

Architectural Consulting Group, Ltd.

Architects / Consultants

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BIDDING REQUIREMENTS

Addendum No 3

Date : January 12, 2022
From : Michael Kurek – Assistant Project Manager
Subject : Addendum No. 1 to the Bidding Documents for:
Project No.: ACG File No. 21-033

Roof Rehabilitation Program Building 'D' McHenry County College

This Addendum forms a part of the Contract Documents and modifies the bidding documents (1-03-2022) and drawings (1-03-2022). Bidders are instructed to acknowledge receipt of this Addendum in the space provided in the Bid Form. Failure to do so will subject the Bidder to disqualification.

Specification:

Procurement and Contracting Requirements – Section 00 10 00 – Solicitation: See attached modified Solicitation pages 01 10 00 -1 thru 3 (rev. 1/13/22) which include the following revisions:

- PROJECT DESCRIPTION: In lieu of, “Rock ballasted single-ply EPDM membrane and flashing system”, insert “Rock Ballast over BUR roof system”.
- SCOPE OF WORK Base Bid and Alternate Bid: Roof D
- GENERAL BUILDING DATA: In lieu of, “ $\frac{3}{4}$ ” perlite over 2” polyisocyanurate insulation”, insert “ $\frac{3}{4}$ ” fiberglass insulation over 1-1/2” rigid polyisocyanurate insulation”.

Division 1 – General Requirements - Section 01 78 36 – Product Warranties

1.5 Warranty Requirements:

- A. In lieu of, “The contractor shall provide a written two (2) year warranty”, insert “The contractor shall provide a written five (5) year warranty”
- B. In lieu of, “no-dollar-limit (NDL) for a period of 20-years”, insert “no-dollar-limit (NDL) for a period of 25-years”

Division 7 – Thermal & Moisture Protection - Section 07 22 00 Roof Insulation – See attached changes, pages 07 22 00-1 thru 07 22 00-4 (rev 1/13/22)

Division 7 – Membrane Roofing - Section 07 52 00 APP Modified Roofing –

1.06 – Material Manufacturers to Owner:

- B. In lieu of, “Twenty (20) year ‘No Dollar Limit’ System Warranty” insert, “Twenty-Five (25) year ‘No Dollar Limit’ Systems Warranty”.

Construction Drawings: (Rev. 1/13/22)

See updated Detail 1 on Sheet A-2 – Coping Detail .

All tapered saddles are not to exceed 12' in width. See Updated Roof Plan on Sheet A1

General:

Bid due date remains unchanged – Tuesday, January 18, 2022 at 9:30am cst. Please be advised, McHenry County College is closed Monday, January 17, 2022.

Very truly yours,

Architectural Consulting Group, Ltd

Michael Kurek
Assistant Project Manager

PROCUREMENT AND CONTRACTING REQUIREMENTS

00 10 00- Solicitation

The Owner (Agent):

McHenry County College
8900 US Hwy 14
Crystal Lake, IL

The Project:

Roof Rehabilitation Program
Building "D" McHenry County College
Crystal Lake, IL 60012

INVITATION TO BID:

Bids Due: **January 18th, 2022 @ 9:30am** (local time) @ biddocuments@mchenry.edu
for the following work:

PROJECT DESCRIPTION:

McHenry County College Facilities Management is accepting bids for a Roof Rehabilitation Program at Building "D" of the McHenry County College Campus located at 8900 US Hwy 14 in Crystal Lake, IL.

The in place roof system consists of a Rock ballasted single-ply EPDM membrane and flashings system over rigid insulation supported by a gypsum deck.

The Base Bid Program includes complete removal and disposal of the roof surface consisting of rock ballast, roofing and insulation assembly down to the deck and installation of new modified roof system. Alternate bids are also being requested.

SCOPE OF WORK:

Base Bid: Roof D – *[Roof Replacement (25-year NDL warranty) – Roof Removal / Fully Adhered Tapered Insulation Assembly / Fully Adhered Cover Board / 2-ply BUR - APP Modified Roofing / Sheet Metal Flashings & Related Metal Work]*

The Base Bid Program includes complete removal and disposal of the roof surface consisting of rock ballast, roofing and insulation assembly down to the gypsum deck and installation of new modified roof system. The entire roof area shall be swept clean of ALL debris and inspected for areas of damaged/deterioration. All areas of damaged/deteriorated gypsum decking shall be repaired under Unit Price provisions.

Install new wood blocking as required at all curbs, penetrations, and perimeter edges to accommodate new insulation and flashings height requirements. Existing roof hatch to be raised, blocked, and reset as required to accommodate new roof and insulation assembly. Clean and paint exterior side.

Install 2- layers of rigid insulation board set in low rise foam. Install new fully adhered tapered rigid insulation saddles, sumps, cover board and cant strip set in low rise foam adhesive. Adjust drain bowl height as required to accommodate new insulation assembly. Install new clamping ring assembly with new cast iron domes and new mounting hardware. Install new cant strips, tapered edge strips, saddles, and crickets at perimeter edges and roof penetrations. Assembly to obtain FM-1-300 equivalent wind up lift rating.

Install new 2-ply type VI felts built-up roofing system set in uniformed mopping of hot asphalt and new torch-applied fully adhered granular surfaced "Energy Star" APP Modified Bitumen roofing and flashing assembly. Heat weld all seams and embed additional granules into leading exposed edges/ bleed outs of modified bitumen during installation to create a continuous granular surface. New system shall be installed in accordance with FM 1-300 uplift rating. All seams shall be checked daily for continuity and strength by the contractor.

All rolled material is to be opened and allowed to relax prior to installation – failure to relax rolled material may result in the rejection of the completed work.

PROCUREMENT AND CONTRACTING REQUIREMENTS

00 10 00- Solicitation

Any tar and/or damage to private vehicles or property shall be professionally repaired/cleaned at the expense of the contractor.

Install new treated wood blocking to achieve minimum flashing heights. Install new sheet metal, flashings, counter-flashings, and related metal and miscellaneous work as specified.

Disconnect, raise and reset all vents, ducts and piping as required to accommodate new roof assembly and flashings. All pipes and conduits shall be set on new prefabricated composite pipe supports and rollers. Install an additional ply of roofing membrane under all equipment and pipe supports. Existing roller supports and pads to be raised and reset. Discard wood pipe supports and replace with new roller supports and pads to match existing. Replace deteriorated roller supports as required- field verify.

Clean prime and paint with rust inhibitor paint all exposed remaining sheet metal vents, hoods, drip caps, flues and pipes. Clean and paint horizontal piping 'safety yellow'.

Clean-up roof surface prior to final completion of roof.

Alternate Bids: Base Bid: Roof D – *[Roof Replacement (25-year NDL warranty) – Roof Removal / Mech. Fastened Base / Fully Adhered Tapered Insulation Assembly / Fully Adhered Cover Board / 2-ply BUR - APP Modified Roofing / Sheet Metal Flashings & Related Metal Work]*

In lieu of low rise foam adhesive, Install new mechanically fastened nailable base sheet to the existing gypsum deck. Install 2- layers rigid insulation board set in uniformed mopping of hot asphalt. Install new fully adhered tapered rigid insulation saddles, sumps, cover board and cant strip set in uniformed mopping of hot asphalt. New system shall be installed in accordance with FM 1-90 uplift rating. All other Based Bid work shall remain.

GENERAL BUILDING DATA:

The roof area at Building "D" totals approximately 26,367+/- square feet. Positive slope appears to be present in the underlying gypsum deck and is sloped to the roof drains. There are (7) large roof top units located on the roof. Other penetrations include (1) roof hatch, gas lines set on pipe supports with portals, soil stacks, flue vents, exhaust vents, (2) gooseneck vents, and miscellaneous penetrations.

According to our test cuts, the low-slope roof system at the roof consists of a Gravel surfaced BUR roof system over ¾" Fiberglass insulation & 1 /12" rigid polyisocyanurate insulation adhered to a base sheet supported by a gypsum deck. The perimeter of the roof area is terminated by sheet coping cap.

BID REQUIREMENTS:

Bids are to be submitted on a lump sum basis, with provisions for additional Unit Price quantities of work. Bids are to be submitted on the forms attached in the Project Manual, in accordance with the requirements set forth in the Instructions to Bidders.

GENERAL BIDDING INFORMATION:

Ricky Sparks
Assistant Vice President Facilities Management
McHenry County College
8900 US Hwy 14
Crystal Lake, IL 60012
P: 815.455.8564
rsparks@mchenry.edu

PROCUREMENT AND CONTRACTING REQUIREMENTS

00 10 00- Solicitation

Deliver bids electronically at: **January 18th, 2022 @ 9:30am** (local time) @ biddocuments@mchenry.edu

Provide electronic copy of the Bid to: (Forward technical questions to this office)

Architectural Consulting Group, Ltd.

c/o: Thomas Zordan, AIA

422 N. Hough Street

Barrington IL 60010

Phone: 847.277.1900

Fax: 847.277.1300

Email: tzordan@acg-ltd.net

PRE-BID MEETING:

A pre-bid meeting is scheduled for: **January 11th, 2022 at 8:00am** (local time).

Pre Bid Meeting will be held at the College Board Room #A217.

BID DUE DATE:

Bids will be due on **January 18th, 2022 @ 9:30am**(local time).

Submit bids to biddocuments@mchenry.edu and tzordan@acg-ltd.net

BID OPENING DATE:

Bids will be opened on **January 18th, 2022 @ 9:30 AM** (local time)

BIDDER REMINDERS:

A 10% Bid Bond is required.

A Bid Bond is not required.

Include the cost of a Performance Bond in your Bid.

Cost for a Performance Bond shall be shown as a Unit Price extra.

Architectural Consulting Group, Ltd.

Thomas Zordan, AIA

Sr. Architect | President

END OF SOLICITATION SECTION

DIVISION 7 - THERMAL & MOISTURE PROTECTION

Section 07 22 00 - Roof Insulation

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work Included (BASE BID):

1. Remove existing roofing system and insulation in its entirety, down to the existing structural deck. Sweep existing deck clean of debris.
2. Inspect roof area for any damaged/deteriorated roof deck. Remove and replace areas of damaged deck. Quantities to be charged under unit price provisions. Photo document all deteriorated decking and report replacement quantities to A/E and Owner on a daily basis.
3. Remove and discard existing flashings, counter-flashings, and related metal work.
4. Sweep existing deck clean of ALL debris
5. Install new adhered rigid insulation in low rise foam adhesive meeting FM-I-300 for wind uplift.
6. Install new fully adhered taper saddles, crickets, cover board insulation and tapered edge strips
7. Install new treated wood blocking as required at all roof curbs/penetrations and perimeter edge to insure proper flashing heights.
8. Adjust drain assemblies as required to accommodate new roofing insulation heights.

B. Work Included (ALTERNATE 1):

1. Remove existing roofing system and insulation in its entirety, down to the existing structural deck. Sweep existing deck clean of debris.
2. Inspect roof area for any damaged/deteriorated roof deck. Remove and replace areas of damaged deck. Quantities to be charged under unit price provisions. Photo document all deteriorated decking and report replacement quantities to A/E and Owner on a daily basis.
3. Remove and discard existing flashings, counter-flashings, and related metal work.
4. Sweep existing deck clean of ALL debris
5. Install new nailed base sheet anchored to deck gypsum over entire roof area.
6. Install new fully adhered rigid insulation set in hot asphalt meeting FM 1-90 wind uplift.
7. Install new fully adhered taper saddles, crickets, cover board insulation and tapered edge strips in hot asphalt
8. Install new treated wood blocking as required at all roof curbs/penetrations and perimeter edge to insure proper flashing heights.
9. Adjust drain assemblies as required to accommodate new roofing insulation heights.

D. Related Items:

1. Section 02220 – Selective Demolition
2. Section 07 52 13 – Modified Bituminous Membrane Roofing

1.02 QUALITY ASSURANCE

A. Reference Standards: Except as modified by the project specifications, cited reference standards govern the work.

B. Qualifications: The Contractor shall have experience in the installation of specified materials, and shall be an approved installer of the same by the material manufacturer. The Contractor shall also have installations of specified materials in the local area in use for a minimum of five (5) years.

DIVISION 7 - THERMAL & MOISTURE PROTECTION

Section 07 22 00 - Roof Insulation

1.03 ENVIRONMENTAL CONDITIONS

- A. Perform all work under the temperature and climatic conditions recommended by the materials manufacturers.

1.04 WORK SEQUENCE

- A. Removals and installations of new materials specified in this Section shall be closely coordinated with the work specified in Sections 02220 and 07550.

1.05 PROTECTION

- A. Store all insulation materials on pallets or raised platforms. Protect stored materials with weather protective coverings. Tarpaulin coverings are preferred. If Visqueen coverings are used as shipped from the factory, venting must be provided to control condensation within each insulation bundle. Improperly stored materials will be rejected. Monitor insulation load coverings daily. Repair covering deficiencies.
- B. Notify the Owner's Representative of areas targeted for work in advance of "tear-off" operations. Immediately notify Owner's Representative of any existing construction anomalies, such as defective roof decking, adjacent wall deficiencies, etc. prior to proceeding with the work.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. (Alternate 1) Base Felt: PRS Glass Base Sheet: PRS Glass Base fiberglass saturated base felt and nail/anchors for nailable roof decks as manufactured by Derbigum of America, or approved equal. New felt and anchors shall obtain FM 1-90 uplift ratings requirements.
- B. (Alternate 1) Perlock / FM90 Split shank hammer-in steel fasteners with factory applied corrosion resistant coating meeting FM-4470 as manufactured by Derbigum of America or approved equal . Fasteners shall meet Dade County approval for pull-out and wind up-lift. Fasteners to meet and or exceed FM 1-90 uplift ratings.
- C. Rigid Roof Insulation: 2 Layers - Closed-cell rigid polyisocyanurate insulation-2.6" thickness with non-asphaltic fiber reinforced felt facers and meeting or exceeding FM Standard 4450/4470 and UL Standard 790 Classification and having a flame spread rating of 25 per ASTM E 84.
- D. Tapered Saddles: Closed-cell rigid polyisocyanurate insulation (1/2" per 1'-0" starting at 0") with non-asphaltic fiber reinforced felt facers and meeting or exceeding FM Standard 4450/4470 and UL Standard 790 Classification and having a flame spread rating of 25 per ASTM E 84.
- E. Cover Board: Fiberglass Mat Faced Gypsum Board (1/2" thickness) conforming with ASTM C 473 and having a minimum Density of 10 pcf per ASTM C303 Dens-Deck Prime or approved equal.
- F. Cant Strips: Rigid high density laminated high tensile strength fiber and expanded perlite composite 45 degree cant. Cant Strip shall have a minimum recycled material content of 35% by weight.
- G. Drain Sump (4'x4' around drains): Pre-fabricated Closed-cell rigid polyisocyanurate insulation with non-asphaltic fiber reinforced felt facers 1/2" per 1' - 0" tapered starting at minimum of 0" and meeting or exceeding FM Standard 4450/4470 and UL Standard 790 Classification and having a flame spread rating of 25 per ASTM E 84.

DIVISION 7 - THERMAL & MOISTURE PROTECTION

Section 07 22 00 - Roof Insulation

- H. Base Bid – Low rise Foam Adhesive: Duotack SPF Adhesive or Manufacturer's approved equal: A two component (Part A and B) low-rise polyurethane foam used to attach insulation to approved compatible substrates. Adhesive is applied with in bands 6/8/12 spacing per FM 1-300. Application rates are typically one gallon per square. Additional adhesive may be required for rougher surfaces.
- I. Alternate 1: Asphalt: Low Fume homogenous Type III asphalt conforming to ASTM D 312, free from water, having a softening point between 195 and 205 degrees Fahrenheit, and a flash point of 525 degrees Fahrenheit.
- J. Wood Blocking: Treated No. 2 "Wolmanized."
- K. Primer: Asphalt primer conforming to ASTI D-41 or Federal Specification SS-A-701.
- L. Flashing Cement: Asphalt based mastic reinforced with non-asbestos fiber and conforming to ASTM D 4586, Type I with a minimum solids content of 75-78% by weight.
- M. Permastic: Low VOC emitting (180grams/L) with a flash point of 114 degrees Fahrenheit.
- N. Roof Drain: New "Zurn" Z-100 Cast Iron Drain Assembly with clamping ring and cast iron drain dome to match existing size configuration or approved equal. Include all accessories and insulation as required for installation.

2.02 MANUFACTURERS

- A. Insulation Board:
 - 1. Performance Roof Systems
 - 2. Approved Equal

PART 3 - EXECUTION

3.01 COORDINATION

- A. Coordinate the installation of insulation with specified removal and new membrane work. See Specification Sections 02220 and 07550.

3.02 REMOVALS

- A. Remove the existing gravel surfaced built-up roofing assembly down to the structural deck. Clean/sweep existing debris.
- B. Remove the existing roof flashings and related metal work. Add new wood blocking as necessary to accommodate new roofing assembly and flashings at the perimeter.

3.03 ROOF INSTALLATION PROCEDURES

- A. Disconnect and raise all existing roof top equipment to appropriate height as required by material manufacturer to accommodate flashings.
- B. Sweep existing surface clean. Repair/replace all areas of damaged and/or deteriorated decking under unit price provisions.

DIVISION 7 - THERMAL & MOISTURE PROTECTION

Section 07 22 00 - Roof Insulation

- C. Install new prefabricated equipment rails, if elected, to match existing equipment locations.
- D. The entire surface of the insulation shall be swept clean of all debris prior to the application of the roofing membrane.
- E. Based Bid – Insulation: Place insulation board, tapered sumps, saddles, cover board and cants into the low rise foam adhesive. Ribbon spacing to be applied to achieve minimum FM-1-300 wind uplift ratings.(12”o.c. spacing at field, 8” spacing at edge, and 6” spacing at comers). Contractor to verify ribbon spacing achieves minimum FM-1-300 wind uplift ratings. Job site conditions may affect performance. Adhesive shall not be used if surface and/or ambient temperatures are below 45°F (7°C) during application or subsequent curing time. Minimum product temperature before entering the dispenser should be 72°F (22°C). Store between 45°F (7°C) and 95°F (35°C). Protect from freezing, any product that does freeze must be removed from the job site and disposed of per State and Federal regulations. Adhesive shall not be used during inclement weather. Adhesive shall not be applied to wet or damp surfaces. Assembly shall be installed in conformance with FM 1-300 wind uplift.
- F. Alternate 1 – Based Felt Base Felt: Install new PRS Glass Base felt and nail/anchors for nailable roof decks as manufactured by Derbigum of America, or approved equal. New felt and anchors shall obtain FM 1-90 uplift ratings requirements.
- G. Alternate 1 – Insulation: Place insulation board, tapered sumps, saddles, cover board and cants into Low Fume Homogenous Type III asphalt conforming to ASTM D 312, free from water, having a softening point between 195 and 205 degrees Fahrenheit, and flash point of 525 degrees Fahrenheit. Roofing Asphalt is to be applied in uniform moppings with an application rate of 23-25lbs per 100sq. ft. or per manufacture requirements. All board joints shall be staggered a minimum of 6” in all directions to insure that board joints do not occur in a continuous manner in the horizontal or vertical planes. All voids, depressions, and damaged sections of insulation are to be in-filled to produce a flat and even surface throughout. Sweep clean the entire surface of the top layer insulation. Alternate 1 assembly shall be installed in conformance with FM 1-90 wind uplift.

3.04 CLEAN-UP:

- A. The entire surface of the insulation assembly shall be swept clean of all debris prior to the application of the roofing membrane.

END OF SECTION 07 22 00

ROOF REHABILITATION PROGRAM BUILDING "D" McHENRY COUNTY COLLEGE

8900 U.S. HWY. 14
McHENRY, ILLINOIS

BUILDING CODES

ALL WORK PERFORMED SHALL CONFORM TO ALL CODES
RECOGNIZED BY McHENRY COUNTY, ILLINOIS

- 2015 INTERNATIONAL BUILDING CODE - ADOPTION ORDINANCE W/ LOCAL AMENDMENTS
- 2018 ILLINOIS ENERGY CONSERVATION CODE - ADOPTION ORDINANCE W/ LOCAL AMENDMENTS

INDEX OF DRAWINGS

T1 GENERAL NOTES, DRAWING NOTES, LOCATION MAP
A1 ROOF PLAN, TARGET NOTES
A2 DETAILS, PHOTOS

GENERAL NOTES

VERIFY ALL CONDITIONS IN FIELD. PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR SHALL VISIT THE PROJECT SITE TO LOCATE, SURVEY, AND VERIFY ALL CONDITIONS, INCLUDING (BUT NOT LIMITED TO) DECK CONDITIONS, FASCIAS, STRUCTURE RELATED TO WORK, MASONRY WALL SURFACES, AND ALL AREAS INCLUDED IN SCOPE OF WORK. MEASURE THE WORK AND BE RESPONSIBLE FOR ALL REQUIRED QUANTITIES. SCALED DIMENSIONS ON THE DRAWINGS ARE INTENDED TO BE APPROXIMATE AND GENERALLY LOCATE THE AREAS OF WORK ONLY.

THE CONTRACTOR SHALL RESTORE ANY AND ALL PORTIONS OF BUILDINGS AND GROUNDS DAMAGED DURING CONSTRUCTION TO PRE-CONSTRUCTION CONDITIONS. RESTORATION SHALL INCLUDE DAMAGE TO ANY EXTERIOR AND INTERIOR FINISHES.

UNLESS OTHERWISE INDICATED BY THE CONTRACT DOCUMENTS OF THE SPECIFIED MANUFACTURER'S RECOMMENDATIONS, FOLLOW INSTALLATION PROCEDURES RECOMMENDED BY THE NATIONAL ROOFING CONTRACTORS ASSOCIATION (NRCA) AND/OR THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA) CURRENT EDITION LITERATURE.

PRIOR TO BEGINNING THE WORK, REVIEW THE FOLLOWING WITH THE OWNER'S REPRESENTATIVE: A) TEMPORARY BUILDING AND GROUNDS PROTECTION AND HOUSEKEEPING, B) PROJECT SAFETY PROVISIONS AND PROCEDURES.

THE OWNER'S REPRESENTATIVE PRIOR TO FABRICATION MUST APPROVE FULL SIZE SHEET METAL MOCK-UPS. ALL EXPOSED EDGES OF THE SHEET METAL FABRICATION MUST BE HEMMED. SPECIFIED CLEATS MUST BE CONTINUOUS. PROTECT NEW METAL WORK FINISHES FROM DAMAGE DUE TO OTHER ROOFING OPERATIONS.

ALL DRAINS, VENTS AND DECK OPENINGS MUST BE COVERED AND/OR PROTECTED DURING ROOFING OPERATIONS TO PREVENT ENTRY OF FOREIGN DEBRIS AND FUMES INTO EXISTING CONSTRUCTION.

TARGET NOTES (IDENTIFIED IN THE NOTE LEGEND) ARE INTENDED TO IDENTIFY TYPICAL DETAILING REQUIREMENTS. IN THE EVENT THAT THE DETAIL CONDITIONS ENCOUNTERED ARE SIMILAR TO THOSE SHOWN ON THE DRAWINGS, ASSUME THAT THE TYPICAL DETAILING APPLIES UNLESS OTHERWISE INDICATED VIA THE OWNER'S REPRESENTATIVE.

THE CONTRACTOR SHALL NOTIFY THE OWNER AND/OR OWNERS REPRESENTATIVE OF ANY DAMAGED DECKING DURING THE REMOVAL PROCESS. THE CONTRACTOR SHALL ALSO BE PREPARED TO MAKE ANY CORRECTIVE REPAIRS UNDER UNIT PRICE PROVISIONS. THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY AND COORDINATE ALL DECKING WORK WITH THE OWNERS PRIOR TO PROCEEDING WITH ANY WORK.

POSITION HOT KETTLES AND/OR TANKERS IN A MANNER, WHICH WILL NOT INTERFERE WITH THE BUILDINGS FRESH AIR INTAKE REQUIREMENTS. THIS ASPECT SHALL BE COORDINATED WITH THE BUILDING ENGINEERS AND/OR OWNERS REPRESENTATIVE.

SITE SET-UP AREAS SHALL BE RESTRICTED TO AREAS AS DESIGNATED BY THE OWNER'S REPRESENTATIVE.
INTERIOR ACCESS: MATERIAL LOADING AND DEBRIS REMOVAL SHALL BE PERFORMED IN A CONTROLLED MANNER. ANY MATERIAL LOADING AND/OR DEBRIS REMOVAL THAT MAY REQUIRE INTERIOR ACCESS AND/OR FREIGHT ELEVATOR ACCESS SHALL BE ARRANGED WITH THE BUILDING OWNER / OWNER'S REPRESENTATIVE. INTERIOR PROTECTION FOR MATERIAL LOADING AND DEBRIS REMOVAL SHALL BE PROVIDED BY THE CONTRACTOR.

DRAWING NOTES

BASE BID: ROOF D - [ROOF REPLACEMENT (25-YEAR NDL WARRANTY) - ROOF REMOVAL / FULLY ADHERED TAPERED INSULATION ASSEMBLY / FULLY ADHERED COVER BOARD / 2-PLY BUR - APP MODIFIED ROOFING / SHEET METAL FLASHINGS & RELATED METAL WORK]

THE BASE BID PROGRAM INCLUDES COMPLETE REMOVAL AND DISPOSAL OF THE ROOF SURFACE CONSISTING OF ROCK BALLAST, ROOFING AND INSULATION ASSEMBLY DOWN TO THE GYPSUM DECK AND INSTALLATION OF NEW MODIFIED ROOF SYSTEM. THE ENTIRE ROOF AREA SHALL BE SWEEP CLEAN OF ALL DEBRIS AND INSPECTED FOR AREAS OF DAMAGED/DETERIORATION. ALL AREAS OF DAMAGED/DETERIORATED GYPSUM DECKING SHALL BE REPAIRED UNDER UNIT PRICE PROVISIONS.

INSTALL NEW WOOD BLOCKING AS REQUIRED AT ALL CURBS, PENETRATIONS, AND PERIMETER EDGES TO ACCOMMODATE NEW INSULATION AND FLASHINGS HEIGHT REQUIREMENTS. EXISTING ROOF HATCH TO BE RAISED, BLOCKED, AND RESET AS REQUIRED TO ACCOMMODATE NEW ROOF AND INSULATION ASSEMBLY. CLEAN AND PAINT EXTERIOR SIDE.

INSTALL 2- LAYERS OF RIGID INSULATION BOARD SET IN LOW RISE FOAM. INSTALL NEW FULLY ADHERED TAPERED RIGID INSULATION SADDLES, SUMPS, COVER BOARD AND CANT STRIP SET IN LOW RISE FOAM ADHESIVE. ADJUST DRAIN BOWL HEIGHT AS REQUIRED TO ACCOMMODATE NEW INSULATION ASSEMBLY. INSTALL NEW CLAMPING RING ASSEMBLY WITH NEW CAST IRON DOMES AND NEW MOUNTING HARDWARE. INSTALL NEW CANT STRIPS, TAPERED EDGE STRIPS, SADDLES, AND CRICKETS AT PERIMETER EDGES AND ROOF PENETRATIONS. ASSEMBLY TO OBTAIN FM-1-300 EQUIVALENT WIND UP LIFT RATING.

INSTALL NEW 2-PLY TYPE VI FELTS BUILT-UP ROOFING SYSTEM SET IN UNIFORMED MOPPING OF HOT ASPHALT AND NEW TORCH-APPLIED FULLY ADHERED GRANULAR SURFACED "ENERGY STAR" APP MODIFIED BITUMEN ROOFING AND FLASHING ASSEMBLY. HEAT WELD ALL SEAMS AND EMBED ADDITIONAL GRANULES INTO LEADING EXPOSED EDGES/ BLEAD OUTS OF MODIFIED BITUMEN DURING INSTALLATION TO CREATE A CONTINUOUS GRANULAR SURFACE. NEW SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH FM 1-300 UPLIFT RATING. ALL SEAMS SHALL BE CHECKED DAILY FOR CONTINUITY AND STRENGTH BY THE CONTRACTOR.

ALL ROLLED MATERIAL IS TO BE OPENED AND ALLOWED TO RELAX PRIOR TO INSTALLATION - FAILURE TO RELAX ROLLED MATERIAL MAY RESULT IN THE REJECTION OF THE COMPLETED WORK.

ANY TAR AND/OR DAMAGE TO PRIVATE VEHICLES OR PROPERTY SHALL BE PROFESSIONALLY REPAIRED/CLEANED AT THE EXPENSE OF THE CONTRACTOR.

INSTALL NEW TREATED WOOD BLOCKING TO ACHIEVE MINIMUM FLASHING HEIGHTS. INSTALL NEW SHEET METAL, FLASHINGS, COUNTER-FLASHINGS, AND RELATED METAL AND MISCELLANEOUS WORK AS SPECIFIED.

DISCONNECT, RAISE AND RESET ALL VENTS, DUCTS AND PIPING AS REQUIRED TO ACCOMMODATE NEW ROOF ASSEMBLY AND FLASHINGS. ALL PIPES AND CONDUITS SHALL BE SET ON NEW PREFABRICATED COMPOSITE PIPE SUPPORTS AND ROLLERS. INSTALL AN ADDITIONAL PLY OF ROOFING MEMBRANE UNDER ALL EQUIPMENT AND PIPE SUPPORTS. EXISTING ROLLER SUPPORTS AND PADS TO BE RAISED AND RESET. DISCARD WOOD PIPE SUPPORTS AND REPLACE WITH NEW ROLLER SUPPORTS AND PADS TO MATCH EXISTING. REPLACE DETERIORATED ROLLER SUPPORTS AS REQUIRED- FIELD VERIFY.

CLEAN PRIME AND PAINT WITH RUST INHIBITOR PAINT ALL EXPOSED REMAINING SHEET METAL VENTS, HOODS, DRIP CAPS, FLUES AND PIPES. CLEAN AND PAINT HORIZONTAL PIPING "SAFETY YELLOW".

CLEAN-UP ROOF SURFACE PRIOR TO FINAL COMPLETION OF ROOF.

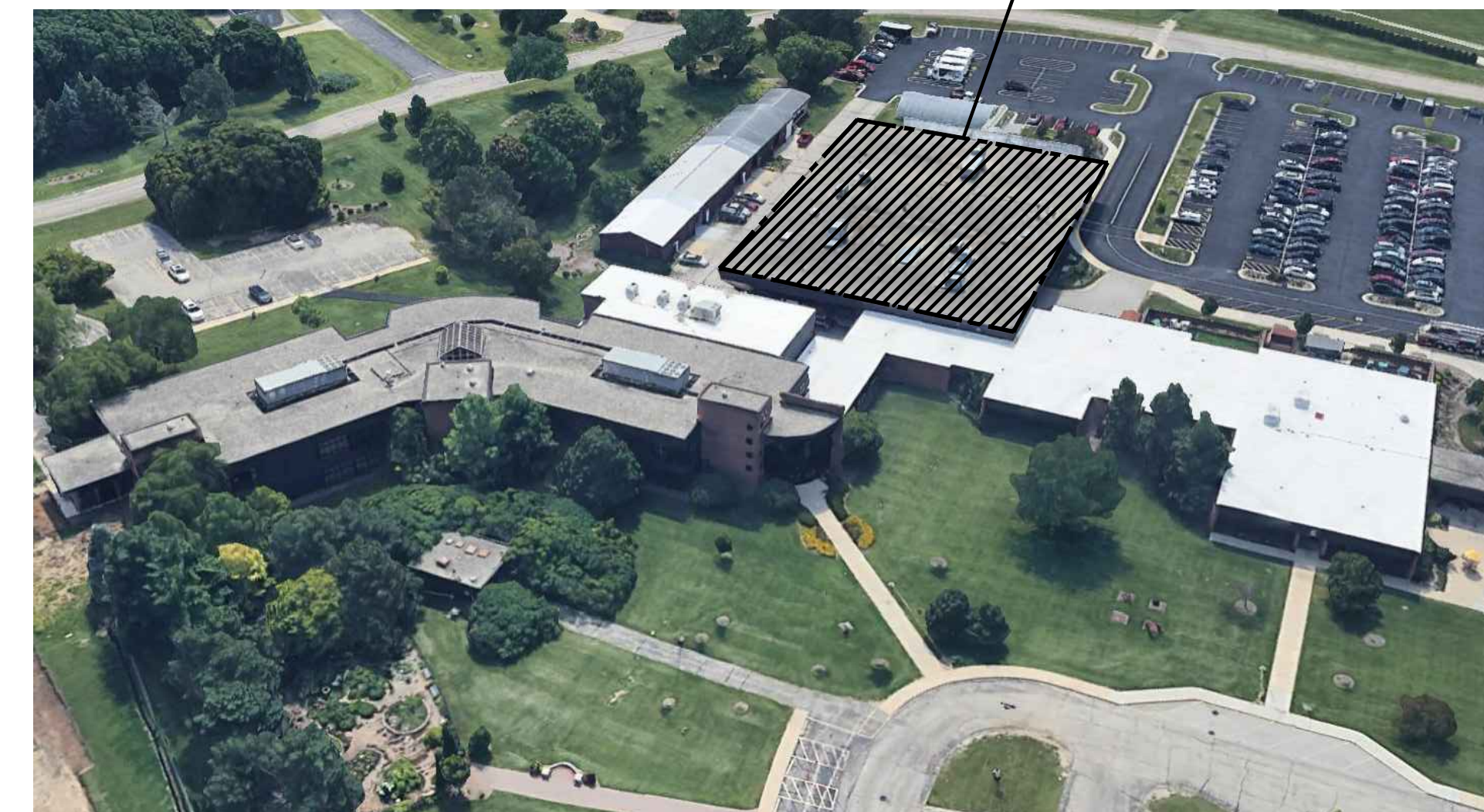
ALTERNATE BIDS: BASE BID: ROOF D - [ROOF REPLACEMENT (25-YEAR NDL WARRANTY) - ROOF REMOVAL / MECH. FASTENED BASE / FULLY ADHERED TAPERED INSULATION ASSEMBLY / FULLY ADHERED COVER BOARD / 2-PLY BUR - APP MODIFIED ROOFING / SHEET METAL FLASHINGS & RELATED METAL WORK]

IN LIEU OF LOW RISE FOAM ADHESIVE, INSTALL NEW MECHANICALLY FASTENED NAILABLE BASE SHEET TO THE EXISTING GYPSUM DECK. INSTALL 2- LAYERS RIGID INSULATION BOARD SET IN UNIFORMED MOPPING OF HOT ASPHALT. INSTALL NEW FULLY ADHERED TAPERED RIGID INSULATION SADDLES, SUMPS, COVER BOARD AND CANT STRIP SET IN UNIFORMED MOPPING OF HOT ASPHALT. NEW SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH FM 1-90 UPLIFT RATING. ALL OTHER BASED BID WORK SHALL REMAIN.



LOCATION KEY PLAN

LOCATION OF WORK
McHENRY COUNTY COLLEGE
BUILDING "D".
CRYSTAL LAKE, ILLINOIS



SITE LOCATION

Architectural
Consulting
Group,
Ltd. **ACG**
422 N. Hough Street
Barrington, IL 60010
Tel: 847-277-1900
www.acg-ld.net

I hereby certify that these documents have been prepared under my supervision and to the best of my knowledge conform with all applicable building codes ordinances.

Thomas F. Jordan, AIA
IL Arch. Lic. #001-014575
Expires: 11-30-2022

ROOF REHABILITATION PROGRAM
BUILDING "D" McHENRY COUNTY COLLEGE
CRYSTAL LAKE, ILLINOIS 60012

NO.	DESCRIPTION	DATE
--	90% Review	
--	ISSUE FOR BID	1.3.22
1	ADDENDUM	1.13.22

Drawing Date: 01.03.2022

Project No.: 21-033

Sheet Title: GENERAL NOTES
DRAWING NOTES
LOCATION/ SITE MAP

Sheet No.:

T-1

I hereby certify that these documents have been prepared under my supervision and to the best of my knowledge conform with all applicable building codes ordinances.

Thomas F. Zordan, AIA
 IL Arch. Lic. #001-014575
 Expires: 11-30-2022

ROOF REHABILITATION PROGRAM
BUILDING "D" McHENRY COUNTY COLLEGE
 CRYSTAL LAKE, ILLINOIS 60012

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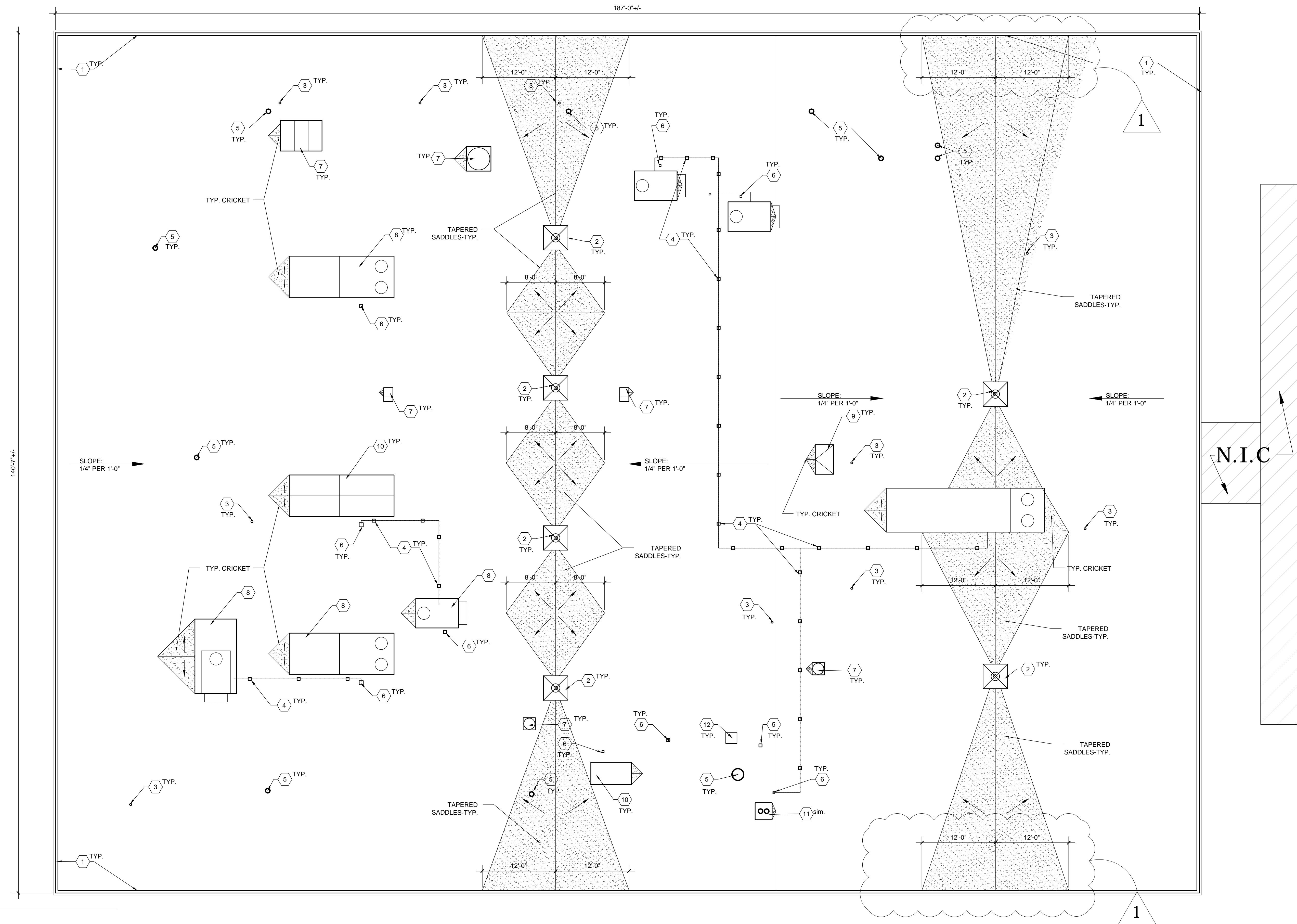
Drawing Date: 01.03.2022

Project No.: 21-033

Sheet Title:
**ROOF PLAN
 TARGET NOTES**

Sheet No.:

A-1



1 ROOF PLAN
 SCALE: 1/8" = 1'-0"

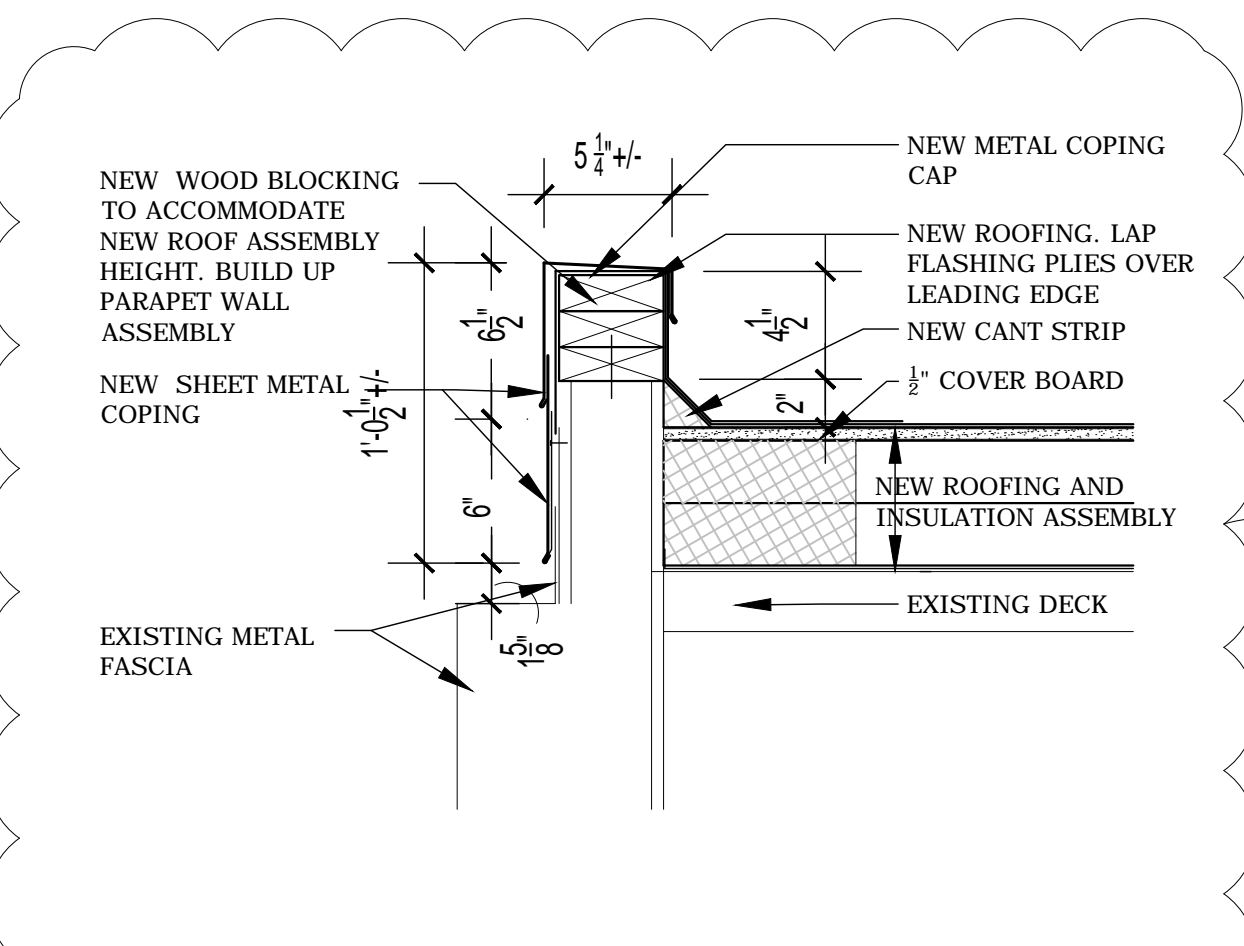
TARGET NOTES

- 1** **COPING CAP DETAIL:** Remove existing roofing and flashing assembly and existing sheet metal coping caps. Install new treated wood blocking, as required to maintain min 8" flashing heights, tapered towards the roof surface at the top edge of all raised perimeter edges. Install new insulation assembly and cant strips. Install new roofing and flashing assembly. Flashings at all raised perimeter edges are to extend onto the top of the parapet wall and completely covering the top and lap over leading edge of the blocking and secure with new mechanical fasteners. Install new sheet metal coping cap with continuous cleat and new gasketed fasteners at 12" O.C. See Detail 1 / Sheet A2.
- 2** **DRAIN DETAIL:** Remove existing roofing assembly and clamping rings. Adjust height of drain head as required. Install new insulation and roofing assembly. Provide 4x4' sumps at all drain locations with tapered insulation. Provide tapered saddles between all drains. Install lead flashing and membrane flashing. Install new clamping ring, drain dome, and stainless steel mounting hardware. Reinstall existing drain strainer using new S.S. hardware, tap and thread mountings as required. See Detail 2 / Sheet A2.
- 3** **SOIL STACK DETAIL:** Remove existing roofing assembly. Remove existing soil stack flashing and install new lead flashings at all soil stack/pipe penetration locations. Prime flange and install new membrane flashings and sealer. See Detail 3 / Sheet A2.
- 4** **PIPE SUPPORT DETAIL:** Disconnect and raise existing pipe, line sets and related components as required to accommodate new roofing assembly. Remove existing roof system complete down roof deck. Install new pre fab pillow block with additional membrane ply at 8'-0" o.c. Reconnect all lines and related components by licensed certified technician. Scrape and paint safety yellow. See Detail 4 / Sheet A2.
- 5** **FLUE VENT DETAIL:** Safely remove and store existing unit/metal cap. Remove existing and install new roofing assembly. Extend pipe as required to maintain 8" minimum flashing heights. Remove existing and install new sheet metal cone flashing at pipe. Install new continuous membrane sealant bead at base of vent stack. Install new sheet metal umbrella hood with new continuous sealant bead. reset existing cap. Scrape prime and paint all metal. See Detail 5 / Sheet A2.

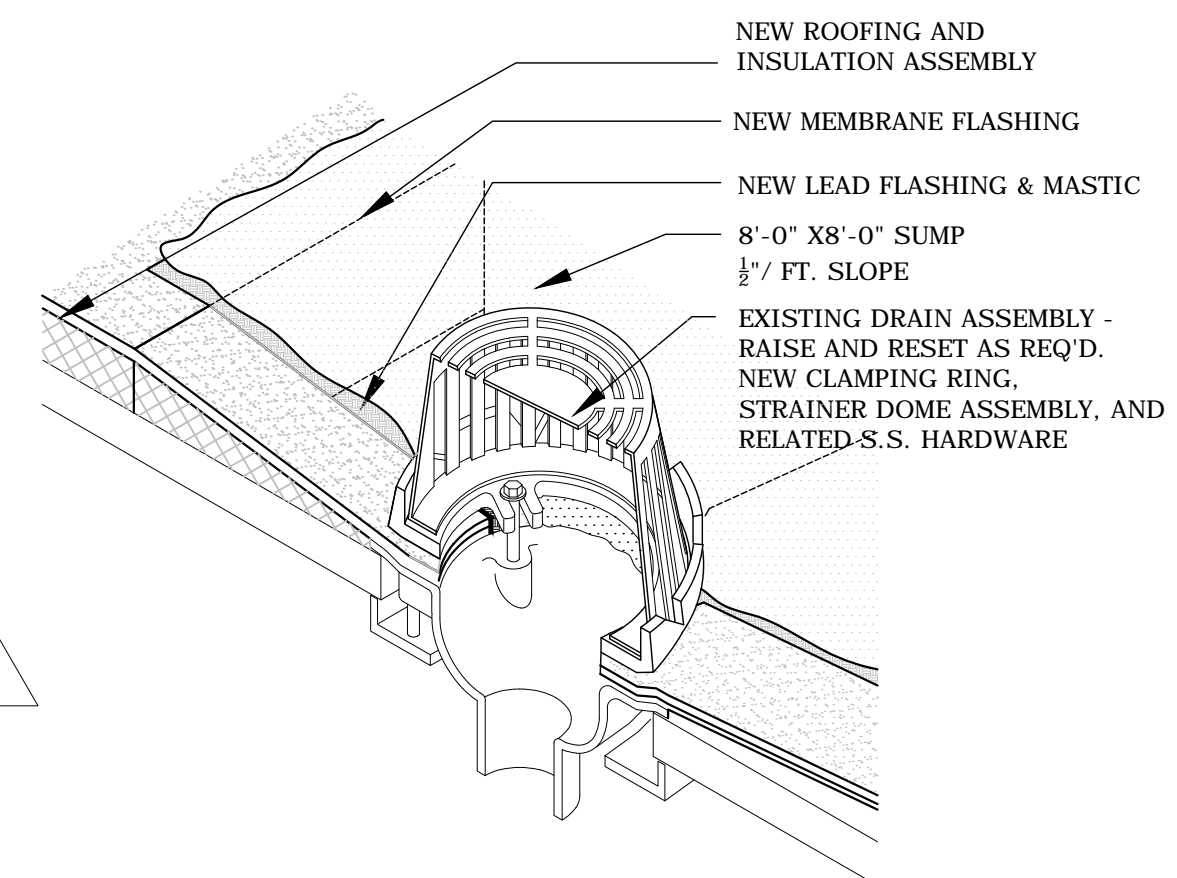
- 6** **PITCH PAN DETAIL:** Remove existing and install new sheet metal pitch pan with continuous flange. All joints to be soldered. Prime flange and install membrane flashing and membrane sealant. Fill pitch pan with cementitious fill and self-leveling sealant. Install new sheet metal hood and sealant. See Detail 6 / Sheet A2.
- 7** **VENT CURB DETAIL:** Safely remove and store existing unit. Remove existing and install new roofing assembly. Install new treated wood blocking as required at top of existing curb to maintain minimum 8" flashing heights. Install new flashing plies terminated at the top edge of the equipment curb with new gasketed fasteners. Reinstall existing unit and secure with new fasteners and gasketed washers. See Detail 7 / Sheet A2.
- 8** **MECH. CURB DETAIL:** Existing mechanical unit to remain in place. Remove existing roofing assembly down to the existing roof deck. Trim existing flashing as required to slip new flashing membrane behind. Install new roof assembly and flashing. Install new butyl tape over new and behind existing flashing. Install liquid apply flashing over transition. Install new sheet metal slip flashing behind existing sheet metal cover with gasketed fasteners at 16" O.C. See Detail 8 / Sheet A2.
- 9** **CURB DETAIL-ROOF HATCH:** Safely remove and store existing roof hatch. Remove existing and install new roofing assembly. Install new treated wood blocking as required at top of existing curb to maintain 8" minimum flashing heights. Install new flashing plies terminated at the top edge of the equipment curb with new gasketed fasteners. Scrape, clean, paint and reinstall existing hatch and flashing and secure with new fasteners and gasketed washers. See Detail 9 / Sheet A2.
- 10** **RAISED PLATFORM COVER:** Safely remove and store metal platform cover. Remove roof assembly down to deck. Install new treated wood blocking as req'd. on existing curbs to maintain 8" min. flashing height. Install new roofing assembly, wrap roof membrane over curb, install membrane flashing. Reset platform cover. See Detail 10 / Sheet A2.

- 11** **FLUE CHASE DETAIL:** Remove 2- flues, raise metal cover and save for re-installation. Scrape, and clean cover to remove rust and dirt. Paint cover. Install new wood blocking as req'd for min. flashing heights. Install new roof assembly. Reset cover with gasketed fasteners at 12" o.c., Reset flues, collars, and rain caps. new caulk at all joints. See Detail 11 / Sheet A-2.
- 12** **ABANDONED: VERIFY W/ OWNER.** Remove curbs, pipes, and metal caps. Metal plate over opening in deck.

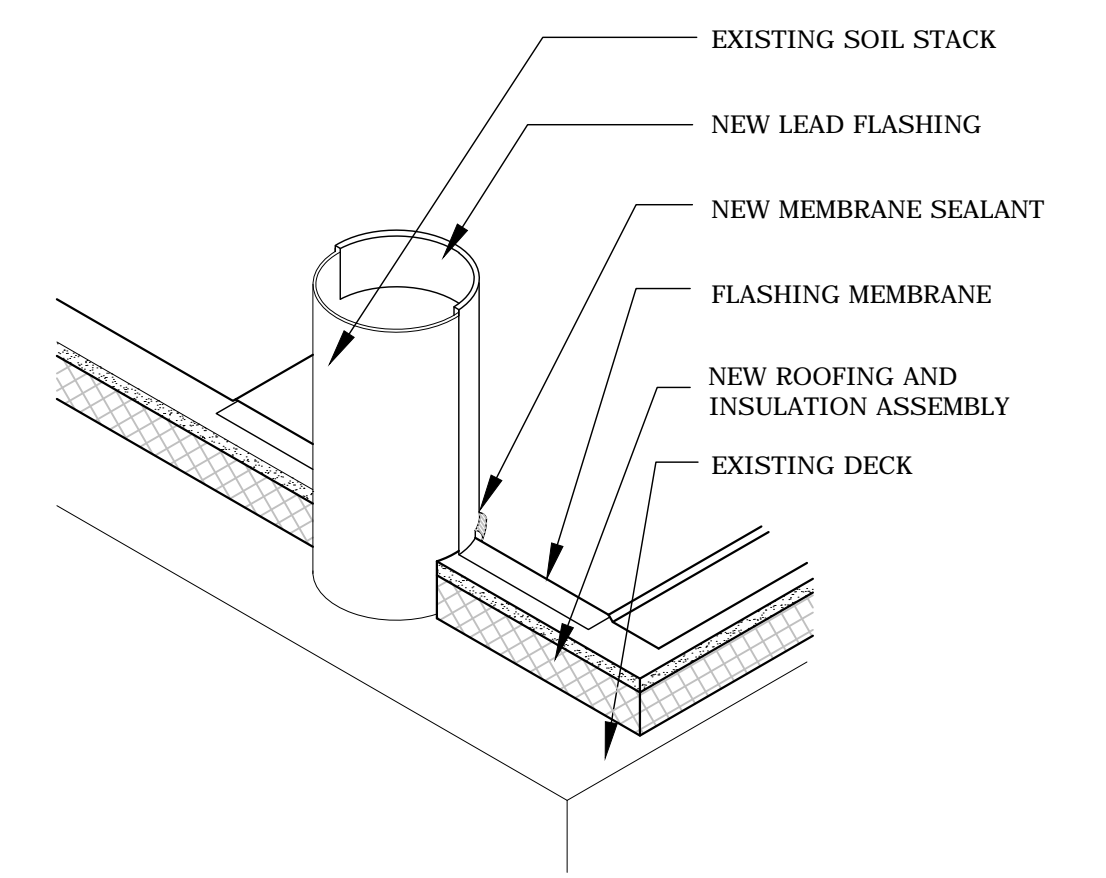
NOTE:
 1. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES AND MEASUREMENTS IN FIELD. IF ANY DISCREPANCIES SHOULD ARISE, THEY SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION FOR CLARIFICATION.
 2. SAFELY RAISE AND RESET ALL EQUIPMENT AS NECESSARY TO PERFORM ALL WORK.
 3. COORDINATE ALL EXTENSION OF MEP EQUIPMENT & CONDUIT, IF REQUIRED, BY LICENSED CONTRACTORS OF THE RESPECTIVE TRADE.
 4. PROVIDE 1/2" PER FOOT TAPERED SADDLES BETWEEN EACH DRAIN AND WHERE SPECIFIED. COORDINATION OF SADDLE LAYOUT AND CONTROL JOINTS WITH ARCHITECT SHALL BE REQUIRED.
NOTE:
 TAPERED PLAN FOR REFERENCE ONLY. CONTRACTOR TO FIELD VERIFY ALL CONDITIONS AND HEIGHTS IN FIELD AND SUBMIT SHOP DRAWINGS FOR REVIEW



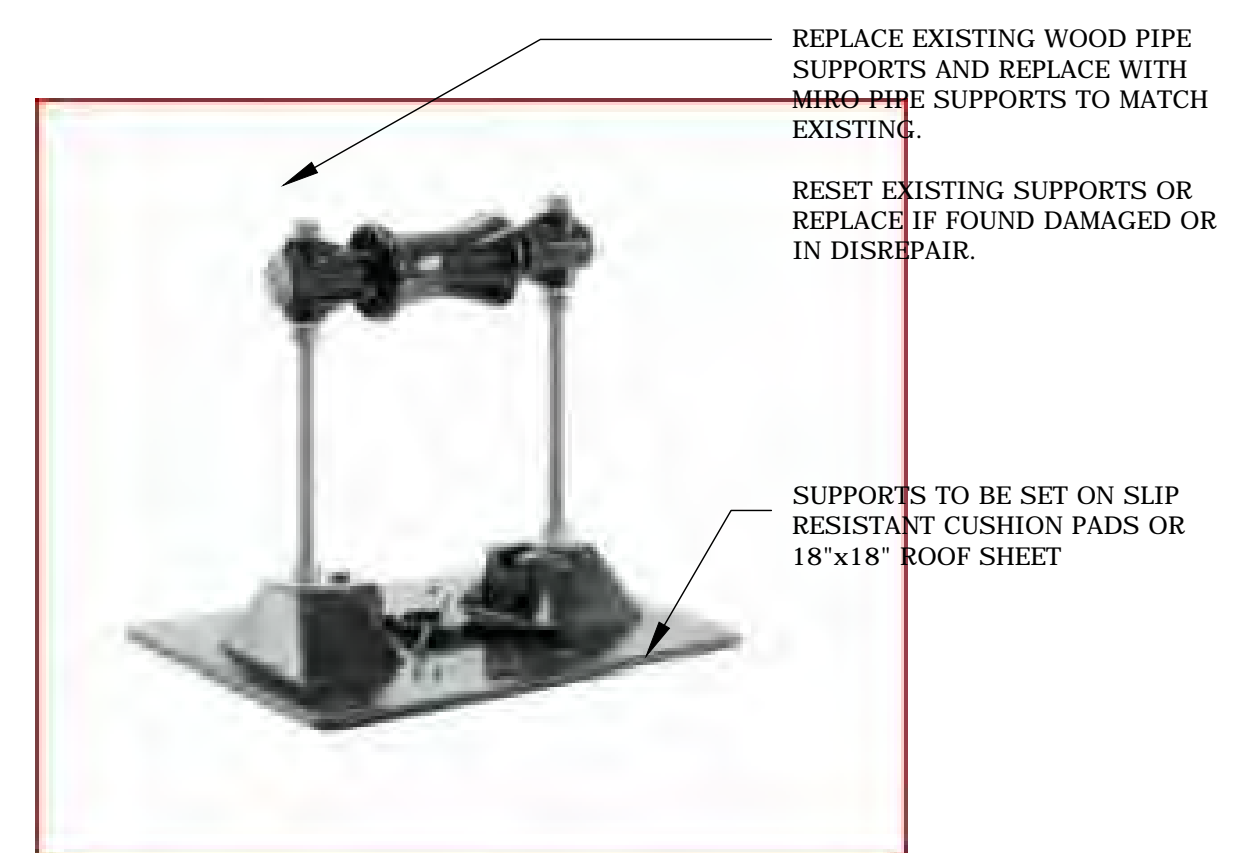
1 COPING DETAIL
SCALE: 1-1/2" = 1'-0"



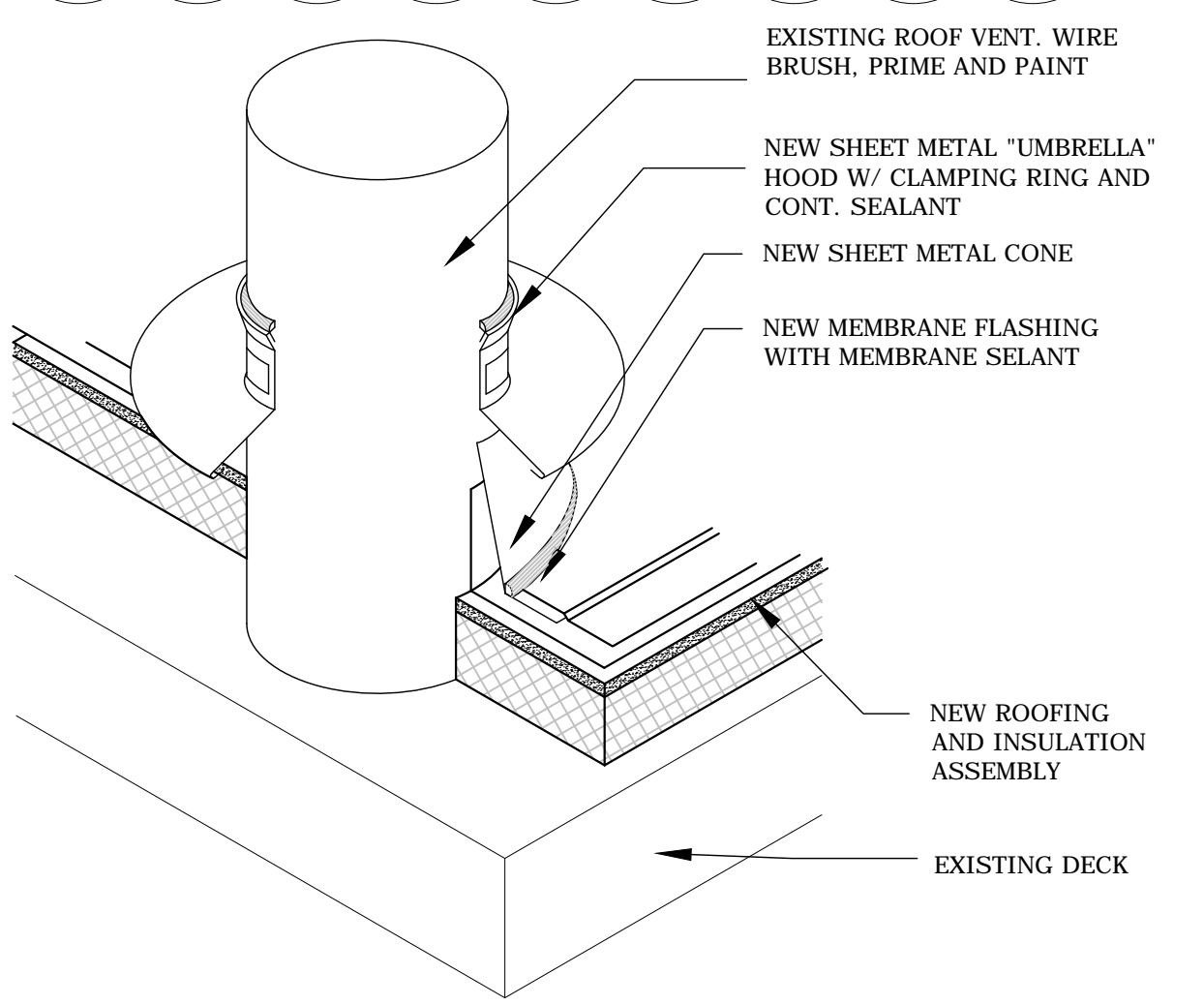
2 ROOF DRAIN DETAIL
SCALE: 1-1/2" = 1'-0"



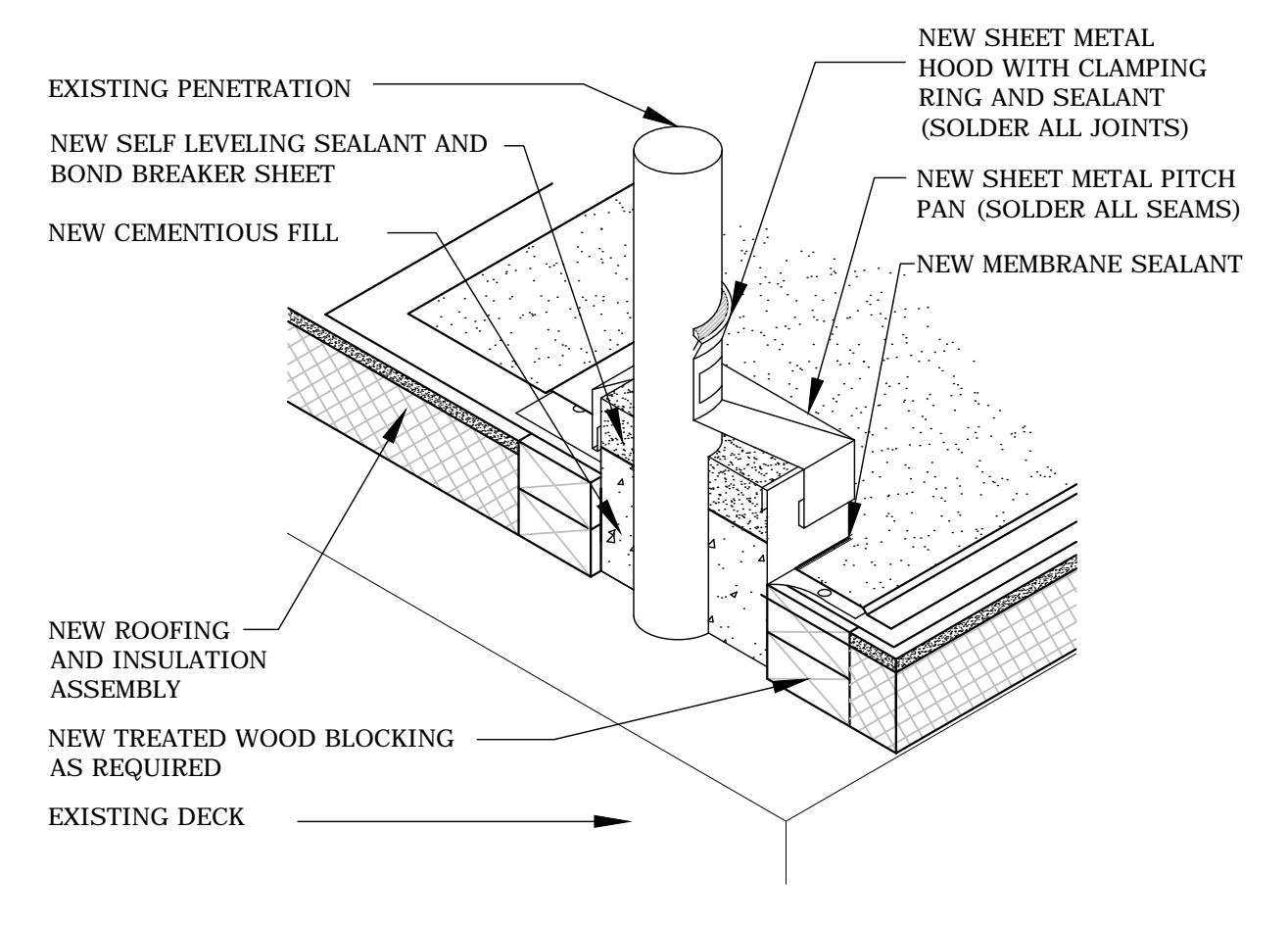
3 SOIL STACK DETAIL
SCALE: 1-1/2" = 1'-0"



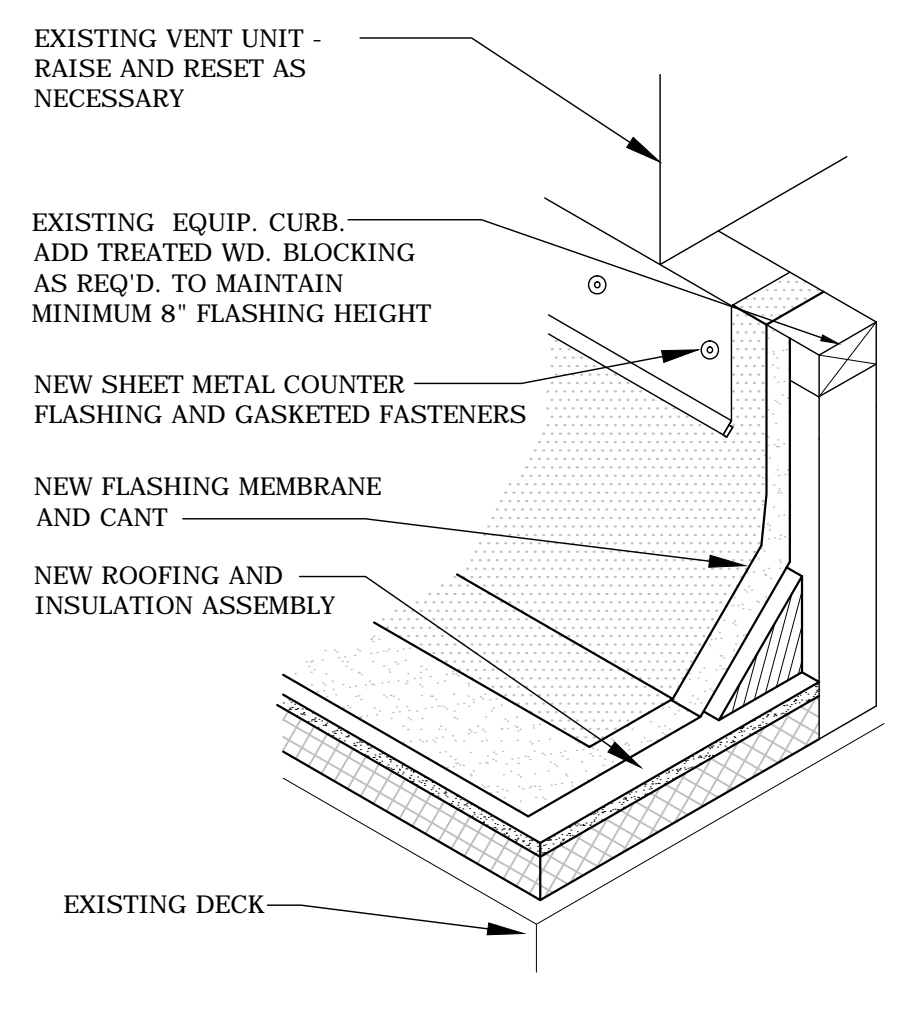
4 PIPE SUPPORT DETAIL
SCALE: 1-1/2" = 1'-0"



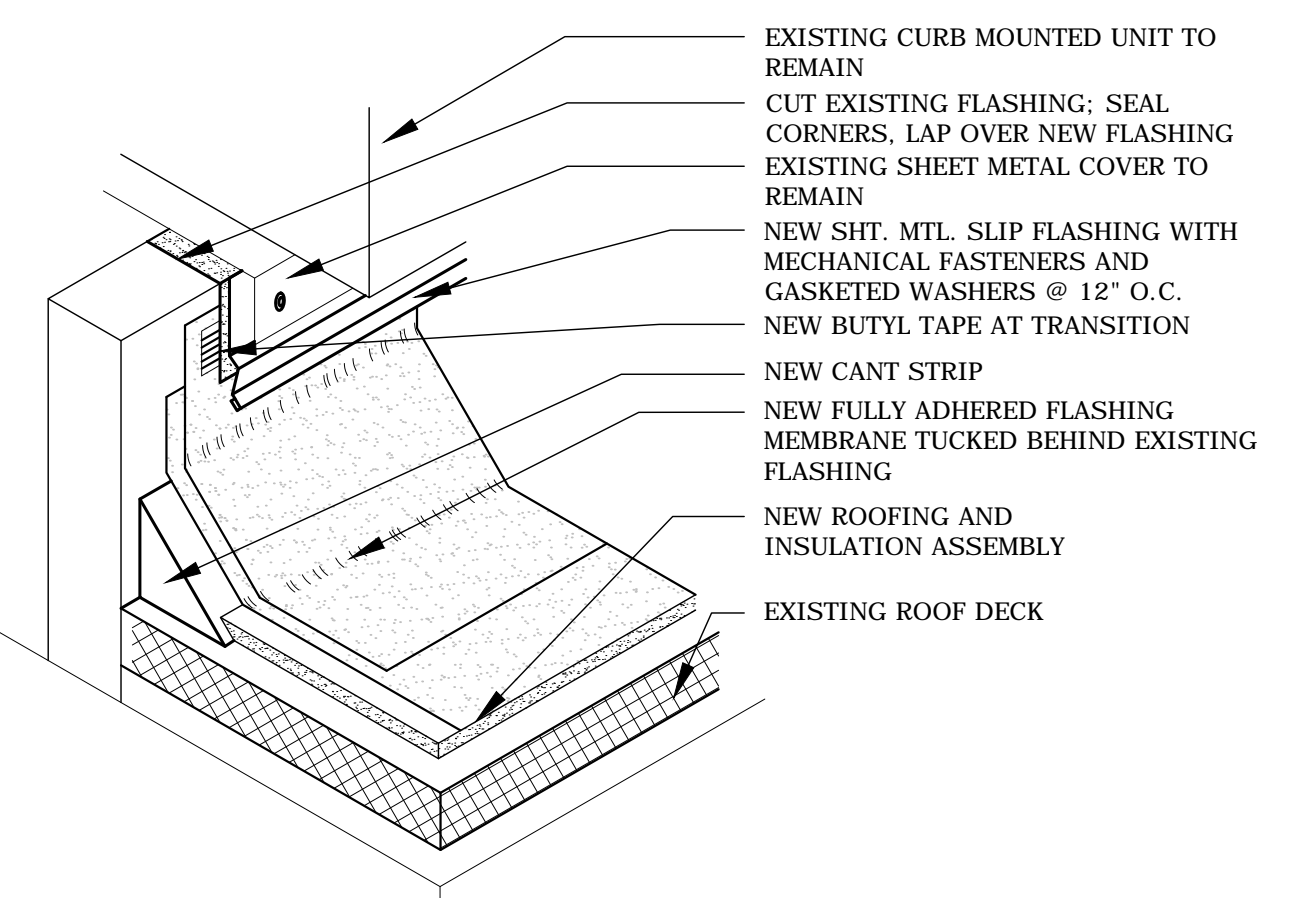
5 FLUE VENT DETAIL
SCALE: 1-1/2" = 1'-0"



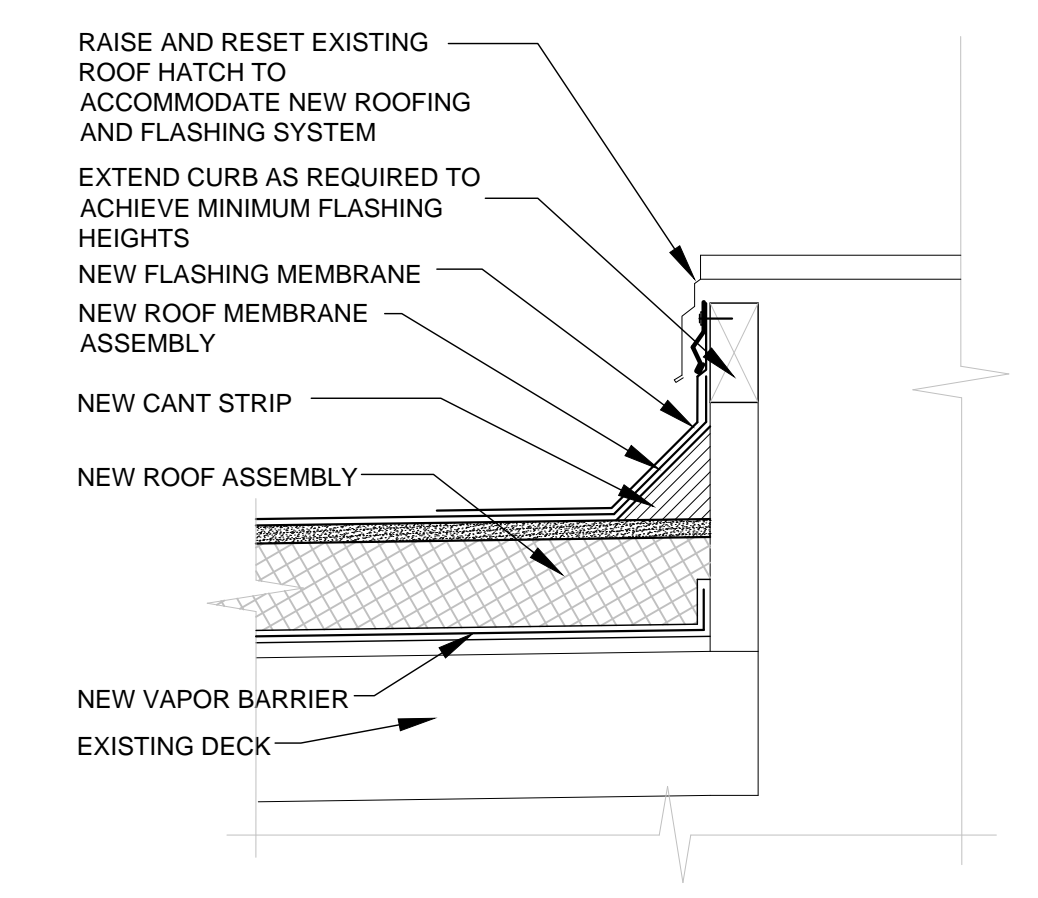
6 PITCH PAN DETAIL
SCALE: 1-1/2" = 1'-0"



7 VENT CURB DETAIL
SCALE: 1-1/2" = 1'-0"



8 MECH CURB DETAIL
SCALE: 1-1/2" = 1'-0"



9 ROOF HATCH DETAIL
SCALE: 1-1/2" = 1'-0"



6 RAISE METAL COVER, INSTALL ADDITIONAL TREATED WD. BLOCKING TO RAISE CURB FOR 8" MIN. FLASHING HEIGHT, WRAP MEMBRANE UP AND OVER TOP OF CURB. SCRAPE AND CLEAN RUST FROM SURFACE PAINT. REMOVE ALL EXISTING CAULKING AT SEAMS AND APPLY NEW CAULK TO SEAL ALL JOINTS.



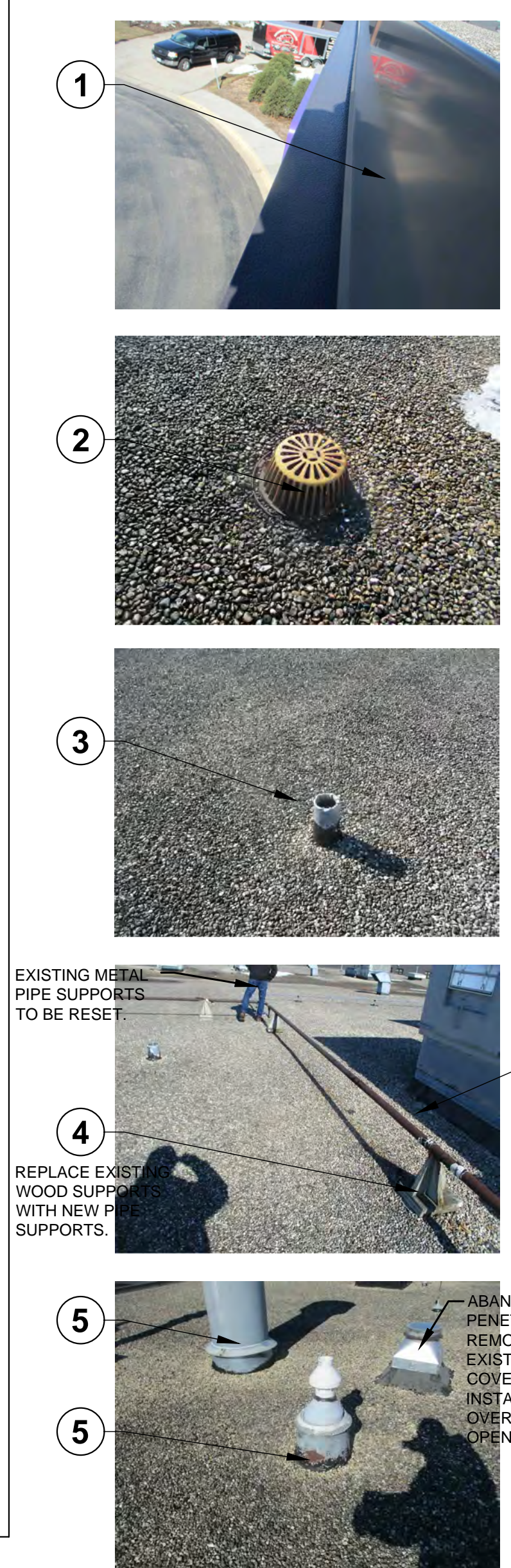
10 RAISED PLATFORM COVER DETAIL
SCALE: NTS



11 RAISE METAL COVER, INSTALL ADDITIONAL TREATED WD. BLOCKING TO RAISE CURB FOR 8" MIN. FLASHING HEIGHT. WRAP MEMBRANE UP AND OVER TOP OF CURB. CAULK ALL JOINTS.

11 FLUE CHASE DETAIL
SCALE: NTS

DETAIL PHOTOS



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DETAILS

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