTABLE/NON-LIFTABLE CURB FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

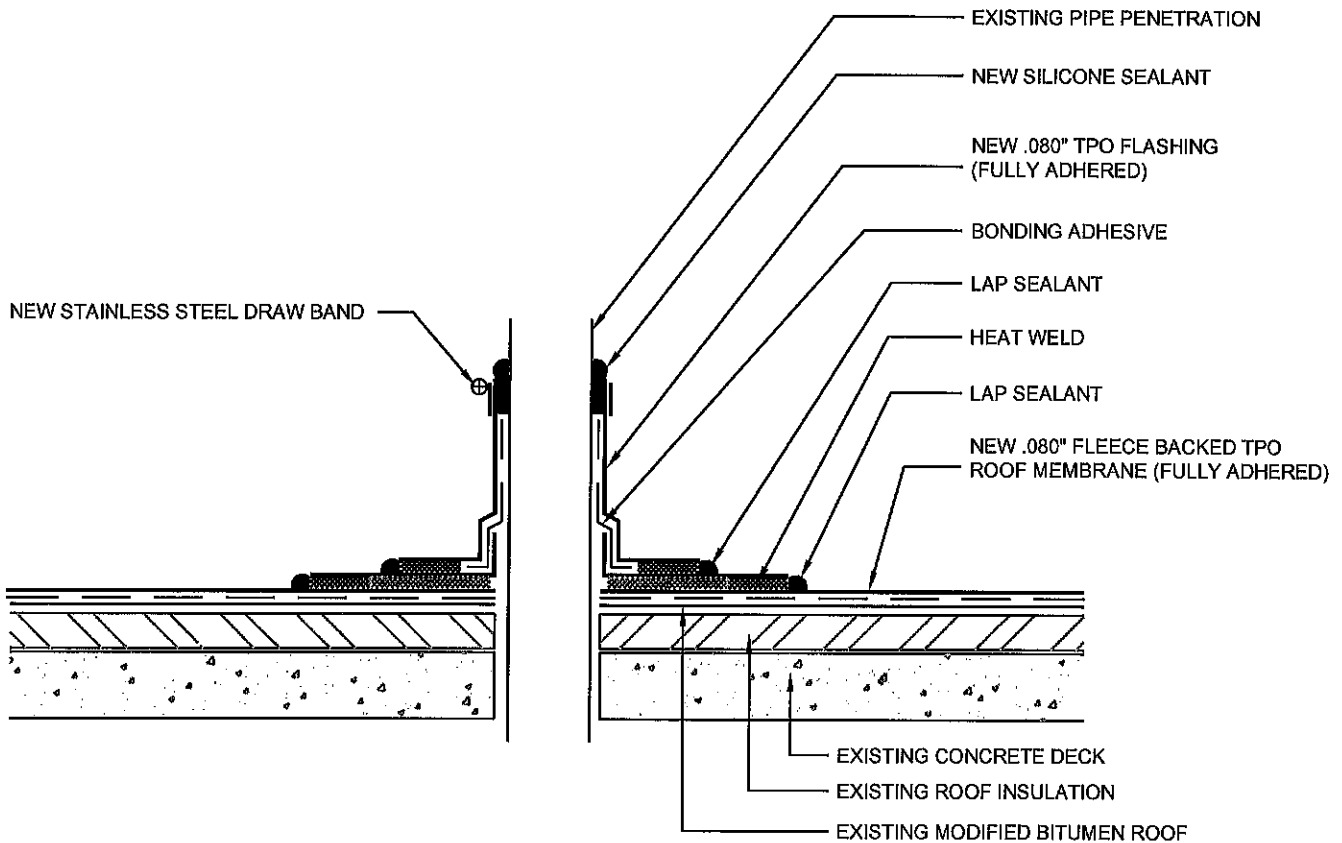
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

7



NOTES:

1. VENT STACKS AND OTHER PIPES SHOULD HAVE A MINIMUM OF 12" OF CLEARANCE ON ALL SIDES FROM WALLS, CURBS, AND OTHER PROJECTIONS TO FACILITATE PROPER FLASHING.

8

PIPE PENETRATION FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

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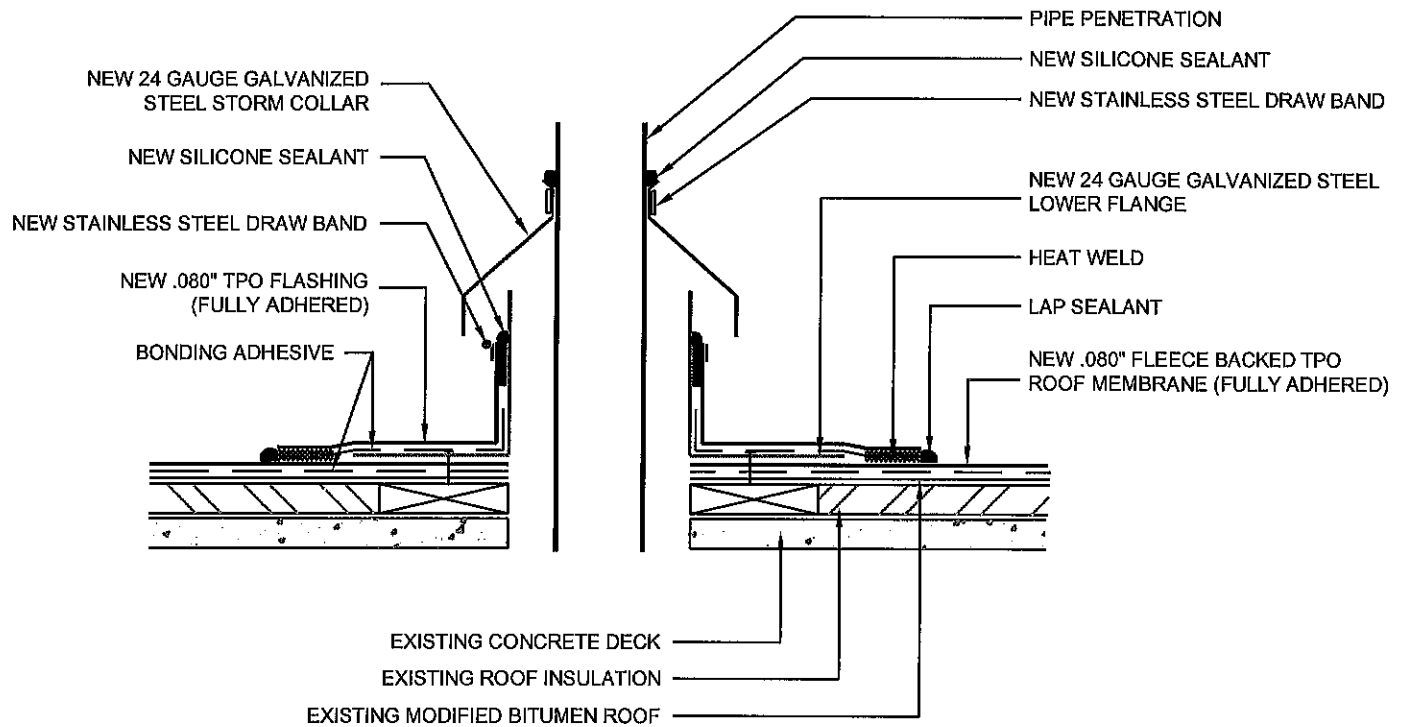
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

8



9

HOT STACK FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

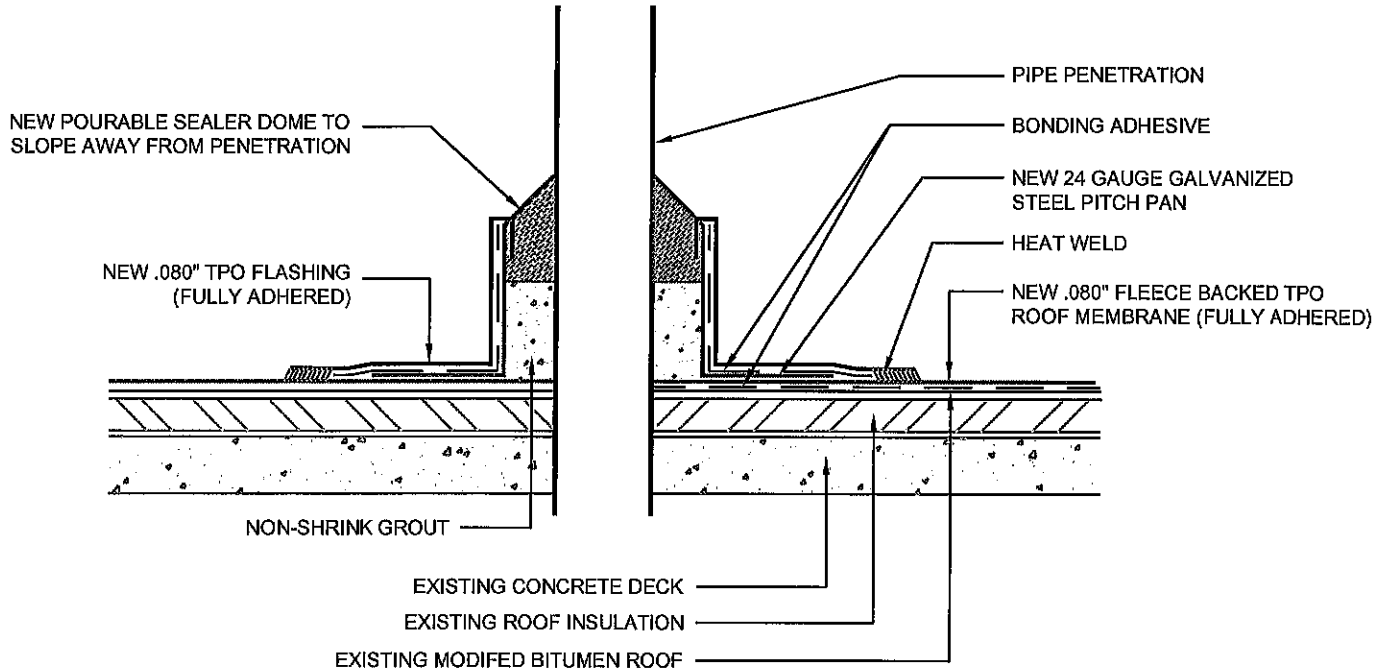
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

9



10

PITCH PAN FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

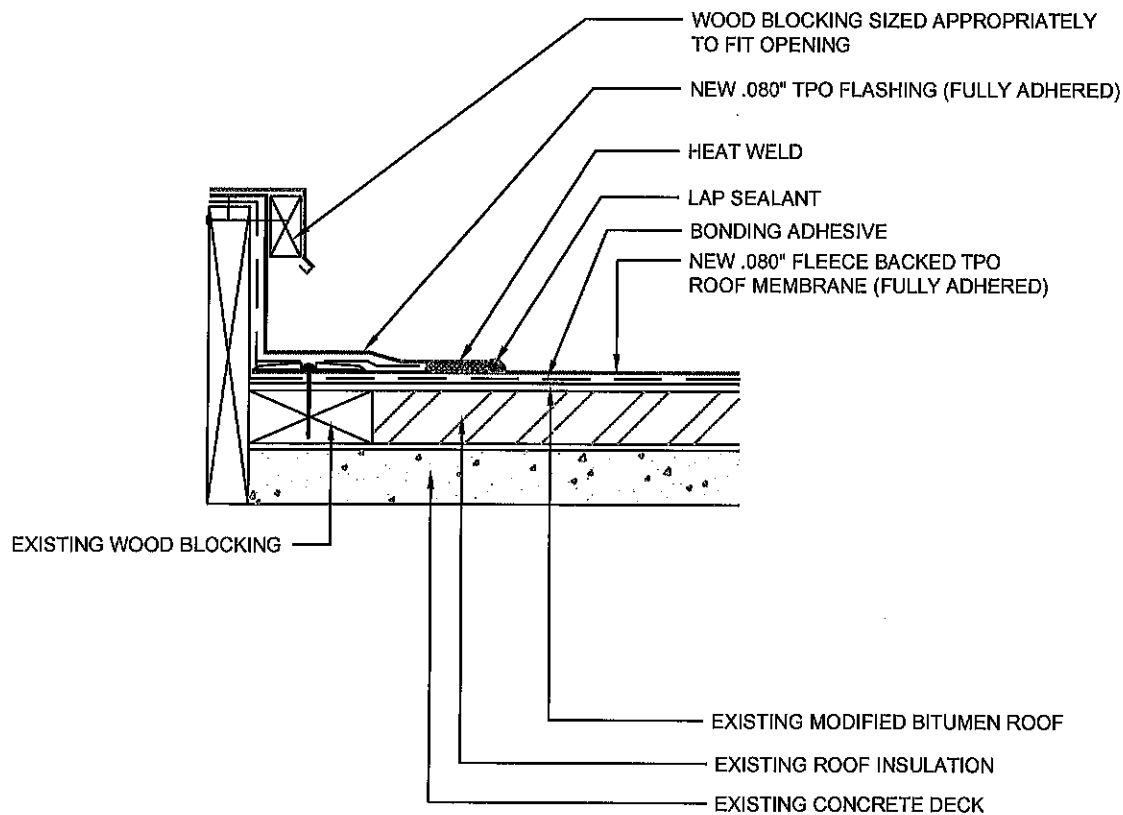
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

10



11

ROOF HATCH FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

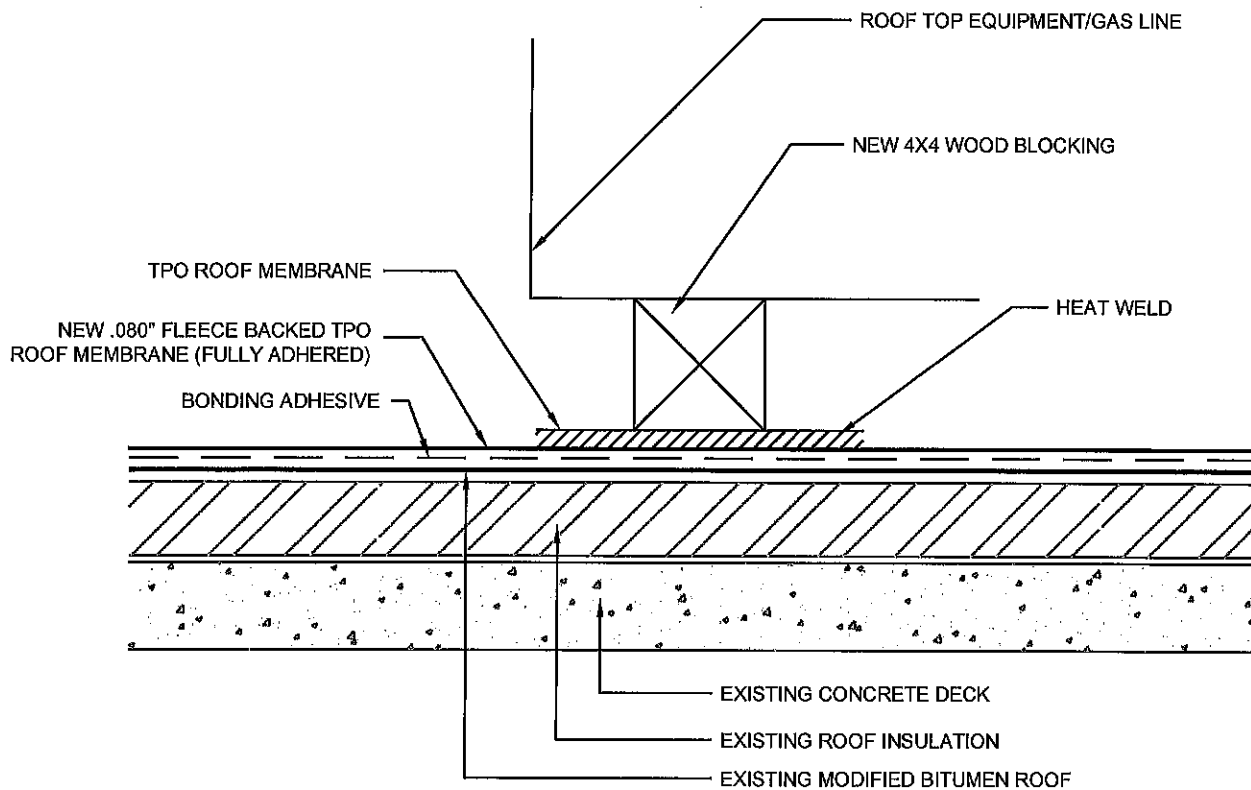
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

11



12

SLIP SHEET FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

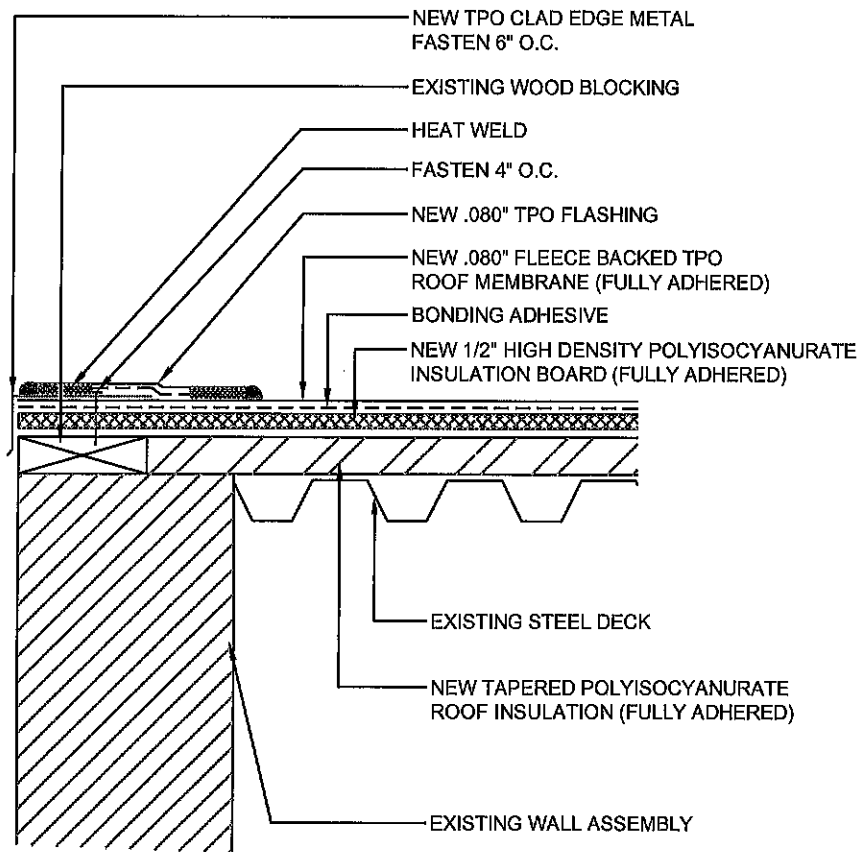
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

12



13

ROOF EDGE FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

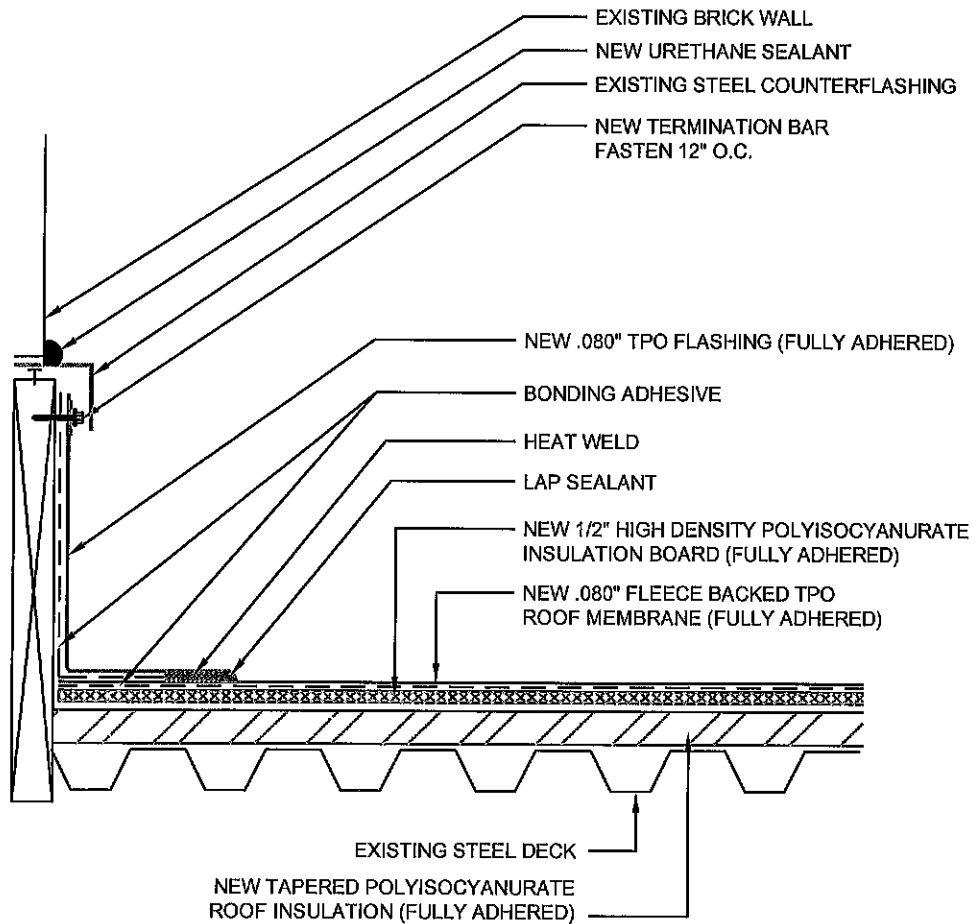
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

13



NOTE:

CUT EXISTING SINGLE-PLY MEMBRANE APPROXIMATELY THREE (3) FEET UP FROM ROOF SURFACE. INSTALL NEW FULLY ADHERED .80" SINGLE-PLY MEMBRANE AS SHOWN ON THE DRAWING.

14

WALL TERMINATION FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

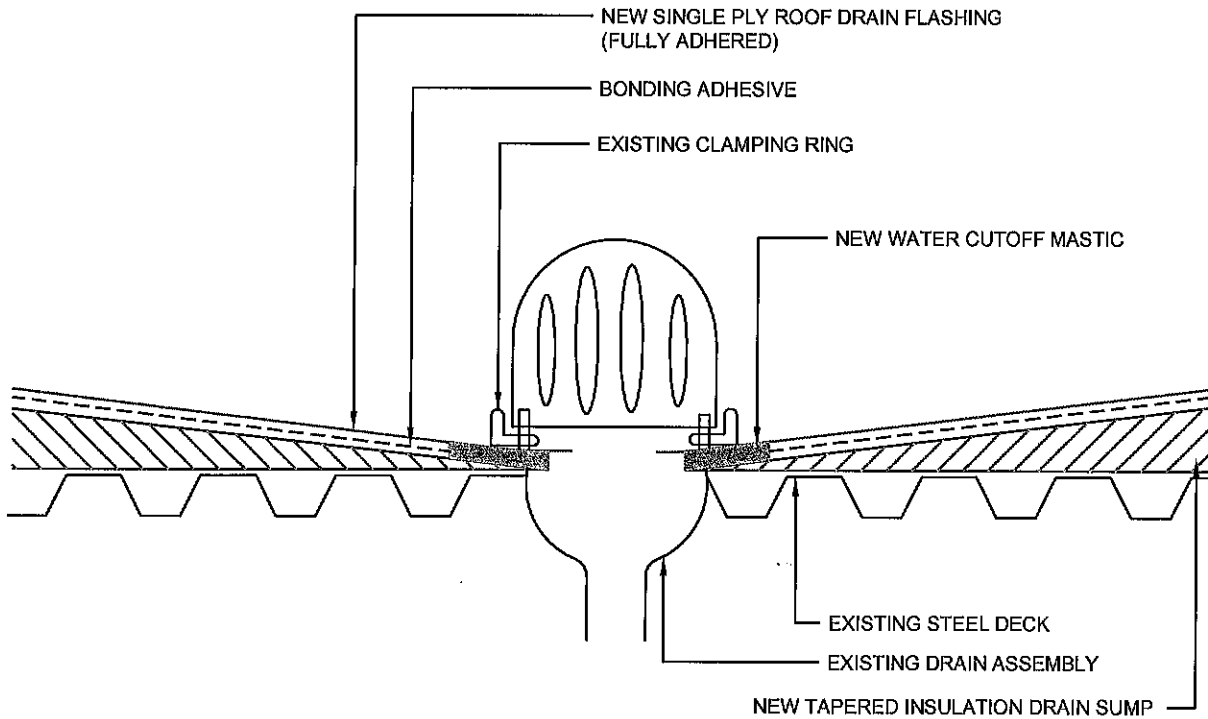
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

14



15

ROOF DRAIN FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

DATE: 09/03/2026

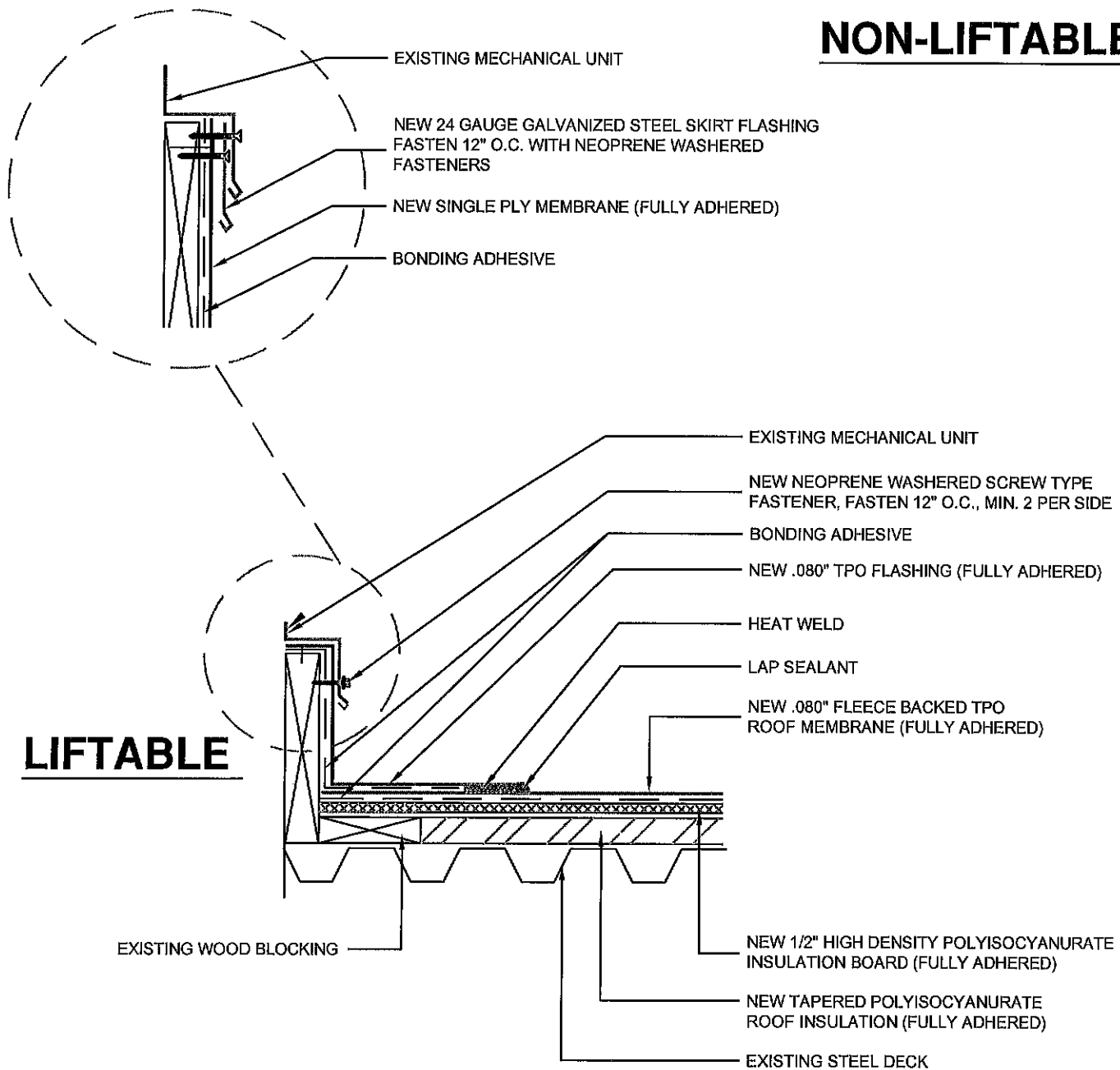
PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

15

NON-LIFTABLE



16

LIFTABLE/NON-LIFTABLE CURB FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

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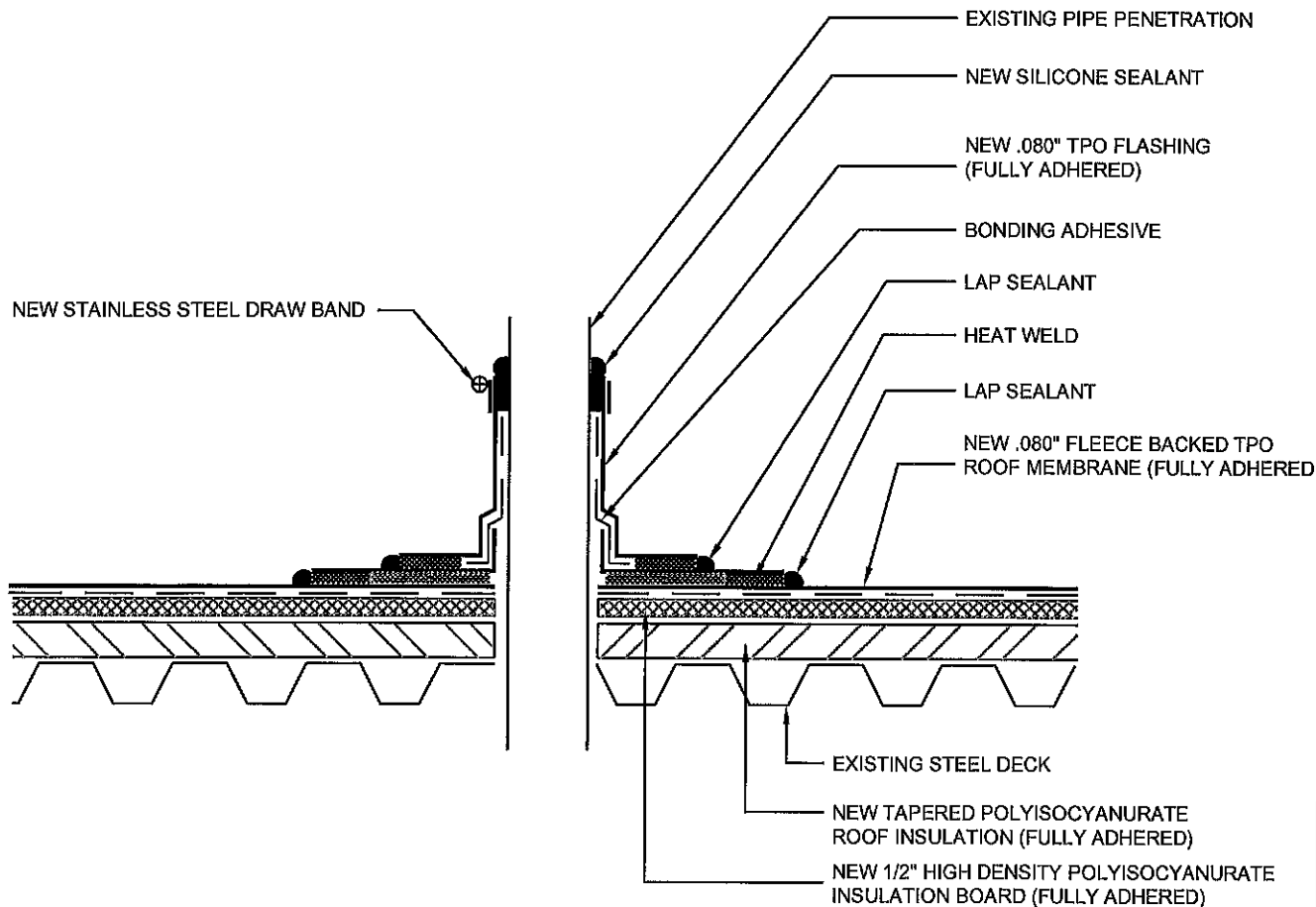
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

16



NOTES:

1. VENT STACKS AND OTHER PIPES SHOULD HAVE A MINIMUM OF 12" OF CLEARANCE ON ALL SIDES FROM WALLS, CURBS, AND OTHER PROJECTIONS TO FACILITATE PROPER FLASHING.

17

PIPE PENETRATION FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

Roof Asset
Management
Services LLC

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

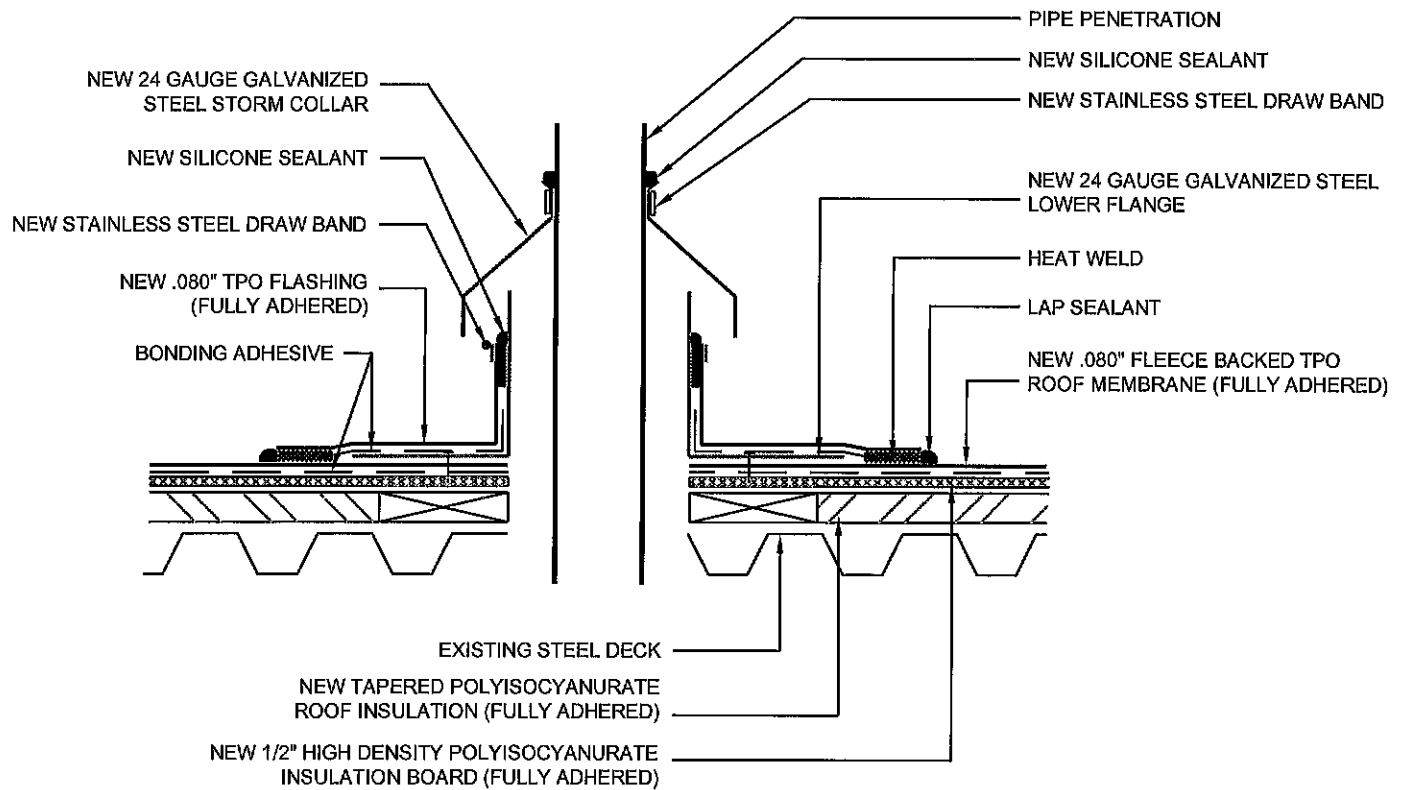
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

17



18

HOT STACK FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

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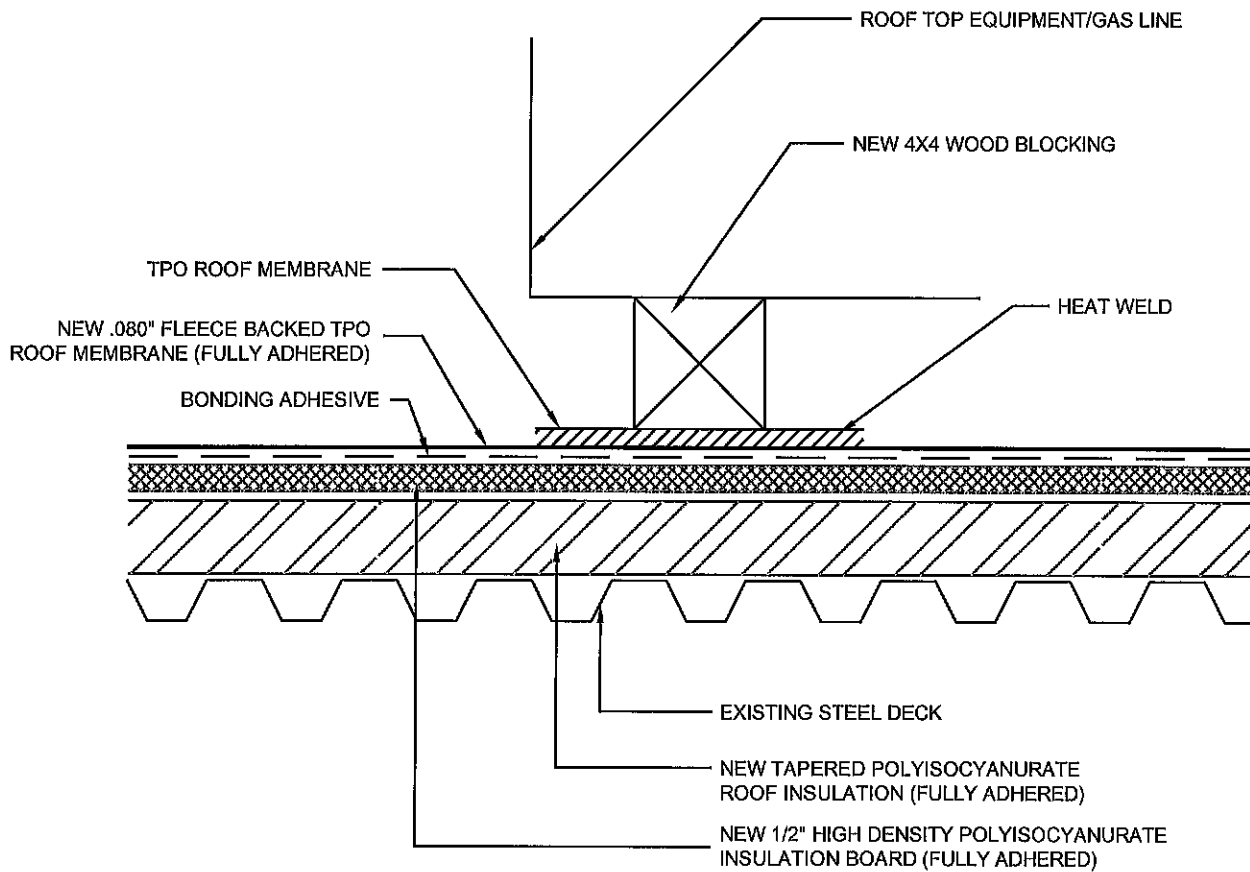
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

18



19

SLIP SHEET FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

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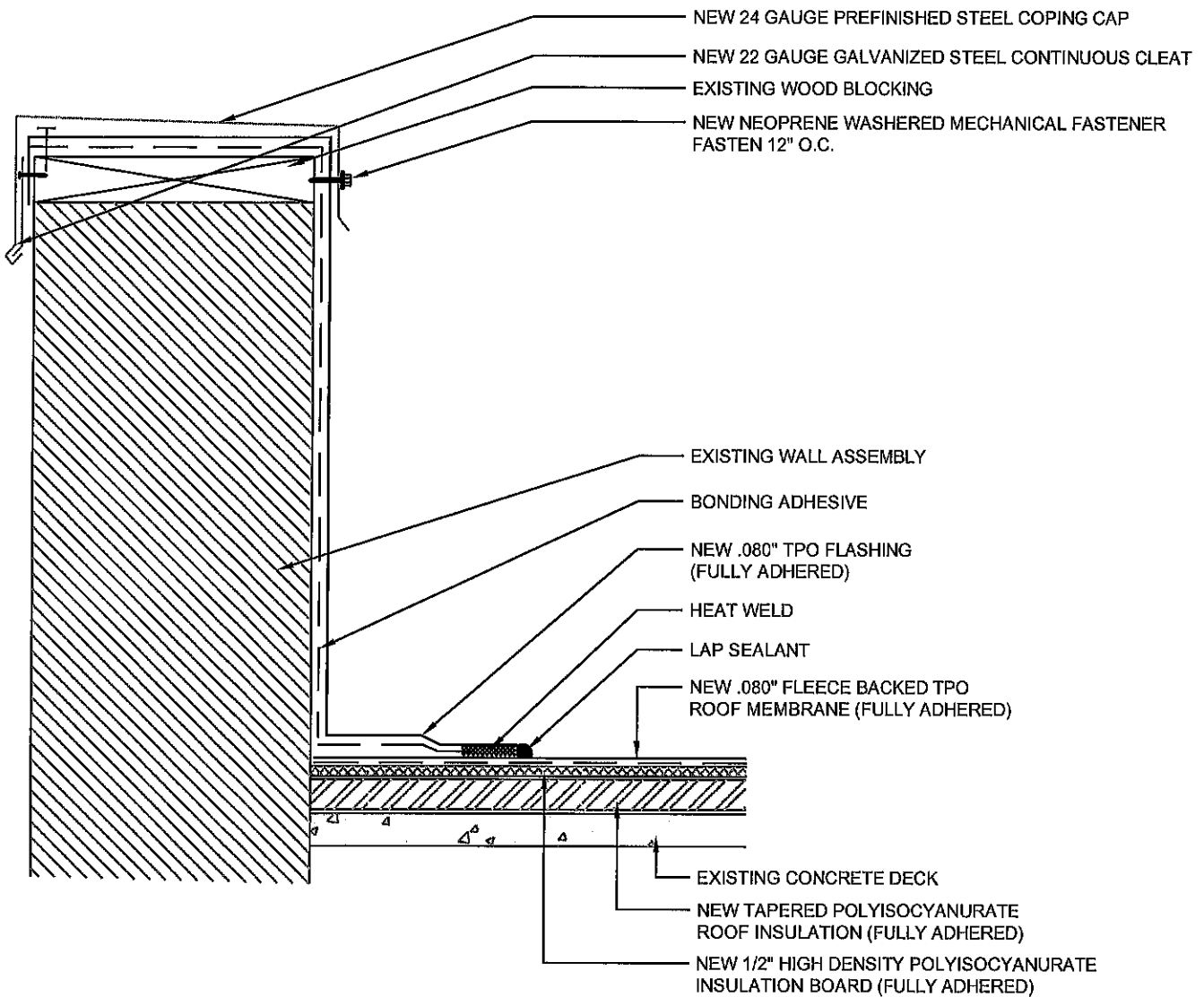
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

19



20

PARAPET WALL FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

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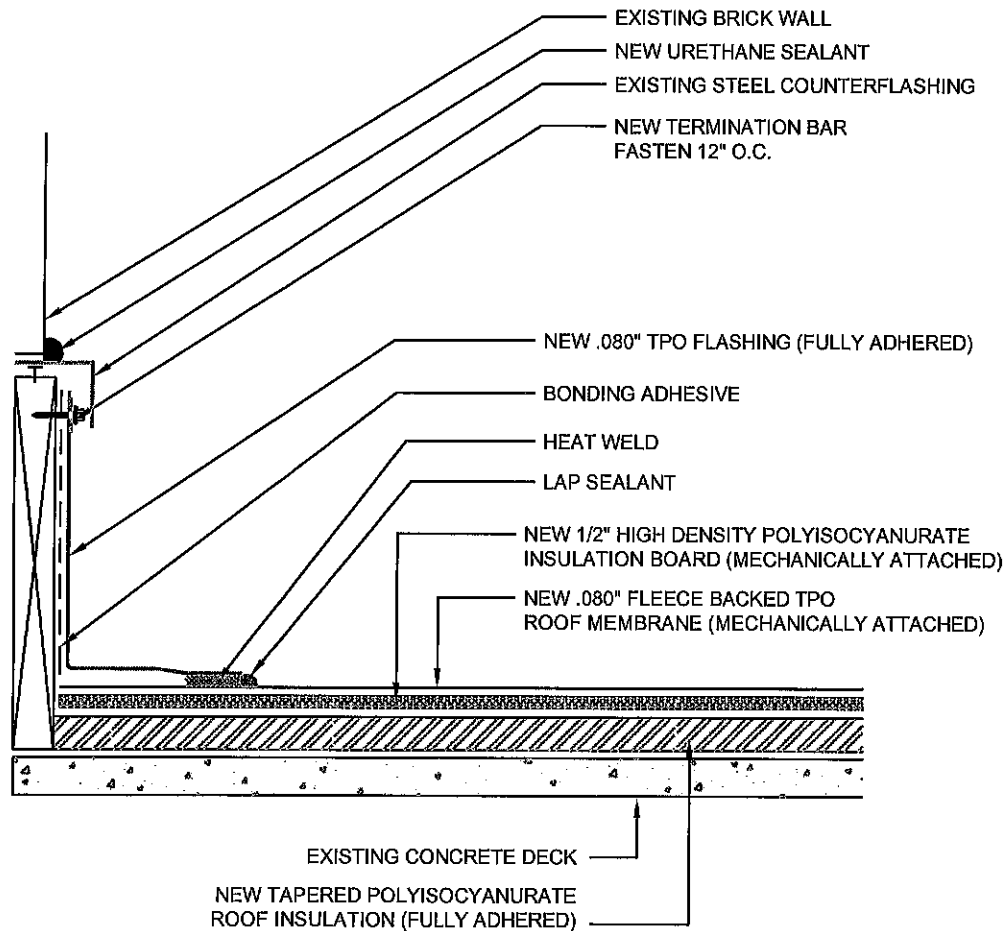
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

20



NOTE:

CUT EXISTING MEMBRANE APPROXIMATELY THREE (3) FEET UP FROM ROOF SURFACE. INSTALL NEW FULLY ADHERED .080" SINGLE PLY MEMBRANE AS SHOWN ON THE DRAWING.

21

WALL TERMINATION FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

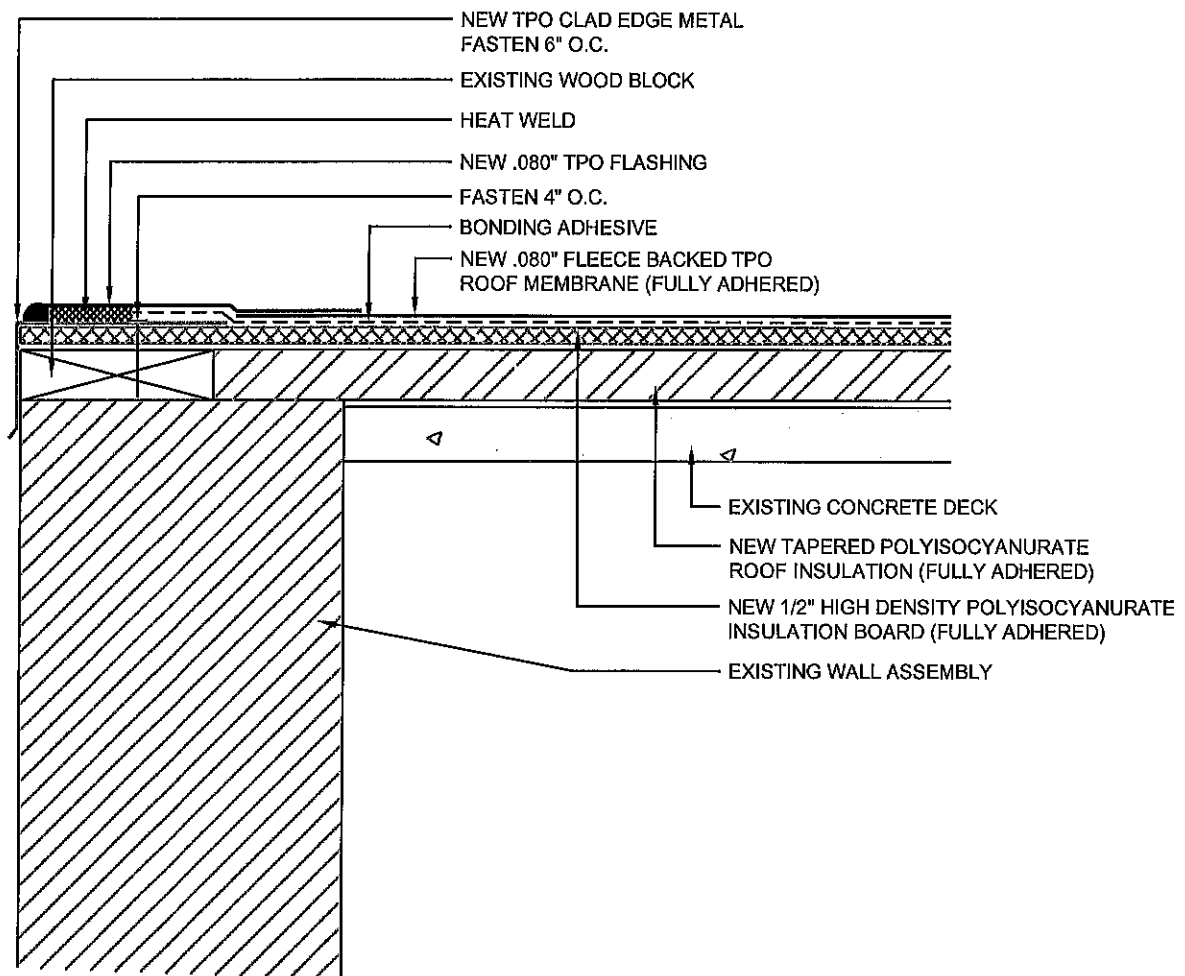
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

21



22

ROOF EDGE FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

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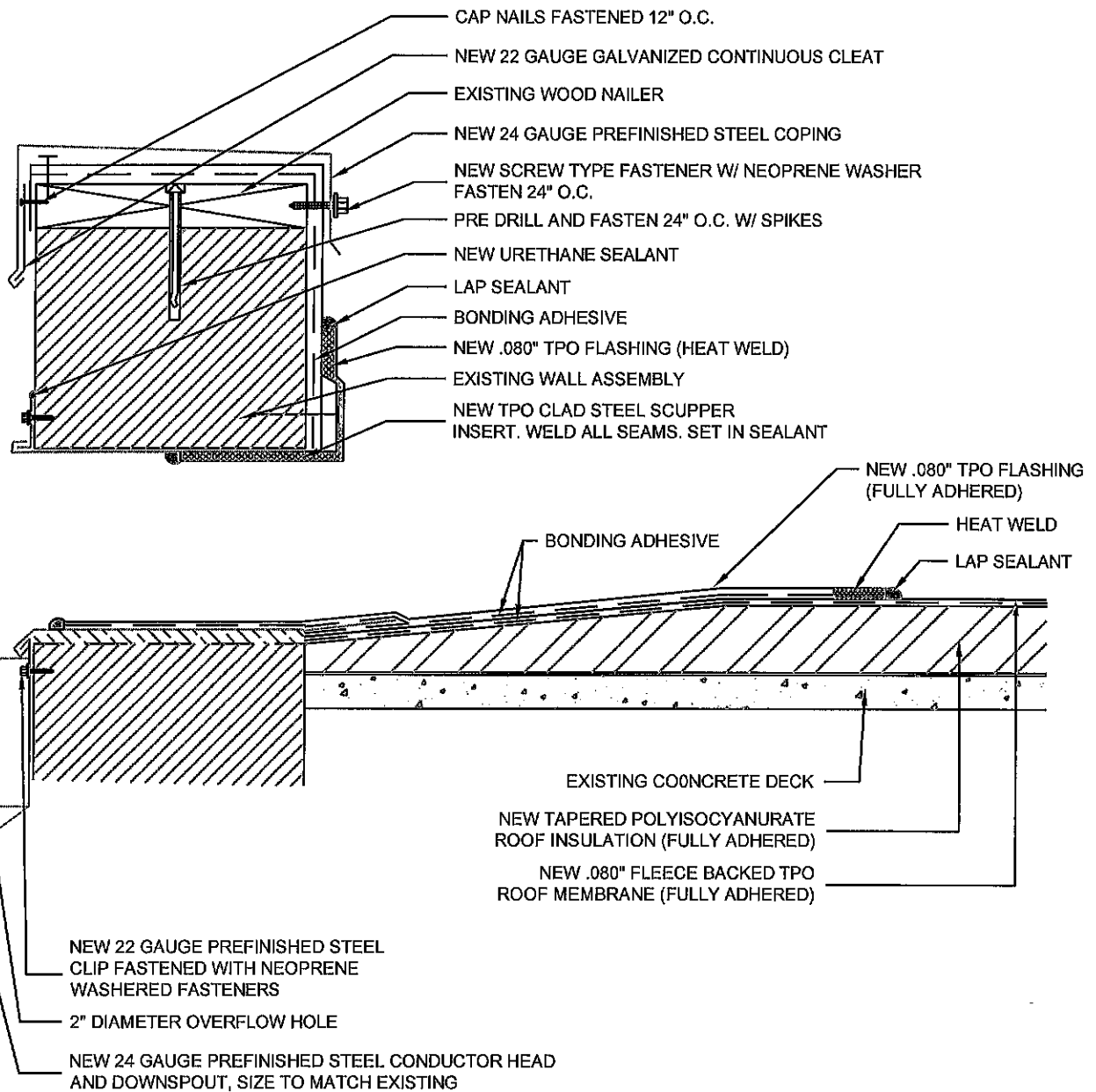
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

22



NOTE

INSTALL NEW 24 GAUGE PREFINISHED STEEL CONDUCTOR HEADS AND DOWNSPOUTS IN ACCORDANCE WITH SMACNA.

23

THROUGH WALL SCUPPER FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

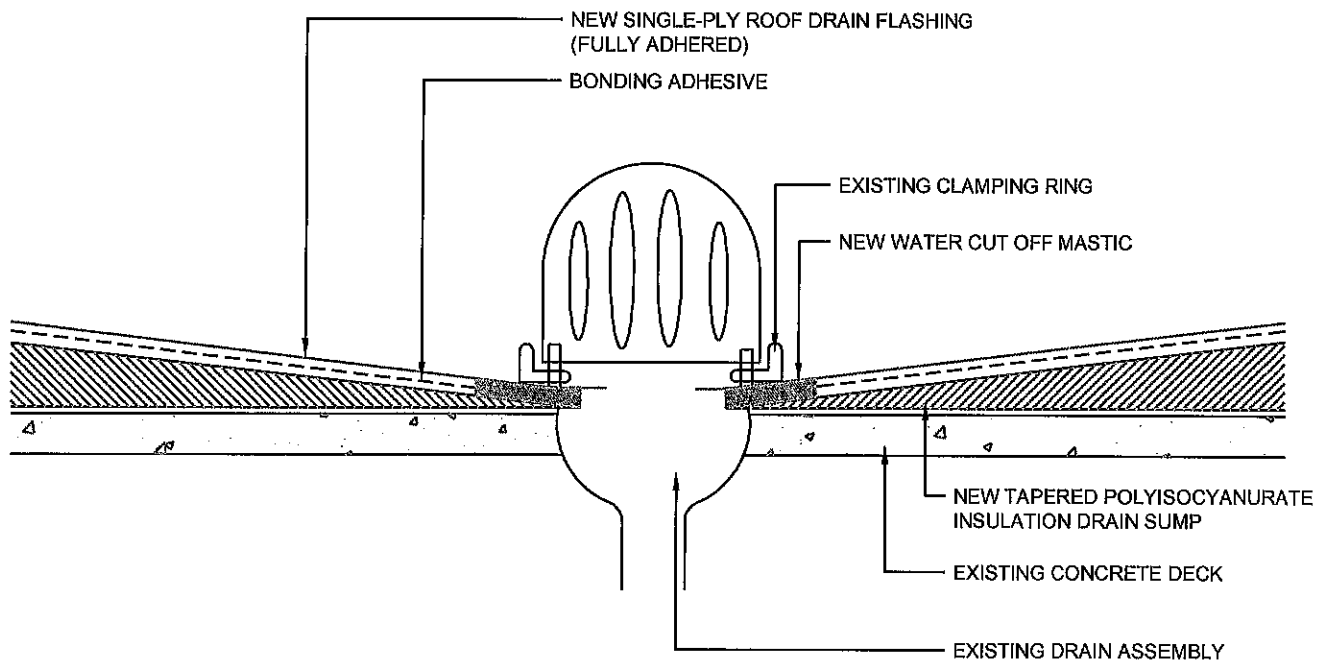
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

23



24

ROOF DRAIN FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

DATE: 09/03/2026

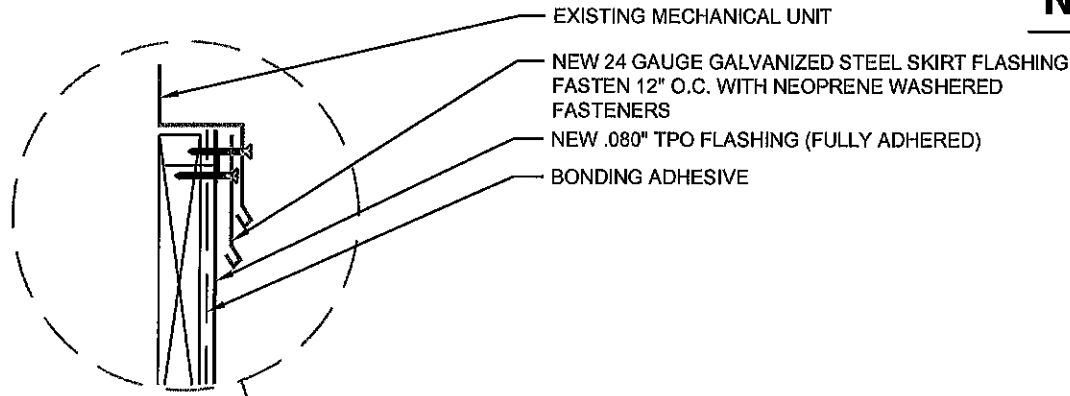
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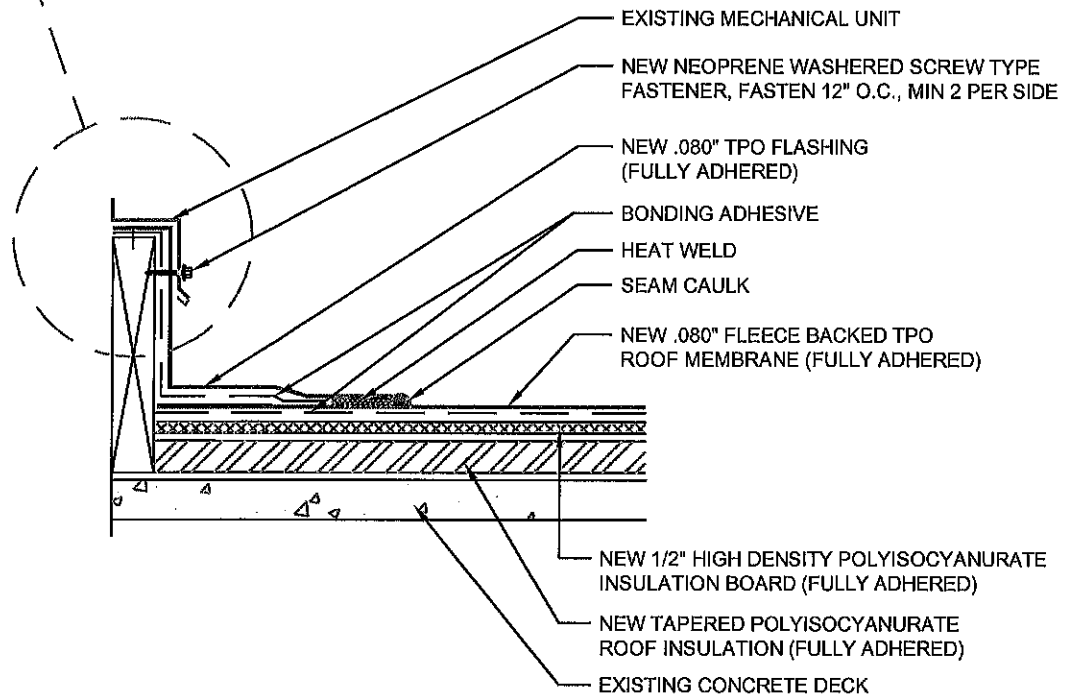
MANAGER: OATHOUT

24

NON-LIFTABLE



LIFTABLE



25

LIFTABLE/NON-LIFTABLE CURB FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

Roof Asset
Management
Services LLC

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

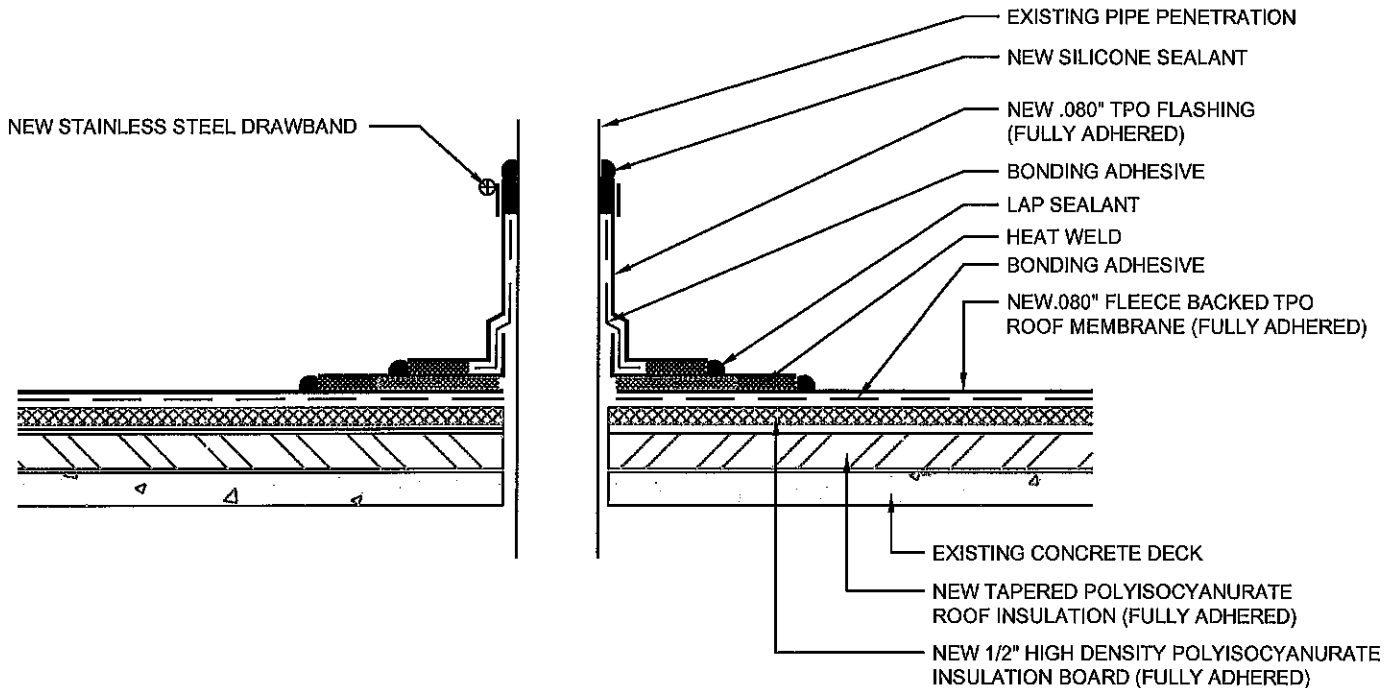
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

25



NOTES:

1. VENT STACKS AND OTHER PIPES SHOULD HAVE A MINIMUM OF 12" OF CLEARANCE ON ALL SIDES FROM WALLS, CURBS, AND OTHER PROJECTIONS TO FACILITATE PROPER FLASHING.

26

PIPE PENETRATION FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

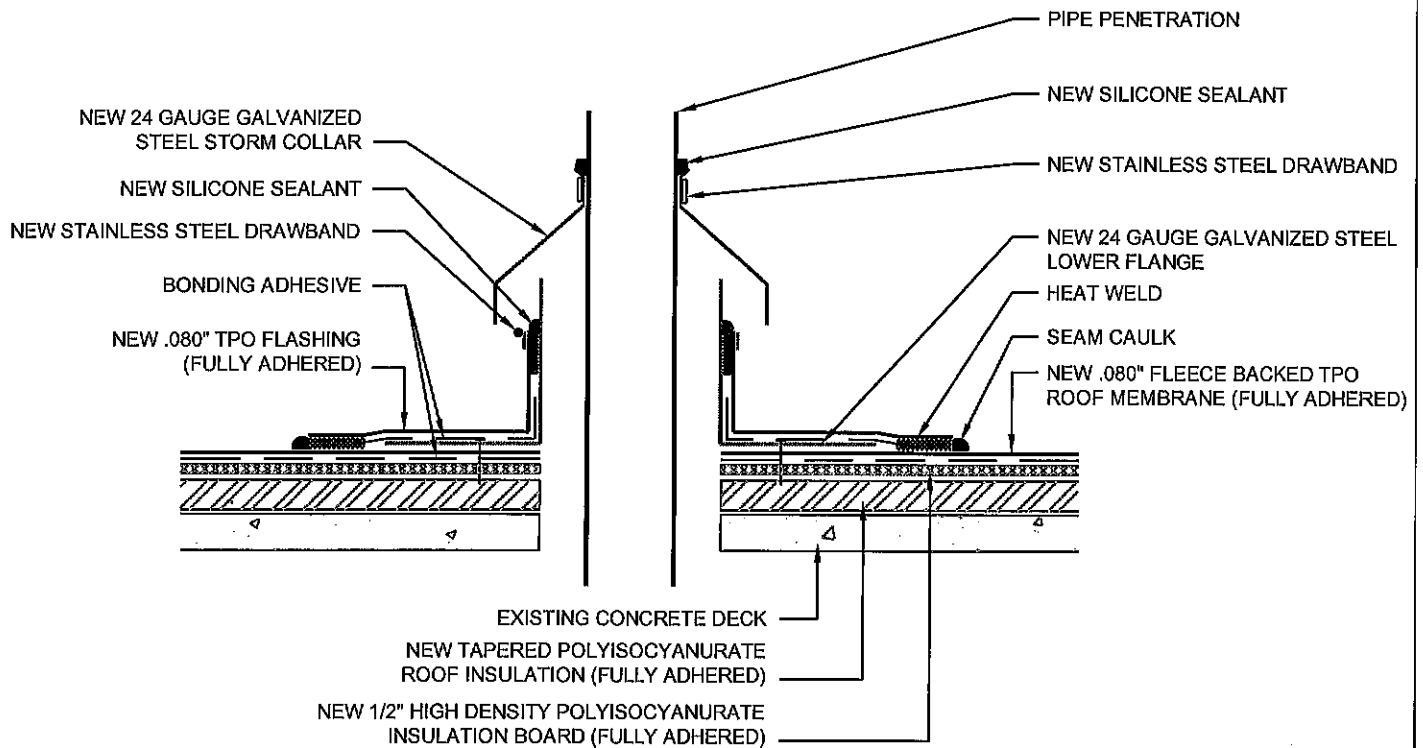
**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS		
NO.	DATE	DESCRIPTION

SCALE:	N.T.S.
DATE:	09/03/2026
PROJECT#	2026039
DRAWN BY:	NICHOLS
MANAGER:	OATHOUT

26



27

HOT STACK FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
**MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI**

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

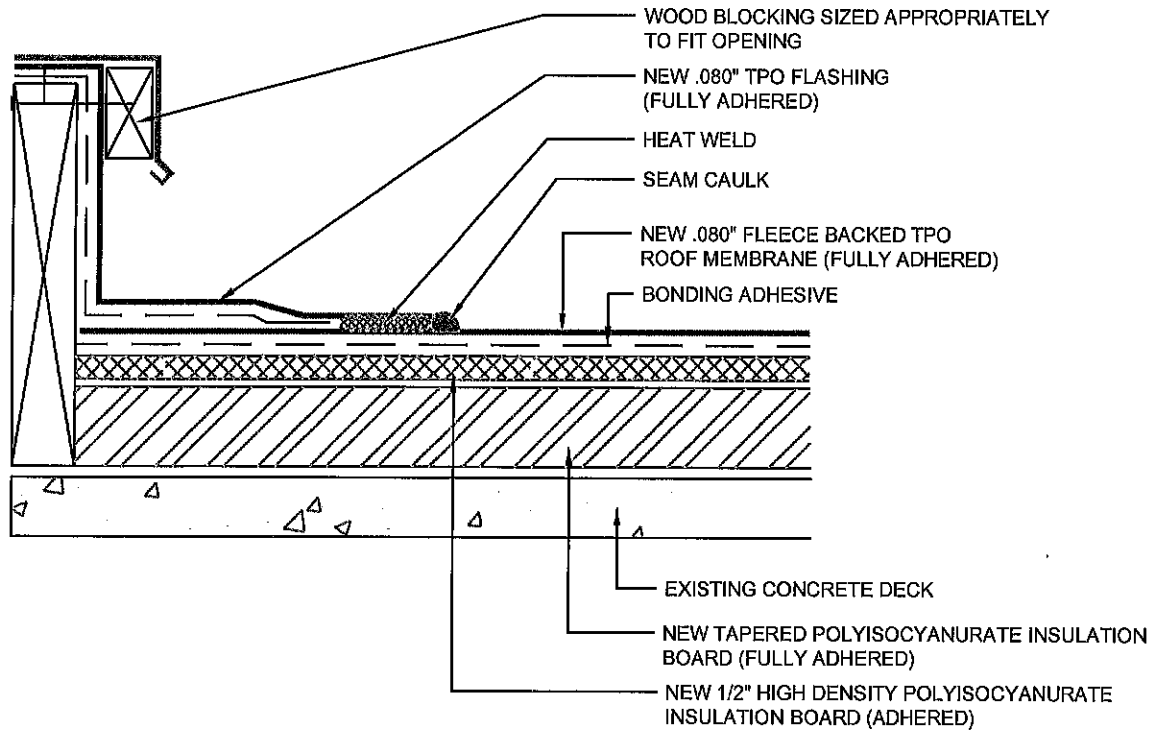
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

27



28

ROOF HATCH FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

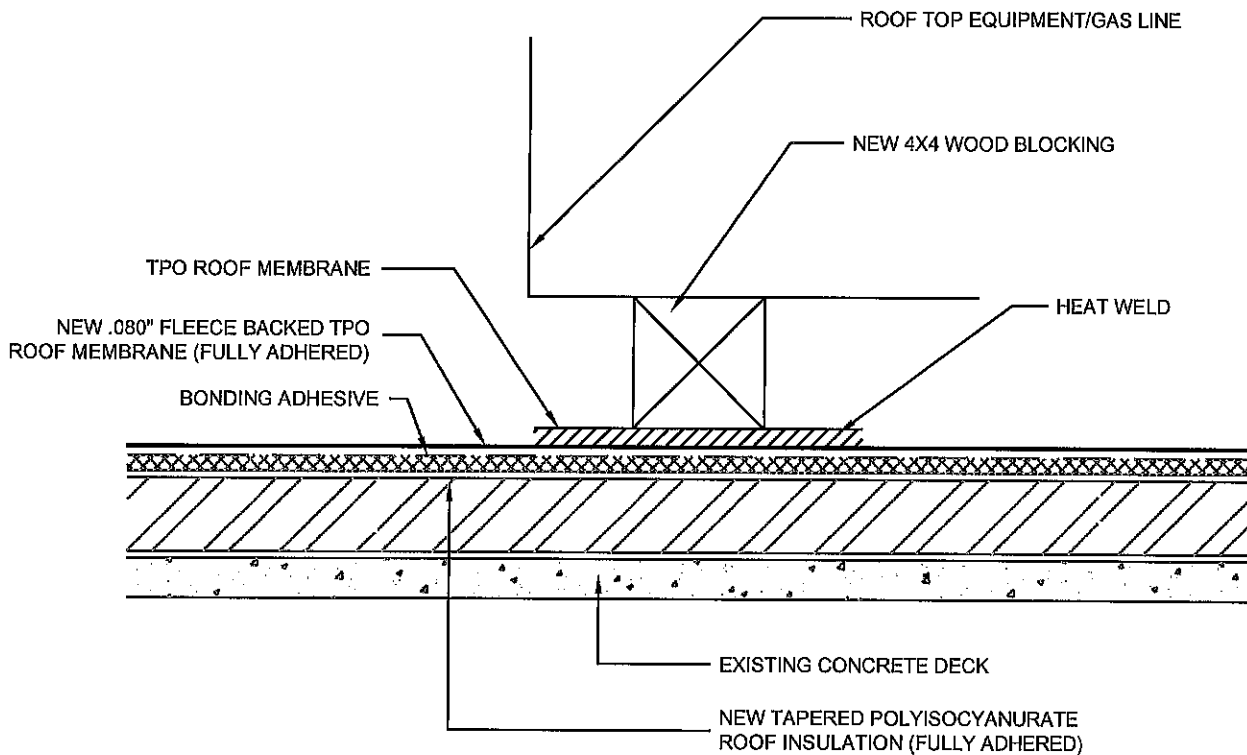
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

28



29

SLIP SHEET FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

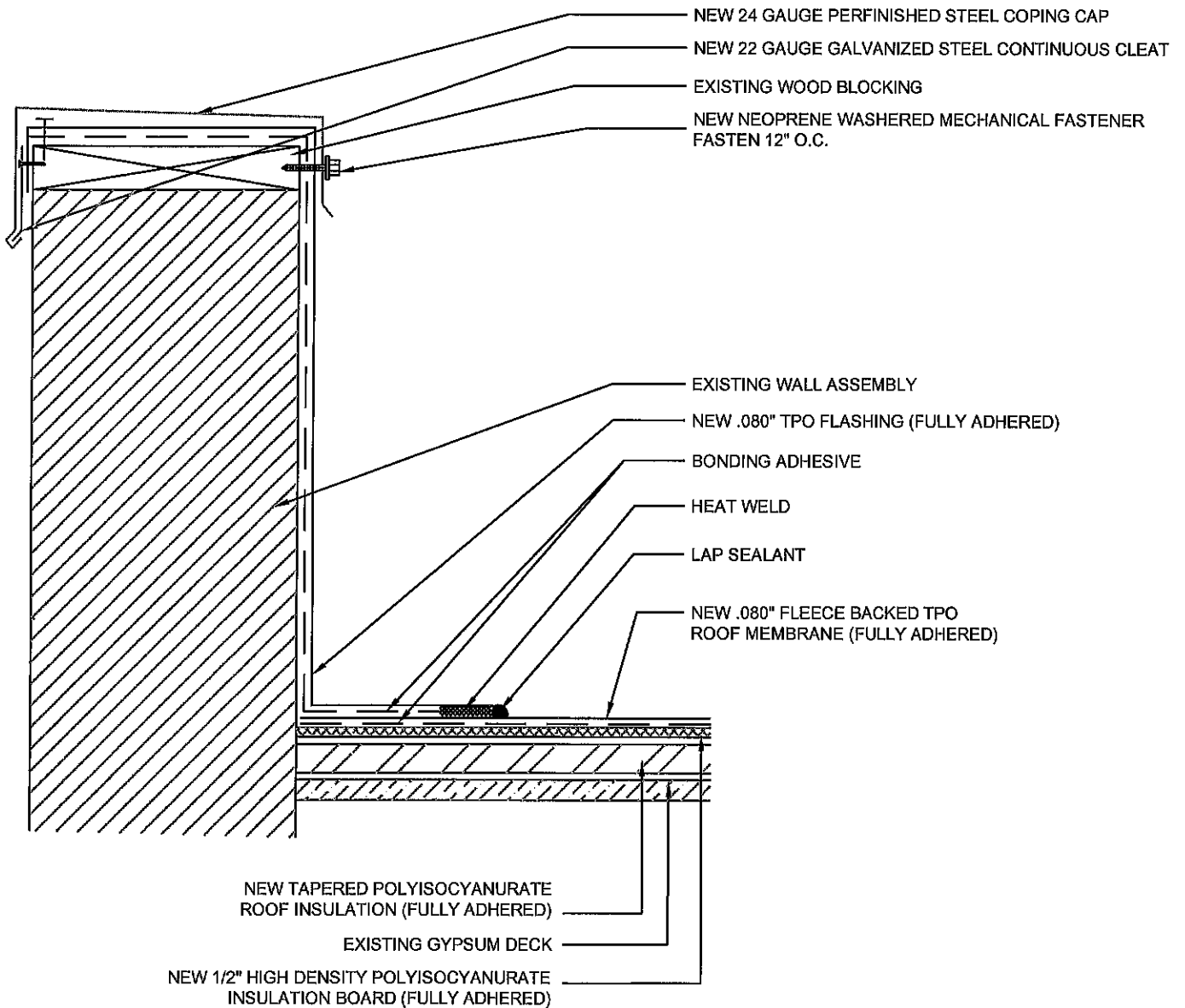
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

29



30

PARAPET WALL FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

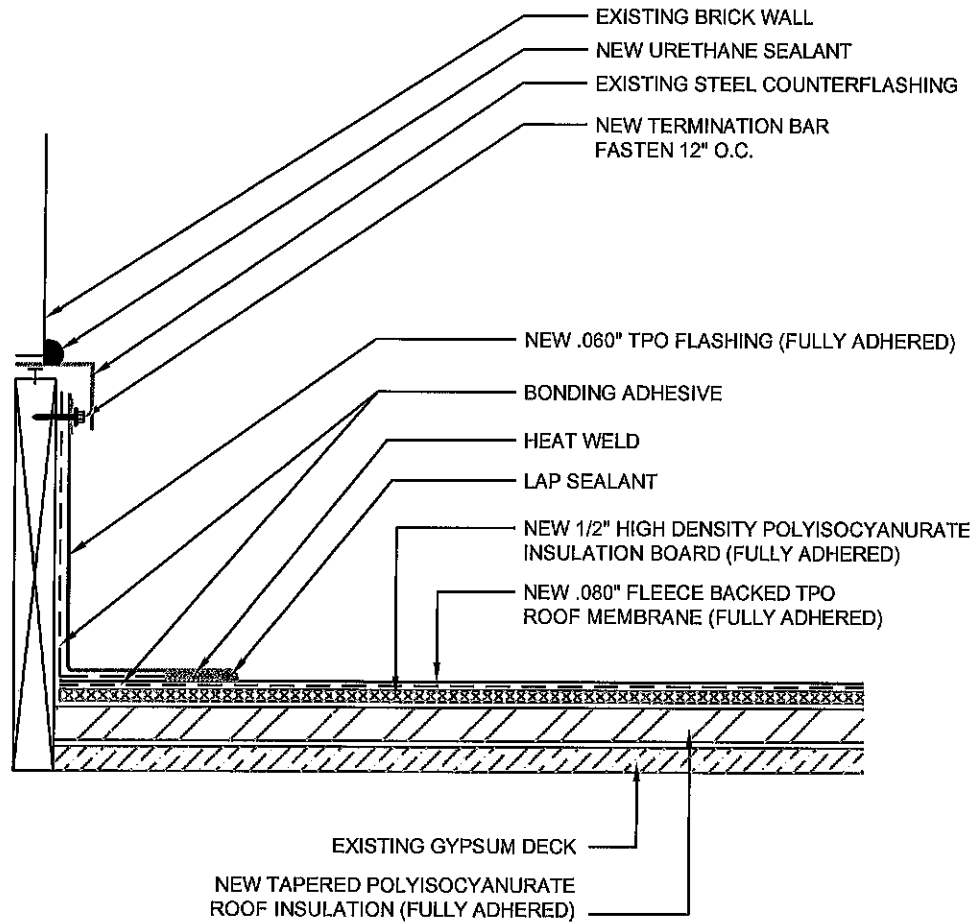
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

30



NOTE:

CUT EXISTING MEMBRANE APPROXIMATELY THREE (3) FEET UP FROM ROOF SURFACE. INSTALL NEW FULLY ADHERED .60" SINGLE PLY MEMBRANE AS SHOWN ON THE DRAWING.

31

WALL TERMINATION FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

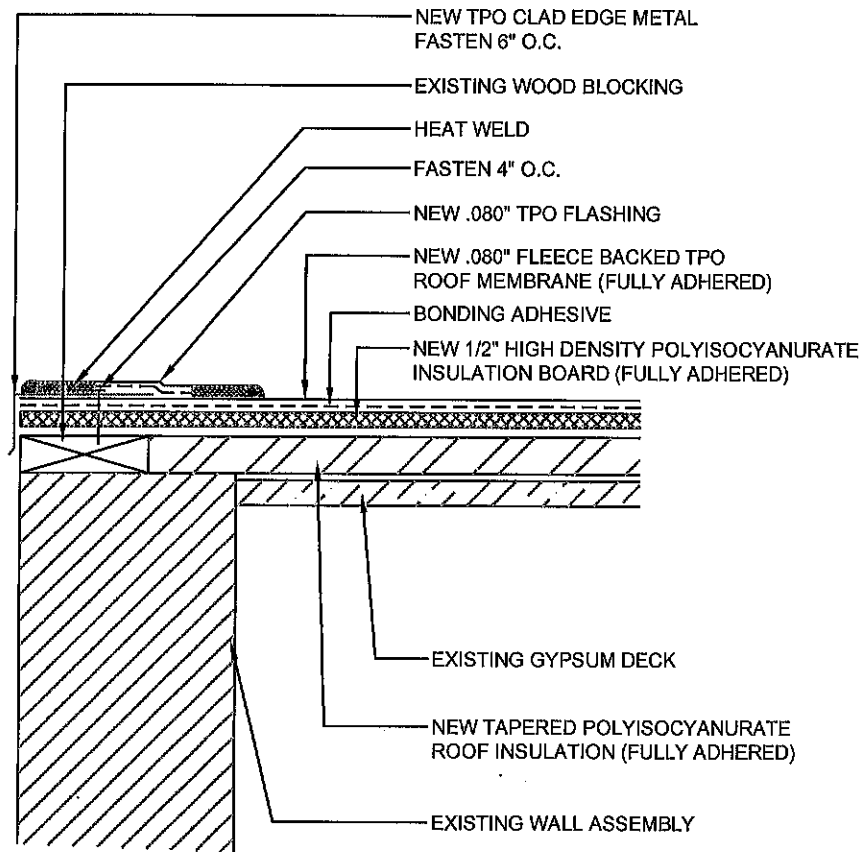
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

31



32

ROOF EDGE FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

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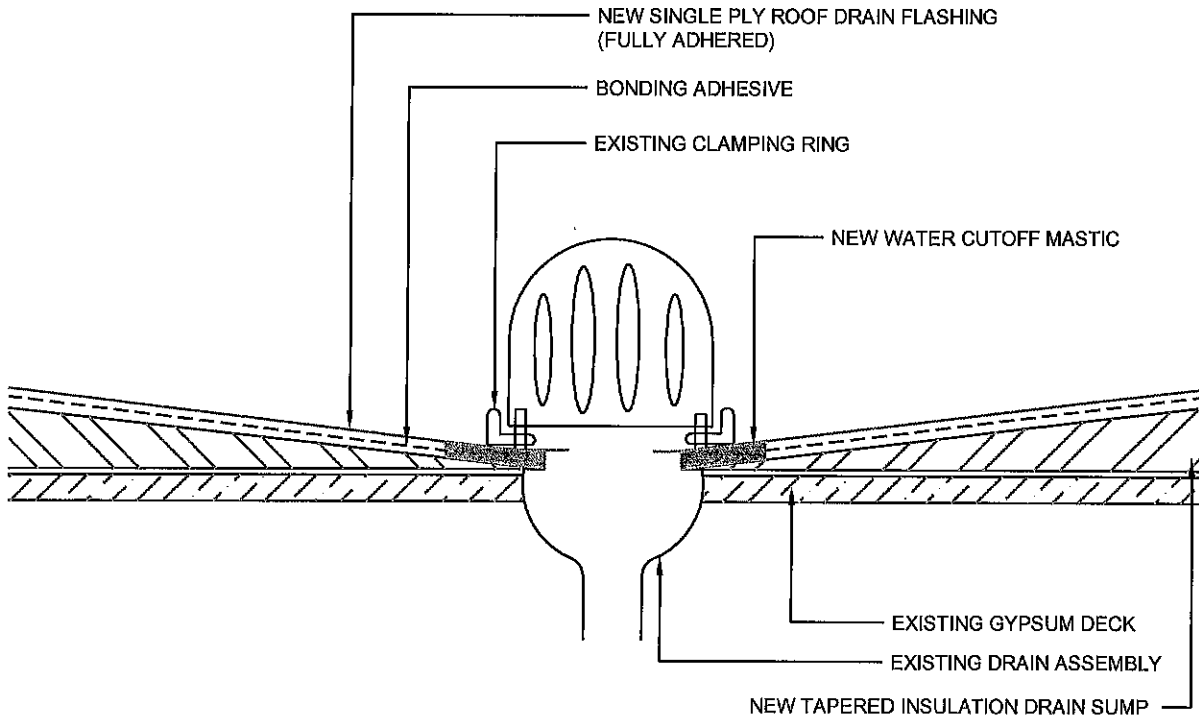
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

32



33

ROOF DRAIN FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

DATE: 09/03/2026

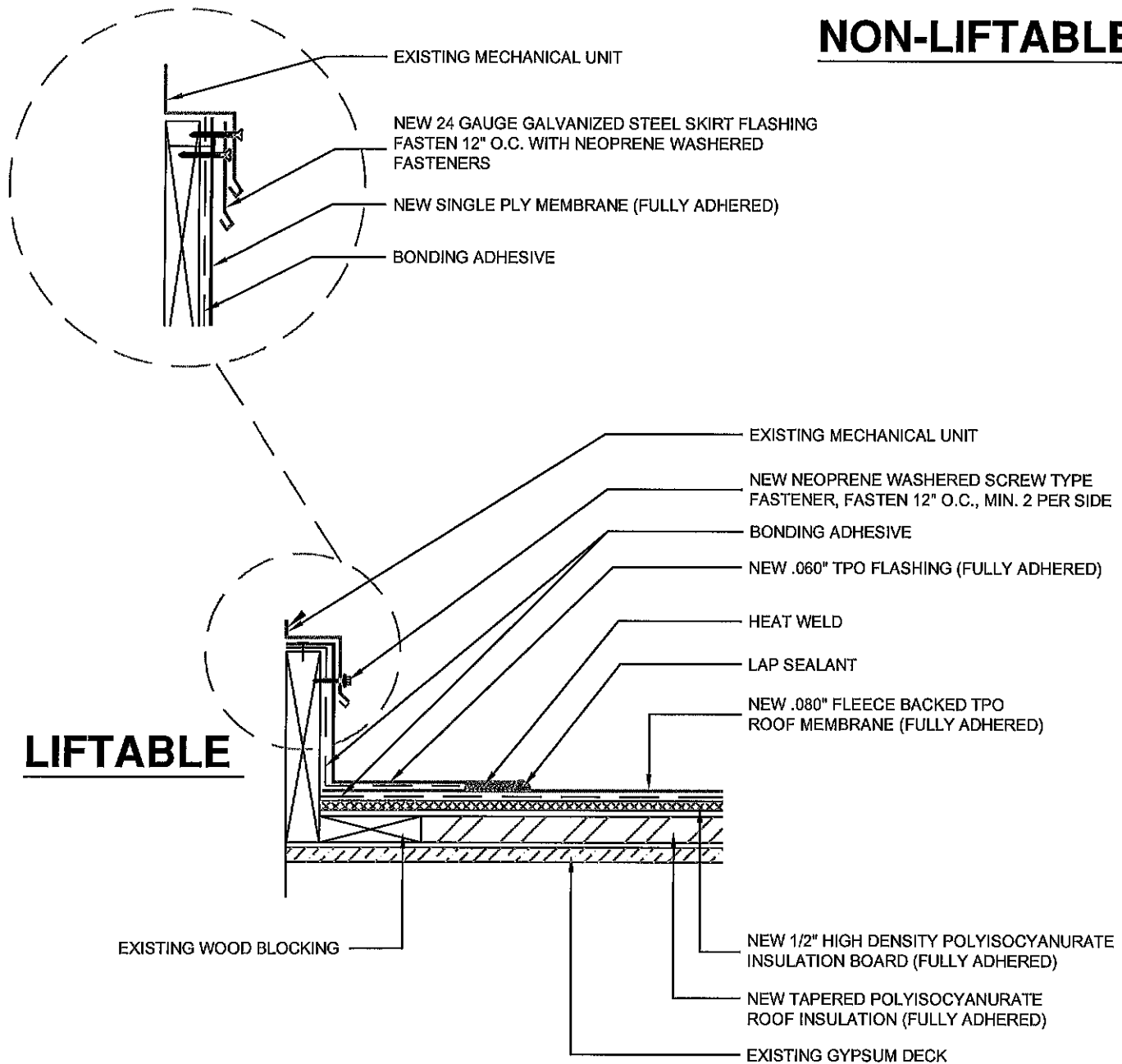
PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

33

NON-LIFTABLE



34 LIFTABLE/NON-LIFTABLE CURB FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

**Roof Asset
Management
Services LLC**

ROOF RECOVERY AND REPLACEMENT FOR:
MISSOURI SOUTHERN STATE UNIVERSITY
FINE ARTS COMPLEX
3950 NEWMAN ROAD
JOPLIN, MISSOURI

REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

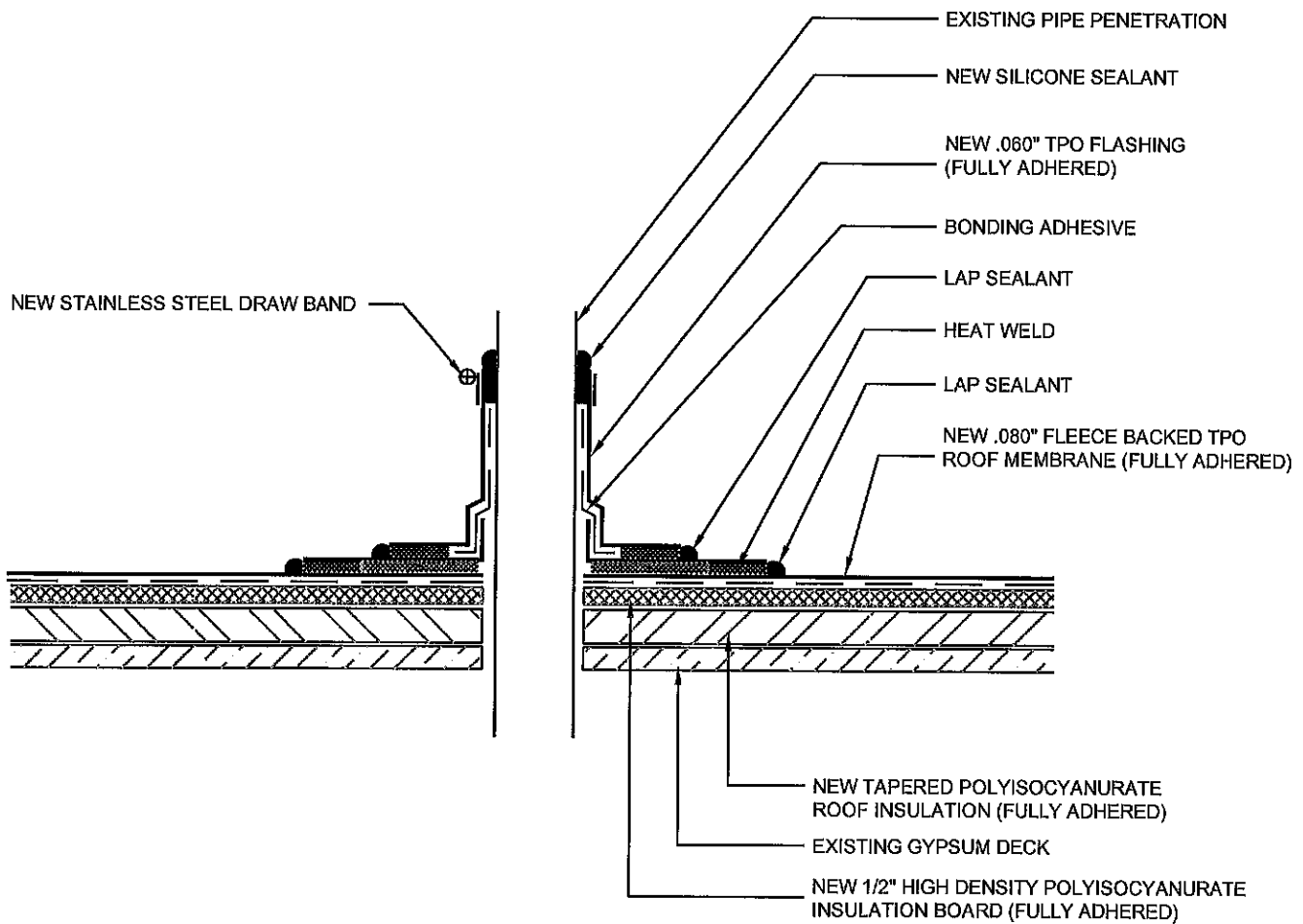
DATE: 09/03/2026

PROJECT# 2026039

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MANAGER: OATHOUT

34



NOTES:

1. VENT STACKS AND OTHER PIPES SHOULD HAVE A MINIMUM OF 12" OF CLEARANCE ON ALL SIDES FROM WALLS, CURBS, AND OTHER PROJECTIONS TO FACILITATE PROPER FLASHING.

35

PIPE PENETRATION FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

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REVISIONS

NO.	DATE	DESCRIPTION

SCALE: N.T.S.

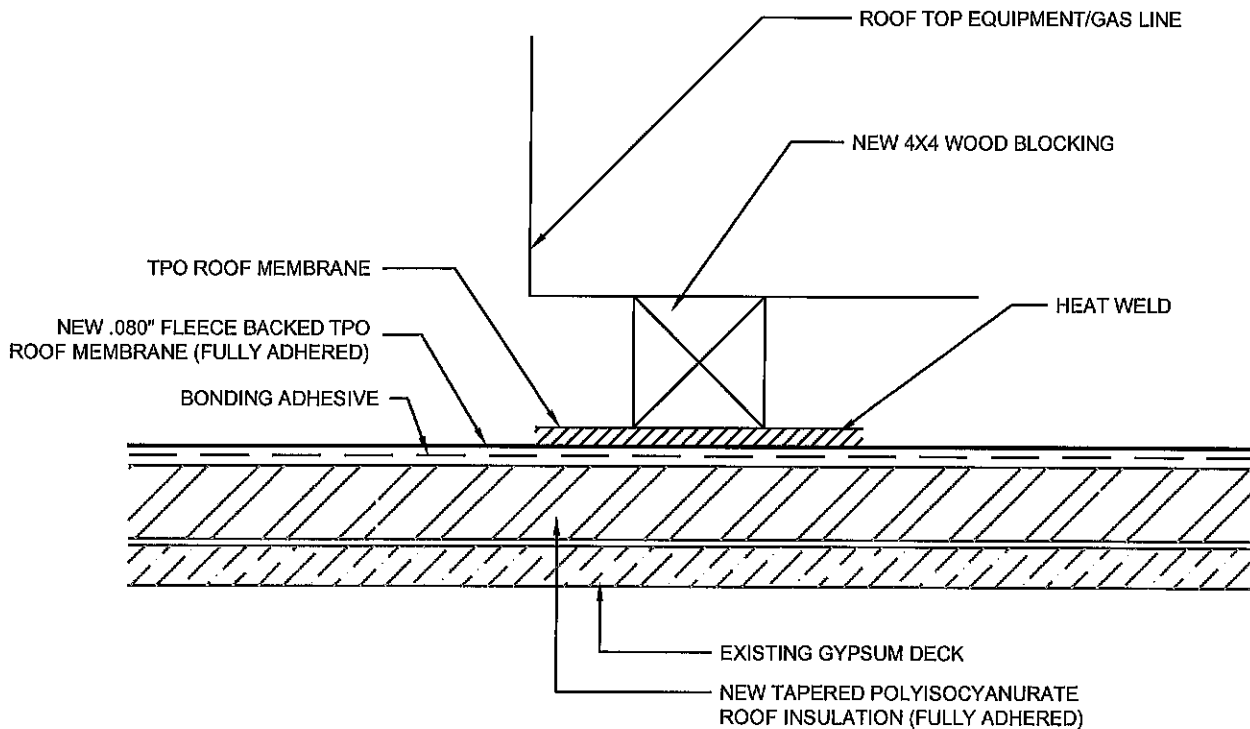
DATE: 09/03/2026

PROJECT# 2026039

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MANAGER: OATHOUT

35



36

SLIP SHEET FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

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SCALE: N.T.S.

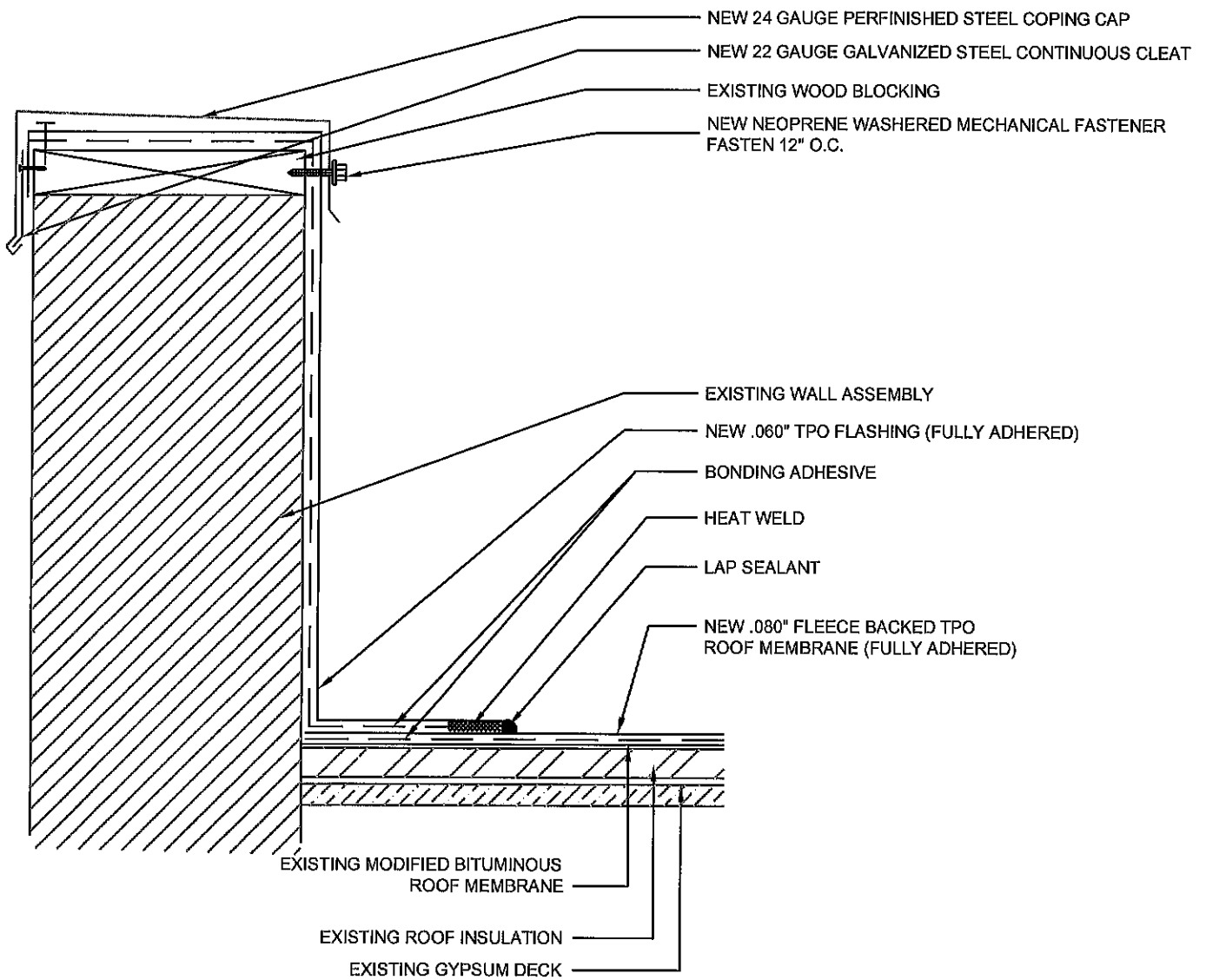
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

36



37

PARAPET WALL FLASHING DETAIL

SCALE= N.T.S.

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SCALE: N.T.S.

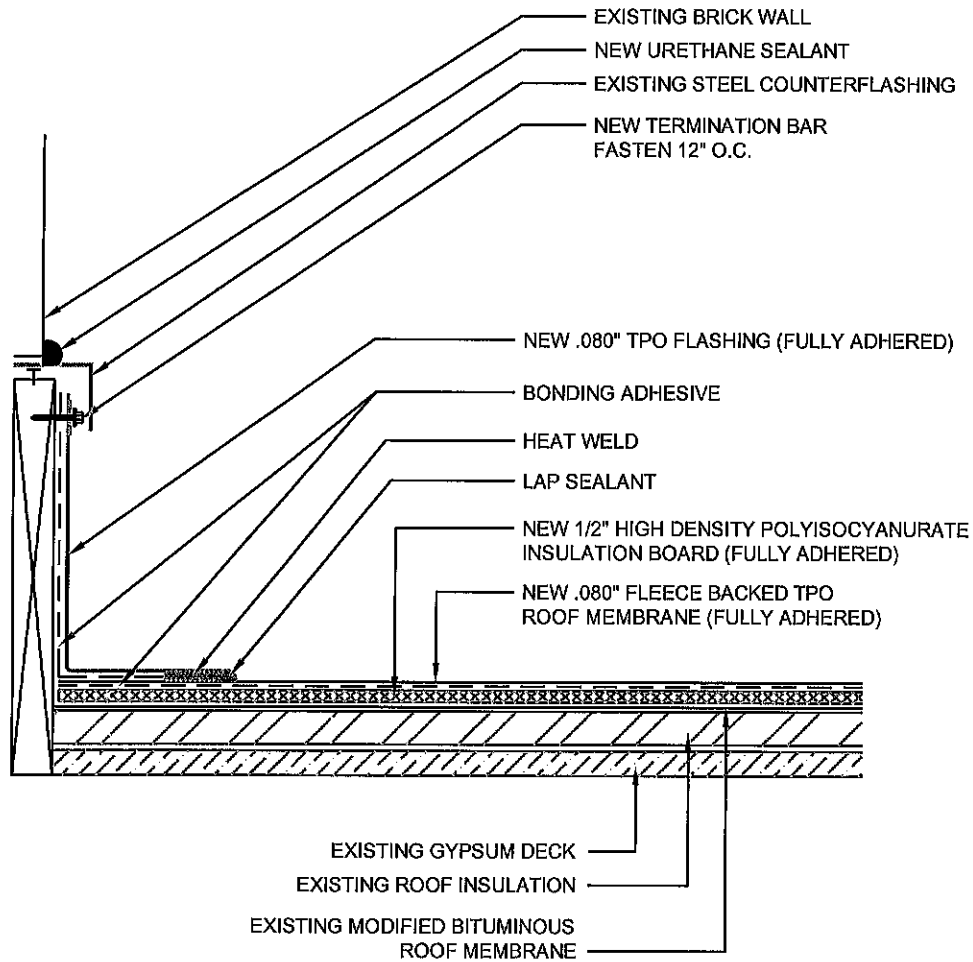
DATE: 09/03/2026

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MANAGER: OATHOUT

37



NOTE:

CUT EXISTING MEMBRANE APPROXIMATELY THREE (3) FEET UP FROM ROOF SURFACE. INSTALL NEW FULLY ADHERED .080" TPO MEMBRANE AS SHOWN ON THE DRAWING.

38

WALL TERMINATION FLASHING DETAIL

SCALE= N.T.S.

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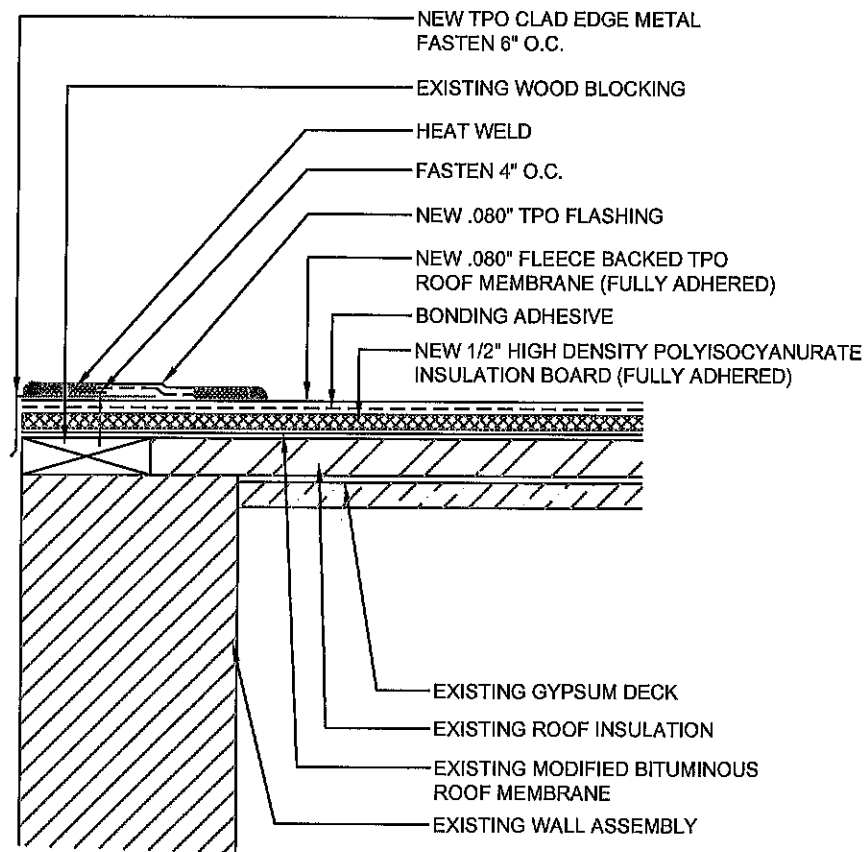
DATE: 09/03/2026

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38



39

ROOF EDGE FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

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SCALE: N.T.S.

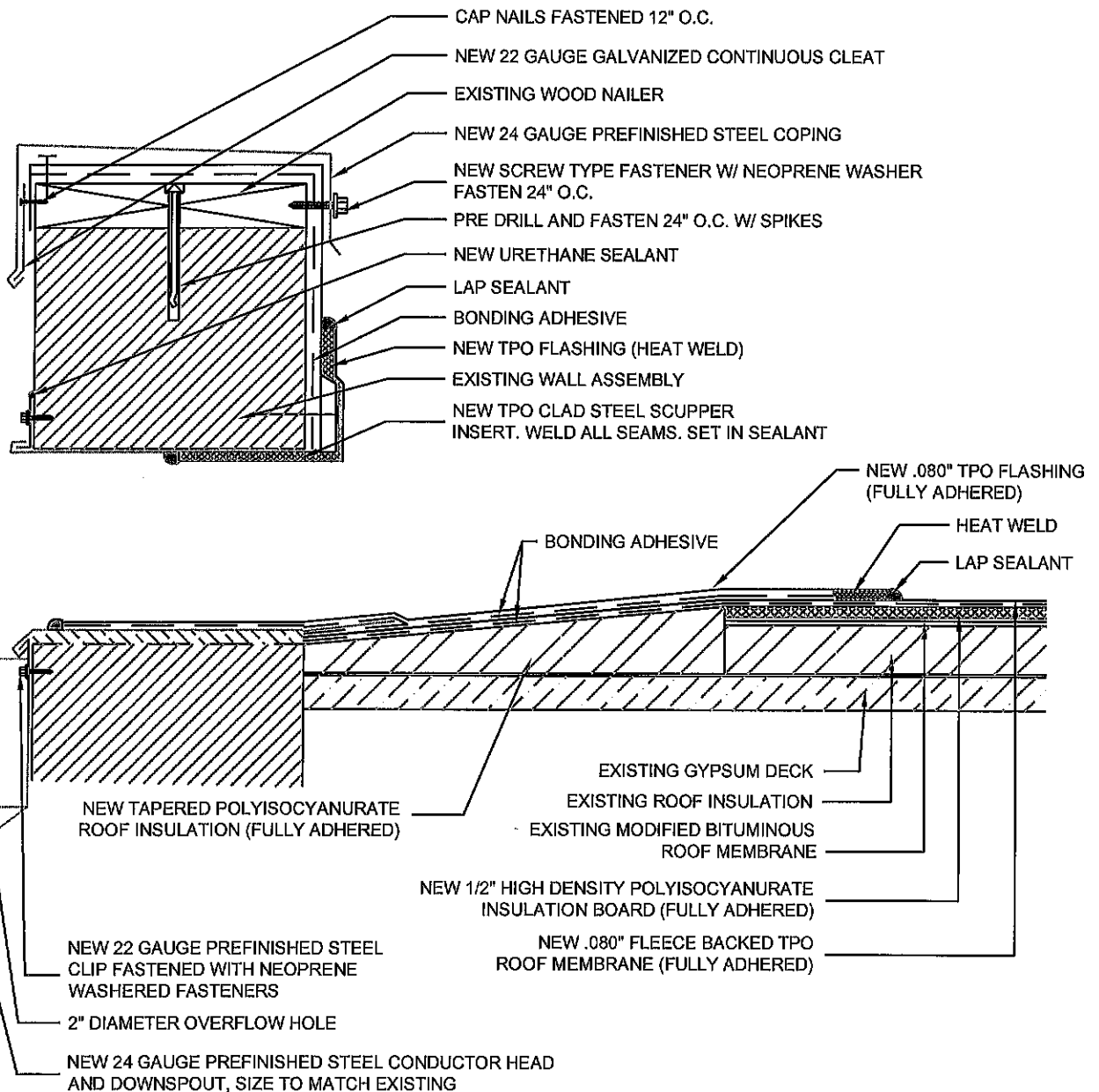
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39



NOTE

INSTALL NEW 24 GAUGE PREFINISHED STEEL CONDUCTOR HEADS AND DOWNSPOUTS IN ACCORDANCE WITH SMACNA.

40

THROUGH WALL SCUPPER FLASHING DETAIL

SCALE= N.T.S.

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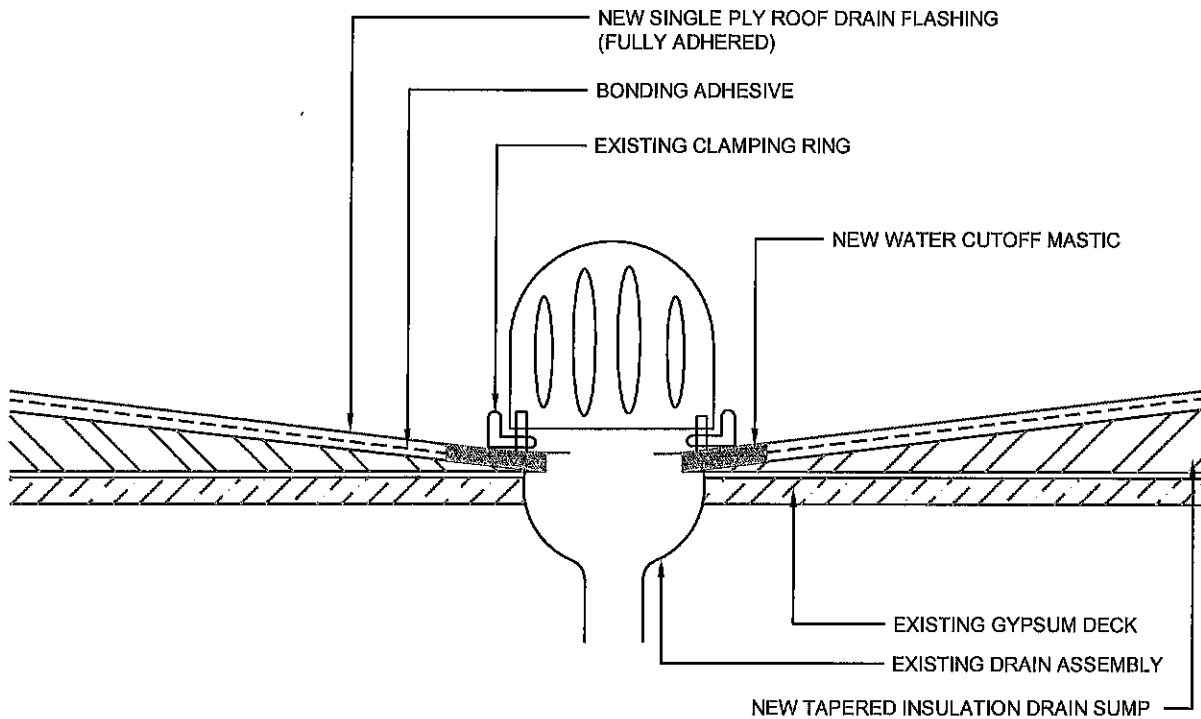
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MANAGER: OATHOUT

40



41

ROOF DRAIN FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

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NO.	DATE	DESCRIPTION

SCALE: N.T.S.

DATE: 09/03/2026

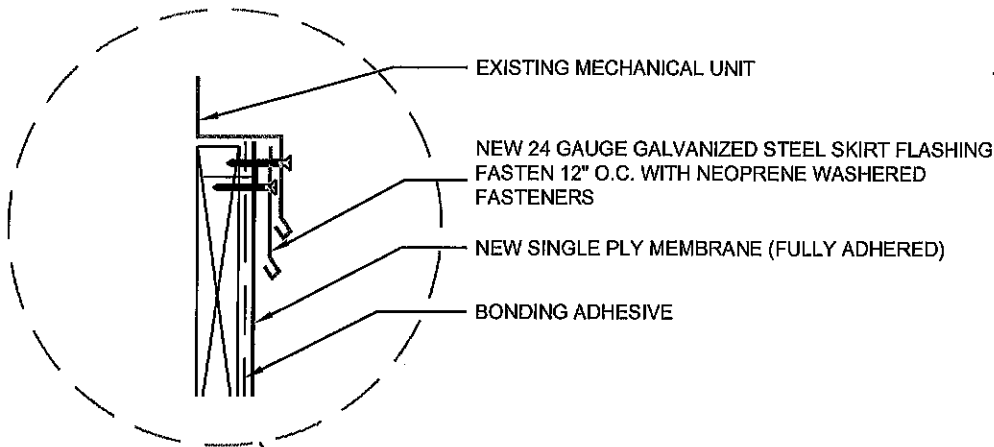
PROJECT# 2026039

DRAWN BY: NICHOLS

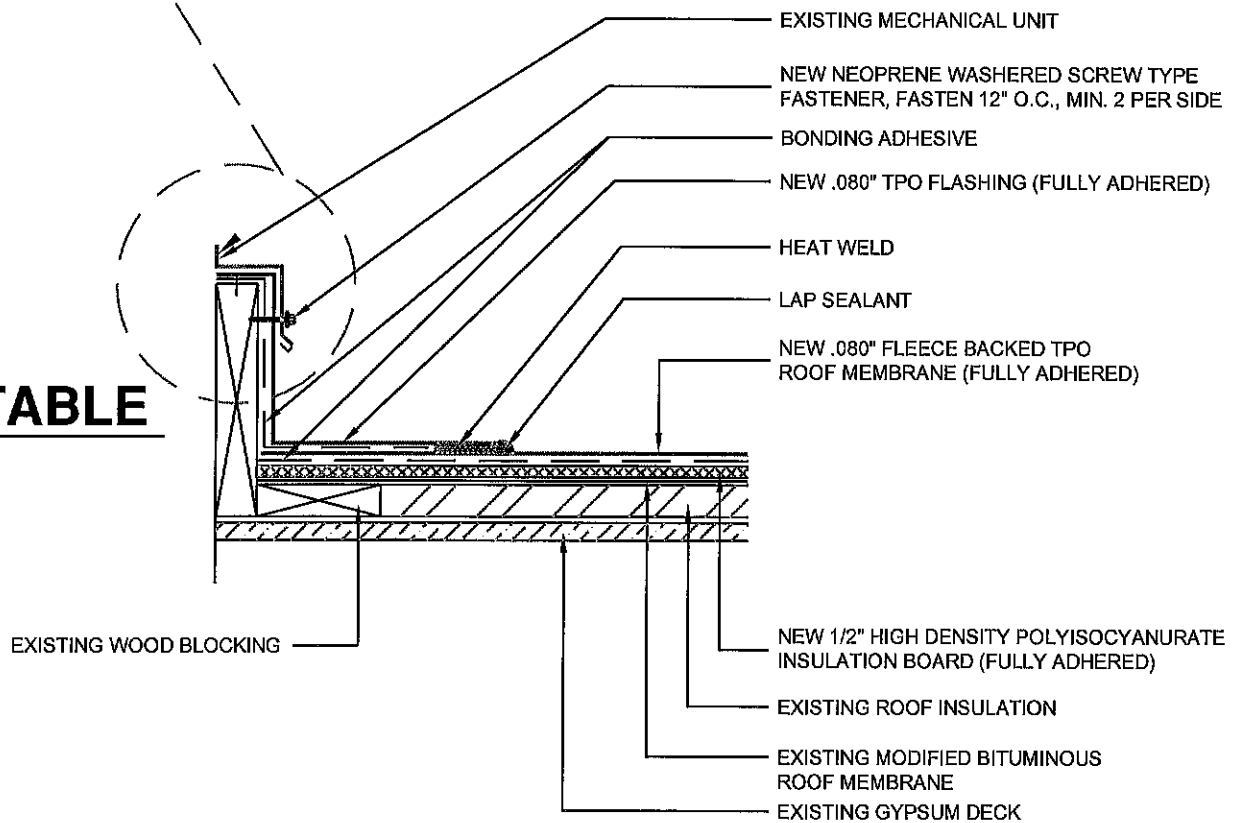
MANAGER: OATHOUT

41

NON-LIFTABLE



LIFTABLE



42 LIFTABLE/NON-LIFTABLE CURB FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

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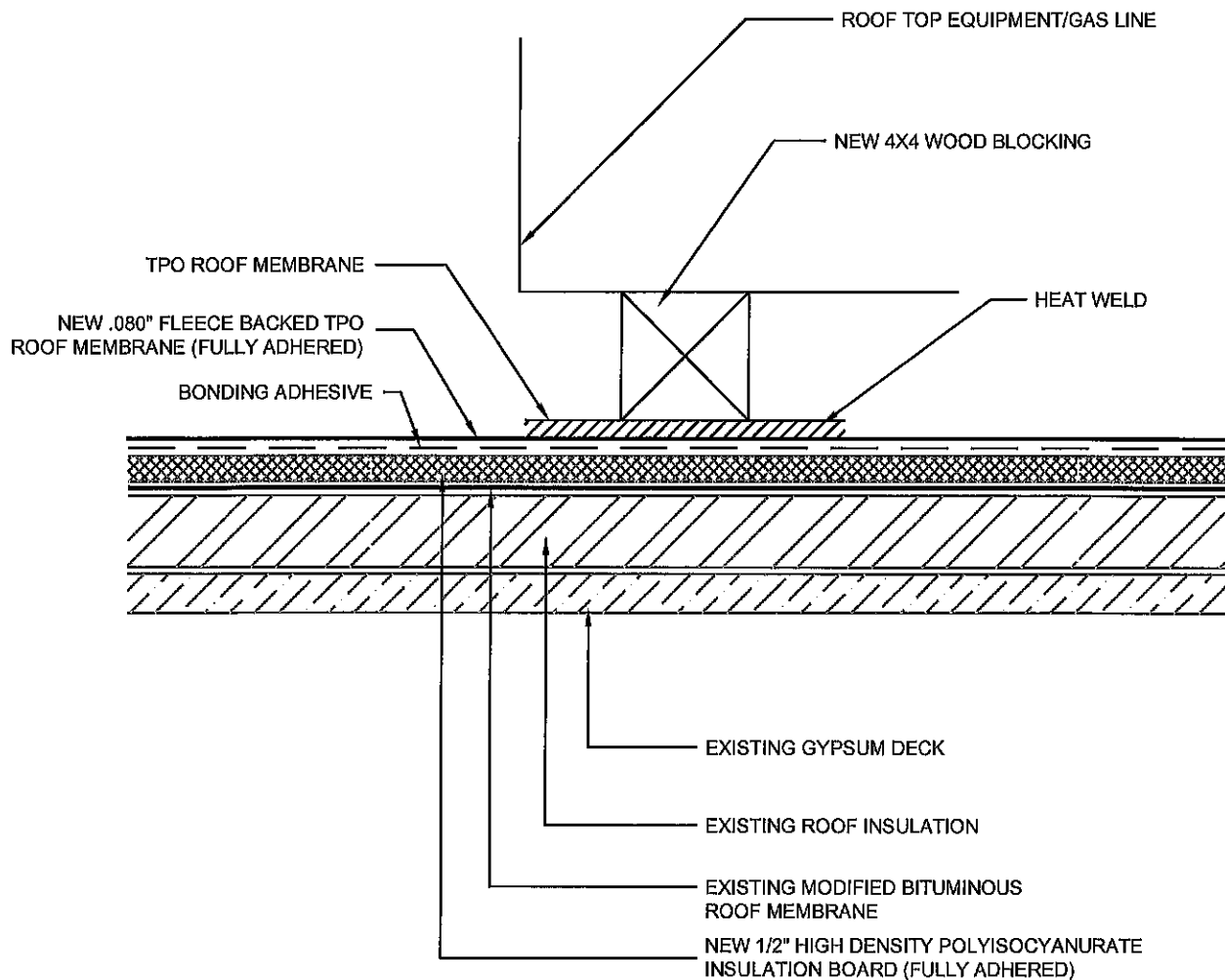
DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

42



43

SLIP SHEET FLASHING DETAIL

SCALE= N.T.S.

BASE BID #1 SCOPE OF WORK

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DATE: 09/03/2026

PROJECT# 2026039

DRAWN BY: NICHOLS

MANAGER: OATHOUT

43