Salt Creek Rural Park District

530 South Williams Avenue ♦ Palatine, Illinois 60074
847.259.6890 ♦ Fax.259-9975
www.saltcreekpd.com

SPECIFICATIONS

PROJECT: TWIN LAKES CLUBHOUSE

OWNER: SALT CREEK RURAL PARK DISTRICT
530 SOUTH WILLIAMS AVENUE
PALATINE, ILLINOIS 60074

BID OPENING: 10:00 AM, September 18, 2026

INSTRUCTIONS TO BIDDERS

1. The following information is enclosed in your Bid Packet.
   - Bid Notice – page 3
   - Invitation to Bid – page 4
   - Design Intent – page 5
   - Bid Form – page 6
   - List of Subcontractors – page 7
   - Agreement Form – page 8-9
   - Anti Collusion Affidavit – page 10
   - Addenda (if any)
   - Conditions of the Bid – pages 11-14
   - Bid Checklist – page 15
   - Specifications/Drawings – (see attached pages)

2. Please read through the material carefully. All figures must be presented on the Bid Form in order to be considered. Information from any other source will be considered supplemental and not as a part of the bid itself.

3. The following items are to be returned as your completed bid:
   - Bid Form - containing all totals
   - Good Standing Letter from Manufacturer
   - Agreement - with the bidder's name completed on line two
   - Signed Anti-Collusion Affidavit
   - Specifications
   - Detailed Specifications (if any)
   - Addenda (if any)
   - Conditions of the Bid

BID NOTICE

The Board of Commissioners of the Salt Creek Park Rural Park District, Palatine, Illinois, invites bids for the roof replacement at Twin Lakes Clubhouse 1200 E. Twin Lake Dr. Palatine, IL 60074. A pre-bid meeting will be held on site at 10:00 a.m. Wednesday, September 10, 2026, at the Salt Creek Rural Park District office located at 530 S. Williams Avenue, Palatine, Illinois.

Specifications may be obtained beginning at 10:00 AM on September 4, 2026 through the BHFX planroom, https://www.bhfxplanroom.com. A non-refundable fee will be charged for each requested bid package. See BHFX's planroom for the cost of both a printed copy and a PDF download.

By Order Of:
Board of Park Commissioners
Salt Creek Rural Park District
Published in the Daily Herald
Wednesday, August 26, 2026

SALT CREEK RURAL PARK DISTRICT

INVITATION TO BID

The Salt Creek Rural Park District will receive sealed bids for the roof replacement at Twin Lakes Clubhouse at the Park District office at 530 S. Williams Avenue until **10:00 a.m. on Wednesday, September 18, 2026.** Bid documents and specifications are available on the designated BHFX Planroom, https://www.bhfxplanroom.com.

Bidders must note:

l. Bids must be submitted in sealed envelopes, and plainly marked **"BID: Twin Lakes Clubhouse"** and have the bidder's company name indicated on the face of the envelope.

2. Bids shall be submitted only on the bid form provided. The bid form must be completed in full and all total prices must include all work as stated in the specifications.

3. All bids submitted will be considered firm for a period of 60 days from the bid opening date.

4. All bidders are required to demonstrate to the satisfaction of the Park District that they are capable and able to complete the work as required in the specifications. Each bidder shall submit with his bid proof that he satisfactorily performed work of a similar nature to that specified within the preceding two years, together with the locations and the names of the responsible individuals in charge of such projects.

5. Questions about the project should be directed to Mr. Chris Paisley, Golf and Maintenance Superintendent, 847-934-6050 X209

SALT CREEK RURAL PARK DISTRICT
DESING INTENT

Base Bid: Install New Asphalt Shingle System

Remove existing asphalt shingle roof system, including underlayment, and trim metal.
Remove all debris from the existing gutter system.
Remove and reinstall salvaged existing gutters and downspouts.
Install a new asphalt shingle roof system per project manual, details, and manufacturer's system requirements.
Install new exhaust vent along the ridge of the building per roof plans and details.
Shingle system to include a 40-year Silver Pledge Warranty (or equivalent) and 2-year contractor workmanship warranty.

Additive 1: New 6" K-style Gutters
Remove existing gutters, downspouts, and downspout hangers from facades. Install new 6" K-style gutters with 3x4 downspouts. Gutter hangers to be installed no more than 24" on center.

Additive 2: Gutter Guards
Install new gutter guards on all gutters.

Additive 3: New Attic Venting Baffles
Remove the existing 11" baffles and install new 22" baffles in each truss cavity.
Remove decking as needed to ensure proper installation.

Additive 4: Replace Heat Tape
Remove the existing heat tape and replace with new heat tape.
Work to be performed by a certified electrician.

SALT CREEK RURAL PARK DISTRICT
BID FORM

Sealed bids will be received by the Salt Creek Rural Park District until **10:00 a.m.** on **Wednesday, September 18, 2026,** and then publicly opened for furnishing the following supplies and/or services to be delivered in accordance with the following instructions:

Bid Opening at: Salt Creek Rural Park District
Rose Park
530 S. Williams Avenue
Palatine, IL 60074

The undersigned, as bidder, declares that the only parties interested in this proposal as principals are named herein; that this proposal is made without collusion with any other person, firm or corporation; that he has carefully examined the location of the proposed work, the contract drawings, the specifications and other contract drawings therein referred to; he proposes and agrees that if this proposal is accepted, he will agree to construct complete in the manner and time prescribed or implied as incidental to such terms, including those in all addenda specifications, and that he will accept in full payment thereof, the lump sum listed below. It shall be understood by the bidder that none of the items shall be deleted individually from the Contract based on the figures given. It shall also be understood that all work will be awarded to one contractor. It is the bidder's responsibility to field verify all measurements of areas and existing conditions, including existing roof assemblies to be bid.

ITEMS:

BASE BID 1A: Remove Existing Shingle Roof System to Deck and Install New Shingle Roof System

Labor: $ _____
Material: $ _____
_____ square feet @ $ _____ per square foot = Total Bid: $ _____

BASE BID 1B: Remove Existing EPDM Roof System with a New EPDM Roof System

Labor: $ _____
Material: $ _____
_____ square feet @ $ _____ per square foot = Total Bid: $ _____

ADDITIVE 1: Install New 6" Gutters and 3" x 4" Downspouts Total Bid: $ _____

ADDITIVE 2: Gutter Guards Total Bid: $ _____

ADDITIVE 3: New Attic Venting Baffles Total Bid: $ _____

ADDITIVE 4: Replace Heat Tape Total Bid: $ _____

UNIT PRICES:

Repair of wood deck, per square foot $ _____
Replacement of wood deck, per square foot $ _____
Repair of wood blocking and nailer, per linear foot $ _____
Replacement of wood blocking and nailer, per linear foot $ _____

TIME AND MATERIALS:

Repair of conditions not described — Material cost plus profit and overhead _____%
Per man-hour $ _____

SUBCONTRACTOR LISTING

In accordance with the Instructions to Bidders, we submit the following:

Subcontractor's Name	*Category of Work*
_____	*Shingling Labor*
_____	*EPDM Labor*
_____	*Sheet Metal*
_____	*Carpentry*
_____	*Gutters & Downspouts*

CONTRACTOR: _____

BY: _____

DATE: _____

AGREEMENT

SALT CREEK RURAL PARK DISTRICT

This Agreement made this _____day of _____, 20_____, by and

between _____, hereinafter called the "CONTRACTOR" and the SALT CREEK RURAL PARK DISTRICT, hereinafter called the "PARK DISTRICT".

WITNESSETH, that the CONTRACTOR and the PARK DISTRICT for the consideration stated here-in agree as follows:

ARTICLE I - SCOPE OF WORK: The CONTRACTOR shall provide all the materials and perform all of the work described in the specifications entitled:

TWIN LAKES CLUBHOUSE
Palatine, Illinois

and in strict accordance with the requirements of all of the component parts of this Agreement as noted under Article V, all of which are attached hereto and made a part hereof.

ARTICLE III - CONTRACT PRICE: The PARK DISTRICT shall make payments to the CONTRACTOR for the completed performance of work included in this agreement in compliance with the prices as noted in the proposal dated and in accord with subsequent approved agreement change orders subject to all of the provisions of the component parts of this agreement.

ARTICLE IV - COMPLIANCE WITH LAW: The CONTRACTOR shall comply with all statutes, rules and regulations of all Federal, State and Local Agencies having jurisdiction over the proposed improvement at the time the proposal was submitted to the PARK DISTRICT. Any and all costs associated in complying with said statutes, rules and regulations in effect at the time proposals were submitted and due shall be included within the costs of the proposal submitted.

ARTICLE V - COMPLIANCE WITH ADA: In addition to the obligations set forth in Article IV, the contractor confirms that the materials and/or products listed in the proposal for bid do comply with the Americans with Disabilities Act, Title II, the ADA Accessibility Guidelines, the Illinois Accessibility Code, and all rules and regulations promulgated with reference thereto. In addition, if the contractor is obligated by this agreement to install the materials and/or products, the contractor shall install the materials and/or products in compliance with the Americans with Disabilities Act, Title II, ADA Accessibility Guidelines, the Illinois Accessibility Code, and all rules and regulations promulgated with reference thereto. All costs of compliance with said statutes, rules and regulations in effect at the time the contractor submitted its bid have been included in the contract price.

ARTICLE VI - COMPONENT PARTS OF THIS AGREEMENT: This agreement consists of the following component parts, all of which are as fully a part of this agreement as if herein set out verbatim, or if not attached, as if attached hereto:

Instructions to Bidders
Invitation to Bid
Cover Letter
Bid Form
This Agreement
Anti-Collusion Affidavit and Contractor's Certification
Conditions of the Bid
Specifications
Detailed Specifications (if any)
Addenda, (if any)

In the event that any provisions in any of the above component parts of the agreement conflict with any provision in any other component parts, the provision in the component part last enumerated above shall govern over any other component part which precedes it numerically, except as may otherwise specifically stated.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed in the original counterparts the day and year first above written.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed in three (3) original counterparts the day, month and year first above written.

CONTRACTOR: _____

ADDRESS: _____

SIGNATURE: _____ TITLE: _____

Attest: _____ Title: _____

(SEAL)

PARK DISTRICT: SALT CREEK RURAL PARK DISTRICT

SIGNATURE: _____ TITLE: _____

Attest: _____ Title: _____

(SEAL)

SALT CREEK RURAL PARK DISTRICT

ANTI-COLLUSION AFFIDAVIT AND CONTRACTOR'S CERTIFICATION

_____, being first duly sworn, deposes and says:

That he is _____ of _____
(Partner, Officer, Owner, etc.) (Contractor)

The party making the foregoing proposal or bid, that such bid is genuine and not collusive, or sham; that said Bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any Bidder or person, to put in a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference with any person; to fix the bid price element of said bid, or of that of any other bidder, or to secure any advantage against any other bidder or any person interested in the proposed contract.

The undersigned certifies that he is not barred from bidding on this contract as a result of a conviction for the violation of State laws prohibiting bid-rigging or bid-rotating.

_____
(Name of Bidder if the Bidder is an Individual)
(Name of Partner if the Bidder is a Partnership)
(Name of Officer if the Bidder is a Corporation)

The above statements must be subscribed and sworn to before a notary public. Subscribed

and sworn to this _____day of _____, 20____.

_____
Notary Public

SALT CREEK RURAL PARK DISTRICT
CONDITIONS OF THE BID
DEFINITION OF TERMS

Throughout these bid documents, the following terms shall be used:

Bidder - Any individual, firm, company or corporation submitting a sealed proposal as a bid on the designated item(s) or project**.**

Contractor - Any individual, firm, company or corporation whose bid is accepted by the Salt Creek Rural Park District for the item(s) or project.

Director - The Executive Director of Parks and Recreation of the Salt Creek Rural Park District or his designated representative.

Park District - The Salt Creek Rural Park District of Cook County, Illinois.

FORMS

All bid proposals are to be submitted on the Bid Form provided, signed in ink in the proper spaces and submitted in a marked and sealed envelope.

ERRORS IN THE BID

When an error is made in extending the total price, the unit price will govern. Otherwise the bidder is not relieved from errors in bid preparation.

CORRECTIONS/WITHDRAWAL

If an error is found in a bid, it must be corrected before the date and time for the bid opening. A written request for withdrawal of the original bid or any part thereof may be granted only if the request is received prior to the specified time of closing. No bid may be withdrawn or canceled after the closing time for receipt of bids and for a period of sixty (60) days thereafter.

SAMPLES

Samples or drawings requested shall be delivered and removed at no cost to the Park District. The Park District will not be responsible for damage to samples. Samples must be submitted prior to the time set for the opening of bids. Samples shall be removed by the Bidder within thirty (30) days after the Bid Award. Any samples not removed by this time will be discarded by the Park District.

TRADE NAMES

When an item is identified in the specifications by a manufacturer's or trade name or catalog number, the Bidder shall bid upon the item so identified. If the specifications state **"or equal,"** bids on other items will be considered, provided the Bidder clearly identifies in his proposal the item to be furnished, together with any descriptive matter which will indicate the character of the item.

The Park District shall have the right to approve or reject as an equal, any article the Bidder proposes to furnish which contains variations from the specifications.

PRICE

1. Bidders must specify unit prices as well as the aggregate price, unless otherwise specified. Failure to specify unit prices when required may result in bid rejection.

2. Cash Discount - Offers of cash discounts will be considered in determining awards.

TAXES

This work is being done under the auspices of the Salt Creek Rural Park District and therefore is exempt from the Illinois sales tax and the Regional Transportation Authority sales tax. The proposal shall not include any costs for these taxes.

DELIVERY CHARGES

All bid prices should include both shipping and delivery charges. These charges shall be freight (F.O.B.) to the Park District. Delivery should be to a desired point within the Park District unless otherwise stated in the call for bids. Any variation from the advertised terms should be clearly stated in the Bidder's proposal.

OMISSIONS AND DISCREPANCIES

Should a Bidder find discrepancies in, or omissions from bid documents, he should at once notify the Salt Creek Rural Park District, which may send a written instruction to all Bidders. No oral interpretation by the Park District will be binding; only instruction in writing will be deemed valid. To receive consideration, requests for interpretation must be made no later than three working days prior to the date set for receipt of bids.

QUESTIONS

All questions and responses will be available to all interested persons through the Park District.

BIDDER'S KNOWLEDGE

Before submitting proposals, Bidders shall visit the site upon which the work is to be executed in order to familiarize themselves with the existing conditions and fully understand the nature and scope of the work. Such an examination will be presumed and no allowances will be made to the Bidder for extra labor or materials required, or on account of any difficulties encountered which might have been foreseen had examination been made. Inspections may be arranged by contacting the staff member listed as the contact person on the cover page.

BID SECURITY

The Bidder shall submit with his bid, a bid bond, cashier's check, or certified check in an amount not less than 10% (ten percent) of the amount of bid. The bid security shall be made payable to the Salt Creek Rural Park District and shall be attached to the proposal. All checks shall be drawn on an acceptable Illinois bank.

Should the Bidder fail or refuse to enter into the agreement and furnish an acceptable bond within 10 calendar days after notification of acceptance of the Bidder's proposal by the Salt Creek Rural Park District, the bid security shall be forfeited and become the property of the Salt Creek Rural Park District.

In the case of the successful Bidder, the bid security will be retained by the Park District. All bid securities will be returned to unsuccessful Bidders by certified mail.

PERFORMANCE BOND

The successful bidder shall submit prior to the start of the work a performance bond of 110% of bid price. In the case of the successful bidder, the bid security will be retained by the Park District. All bid securities will be returned to unsuccessful bidders.

ACCEPTANCE OR REJECTION OF BIDS

The Park District reserves the right to reject any or all bids, to award a contract for only a portion of the bid work, waive informalities or technicalities in any bid, and accept any bid it deems to be in its best interest.

The Park District may consider such factors as bid price, delivery guarantee, experience and responsibility of bidder, methods of construction and similar factors in determining which bid it deems to be in its best interest.

BID DATE EXTENSION

If less than three (3) sealed bids are received, the Park District reserves the right to extend the bid opening date by two weeks and to contact vendors to solicit additional bids. Bidders submitting sealed bids by the original bid opening date will be given the option of re-submitting a sealed bid.

EXECUTION OF CONTRACT AND PERFORMANCE/PAYMENT BONDS

It is the intent of the Park District to accomplish as much of this work possible within a limited budget. It is therefore conceivable that some bid items may be omitted from the agreement.

The successful Bidder/Bidders shall enter into a written agreement with the Salt Creek Rural Park District within ten (10) calendar days after notification of acceptance of the proposal. The agreement included herewith shall be executed for performance of the work ahead.

Within ten (10) calendar days of being awarded the Bid, the Bidder shall furnish a sufficient surety bond, in a form satisfactory to the Park District. The bond shall guarantee faithful performance of all the provisions of the agreement, for all work and materials against defects, and the payment of all bills and obligations arising from the agreement. It shall also fully guarantee the performance and replacement of all material and equipment, including labor, for a period of one year after final acceptance of the project by the Director.

GUARANTEE

The Bidder shall guarantee, in writing, that all materials and workmanship are free from defects and will remain so free for a period of at least one year after completion of the work. He shall further agree to replace all defective materials furnished under this agreement for a period of one year from the date of final acceptance, at no additional charge to the District.

ANTI-COLLUSION AFFIDAVIT

Bidders shall file an affidavit of anticollusion, contained herein, with all bids for award consideration.

PREVAILING WAGE ACT

The Contractor shall comply with the law as enacted by the State of Illinois, approved September 22, 1979, being 820 I.L.C.S. 155/1 ET SEQ. in which the State has enacted an act regulating wages of laborers, mechanics and other workmen employed in any public works by the State, County, City or any public body or political subdivision or by any one under contract for public works. All Bidders shall figure payment of prevailing wages for all classes of labor used on the project. The successful Bidder's agreement shall contain provisions to insure that both the Prevailing Wage (Ill. Rev. Stat., Ch. 48, 39s-1-12) and the Preference to Illinois Workers Act (Ill. Rev. Stat., Ch. 48, 269-275) are followed. (See attached Cook County Prevailing Wages and explanations included within this packet).

PARK DISTRICT RIGHT

The Park District at all times reserves the right to reject any and all bids submitted hereunder, or accept any bid or combination of bids in the best interest of the Park District and the right to waive minor deviations from the "Contract Documents".

INDEMNIFICATION

The Contractor shall indemnify and save harmless the Salt Creek Rural Park District from and against any and all claims, costs, damage and demands resulting from injuries or death or damage to property alleged to have arisen as a result of or connected with the performance of work under the agreement by the Contractor or his Subcontractor. The Contractor shall defend the Salt Creek Rural Park District against any actions based thereon and shall pay all fees of attorneys and all costs and other expenses arising therefrom.

BID CHECKLIST

PROJECT _____

BIDDER _____

ITEM	RECEIVED	CORRECT INFORMATION
Bid Form		
Good Standing Letter From Manufacturer		
Agreement		
Anti Collusion		
Specifications		
Detailed Specifications (if any)		
Addenda (if any)		
Conditions of the Bid		
Estimated Progress Schedule		
Bid Security		

Section 00700

GENERAL CONDITIONS

This Contract is also governed by the provisions of the “Standard General Conditions of the Construction Contract” prepared by the Engineers Joint Contract Documents Committee (EJCDC), Document No. C-700 (2013 Edition). Where reference is made to the “General Conditions” or “Conditions of the Contract”, the document specified herein is the object of such reference.

A copy of EJCDC No. C-700 (2013 Edition) is provided upon request for your reference.

Section 00800

SUPPLEMENTARY CONDITIONS

SC 0.1 INTRODUCTION

These Supplementary Conditions amend and modify the General Conditions of the Contract and other provisions of the Contract Documents as indicated. All provisions which are not so amended and modified remain in full force and effect.

Numbers and titles used in these Supplementary Conditions correspond with numbers and titles in the General Conditions. The designation "GC" preceding a number refers to that article, paragraph, or subparagraph in the General Conditions. Likewise, the prefix "SC" with a number refers to that article, paragraph, or subparagraph in the Supplementary Conditions.

In articles of the General Conditions, wherever the term Engineer appears, the term Consultant shall be substituted.

The terms used in these Supplementary Conditions which are defined in the General Conditions of the Contract have the meanings assigned to them in the General Conditions.

SC 1.01, A., 1. "ADDENDA"

Amend paragraph GC 1.01, A., 1. to read as follows:

> "Written or graphic instruments issued prior to the execution of the Agreement which clarify, correct or change the Bidding Requirements or the Contract Documents."

and as so amended GC 1.01, A., 1 remains in effect.

SC 1.01, A., 20. "ENGINEER"

Amend paragraph GC 1.01, A., 20. by adding the sentence:

> "In the Articles of the General Conditions, the word Engineer shall mean the Roof Consultant."

and as so amended GC 101, A., 20. remains in effect.

SC 1.01, A., 32. "RESIDENT PROJECT REPRESENTATIVE"

Amend paragraph GC 1.01, A., 32. by adding the sentence:

> "The Resident Project Representative (RPR) may be referred to as the Quality Compliance Observer (QCO)."

and as so amended GC 1.01, A., 32. remains in effect.

SC 1.01, A., 38. "SPECIFICATIONS"

Amend paragraph GC 1.01, A., 38. by adding the sentence:

> "Specifications are provided in Divisions 2 through 16 of the Project Manual."

and as so amended GC 1.01, A., 38. remains in effect.

SC 1.02, E., 1. "FURNISH"

Amend paragraph GC 1.02, E., 1. to read:

> "the word "furnish" when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials and equipment to the Site and to the roof location designated in the Contract ready for use or installation and in usable and operable condition."

and as so amended GC 1.02, E., 1. remains in effect.

SC 1.02, E., 5. "MANUFACTURER"

Amend paragraph GC 1.02, E. by adding sentence 5. to read:

"The word "manufacturer" when used in connection with services, materials, and equipment shall unless otherwise specified mean the guarantor of the roof system designated and agreed in the Contract."

SC 2.02 COPIES OF DOCUMENTS

Amend paragraph 2.02 by deleting in its entirety and substitute the following:

"Consultant shall furnish to contractor one printed copy of the project manual. Additional printed copies will be furnished upon request at the cost of reproduction."

SC 3.01 CONTRACT DOCUMENTS

Amend Article GC 3.01 by adding paragraph F to read:

"F. Sections of Division 1 – General Requirements, govern the execution of all Sections of the Specifications."

and as so amended GC 3.01 remains in effect.

SC 4.01 COMMENCEMENT OF CONTRACT TIME

Amend paragraph GC 4.01, A. to read as follows:

"The Contract Time will commence to run on the Effective Date of the Agreement, or on the date designated in the Agreement, whichever is earlier. If a Notice to Proceed is given, Contract Time will commence on the date indicated in the Notice to Proceed."

and as so amended GC 4.01, A. remains in effect.

SC 4.05 DELAYS IN CONTRACTOR'S PROGRESS

Amend article to include a paragraph H. to read:

"H. Weather conditions: The Contract Time stated in the Agreement and as may be amended through Change Order, does not include time for delays due to weather conditions. When precipitation or high winds or threat of precipitation leads the Contractor to cancel roof construction at this and other project sites on a specific day, the Contractor's request for extension commensurate with delay will have merit."

and as so amended GC 4.05 remains in effect.

SC 5.03, A., 1. SUBSURFACE CONDITIONS

Amend paragraph by adding text to read:

"Consultant has no special knowledge of reports, explorations, or tests of subsurface conditions. Contractor shall be responsible for ascertaining accurate technical information before the commencement of the Work."

and as so amended GC 5.03, A., 1. remains in effect.

SC 5.03, A., 2. PHYSICAL CONDITIONS

Amend the paragraph by adding text to read:

"Consultant has no special knowledge of drawings of physical conditions in or relating to existing surface or subsurface structures. Contractor shall be responsible for ascertaining accurate technical information before the commencement of the Work. This includes, but is not limited to, the existing roof system materials and the size of the work area included in the project."

and as so amended GC 5.03, A., 2. remains in effect.

SC 6.01, A. PERFORMANCE, PAYMENT AND OTHER BONDS

Amend the beginning of the paragraph. Insert before the word "Contractor", the following text to begin the paragraph:

"The Owner may require the Contractor to obtain construction bonds for which the Owner will bear the cost. In this event,"…

and as so amended GC 6.01, A. remains in effect.

SC 6.03 CONTRACTOR'S INSURANCE

Amend paragraph 6.03 by deleting it in its entirety, and substituting the following:
"Contractor to provide insurance as required in the contract documents and to include INTERSTATE ROOF SYSTEMS CONSULTANTS, INC. as an additional insured."

SC 6.04 OWNER'S LIABILITY INSURANCE

The Owner will provide endorsement in his liability insurance policy naming INTERSTATE ROOF SYSTEMS CONSULTANTS, INC. as an additional insured.

SC 6.05 PROPERTY INSURANCE

Amend paragraph 6.05 by deleting it in its entirety, and substituting the following:

"Contractor to provide insurance as required in the contract documents."

SC 6.05, C. DEDUCTIBLE PROVISIONS

Amend paragraph by adding a sentence to read:

"In the event of a claim in the interest of Contractor, Subcontractor or others, Contractor shall provide payment of the deductible amount of the Owner's property insurance.

and as so amended GC 6.05, C. remains in effect.

SC 8.02 COORDINATION

Amend Article by deleting "Supplementary Conditions" and substituting the text,

"Contract Documents."

and as so amended GC 8.02 remains in effect.

SC 10.02 VISITS TO SITE (Periodic visits)

Verbiage in Article 10.02 remains the same.

SC 10.03 PROJECT REPRESENTATIVE

Amend paragraph by deleting entire text of GC 10.03, A. and substituting text to read:

"Owner and Consultant agree that Consultant will furnish a Quality Compliance Observer (QCO) to assist Consultant in observing that the Work is in accord with the Specifications. The duties of the QCO will include, but will not necessarily be limited to, the following:

(1) Conferences and Meetings: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings.

(2) Liaison:

a. Serve as Consultant's liaison with Contractor, working principally through Contractor's superintendent, and assist in understanding the intent of the Specification; and assist Consultant in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-site operations.

b. Assist in obtaining from Owner additional details or information, when required for proper execution of the Work.

(3) Shop Drawings and Samples:
   a. Record date of receipt of Shop Drawings and samples.
   b. Receive samples which are furnished at the site by Contractor, and notify Consultant of availability of samples for examination.
   c. Advise Consultant and Contractor of the commencement of any Work requiring a Shop Drawing or sample if the submittal has not been approved by Consultant.

(4) Review of Work, Rejection of Defective Work, Inspections and Tests:
   a. Conduct on-site observations of the Work in-progress to assist Consultant in determining if the Work in general is proceeding in accordance with the Specifications.
   b. Report to Consultant whenever it appears that any Work is unsatisfactory, faulty or defective or does not conform to the Specifications, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Consultant of Work that appears should be corrected or rejected or should be uncovered for observations, or requires special testing inspection or approval.
   c. Verify that tests, equipment and systems startups are conducted in the presence of appropriate personnel, and that Contractor maintains adequate records thereof; and observe, record and report to Consultant appropriate details relative to the test procedures and startups.
   d. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections and report to Consultant.

(5) Interpretation of Contract Documents: Report to Consultant when clarifications and interpretations of the Specifications are needed and transmit to Contractor clarifications and interpretations as issued by Consultant.

(6) Modifications: Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report with QCO's recommendations to Consultant. Transmit to Contractor decisions as issued by Owner through Consultant.

(7) Records:
   a. Maintain at the job site orderly files for reports of job conferences, Shop Drawings and samples, reproductions of original Contract Documents including all Work Directive Changes, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, Consultant's clarifications and interpretations of the Specifications, progress reports, and other Project-related documents.
   b. Keep a log, recording Contractor hours on the job site, weather conditions, data relative to questions of Work Directive Changes, Change Orders or changed conditions, list of job site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; send originals to Consultant weekly.
   c. Record names, addresses and telephone numbers of all Contractors and subcontractors.

(8) Reports:
   a. Furnish Consultant periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and sample submittals.
   b. Advise Consultant in advance of scheduled major tests, inspections or start of important phases of the Work.
   c. Report immediately to Consultant and Owner upon the occurrence of any accident.

(9) Photographs: Provide photographic evidence of Work in-progress, non-conforming Work and corrected Work.

(10) Certificates: During the course of the Work, verify that certificates and other data required to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Specifications and have this material delivered to Consultant for review and forwarding to Owner prior to final payment for the Work.

(11) Completion: Before Consultant issues a Certificate of Substantial Completion, submit to Contractor a list of observed items requiring completion or correction.

Quality Compliance Observer:

(12) Shall not authorize any deviation from the Contract Documents or substitution of materials or equipment, unless authorized by Consultant.
(13) Shall not exceed the limitations of Consultant's authority as set forth in the Contract Documents.
(14) Shall not undertake any of the responsibilities of Contractor, subcontractors or Contractor's superintendent.
(15) Shall not advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction unless advice is specifically required by the Contract Documents.
(16) Shall not advise on, issue directions regarding or assume control over safety precautions and programs in connection with the Work.
(17) Shall not accept Shop Drawing or sample submittals from anyone other than Contractor.
(18) Shall not authorize Owner to occupy the Project in whole or in part.
(19) Shall not participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized by Consultant."

and as so amended forms GC 10.03 in its entirety.

SC 10.06 DETERMINATION OF UNIT PRICES

Amend paragraph by deleting entire text of GC 10.06 and substituting text to read:

"Consultant will have the authority to determine the actual quantities and classifications of items of Unit Price Work performed by the Contractor, and the written decisions of the Consultant on such matters will be final, binding on the Owner and Contractor, and not subject to appeal (except as modified by the Consultant to reflect change factual conditions)."

and as so amended forms GC 10.06 in its entirety.

SC 12.01 CLAIMS

Amend the parenthetical clause in the first sentence of paragraph B. to read:

…"(but in no event later than seven days)"…

and as so amended GC 12.01 remains in effect.

SC 13.01, B., 2. COST OF WORK

Amend paragraph by deleting the last sentence and substituting a sentence to read:

"All trade discounts, rebates, and refunds, and returns from sale of surplus materials and equipment shall accrue to Contractor unless Owner's deposit funds have directly supplied the materials or equipment, in which case, the discounts, rebates, and refunds, and return from sales shall accrue to Owner. Contractor shall make provisions so that they may be obtained."

and so amended GC 13.01, B., 2. remains in effect.

SC 15.01, C., 1. REVIEW OF APPLICATIONS FOR PAYMENT

Amend the time frame designated in the first sentence (ten days) to read:

"…ten business days…"

and as so amended GC 15.01, C., 1. remains in effect.

SC 15.01, D. PAYMENT BECOMES DUE

Amend the time frame designated in subparagraph 1. (ten days) to read:

"thirty days…"

and as so amended GC 15.01, D. remains in effect.

SC 15.06, B., 1. REVIEW OF APPLICATION FOR FINAL PAYMENT

Amend the time frame designation in the first sentence (ten days) to read:

"…ten business days…"

and so amended GC 15.06, B., 1. remains in effect.

END OF SECTION

Section 01001
GENERAL REQUIREMENTS

PART 1 GENERAL

1.01 SUMMARY OF WORK

A. Work covered by Contract:
   1. Provide labor, materials, equipment and tools:
      a. Furnish and install a new roofing system.
      b. Perform duties related to roof construction including, but not necessarily limited to sheet metal, plumbing, mechanical, electrical, masonry, carpentry, and painting work.
   2. Coordinate sheet metal, plumbing, mechanical, electrical, masonry, carpentry, and painting work by others.

1.02 MEASUREMENT AND PAYMENT

A. Lump Sum Bid.

B. Unit Prices:
   1. Fixed and inclusive of costs, overhead, and profit.
   2. Quantity not fixed.
   3. Unit basis:
      a. Dollars per square foot at roof plane.
      b. Dollars per linear foot.
      c. Dollars per item.

C. Time and Materials Price:
   1. Repair of conditions not described:
      a. Amount per man-hour for labor.
      b. Percent over cost for material furnished.

D. Application for payment: As provided in the AGREEMENT and CONDITIONS OF THE CONTRACT, as supplemented.

E. Change Order procedure:
   1. As provided in the CONDITIONS OF THE CONTRACT.
   2. Consultant will initiate Work Change Directive or Bulletin form at Owner's request.
   3. Consultant will initiate Change Order at Owner's request.
   4. Changes in the Contract:
      a. Written
      b. Executed by Owner.

F. Liquidated Damages:

   CONTRACTOR and OWNER recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not completed within the times specified in the agreement, plus any extensions thereof allowed in accordance with the Conditions of the Contract. The parties also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty), CONTRACTOR shall pay OWNER **$750.00** for each day that expires after the time specified in agreement for Substantial Completion until Work is substantially complete. After Substantial Completion, if CONTRACTOR shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by OWNER, CONTRACTOR shall pay OWNER **$750.00** for each day that expires after the time

specified in agreement for completion and readiness for final payment until the Work is completed and ready for final payment.

1.03 ADDITIVES

A. Follow requirements in Section(s)
   1. 07581
   2. 07582

1.04 ALTERNATES

A. None specified at this time.

1.05 SUBSTITUTIONS AND PRODUCT OPTIONS

A. Follow requirements:
   1. INSTRUCTIONS TO BIDDERS, Article entitled BASIS OF THE BID.
   2. CONDITIONS OF THE CONTRACT and as supplemented.
   3. Section 073113, Article 2.13.

1.06 COORDINATION

A. Contractor shall have lead responsibility for coordination of construction activities which affect the Work including:
   1. Communicating directly with others working on site for the Owner.
   2. Scheduling and performing the Work in concert with others working on site for the Owner.
   3. Notifying the Owner where effective coordination with others working on site for the Owner is insufficient to provide the Work as agreed.

B. Coordination of the Work:
   1. Perform Work in accord with agreed schedules.
   2. Interruption of the Owner's operations will not be acceptable except where agreed in advance.

C. Mechanical and electrical coordination:
   1. Perform Work in accord with agreed schedules.
   2. Interruption of utility service will not be acceptable except where agreed in advance.
   3 Provide reasonable advance notice of shutdowns and rooftop unit movement.
   4. Provide disconnections, reconnections and attachment of rooftop units and utility lines.
   5. Arrange mechanical disconnections, adjustments, and connections.
   6. Arrange electrical disconnections, adjustments, and connections.

1.07 REGULATORY REQUIREMENTS

A. Provide Work in compliance with codes, regulations, and statutes governing construction at the Project location.

B. Follow CONDITIONS OF THE CONTRACT and as supplemented.

1.08 REFERENCE STANDARDS

A. The edition of a Standard current at the Bid Due Date shall be the applicable reference Standard for this Contract.

B. American National Standards Association, ANSI.

C. American Plywood Association, APA, Design/Construction Guide to Nonresidential Roof Systems.

D. American Society for Testing and Materials, ASTM, Annual Book of ASTM Standards.

E. Asphalt Roofing Manufacturers Association, ARMA.

F. National Institute of Standards and Technology, NIST.

G. National Roofing Contractors Association, NRCA, NRCA Roofing and Waterproofing Manual and NRCA Technical Bulletins.

H. Sheet Metal and Air Conditioning Contractors National Association, SMACNA, Architectural Sheet Metal Manual.

I. Underwriters Laboratories, Inc., UL, Building Materials Directory.

J. Western Wood Products Association, WWPA, Western Lumber Products Use Manual.

1.09 PROJECT MEETINGS

A. Preconstruction conference:
   1. Convened by Consultant, Owner and Contractor.
   2. Schedule: Upon or before material unloading.
   3. Participants:
      a. Contractor's Project Manager.
      b. Contractor's Field Superintendent.
      c. Contractor's Crew Foreman.
      d. Owner's Representative.
      e. Store Management.
      f. Consultant.

B. Progress meetings:
   1. Convened by Consultant and Contractor.
   2. Schedule: As requested by Consultant and Owner, or Contractor, and upon Contractor's Notice of Substantial Completion.
   3. Participants:
      a. Contractor's Project Manager.
      b. Owner's Representative.
      c. Store Management.
      d. Consultant.

1.10 SUBMITTALS

A. Construction Progress and Cost Value Chart:
   1. Follow format furnished in the Project Manual.
   2. Submit as specified in the AGREEMENT and CONDITIONS OF THE CONTRACT and as supplemented.

B. Manufacturer's data, samples, inspection forms, and details:
   1. Submit 1 Copy of the designated product specifications, samples, color charts, and manufacturers' details to Consultant for review at least 5 business days before construction commences.
   2. Submittals required: Article 1.05 of Section 073113.
   3. Submit inspection forms from inspections performed during construction and for final inspection to the Consultant no later than one day after inspection.

C. Pre-construction Shop Drawings:
   1. Submit 1 copy to Consultant for review at least 5 business days before construction commences.
   2. Submittals required: Article 1.05 of Section 073113

D. Shop drawings for Work proposed during construction: Submit to Consultant for review within 2 business days of Owner's request.

F. Closeout documents: As provided in the AGREEMENT and CONDITIONS OF THE CONTRACT.

1.11 QUALITY CONTROL

A. Contractor and subcontractors: Continuous and successful business under current company name and in current practiced trade for the 5 years previous to Contract award.

B. Contractor's personnel:
   1. Provide Work using personnel skilled in their trades.
   2. Provide electrical, mechanical, and plumbing work by qualified individuals licensed in their practiced trade.

C. Contractor's execution: Provide Work in accord with the Contract Documents and where a procedure may not be specified in the Contract Documents, provide in accord with the components manufacturers' specifications as submitted to and approved by the Consultant.

1.12 CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

A. Mobilization and Set-up:
   1. Owner will designate adequate space for hoisting, loading, and unloading of materials.
   2. Owner will designate parking space for the Contractor's personnel and equipment.

B. Temporary Utilities:
   1. Owner will provide water from existing outlets and Contractor shall provide electricity for construction purposes.

C. Protection:
   1. Personal safety:
      a. Exercise due care to prevent debris and material from falling from the roof to the ground and through the deck and through ceilings.
      b. Coordinate and provide the closing, distribution of personal safety equipment, erection and maintenance of barricades, and the restricting of access to areas in and around the building in order that Work shall present no danger to the health, well-being, and safety of person and persons.
   2. Property protection:
      a. Provide in accord with CONDITIONS OF THE CONTRACT and as supplemented.
      b. Provide necessary equipment, temporary enclosures, devices, and coverings to prevent damage to property including, but not limited to, walls; structures; equipment; product; windows and skylights; walkways; driveways; landscaping, areas scheduled for, but not immediately subject to, the Work; areas adjacent to, but not part of, the Work.
      c. Provide coverings to protect walls in staging and tear-off areas.
      d. Provide procedures to prevent the ignition or delayed ignition of materials and debris.
      e. Provide daily coordination and covering of tenant products where work is being performed each day.
      f. Smoking is not allowed on roofs at anytime.
      g. A minimum of two, 10-pound ABC fire extinguishers shall be available and on the roof during roof construction.
   3. Security:
      a. Provide protection against theft of materials and equipment, which are part of the Work.
      b. Provide security to prevent the use of ladders and equipment during and between work periods.

D. Sanitary Facilities:
   1. Contractor shall provide and Owner will designate location.

E. Construction Debris:
   1. Clean site continually.
   2. Owner will have the right to salvage any abandoned equipment and scrap materials.
   3. Remove debris from site daily.
   4. Securely cover debris boxes during non-work periods.

F. Building Access: Contractor's forces shall not enter into Owner's facilities unless specific provisions are arranged.

1.13 MATERIALS AND EQUIPMENT

A. Delivery of manufacturers' products:
   1. Original, sealed containers and wrappers.
   2. Original, intact manufacturers' labels listing brand, weight, and references.

B. Delivery of bulk materials:
   1. Identified by manufacturers' or suppliers' manifests or bills of lading containing the manufacturers' specifications issued.
   2. Verification of certification shall be presented upon delivery to the Resident Project Representative.

C. Delivery of shop fabricated goods: Exempt from requirements of Paragraphs A and B of this Article.

D. Storage of materials:
   1. Ground storage will not be acceptable unless approved in advance by the Owner and the Consultant.
   2. Storage inside the structure will not be acceptable unless approved in advance by the Owner and the Consultant.
   3. Rooftop storage and ground storage will not be acceptable unless:
      a. Weight shall be distributed in accord with the capacity of the structural deck.
      b. Materials manufacturers' storage specifications shall be met and approved by the Resident Project Representative.
      c. Materials shall be stored on pallets a minimum of 4 inches above the surface.
      d. Materials shall be completely covered with secured and waterproof tarpaulins.
      e. Manufacturers' preshrunk plastic wrappers and polyethylene tarps will not be acceptable as storage covering.
      f. Rolled goods shall be stored on ends except where specified otherwise by the manufacturer.
      g. Rolled goods shall not be used as weights for tarps.

E. Handling: Prevent damage in handling and storage.

1.14 CONTRACT CLOSEOUT

A. Final Cleaning:
   1. Comply with Article 1.12, Paragraph E, this Section.
   2. Restore property damaged during the Work to its original condition at no cost to the Owner.
   3. Remove equipment, debris and materials from the site.

B. Closeout submittals:
   1. Comply with AGREEMENT and CONDITIONS OF THE CONTRACT.
   2. Final Waiver of Lien.
   3. Final billing.
   4. Guarantee agreement and Contractor warranty agreements.

1.15 SPECIFICATION TECHNIQUES

A. Format:
   1. These specifications are written in imperative and streamlined form and are directed to the Contractor unless specifically noted otherwise.
   2. The words “shall be” shall be inferred where a colon (:) is used within phrases or sentences.

B. Reference: Where an Article is cited for reference and no Section is included in that reference, the Section shall be the Base Bid Section of Division 7.

C. Definitions:
   1. The word “furnish” shall mean to purchase, supply, and deliver to the Work’s site, elevation, and location those goods and services which are part of the Work.
   2. The word “install” shall mean to place and integrate into position for designed use.
   3. The word “provide” shall mean furnish and install.

END OF SECTION

Section 07 31 13
Asphalt Shingle

PART I GENERAL

1.01 SECTION INCLUDES

A Inspection of site:

1. Project Name: Twin Lakes Clubhouse
2. Roof Section(s) Included in Project: A

B Asphalt roofing shingles.

C Leak barrier and roof deck protection.

D Metal flashing associated with shingle roofing.

E Attic ventilation.

1.02 RELATED SECTIONS

A Section 01001 – General Requirements

B Section 075323 – EPDM

C Section 07581 – Additive 1

D Section 07582 – Additive 2

E Section 07583 – Additive 3

F Section 07584 – Additive 4

1.03 REFERENCES

A American Society for Testing and Material (ASTM) – Annual Book of ASTM Standards

1. ASTM A 653/A 653M - Standard Specification for Steel Sheet, Zinc Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
2. ASTM B 209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
3. ASTM B 370 - Standard Specification for Copper Sheet and Strip for Building Construction.
4. ASTM D 3018 - Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules.
5. ASTM D 3161 - Standard Test Method for Wind-Resistance of Asphalt Shingles (Fan-Induced Method).
6. ASTM D 3462 – Standard Specification for Asphalt Shingles Made From Glass Felt and Surfaced with Mineral Granules.
7. ASTM D 4586 - Standard Specification for Asphalt Roof Cement, Asbestos-Free.
8. ASTM D 7158 - Standard Test Method for Wind-Resistance of Sealed Asphalt Shingles (Uplift Force/Uplift Resistance Method).
9. AC438-1011-R1 – New Acceptance Criteria for Alternative Asphalt Roofing Shingles
10. ASTM D226/D226M - Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing 2017.
11. ASTM D1970/D1970M - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection 2021.
12. ASTM D3161/D3161M - Standard Test Method for Wind Resistance of Steep Slope Roofing Products (Fan-Induced Method) 2020.
13. ASTM D3462/D3462M - Standard Specification for Asphalt Shingles Made From Glass Felt and Surfaced with Mineral Granules 2019.
14. ASTM D4869/D4869M - Standard Specification for Asphalt-Saturated Organic Felt Underlayment Used in Steep Slope Roofing 2016a (Reapproved 2021).

15. ASTM E96/E96M - Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials 2022a.
16. ASTM E108 - Standard Test Methods for Fire Tests of Roof Coverings 2020a.
17. ASTM F1667/F1667M - Standard Specification for Driven Fasteners: Nails, Spikes, and Staples 2021a.

B Underwriters Laboratories (UL) - Roofing Systems and Materials Guide (TFWZ.R21)
1. UL 790 - Tests for Fire Resistance of Roof Covering Materials.
2. UL 997 - Wind Resistance of Prepared Roof Covering Materials.

C Asphalt Roofing Manufacturers Association (ARMA)

D Sheet Metal and Air Conditioning Contractors National Association, 1nc. (SMACNA) - Architectural Sheet Metal Manual.

E National Roofing Contractors Association (NRCA)

F American Society of Civil Engineers (ASCE).
1. ASCE 7 - Minimum Design Loads for Buildings and Other Structures.

G U.S. Green Building Council (USGBC)

H Leadership in Energy and Environmental Design (LEED)

I ENERGY STAR

J Cool Roof Rating Council (CRRC)

K Miami Dade County

1.04 DEFINITIONS

A Roofing Terminology: Refer to ASTM D1079 and the glossary of the National Roofing Contractors Association (NRCA) Roofing and Waterproofing Manual for definitions of roofing terms related to this section.

1.05 SUBMITTALS

A Submit copies of approved manufacturer product data sheets and detail drawings for each type of roofing product.

1. Shingles.
2. Underlayment.
3. Ice Shield.
4. Rubberized Asphalt Sealants
5. Exhaust Venting.
6. Starter Shingle.
7. Hip/Ridge Shingles.
8. Trim Metals.
9. Valley Metal.

B Manufacturer’s detail drawings.

C Manufacturer’s installation instructions.

D Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

E Safety Data Sheets (SDS) for all material used on site.

1.06 QUALITY ASSURANCE

A As provided in the CONDITIONS OF THE CONTRACT, and as supplemented.

1. Provide all primary roofing products, including shingles, underlayment, leak barrier, and ventilation, by a single manufacturer.
2. Installer must be approved for installation of all roofing products to be installed under this section.
3. Job site to be cleaned up at the end of each day.
4. Protect landscaping and balconies.

1.07 MOCK-UPS

A Provide mock-up of 100 sq.ft. as directed by Consultant, including underlayment, shingles, eave protection membrane, and associated flashings.

B Locate as directed by Architect/Roof Consultant.

C Mock-up may remain as part of work.

1.08 REGULATORY REQUIREMENTS

A Provide a roofing system achieving an Underwriters Laboratories (UL) Class A fire classification.

B Install all roofing products in accordance with all federal, state and local building codes.

C All work shall be performed in a manner consistent with current OSHA guidelines.

1.09 PRE-CONSTRUCTION MEETING

A For all projects a pre-construction meeting will be held between the Contractor, Consultant, and Owner.

B The meeting shall take place before the start of the roofing installation, no more than 2 weeks before the roofing project.

C Attendees shall review all pertinent requirements for the project, including but not limited to, scheduling, weather considerations, project duration, and requirements for the specified warranty.

1. Required Attendence: Consultant, Project Manager, Forman/Superintendent, and Subcontractor
2. Optional Attendence: Owner

1.10 DELIVERY, STORAGE, AND HANDLING

A As Designated inSection01001, Article 1.13 and as supplemented in this section.

B Coordinate delivery with Consultant.

C Material containers, mixing, and dilution:

1. Containers shall be closed and sealed except when materials are being removed.
2. Follow Manufacturers' instructions for mixing and stirring.
3. Cements, adhesives, primers, coatings, and sealants which have been diluted or cut back after their manufacture shall be be incorporated into the work.

D Store all products in manufacturer's unopened, labeled packaging until they are ready for installation. Store products in a covered, ventilated area, at temperature not more than 110 degrees F; do not store near steam pipes or radiators. Store bundles on a flat, properly drained surface. Maximum stacking height shall not exceed manufacturers recommendations. Store all rolls on end. Store and dispose of solvent-based materials in accordance with all federal, state and local regulations. Shingle bundles shall not be stored "broken" over the ridge.

1.11 WEATHER CONDITIONS

A Proceed with work only when existing and forecasted weather conditions will permit work to be performed in accordance with manufacturers recommendations.

B Follow manufacturers cold weather recommendations when installing shingles, eave protection membrane, and underlayment in temperatures below 40 degrees F.

C Work shall **NOT** proceed over damp or frozen substrates.

1.12 SEQUENCING AND SCHEDULING

A As designated in Section 01001, Article 1.06

B Proceed with Permanent flashing and sheet metal installation concurrently with roofing.

C Arrange work to avoid traffic over completed work.

D Materials and equipment shall not be stored on completed work.

1.13 WARRANTY

A Provide to the owner a warranty covering:

1. Roofs installed by a Certified Manufacturer Contractor only.
2. Manufacturing defects: 100% coverage for materials and labor for:
   a 40 years with the first 20 years non- prorated.
3. Workmanship errors: 100% coverage for workmanship errors for:
   a 10 years.
4. Roof system shall NOT be installed over an existing roof, all existing roof materials must be removed to the deck.
5. Warranted against algae discoloration for 25 years
6. Roofs installed on portions of buildings do not qualify for warranty.
7. In addition to the requirements listed above, contractor must register and pay for this warranty in accord with manufacturer requirements. On projects that total more than 250 squares, the permanent warranty will be issued only if the project passes final inspection. Manufacturer reserves the right to withhold the warranty if the roof has not been installed according to Manufacturer's written application instructions. Manufacturer also strongly recommends that your Certified Contractor schedule a start-up and at least one interim inspection on projects of 250 squares or more by contacting the manufacturer.
8. Roofing Installers Warranty: Correct defective work within 2-year period commencing on Date of Substantial Completion. Installer will repair or replace components of asphalt shingle roofing that fail in materials or workmanship within specified warranty period.
9. Warranty must be transferable.
10. Warranty must state roof area as designated by Consultant.

PART II PRODUCTS

2.01 MANUFACTURER

A Acceptable Manufacturer: GAF Materials Corporation, Owens Corning, CertainTeed

B Requests for substitutions will be considered. Submit for approval.

2.02 SHINGLES

A Granule surfaced, self-sealing asphalt shingle with a strong fiberglass reinforced Micro Weave core and StainGuard protection, which prevents pronounced discoloration from blue-green algae through formulation/unique blends of granules.

1. Timberline HDZ, Duration, Landmark
2. Color: Owner to select from manufacturers' full range.

2.03 HIP AND RIDGE SHINGLES

A High profile self sealing hip and ridge cap shingle matching the color of selected roof shingle.

2.04 STARTER STRIP

A Self sealing starter shingle designed for premium roof shingles.

2.05 LEAK BARRIER

A Underlayment: Self-adhering rubber-modified asphalt sheet complying with ASTM D1970/D1970M; 40 mil (0.55 mm) total thickness; with strippable release film and woven polypropylene sheet top surface.

1. Minimum Requirements: Comply with ICC-ES AC188.
2. Self Sealability: Passing nail sealability test specified in ASTM D1970/D1970M.
3. Low Temperature Flexibility: Passing test specified in ASTM D1970/D1970M.
4. Water Vapor Permeance: 0.067 perm (0.38 ng/(Pa s sq m)), when tested in accordance with ASTM E96/E96M, Procedure A (desiccant method).
5. Performance: Meet or exceed requirements for ASTM D226/D226M, Type II asphalt-saturated organic felt.
6. Liquid Water Transmission: Passes ASTM D4869/D4869M.
7. Functional Temperature Range: From minus 70 degrees F (minus 56.7 degrees C) to 212 degrees F (100 degrees C).

2.06 SHINGLE UNDERLAYMENT

A Premium , water repellant, breather synthetic type underlayment. UV stabilized polypropylene construction. Meets or exceeds ASTM D226 and D4869. Approved by Dade Country, Florida Building Code, and ICC.

2.07 ROOFING CEMENT

A Asphalt Plastic Roofing Cement meeting the requirements of ASTM D 4586, Type I or II.

1. Trowel Grade.
2. Waterproof
3. Asbestos Free
4. Manufacturer: Accepted by selected shingle manufacturer.

2.08 ROOF ACCESSORIES

A Dryer Vents

1. Material: Steel
2. Guage: Minimum 24
3. Brand/Manufacturer: Broan
4. Model: 636

2.09 ATTIC VENTILATION

A Ridge Vents

1. Rigid plastic ridge ventilator designed to allow the passage of hot air from attics while prohibiting snow infiltration. For use in conjunction with eave/ soffit intake ventilation products. Provides a minimum 18.0 sq inches Net Free Ventilation Area per lineal foot.
2. Low profile roof-to-wall ventilator to allow the passage of hot air from attics while prohibiting snow infiltration. For use in conjunction with eave/ soffit intake ventilation products. Provides a minimum 9.0 sq inches Net Free Ventilation Area per lineal foot.
   a Lomanco Omni-wall Vent (OW-4) or approved equivalent.

B Fascia and Soffit/Under Eave Vents

1. Salvage existing intake venting system.

2.10 FASTENERS

A Shingle Nails:

1. Sandard round wire, zinc-coated steel or aluminum.
2. 10 to 12 gauge, smooth, barbed or deformed shank, with heads 3/8 inch to 7/16 inch in diameter, nail shank diameter of 0.109-inch.
3. Length must be sufficient to penetrate into solid wood at least 3/4 inch or through plywood or oriented strand board by at least 1/8 inch .
4. ASTM F1667/F1667M

B Plywood Nails:

1. Common Ring Shank.
2. Size: 8d

C Masonry Nails:

1. Annualar Groove.
2. Cap: 1 inch diameter.

D Metal to Wood Fastener: HWH Trugrip Series with EPDM Washers by Buildex.

E Metal to Metal Fasteners: HWH Teks by Buildex.

F Masonry Fasteners:

1. Tapcon Series by Buildex.
2. Pin Sets with Lead Anchors.

2.11 METAL FLASHING

A SMACNA Recommendationd form minimum standards where not exceeded in this Article.

B Metal Flashings: Provide sheet metal eave edge, gable edge, ridge, ridge vents, open valley flashing, chimney flashing, dormer flashing, and other flashing as indicated.

C Form flashings to profiles indicated on drawings.

D Form sections square and accurate to profile, in maximum possible lengths, free from distortion or defects detrimental to appearance or performance.

E Hem exposed edges of flashings a minimum of 1/4 inch (6 mm) on underside.

F Details:
1. Soil Stack:
   a Material: Pig lead alloy or equivalent neoprene boot flashing
   b Weight: 4 pounds per square foot.
   c Form: Preformed and soldered with sloped base.
   d Reference: ASTM B-29.
2. Drip Edge:
   a Material: Aluminum
   b Thickness: .019-inch
   c Size: 4-inch flange and 2-inch face.
   d Finish: Prefinished.
   e Color: Selection by Owner; provide standard colors.
3. Gutter Apron:
   a Material: Aluminum
   b Thickness: .019-inch
   c Size: 4-inch flange and 2-inch face.
   d Finish: Prefinished.
   e Color: Selection by Owner; provide standard colors.
4. Valley flashings:
   a Material: Galvanized Steel
   b Gauge: Min. 24.
   c Size: 18 inches wide with 1 inch high inverted “V” centerline crimp.
   d Finish: Prefinished.
   e Color: Selection by Owner; provide standard colors.

2.12 TEMPORARY MATERIALS

A Mesh Reinforced Vinyl Sheeting.

B Roof Cement, Article 2.07

2.13 EQUIVALENTS

A Products of this Section may be bid on an equivalent basis, and substitutions may be 10approved.

1. As provided in the CONDITIONS OF CONTRACT and as supplemented.
2. As provided in the INSTRUCTIONS TO BIDDERS, Article entitled BASIS OF THE BID.
3. In accord with Section 01001, Article 1.10

B As approved in advance by the Owner and Consultant.

PART III EXECUTION

3.01 PRE-CONSTRUCTION SITE EXAMINATION

A Examine site to determine satisfactory conditions for work.

B Write Consultant to notify of defects and conditiond which may adversely influence performance or completion of work.

C Absence of written notice will constitute the Contractor's acceptance of site.

D Verify:

1. Deck support, attachment, and integrity.
2. Deck weight limits before loading materials.
3. Existence and locations of above ground utility lines, underground utilities, water and gas lines, fire sprinkler systems, pavement heating devices, above and below deck conduit and tubing, ceiling suspension systems, and lawn sprinkler systems.
4. Dry and acceptable surfaces to receive the work.
5. Undamaged, properly installed and sloped, and acceptable deck to receive the work.
6. Curbs, pipes, sleeves, ducts, vents, nailers, and blocking are secure and acceptable.

3.02 PREPERATION

A Remove all existing roofing down to the roof deck.

1. Replace damaged deck with new materials as needed
2. Patch slant back vent holes with blocking and plywood/OSB to match existing decking.

B Verify that the deck is dry, sound, clean and smooth. It shall be free of any depressions, waves, and projections.

C Cover with sheet metal, all holes less than 6-inches in diameter, cracks over ½-inch in width, loose knots and excessively resinous areas.

D Clean deck surfaces thoroughly prior to installation of eaves protection membrane and underlayment.

3.03 INSTALLATION OF UNDERLAYMENT

A General:

1. Install using methods recommended by manufacturer, in accordance with local building codes. When local codes and application instructions are in conflict, the more stringent requirements shall take precedence.
2. Refer to project details and manufacturer's installation instructions.

B Eaves:

1. Install eaves edge metal flashing tight with fascia boards; lap joints 2 inches and seal with plastic cement or high quality urethane sealant; nail at the top of the flange.
2. On all roofs install leak barrier up the slope from eaves edges at least 36 inches beyond the interior "warm wall". Lap ends 6 inches and bond.

C Valleys:

1. Install eaves protection membrane at least 36 inches wide and centered on the valley with 18" strips on each side. Refer to Valley Detail.
2. Where valleys are indicated to be "open valleys", install metal flashing over leak barrier before roof deck protection is installed; DO NOT nail through the flashing. Secure the flashing by nailing at 18 inches on center just beyond edge of flashing so that nail heads hold down the edge.
3. Strip valley metal in with additional 6 inch strips of leak barrier over nails.

D Roof Deck Protection:

1. Install one layer of roof deck protection over the entire area including areas protected by leak barrier at the eaves or valley. Install sheets horizontally so water sheds and secure in place per manufacture requirements.
2. On roofs sloped at more than 4:12, lap horizontal edges at least 2 inches and at least 2 inches over eaves protection membrane.
3. Lap ends at least 4 inches. Stagger end laps of each layer at least 36-inches.
4. Lap roof deck protection over leak barrier in valley at least 6 inches .

E Penetrations:

1. Vent pipes: Install a 24 inch square piece of eaves protection membrane lapping over roof deck underlayment; seal tightly to pipe.
2. Vertical walls: Install eaves protection membrane extending at least 8 inches up the wall and 12 inches on to the roof surface. Lap the membrane over the roof deck underlayment.
3. Rake Edges: Install metal edge flashing over eaves protection membrane and roof deck underlayment; set tight to rake boards; lap joints at least 2 inches and seal with plastic cement; secure with nails.

3.04 INSTALLATION OF STARTER SHINGLES

A General:

1. Install in accordance with manufacturer's instructions and local building codes. When local codes and application instructions are in conflict, the more stringent requirements shall take precedence.
2. Refer to application instructions and project details for the selected starter strip shingles.

B Placement and Nailing:

1. For maximum wind resistance along eaves, install starter strip containing sealant or cement shingles to underlayment and each other in a 4" width of asphalt plastic roof cement.
2. Install manufacturers starter strip up gable edge fascia boards as required by manufacturer.
3. Place starter strip shingles 1/4" – 3/4" over eave and rake edges to provide drip edge.
4. Nail approximately 1-1/2" – 3" above the butt edge of the shingle.

3.05 INSTALLATION OF SHINGLES

A General:

1. Install in accordance with manufacturer's instructions, project details, and local building codes. When local codes and application instructions are in conflict, the more stringent requirements shall take precedence.
2. Minimize breakage of shingles by avoiding dropping bundles on edge, by separating shingles carefully (not by "breaking" over ridge or bundles), and by taking extra precautions in temperatures below 40 degrees F (4 degrees C).
3. Handle carefully in hot weather to avoid scuffing the surfacing or damaging the shingle edges.

B Placement and nailing

1. Secure with 6 Nails per Shingle in accordance with Manufacturers application instructions or local codes.
2. Placement of nails varies based on the type of shingle specified. Consult the application instructions for the specified shingle for details. Nails must be placed within 1 inch of the end of the shingle.

3. Nails must be driven flush with the shingle surface. Do not over-drive or under-drive the nails.
4. Shingle offset varies based on the type of shingle specified. Consult the application instructions for the specified shingle for details.
5. Project first course of shingles minimum ¼ inch and up to ¾ inch beyond fascia boards.
6. Extend shingles 1/2 inch beyond face of gable edge fascia boards.

C Valleys

1. Install valleys using the "open valley" method:

a Snap diverging chalk lines on the metal flashing, starting at 3 inches each side of top of valley, spreading at 1/8 inch per foot to the eaves.
b Run shingles to chalk line.
c Trim last shingle in each course to match the chalk line; do not trim shingles to less than 12 inches wide and dog ear the corner of the shingle.
d Apply a 2 inch wide strip of plastic cement under ends of shingles, sealing them to the metal flashing.

D Penetrations

1. All Penetrations are to be flashed according to manufacturer, ARMA and NRCA

3.06 INSTALLATION OF ATTIC VENTILATION

A General

1. Ventilation must meet or exceed current F.H.A., H.U.D. and local code requirements.

B Exhaust Ventilation

1. Ensure proper opening size is obtained for exhaust venting
2. Install venting as designated on the Roof Plan
3. Install ridge shingles and flashing metals over vent.

3.07 PROTECTION

A As provided in Section 01001, Article 1.12, Paragraph C.
B Demolish only roofing which shall be replaced by the completed shingle assembly before the stop of work on that day.
C Provide tie-ins and water cutoffs to prevent moisture from entering into
D Protect installed products from foot traffic until completion of the project.

3.08 REJECTED WORK

A Promptly remove from this site and do not incorporate in the work:

1. Work rejected by the Owner through the Consultant.
2. Damaged Materials.

3.09 FLASHINGS AND COUNTERFLASHINGS

A Stacks, pipes, flues, and vents.

1. Integrate flashing flange into shingle courses.
2. See ARMA Figures 37, 38, 39, and SMACNA Figure 4.19.

3.10 CLEANING

A In accord with Section 01001, Article 1.12, D., and Article 1.14, A.

B In accord with CONDITIONS OF THE CONTRACT, and as supplemented.

C Clean and flush gutters and downspouts.

3.11 FIELD QUALITY COMPLIANCE

A Field Inspection and testing will be performed in accord with CONDITIONS OF THE CONTRACT and as supplemented.

B Correct identified defects and irregularities and all work not in accord with this Contract.

3.12 PROJECT CLOSE OUT

A Submittals for all products used in the roof system.

B Warranty provided to owner for project.

C Attic Stock:

1. Up to 3% of total project square footage, minimum of 1 square (3 Bundles)

END OF SECTION

Section 075323
Ethylene-propylene-Diene-Monomer Roofing
BASE BID

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Inspection of site:
   1. Building name: Twin Lakes Clubhouse
   2. Roof areas: B

B. Demolition of existing roofing.

C. Deck and substrate inspection and repair.

D. Single ply roofing.

E. Sheet metal work.

F. Mechanical equipment movement and electrical connections.

1.02 RELATED SECTIONS

A. Section 01001 – General Requirements.

B. Section 073113 – Asphalt Shingles.

C. Section 07581 – Additive 1.

D. Section 07582 – Additive 2.

E. Section 07583 – Additive 3.

F. Section 07584 – Additive 4.

1.03 REFERENCES

A. ASTM C-1013-94, Specification for Faced Rigid Cellular Polyisocyanurate Roof Insulation.

B. ASTM C-1289-14, Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board.

C. ASTM D-1970-90 (1994), Specification for Sheet Materials, Self-Adhering Polymer Modified Bituminous (Ice Shield).

D. ASTM D-4637-87, Specification for Vulcanized Rubber Sheet Used in Single Ply Roofing (EPDM).

E. ASTM D-4811-90, Specification for Non-Vulcanized Rubber Sheet Used as Roof Flashing.

F. ASTM D-4897-94, Specification for Asphalt-Coated Glass-Fiber Venting Base Sheet.

G. ASTM D-5019-89, Specification for Polymeric Reinforced Non-Vulcanized Sheet Used in Roofing (CSM/PIB).

H. FM – Roof Assembly Classifications.

I. Federal Specification HH-I-1972/2 Class 1 Insulation Board, Thermal, Faced, Polyisocyanurate.

J. SMACNA, Architectural Sheet Metal Manual.

K. SSPC, Steel Deck Surface Preparation.

L. U.L. – Fire Hazard Classifications.

M. Western Wood Products Association, WWPA, Western Lumber Products Use Manuel.

1.04 ROOF SYSTEM DESCRIPTION

A. Single Ply Roofing System:
   1. Insulated.

B. U.L. Class A System.

C. F.M. Wind Up-lift resistance:
   1. Meets or exceeds 1-60 rated and approved insulation and fastening system.

1.05 SUBMITTALS

A. As provided in Section 01001, Article 1.10.

B. Samples of Product data:
   1. Membranes.
   2. Insulation.

C. Samples of Product sample, 12 inches by 12 inches:
   1. Membranes.
   2. Insulation.

D. Manufacturer’s detail drawings.

E. Guarantee and Contractor warranty application forms.

F. Manufacturer’s installation instructions.

G. Manufacturer’s inspection forms from inspections performed during construction and for final inspection.

H. Manufacturer’s pre-installation notice (NOA) and (ANOA) for commencement of guarantee work.

I. Shop drawings.

J. Safety Data Sheets (SDS) for all materials used on site.

K. Dimensioned shop drawings shall include:
   1. Outline of roof with roof size and elevations shown.
   2. Profile details of flashing methods for penetrations.
   3. Technical acceptance from manufacturer.

1.06 QUALITY ASSURANCE

A. As provided in CONDITIONS OF THE CONTRACT and as supplemented.

1.07 REGULATORY REQUIREMENTS

A. As designated in Section 01001, Article 1.07.

1.08 PRE-CONSTRUCTION CONFERENCE

A. As designated in Section 01001, Article 1.09.

1.09 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. As designated in Section 01001, Article 1.13.

B. Coordinate delivery with Consultant and Owner.

C. Prevent wrappers and packaging materials from inclusion in the roof system.

D. All flammable materials shall be store in a cool, dry area away from sparks and open flames. Follow precautions outlined on containers or supplied by material manufacturer/supplier.

E. All materials which are determined to be damaged by the Owner's Representative or manufacturer are to be removed from the job site and replaced at no cost to the Owner.

F. Material containers, mixing, and dilution:
   1. Containers shall be closed and sealed except when materials are being removed.
   2. Follow manufacturers' instructions for mixing and stirring.
   3. Cements, adhesives, primers, coatings, and sealants which have been diluted or cut back after their manufacture shall not be incorporated into the Work.

G. Membrane rolls shall be stored lying down on pallets and fully protected from the weather with clean canvas tarpaulins. Unvented polyethylene tarpaulins are not accepted due to the accumulation of moisture beneath the tarpaulin in certain weather conditions that may impact the ease of membrane weldability.

1.10 ENVIRONMENTAL REQUIREMENTS

A. Work shall not proceed during inclement weather.

B. Work shall not commence on a day when precipitation is imminent or probable.

C. All work shall be scheduled and executed without exposing the interior building areas to the effects of inclement weather. The existing building and its contents shall be protected against all risks.

D. Work shall not proceed over damp or frozen substrates.

E. Cold weather application procedures shall be employed when sustained ambient temperature is less than 40 degrees Fahrenheit.
   1. Plans for area enclosures shall be submitted in advance for approval by the Consultant.
   2. Adhesives are to be stored per manufacturer's specification.
   3. Adhesive manufacturer's specification for application shall be maintained for work to proceed.

F. All clean scrap roof membrane shall be recycled. The applicator shall bag and store all clean membrane trimming. These bags shall be delivered to the closest Sika-Sarnafil facility or retrieved by the local Sika-Sarnafil technician during interim or final roof inspections.

1.11 SEQUENCING AND SCHEDULING

A. As designated in Section 01001, Article 1.06.

B. Roof traffic and damage:
   1. Sequence Work to avoid traffic over completed Work.
   2. Regular storage of materials and equipment on completed Work shall not be acceptable.
   3. Immediately repair roof damage due to traffic.
   4. Construct runways over existing roofing and where traffic is unavoidable over completed work.

C. Utility piping and mechanical elevation adjustments:
   1. Coordinate in order for roofing to proceed unimpeded.

D. Roof membrane construction:
   1. Phased installation of the final roofing membrane shall not be acceptable.
   2. Complete membrane seams the same day that two contiguous membrane sheets are installed.

E. Flashing construction:
   1. Drain flashings shall be complete on the same day as sump materials installed.
   2. Permanent flashing shall proceed concurrently with roof membrane construction.

1.12 GUARANTEE AND WARRANTIES

A. As provided in the CONDITIONS OF THE CONTRACT and as supplemented.

B. The Contractor shall provide the Owner with the roofing material manufacturer's 20-year system guarantee against defects in materials and workmanship. A specimen of this guarantee shall be presented to the Owner and Consultant at Contract execution. The completed and approved guarantee agreement shall be delivered to the Owner before final payment will be made. The guarantee shall provide for repair and replacement of defective Work and contaminated roof insulation at ***no cost*** to the Owner with a defined deductible amount and defined dollar limitation. Additionally, the Contractor shall warrant for a period of two years from the date of Substantial Completion all portions of the Work not within the scope of the manufacturer's guarantee. Contractor's warranty repairs and replacements shall be performed promptly upon notice by the Owner and at ***no cost*** to the Owner.

C. The Owner shall within 48 hours notify both the manufacturer and the applicators of any leaks as they occur, during the timeframe when both the contractor's and the manufacturer's warranties are in effect.

D. Warranty documents shall state the roof area as designated by Consultant.

PART 2 PRODUCTS

2.01 SHEET MATERIALS

A. Select materials in this Article and Article 2.03, which are available through or approved by a single manufacturer.

B. Roofing Membrane, Ethylene Propylene Diene Monomer, EPDM:
.060 mil Pre-Kleened Sure-Seal FR EPDM Membrane by Carlisle Syntec, Inc.

C. Roofing Flashing Membrane:
1. Ethylene Propylene Diene Monomer, EPDM by
   a. Carlisle Syntec, Inc.
   b. Firestone Building Products.
   c. Johns Manville Roofing Systems.
   d. Versico Roofing Systems.

D. Roof Pads and Walkways: Pre-molded pads by the roof membrane system manufacturer selected in Article 2.01.

E. Slip Sheet materials as approved by the roof membrane system manufacturer selected in Article 2.01.

2.02 LAP SPLICING SYSTEM

A. Seam tape by membrane manufacturer.
1. 3 inch seam tape by membrane manufacturer. (Factory Applied)
2. 6 inch seam tape by membrane manufacturer. (Field Applied)

2.03 ROOF INSULATION

A. Coverboard
1. Material: HD Polyisocyanurate
2. Dimensions: 48 inches wide by 48 inches long
3. Characteristics:
   a. LTTR-Value at a rate of 2.5
   b. Compressive strength: 100PSI
   c. Facer: Coated Glass Facer

2.04 SURFACING

1. None specified as of Project Manual publication date.

2.05 WOOD PRODUCTS

A. Nailers and blocking: Construction Grade Pine.

2.06 FASTENERS

A. Nail systems:
1. Galvanized roofing nail: 12 gauge, 3/8 inch head.
2. Roofing nail: 12 gauge, 1 inch head.
3. Aluminum nail: Screw shank.
4. Simplex cap nail: Annular grooved, 1 inch diameter cap.
5. Trufast: FM Series Fasteners
6. Not allowed: Pneumatically driven fasteners.

B. Screw, screw/plate, anchor systems:
   1. Roof system manufacturer's proprietary or approved fastening system.
   2. Sure-Seal System by Carlisle Syntec Systems.
   3. Ultra-Fast System by Johns Manville Roofing Systems.
   4. Maxiseal HWH Teks/1 (CL) with encapsulated EPDM washers.
   5. Wafer head Teks/3 (CL) by ITW Buildex.
   6. Flat head Teks/4 (CL) by ITW Buildex.
   7. HWH Trugrip series steel with Climaseal coating and EPDM washers by ITW Buildex.

C. Sheet metal nailing and/or anchoring applications shall be in accordance with SMACNA and Factory Mutual recommendations.
   1. In each and every case where nailing and/or anchoring systems are being incorporated into the specified roof assembly, fasteners shall be of the same composition as material being fastened to prevent galvanic corrosion between dissimilar metal types.
   2. The selection and use of miscellaneous fasteners not specified under this Section shall be in strict compliance with local codes, regulations, and statutes governing construction at the Project location.

D. Miscellaneous fasteners and anchors:
   1. All fasteners, anchors, nails, straps, bars, etc. shall be post-galvanized steel, aluminum, or stainless steel or polymer bar.
   2. Mixing metal types and method of contract shall be assembled in such a manner as to avoid galvanic corrosion.
   3. Fasteners for attachment of metal to masonry shall be expansion-type fasteners with stainless steel pins.
   4. All concrete fasteners and anchors shall have a minimum embedment of 1 ¼-inch (32mm) and shall be approved for such use by the fastener manufacturer.
   5. All miscellaneous wood fasteners and anchors used for flashings shall have a minimum embedment of one-inch (25mm) and shall be approved for such use by the fastener manufacturer.

2.07 SEALANTS, BACKERS, BONDING SYSTEMS, SOLVENTS

A. Products shall not contain asbestos.

B. Backer rod, closed cell, non-gassing polyethylene:
   1. Ethafoam.
   2. Sonofoam Soft Backer Rod.

C. Metal joints and masonry joints:
   1. Chem-Calk 900 by Bostik.
   2. Sonolastic NP-1 by Sonneborn.

D. Metal-to-concrete or metal-to-masonry joints:
   1. Dymonic by Tremco

E. Horizontal masonry and coping joints:
   1. Dymonic by Tremco

F. Sealant pan fillers,
   1. Sure-Seal Pourable Sealer by Carlisle Syntec, Inc.
   2. Non-shrink grout.

G. Bonding Adhesives by Carlisle Syntec
   1. 90-8-30A Bonding Adhesive for membrane and flashing application.
   2. CavGrip Low VOC Adhesive Primer.
   3. FlexibleFAST – Adhesive
   4. Type III Roofing Asphalt

H. Splice Adhesives by Carlisle Syntec.

I. Splice Wash by Carlisle Syntec.

J. SureSeal Lap Sealant

K. Water Cut-Off Mastic by Carlisle Syntec

2.08 DECKING

A. Repair and replacement of wood deck: Match existing CDX plywood thickness.

2.09 SHEET METAL

A. SMACNA recommendations form minimal specifications where not exceeded in this Article.

B. Prefinished Steel:
1. 2-Piece Metal Coping with Continuous Cleat for Outside Face:
   a. Design: As shown in detail.
   b. Gauge: 24.
   c. Cleat Gauge: 22.
   d. Fasteners: Article 2.06, B., this section.
   e. Finish: Submit color samples.
2. Perimeter Fascia:
   a. Design: Match existing
   b. Gauge: 24.
   c. Cleat Gauge: 22.
   c. Fasteners: Article 2.06, B., this section.
   d. Finish: Submit color samples.4
3. Counterflashing:
   a. Design: Slip Metal Counterflashing.
   b. Gauge: 24
   c. Height: 4-inches min.
   d. Fasteners: Article 2.06, B., this section.
   e. Finish: Submit color samples.

C. Aluminum:
1. Termination bar:
   a. Size: 3/32 inch by 1-1/4 inches by 120 inches.
   b. Holes: Slotted and 6 inches on center.
   c. Profile: Top edge caulk cup.
   d. Design: Approved by manufacturer.

2.10 ACCESSORIES

A. Crickets:
1. Material: Polyisocyanurate.
2. Rise: Two times the roof slope.

B. Saddles:
1. Material: Polyisocyanurate.
2. Rise: Two times the roof slope.

C. Portal systems:
1. Neoprene Retrofit Pipe Seals by Portals Plus, Inc,: Models #RF-13, RF-36, and HPRF and adapter rings.

D. Pipe clamps:
1. Galvanized steel.

E. Pre-molded inside/outside corner flashings.

F. Pre-molded T-Joint covers.

G. Expansion joint cover:
   1. Manufacturer: Approved by membrane manufacturer.

H. Roof drains:
   1. Cast iron drain strainer to match existing bowl size.

I. Roof access systems:
   1. Replace roof hatch to match existing.
   2. Manufacturer: Bilco Babcock Davis

J. Temporary materials:
   1. Water cut-offs:
      a. Water block sealant.
      b. Roof membrane as provided in Article 2.01, this Section.

2.11 EQUIVALENTS

A. Products of this Section may be bid on an equivalent basis and substitutions may be approved:
   1. Comply with CONDITIONS OF THE CONTRACT and as supplemented.
   2. Comply with INSTRUCTIONS TO BIDDERS, Article entitled BASIS OF THE BID.
   3. Comply with Section 01001, Article 1.10.
4. As approved in advance and in writing by the Owner and the Consultant.

PART 3 EXECUTION

3.01 PRE-CONSTRUCTION SITE INSPECTION

A. Examine site to determine satisfactory conditions for work.

B. Write Consultant to notify of defects and conditions, which may adversely influence performance or completion of Work.

C. Absence of written notice will constitute the Contractor's acceptance of site.

D. Verify:
   1. Deck support, attachment, and integrity.
   2. Deck weight limits before loading materials.
   3. Existence and locations of above ground utility lines, underground utilities, water and gas lines, fire sprinkler systems, pavement heating devices, above and below deck conduit and tubing, ceiling suspension systems, and lawn sprinkling systems.
   4. Dry and acceptable surfaces to receive the Work.
   5. Undamaged, properly installed and sloped, and acceptable deck to receive the Work.
   6. Curbs, pipes, sleeves, ducts, vents, nailers, and blocking as secure and acceptable.

3.02 PROTECTION

A. Comply with Section 01001, Article 1.12, Paragraph C.

B. Demolish only roofing which shall be replaced by the completed membrane assembly before the stop of work on that day.

C. Provide tie-ins and water cut-offs to prevent moisture from entering into and under the Work.

3.03 DEMOLITION

A. Remove roofing materials to the deck.

B. Remove flashings, detail and edge materials.

C. Remove abandoned elements:
   1. As identified:
      a. On Roof Sketch.
      b. On roof, marked " X ".
      c. By owner.
   2. Remove from site.
   3. Install deck over openings and repair holes in deck: Article 3.04.

D. Incidental damage to property:
   1. Comply with CONDITIONS OF THE CONTRACT, and as supplemented.
   2. At no cost to the Owner, immediately restore and repair any interrupted system and condition whose existence was:
      a. Verifiable and unconcealed.
      b. Verifiable and concealed.
      c. Unverifiable and unconcealed.
   3. In accord with the Time and Material Bid, immediately restore and repair any interrupted system and condition whose existence was unknown, unverifiable, and concealed.
   4. At no cost to the Owner, replace and repair any elements specified for reuse and damaged during removal.

E. Debris: Follow Section 01001, Article 1.12.

3.04 DECK REPAIR

A. Regulation:
   1. Comply with:
      a. Section 01001, Article 1.12, C.
      b. Article 2.08, this Section.
      c. Specifications of material manufacturer.
   2. Where indicated by Quality Compliance Observer.

B. Wood decking:
   1. Remove deteriorated sheet in its entirety.
   2. Install ends over structural members.
   3. Provide 1/8 inch gap at joints.
   4. Provide level joints.
   5. Install “H” clips on mid-span laps.
   6. Fasten 6 inches on center along edges and 12 inches on center on intermediate joists.
   7. Evaluation for patching:
      a. Isolated, cut-out, uncorroded hole or short gash.
      b. Maximum dimension, 12 inches.
      c. Remove deck section having multiple holes, holes caused by corrosion, a hole over 12 inches in any dimension, or a cut which penetrates two or more adjacent top flanges.
   8. Hole patching:
      a. Unit price work.
      b. Provide patch with 3 inch overlap on contiguous flanges.
      c. Provide patch with full overlap on adjacent flanges.
      d. Fasten corners.
      e. Fasten sides 3 inches on center.
      f. Patch shall be flat with top flanges.

3.05 PREPARATION AND CONDITIONS

A. Provide Work on suitable substrate and conditions:
   1. Free of debris and residue.
   2. Smooth.
   3. Uniform.
   4. Dry.
   5. Structurally sound.

B. Provide coordination of related work:
   1. Section 01001, Article 1.01, Paragraph A., 2.

C. Wall base and penetration sealing:
   1. Materials: Article 2.07,C.
   2. Seal holes, openings, cracks, and joints to prevent material from penetrating into the building.

D. Wood nailers and blocking:
   1. Inspect nailers at walls, edges, joints, hatches, vents, curbs, and boxes:
      a. Repair as agreed by Quality Compliance Observer.
      b. Enhance fastening as agreed by Quality Compliance Observer.
      c. Remove rotted and deteriorated material.
      d. Provide replacement for demolished materials: Article 2.05, A.
      e. Perform on Unit Price basis.
   2. Provide nailers to achieve elevations and transitions:
      a. Material: Article 2.05, A.
      b. In accord with specified construction.
      c. As a portion of the Base Bid Work.

3. Provide blocking to achieve flashing elevations:
    a. Minimum 8 inches above finished roof surface.
    b. In accord with Article 2.05, A.
    c. As a portion of the Base Bid Work.

E. Detail disconnections and attachments:
1. Ductwork, vent hoods, mechanical elements, and other rooftop fixtures that are disconnected, moved, or altered during construction shall be installed and fastened in a manner commensurate with original attachment.
2. Nails shall be unacceptable as exposed fasteners.
3. Exposed fasteners shall have EPDM washers.

F. Drains:
1. Existing drains: Inspect and ensure functioning.
2. Absence of written notice from Contractor to Consultant will constitute Contractor's verification that no drain is clogged and that no drain and no accessory is broken or malfunctioning.
3. Absence of written notice from Contractor to Consultant will constitute Contractor's verification that no drain is leaking prior to commencement of work. Contractor shall repair at no addition cost to the Owner, leaks that occur during and as a result of the work.
4. Replace, as a portion of the Base Bid:
    a. All clamping rings.
    b. All screws, bolts, and clamps.
    c. All existing non-cast iron strainers with cast iron strainers.
    d. All broken or damaged cast iron strainers.
5. Protection:
    a. Block drains to prevent debris and materials from entry.
    b. Clear blocking before the stop of work each day.

3.06 TEMPORARY WORK

A. Temporary roofing: Unacceptable.

B. Temporary flashing: Unacceptable.

C. Temporary tie-ins and water cut-offs:
1. Protection: Article 3.02.
2. Materials: Article 2.10.
3. Line of tie-in to existing roofing: Provide smooth and clean surface.
4. Width of tie-in: 12 inches on new roof and 12 inches on old roof.
5. Void between new and existing roofing: Fill in with loose laid insulation.

3.07 REJECTED WORK

A. Promptly remove from this site and do not incorporate in the Work:
1. Work rejected by the Owner through the Consultant.
2. Stored materials damaged or exposed to moisture.
3. Installed underlying materials damaged or exposed to moisture.

3.08 INSULATION – PROCEDURES

A. Install boards butted to each other and adjacent materials.
1. Gaps in excess of 1/8 inch not acceptable.
2. Fill voids and gaps with insulation trimmed to fit.

B. Install with no joints cantilevered.

C. Install with full bearing on underlying materials.

D. Install insulation fasteners:
   1. Driven perpendicular to deck.
   2. Penetrating ¼ inches through deck.
   3. With only approved fastener/plate combinations.
   4. Contractor shall chalk-line the top layer of insulation to ensure that all fasteners are aligned uniformly as tested by the Manufacturer and engaging the top flange of the metal deck.

E. Install mechanical fasteners using tools designed or approved by the fastener manufacturer for roof insulation screw installation.

F. Score and cut insulation to conform to substrate variations.

3.09 INSULATION COVER BOARD

A. Material: Article 2.03, A.

B. Line of longitudinal joints perpendicular to deck material longitudinal joints.

C. Line of longitudinal joints parallel to structural deck supporting members.

D. Layout with lateral and longitudinal joints staggered.

E. Mechanically attach to deck through all layers:
   1. Wind uplift base rating: Article 1.04.
   2. Fastener system: Article 2.06, B
   3. Fastener quantity for each board:
      a. In roof field: 8 fasteners.
      b. In roof perimeter: 12 fasteners.
   4. Fastener pattern on each board:
      a. See FM Loss Prevention Data Sheet 1-28.
   5. Partial boards shall be fastened at a rate commensurate with full boards and shall not have less than 4 fasteners per piece unless less than 6 square feet, in which case 3 fasteners per piece shall be acceptable.

3.10 TAPERED POLYISOCYANURATE INSULATION STRIPS

A. Provide:
   1. Along walls.
   2. Around rail curbs and curbed boxes.

3.11 MEMBRANE ROOFING

A. Manufacturer’s information:
   1. Use manufacturer’s general application specifications as a guide where provisions are not specified, or are not more stringent in this Section.
   2. Seek modification where guarantor will not issue required agreement without changes in the Work.

B. Procedures:
   1. Sheet attachment: Fully adhered.
   2. Position membrane over acceptable substrate.
   3. Allow membrane to relax a minimum of 30 minutes prior to installation.
   4. Install membrane so that all sheets are shingled to avoid bucking of water.
   5. Complete membrane seams the same day that two contiguous membrane sheets are installed.
   6. Install adjoining sheets overlapping edges to provide required minimum splice width.
   7. Clean dust, dirt, and excess dusting agent from the membrane.
   8. Remove wrinkles from sheet prior to securing membrane.
   9. Repair wrinkles, voids and other anomalies immediately.

10. Clean seams and remove residues per system manufacturer's specification.
11. Seam sealant per system manufacturer's specification.
12. Remove temporary tie-in and water cut-off material before proceeding with continuous work.
13. Demolish all materials incorporated into portions constructed with phased or temporarily capped membrane assemblies.
14. Complete seams with seam tape per system manufacturer's specification.
15. Secure the membrane to the perimeter and curbs per manufacturer's specification.
16. Install patch on membrane seams where elevation of membrane changes.
17. Install T-Joint cover patch on all T-Joints.

C. Membrane installation around penetrations, projections, and perimeter walls:
   1. Membrane attachment around base of penetrations, projections and walls shall be accomplished in accord with the manufacturer's instructions.
      a. Fasteners shall clamp membrane tight.
   2. Overlap flashing sheets per manufacturer's recommendations.

D. Install single-ply membrane:
   1. End laps and side laps per manufacturer's specification.
   2. Sheet attachment:
      a. Fully adhered.
      b. Fold membrane sheet back so that half of the underside of the sheet is exposed.
      c. Apply bonding adhesive to the membrane and the substrate to achieve continuous and uniform coating of both surfaces.
      e. Bond the membrane to the substrate.
      f. Broom the membrane to ensure maximum contact.
      f. Repeat the bonding procedure for the other half of the membrane.

3.12 MEMBRANE SURFACING

A. None specified at time of publishing.

3.13 MEMBRANE FLASHINGS

A. Materials: Article 2.01 and 2.09.

B. Adhesive: Article 2.07.

C. Installation procedures:
   1. Follow manufacturer's application instructions where not exceeded in this Article.
   2. Flashings shall be mechanically attached with fasteners concealed.
   3. Flashings shall extend to or above existing flashing elevations.
   4. Flashings shall be fully adhered.
   5. Clean all vents, pipes, conduits, tubes and stacks to bare metal.

D. Flashing application:
   1. Install flashing sheet concurrently with roof membrane as job progresses.
   2. Install flashing sheet such that material is properly shingled beginning at lower elevations.
   3. Flashing sheets shall be adhered to compatible dry, smooth, and solvent-resistant surfaces.
      a. Adhesive shall be applied in smooth, even coatings with no gaps, gobs, or similar inconsistencies.
      b. Only an area that can be completely covered in the same days' operations shall be flashed.
   4. Over the properly installed/prepared substrate surface, apply bonding adhesive at a rate according to the manufacturer requirements.
      a. Allow first layer of adhesive to dry completely prior to installing the membrane.

5. Position flashing membrane and apply a 100% continuous coat of bonding adhesive to the exposed bottom side of the flashing membrane.
   a. Allow the adhesive to dry to a point of being tacky, but not stringy to the touch. Do not allow adhesive to "dry out" completely.
6. When sufficiently dry, carefully maneuver the glued portion of the flashing membrane onto the glued substrate surface, avoiding any wrinkles or air pockets. Hand roll firmly into place.
7. All adhered flashing sheets that exceed 30-inches in height shall receive additional securement.
8. No adhesive shall be applied to seam locations that are to be hot-air welded.
9. The finished application shall exhibit no holidays, wrinkles, fishmouths, voids, loose laps, etc.
10. Inside and outside corner treatment: After base flashing is installed, heat-weld inside and outside corners into place with a hand-held hot-air welder and roll into place.
11. Non-membrane flashing, such as clad metal or pre-engineered fascia products: clad metal.
    a. A white PVC-coated, heat-weldable sheet metal capable of being formed into a variety of shapes and profiles. Clad is a 25 gauge, G90 galvanized metal sheet with a 20 mil (1mm) unsupported membrane laminated on one side, 4-feet x 10-feet (1.2m x 3.0m).
    b. Non-typical edge: Project-specified perimeter edge detail reviewed and accepted for one-time use by manufacturer's technical department. Consult Regional Technical Manager prior to job start for review, consideration, and acceptance.
12. Separation fabric, 11 oz. Sarnafil, capable of divorcing non-compatible products from contact with flashing membrane; supplied by Sika-Sarnafil.

E. Elevation on vertical details:
   1. Minimum 8 inches above finished roof surface.

F. Terminations:
   1. Walls where coping scheduled:
      a. Extend across nailer to outside edge.
      b. Fasten along top outside edge of nailer, 6 inches on center.
   2. Surfaces where compression bar scheduled: Extend up to and along scheduled fixation line.
   3. Surfaces where counterflashing scheduled:
      a. Extend up to 1/4 inch below detail receiver.
      b. Fasten membrane in a line 1 inch below termination edge and on 12 inch centers.
   4. Edge details:
      a. Adhere to flange.
      b. Extend to outside break.
   5. Box penetrations:
      a. Extend to top outside edge of nailer.
      b. Fasten in line 1 inch below termination edge and on 6 inch centers.
   6. At wall coverings:
      a. Extend up al walls and onto shingle roof system.

3.14 DRAINAGE

A. Drains:
   1. Inspection and repair: Article 3.05.
   2. Sequence and schedule: Article 1.1.
   3. Replace as portion of the Base Bid:
      a. Replace all clamping rings.
      b. Replace all bolts and clamps.
      c. Replace all broken or non-cast iron drain covers

3.15 METAL EDGE

A. Material: Article 2.09.

B. Nailer: Article 2.05, A.

C. Install at top of roof system.

D. Continuous cleats:
1. Fasten 12 inches on center along lowest nailer.

E. Follow Metal Edge Detail.

3.16 UTILITY AND SUPPORT PENETRATIONS

A. Verify conditions and at pipe, cable, and utility penetrations:
1. Vertical penetrations:
a. Provide adjustments for minimal acceptable clearance above finished roof surface: 8 inches.
b. Provide service interruption and reconnection: Article 3.05, B.
2. Horizontal penetrations:
a. Provide rerouting where less than 8 inches above finished roof and where flashing penetrated.

B. Provide hooded sealant pans on single pipes, rods, tubes, and supports:
1. Material: Article 2.09.
2. Seal penetrations at membrane with sealant: Article 2.07.
3. Adhere membrane over flanges and to roof surface.
4. Fill pan with grout and sealant. Article 2.07.
5. Follow Sealant Pan Detail.

C. Single pipes, rods, tubes and supports:
1. Provide pre-molded boot flashing where possible.
2. Field fabricate flashing on single penetrations where pre-molded boots are not used.

D. Provide retrofit boots for uninterrupted penetrations by single pipes and supports:
1. Portal system: Article 2.10.
2. Seal penetration at membrane with sealant.
3. Fasten and seal side seam.
4. Adhere membrane over flanges and to roof surface.
5. Install drawband and caulk.

3.17 CURBED BOX PENETRATIONS

A. Inspect existing attachment and elevations.

B. Remove units or fixtures to provide access for installation of blocking, flashings and counterflashing.

C. Mechanically attach curb-wall insulation.

D. Counterflashing skirts: Fastened 12 inches on center behind cap flashing.

E. Split corners: Where cap flashings are split, repair with a sealed underlying metal corner splice.

F. Follow Curbed Box Flashing Detail.

3.18 SOIL STACKS

A. Extend stacks to a minimum height of 8 inches above membrane system:
   1. Where cast iron: Use tapered cast iron extension pipe.
   2. Where PVC: Seal a coupling to existing and seal an extension piece to the coupling.

B. Install premolded flashing.

C. Field wrap stacks.

3.19 SHEET METAL ACCESSORIES

A. Coping:
   1. Locate where indicated on Roof Sketch.
   2. Demolish existing coping.
   3. Provide repair and modification of nailers as indicated by design of coping.
   4. Adhere and seal water-stop membrane 3 inches over flashing termination, across nailer and extending down outside edge 1 inch below exposed nailer.
   5. Install continuous fascia cleat fastened 4 inches on center.
   6. Install flashing membrane.
   7. Install new coping: Article 2.09.
   8. Provide separate end cap piece with wall flange.
   9. Fasten:
      a. Screw with washer: Article 2.06.
      b. Spacing: 24 inches on center along inside face.
      c. Not approved: Exposed nails and top fastening.
   10. Caulk in laps and over joints.

3.20 ROOF ACCESSORIES

A. Walk pads:
   1. Materials: Article 2.01, D.
   2. Provide where designated on Roof Sketch.
   3. Provide:
      a. Around roof top mechanical units
      b. At roof hatch.
   4. Bond roof pad to smooth roof surface.

B. Gas line: Provide 2 inches between gas line traps and finished roof system.

C. Duct supports:
   1. Provide roof pads under duct supports.
   2. Provide wood blocks, minimum 2 inches thick by 12 inches wide by 12 inches long.

D. Shroud:
   1. Install metal shroud above pipe penetrations into the wall.
   2. Attach shroud to wall.
   3. Cover shroud flange with flashing material.

3.21 CLEANING

A. Follow Article 3.03, this Section.

B. Follow Section 01001, Article 1.12 and Article 1.14.

C. Follow CONDITIONS OF THE CONTRACT and as supplemented.

3.22 FIELD QUALITY COMPLIANCE

A. Field inspection and testing will be performed in accord with CONDITIONS OF THE CONTRACT and as supplemented.

B. Correct identified defects and irregularities and all Work not in compliance with the Contract.

3.23 MANUFACTURER'S FIELD SERVICES

A. Provide manufacturer's field services.

B. Request progress inspections by manufacturer's representative where required under guaranteed provisions.

END OF SECTION

Section 07581

ADDITIVE 1

PART 1 GENERAL

1.01 SUMMARY

A. Where awarded in the AGREEMENT, the Work of this Section shall be performed in accord with the Contract Documents and shall not extend the Contract Time.

B. Location of Additive Work: Roof Area A.

C. Description of Additive Work: Install new 6" K-Style Gutters With Hand/Strip Miters And 3"x4" Downspouts.

D. Work of this Section shall conform to the Articles of Section 07 31 13 except where exclusion is specified.

PART 2 PRODUCTS

2.01 MATERIALS

A. Provide as specified in Section 07 31 13.

PART 3 EXECUTION

3.01 INSTALLATION

A. Perform Work:
1. As specified in Section 07 31 13, Articles 3.01 through 3.12.
2. Where designated on Roof Sketch.

END OF SECTION

Section 07582

ADDITIVE 2

PART 1 GENERAL

1.01 SUMMARY

A. Where awarded in the AGREEMENT, the Work of this Section shall be performed in accord with the Contract Documents and shall not extend the Contract Time.

B. Location of Additive Work: Roof Area A.

C. Description of Additive Work: New Gutter Guards.

D. Work of this Section shall conform to the Articles of Section 07 31 13 except where exclusion is specified.

PART 2 PRODUCTS

2.01 MATERIALS

A. Gutter Guards
1. Brand/Manufacturer: U.S. Aluminum
2. Model: Hydro Flo

B. Substitutions
1. Requests for substitutions will be considered. Submit for approval.

PART 3 EXECUTION

3.01 INSTALLATION

A. Perform Work:
1. As specified in Section 07 31 13, Articles 3.01 through 3.12.
2. Where designated on Roof Sketch.

END OF SECTION

Section 07583

ADDITIVE 3

PART 1 GENERAL

1.01 SUMMARY

A. Where awarded in the AGREEMENT, the Work of this Section shall be performed in accord with the Contract Documents and shall extend the Contract Time.

B. Location of Additive Work: Roof Area A.

C. Description of Additive Work: Install New Attic Vent Baffles

D. Work of this Section shall conform to the Articles of Section 07 31 13 except where exclusion is specified.

PART 2 PRODUCTS

2.01 MATERIALS

A. Vent Baffles
1. Brand/Manufacturer: ADO Products
2. Model: Provent
3. Size: 22”

B. Substitutions
1. Requests for substitutions will be considered. Submit for approval.

PART 3 EXECUTION

3.01 INSTALLATION

A. Perform Work:
1. As specified in Section 07 31 13, Articles 3.01 through 3.12.

END OF SECTION

Section 07584

ADDITIVE 4

PART 1 GENERAL

1.01 SUMMARY

A. Where awarded in the AGREEMENT, the Work of this Section shall be performed in accord with the Contract Documents and shall not extend the Contract Time.

B. Location of Additive Work: Roof Area A.

C. Description of Additive Work: Install New Heat Tape at Existing Location

D. Work of this Section shall conform to the Articles of Section 07 31 13 except where exclusion is specified.

PART 2 PRODUCTS

2.01 SYSTEM DESCRIPTION

A. Provide a complete electric roof and gutter de-icing system consisting of self-regulating heating cable and compatible components from a single manufacturer.

B. System shall be designed for the project roof geometry and environmental conditions. Determine cable spacing, routing, circuit lengths, and required wattage in accordance with manufacturer's engineering criteria.

C. Constant-wattage cable may be used only when specifically designed and listed for the application and approved by the Architect/Consultant.

2.02 HEATING CABLE

A. Type: Self-regulating, parallel-circuit electric heating cable designed for roof and gutter de-icing.

B. Heat tape to provide a minimum 8 watts per foot at 32 degrees Fahrenheit.

C Voltage: 120 or 208/240 volts as coordinated with available electrical service and manufacturer's requirements.

D. Cable shall be capable of crossing or overlapping only where expressly permitted by the manufacturer. Where not permitted, route cable to prevent contact or overlap.

E. Outer jacket shall be moisture-resistant, UV resistant, and suitable for direct exposure to weather.

F. Provide factory-approved power connection kits, end seals, splice/tee kits, and accessories compatible with the heating cable.

2.03 ATTACHMENT ACCESSORIES

A. Provide manufacturer-approved clips, hangers, spacers, and attachment devices suitable for asphalt shingle roofing, gutters, and downspouts.

B. Do not use field-fabricated attachment methods that may abrade, crush, pinch, or otherwise damage the heating cable.

C. Do not penetrate exposed shingle roofing solely to secure heating cable unless the attachment is specifically detailed and approved in writing by the roofing manufacturer and heat trace manufacturer.

D. Do not use adhesives, sealants, staples, nails, or fasteners in contact with heating cable unless specifically approved by the heat trace manufacturer.

2.04 CONTROLS

A. Provide automatic control system using ambient temperature and moisture/snow sensing suitable for roof de-icing service.

B. Control shall energize heating cable when conditions conducive to snow/ice accumulation are detected and de-energize the system when heating is not required.

C. Provide manual override or test function where recommended by the manufacturer.

D. Locate controls and sensors in accordance with manufacturer's requirements and where accessible for service.

2.05 ELECTRICAL PROTECTION

A. Provide dedicated branch circuits sized for connected heat trace load and in accordance with NEC and manufacturer's requirements.

B. Provide ground-fault equipment protection as required by NEC and the heat trace manufacturer.

C. Provide weatherproof enclosures, fittings, and connections at exterior locations.

D. Clearly identify circuit breakers and controls serving the roof de-icing system.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify roofing, gutters, downspouts, electrical service, and substrates are complete and suitable for installation.

B. Do not install cable over damaged shingles, sharp edges, loose metal, or other conditions that could damage the cable.

C. Report conflicts between the proposed heat trace installation and roofing warranty requirements before proceeding.

3.02 INSTALLATION

A. Heat trace to be installed by a certified electrician.

B. Install complete system in strict accordance with approved shop drawings, NEC, listing requirements, and manufacturer's written instructions.

C. At eaves, route cable in a manufacturer's recommended pattern extending sufficiently upslope to create a continuous drainage path through the ice-dam zone.

D. Extend heating cable through gutters and downspouts where indicated or required to aintain an open drainage path. Terminate or loop cable in downspouts in accordance with manufacturer's requirements.

E. Provide heat trace at valleys and other concentrated drainage locations.

F. Maintain required bend radius and cable spacing. Do not kink, crush, stretch, cut, or otherwise damage heating cable.

G. Do not route heating cable across sharp metal edges without manufacturer-approved edge protection.

H. Coordinate routing to minimize visual impact while maintaining required system performance.

I. Roof penetrations for electrical connections shall be minimized and shall be flashed and sealed in accordance with roofing manufacturer requirements.

3.03 FIELD QUALITY CONTROL

A. Test heating cable insulation resistance before installation, after attachment to the roof, and after completion of all electrical connections, in accordance with manufacturer's requirements.

B. Record test values for each circuit and submit results to Architect/Consultant.

C. Verify continuity, controls, sensors, ground-fault protection, and proper system operation.

D. Replace damaged or nonconforming heating cable. Splicing damaged cable is not permitted unless specifically allowed by the manufacturer using a listed repair/splice kit.

3.04 DEMONSTRATION AND CLOSEOUT

A. Demonstrate system operation and control functions to Owner's representative.

B. Provide final circuit schedule and as-built roof plan identifying heating cable routing and electrical connection locations.

C. Provide Owner with manufacturer's maintenance and seasonal inspection recommendations.

END OF SECTION

LIST OF DETAILS

NOTE:

1. The Sketches and Details included in the Contract depict only the concept of the Work.
2. No scale is provided; none shall be inferred or assumed. Component proportions are not necessarily as depicted.
3. Notes on the Sketches and Details are supplemental to the specifications and are a portion of the Work.
4. Structural and connecting conditions may differ from those depicted. Contractor shall verify field conditions.

RP-01 ROOF PLAN

D-01 GUTTER EDGE DETAIL

D-02 RAKE EDGE DETAIL

D-03 RIDGE WITH CONTINUOUS RIDGE VENT DETAIL

D-04 HIP DETAIL

D-05 CLOSED CUT VALLEY DETAIL

D-06 HEADWALL FLASHING DETAIL

D-07 NON-VENTED RIDGE DETAIL

D-08 VENT PIPE PENETRATION DETAIL

D-09 VENT FLASHING DETAIL

D-10 STEP-TINS AT METAL ROOF INTERFACE DETAIL

D-11 ROOF DRAIN DETAIL

D-12 NON-REMOVABLE CURB DETAIL

D-13 PLUMBING VENT FIELD WRAP DETAIL

D-14 PRESSURE SENSITIVE POURABLE SEALER DETAIL

D-15 HATCH DETAIL

D-16 COPING METAL DETAIL

Interstate Roof Systems Consultants, Inc.
CO Office: (719) 345-6460
IL Office: (847) 695-1460
WI Office: (262) 336-8270
Website: irscinc.com

Twin Lakes Clubhouse
Key Notes
Project # 10364.PMSQ26



1. New roof hatch with safety gate and easy-up ladder assist to be installed.



2. New membrane flashing to tie into RTU membrane skirt and fastened with gasketed fasteners.



3. Vent hoods to be removed and reinstalled and stripped in to cover fasteners.



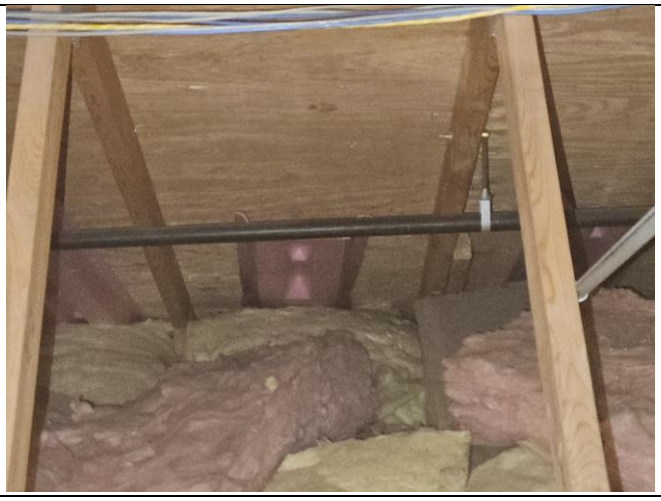
4. All surface-mounted equipment/items to be removed and reinstalled. (Electrical boxes, conduit, etc.)



5. Gas lines are to be adjusted as needed to accommodate new roof insulation heights.



6. Storm detection system/siren to be removed and reinstalled.

	
7. Bottom trim board to be replaced with new painted plywood to match. New headwall flashing to be installed	8. 22-inch baffles to be installed in each truss cavity to allow for proper airflow. Ensure cavity has proper airflow.
	
9. All Heat tape is to be removed and reinstalled.	10. Sheet metal cover to be installed at locations where gutters overlap.

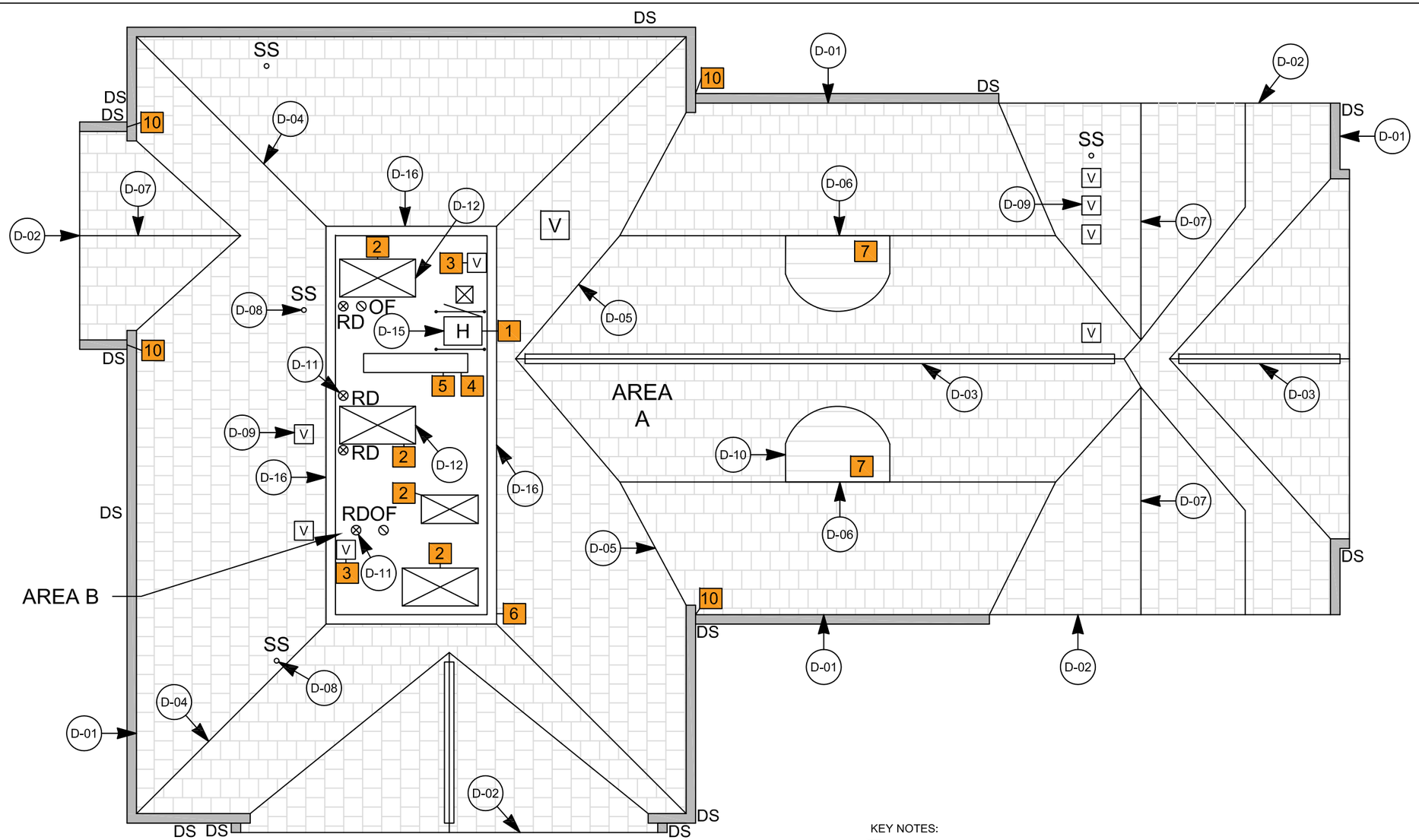
LEGEND

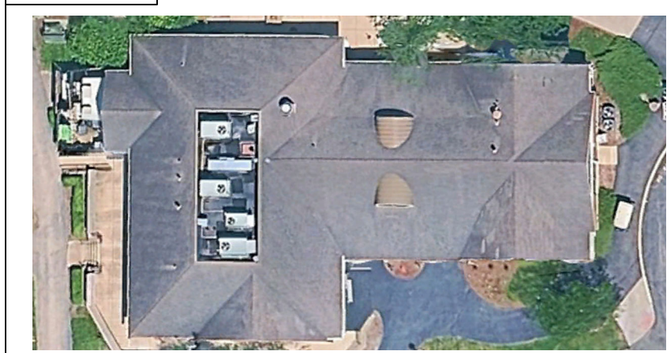
PENETRATIONS:
- ABANDONED
- ANTENNA
- CH CHIMNEY
- D DUCT
- F FLUE
- H HATCH
- LADDER
- PIPE CHASE
- P PIPE PORTAL
- ROOF TOP UNIT
- RTU ON RAILS
- SAT. DISH
- S SKYLIGHT
- SH SMOKE HATCH
- SS SOIL STACK
- V VENT
- ROOF PENETRATION
- WALKWAY

DRAINAGE:
- RD DRAIN
- OF OVERFLOW
- DRAIN SUMP
- DS DOWN SPOUT
- SCUPPER
- OF OVERFLOW SCUPPER
- COLLECTOR BOX
- WALL DRAIN

LINE WORK:
- EXP. JOINT
- M MECH. SCREEN
- ROOF DIVIDER
- WALL EXP.

NOTES:
- ANOMALY
- TEST LOCATION
- SLOPE
- PHOTO NUM.
- DETAIL NUM.





AERIAL IMAGE

N.T.S.

GENERAL ROOF NOTES:

1. CONTRACTOR TO VERIFY ALL ROOF DIMENSIONS, NUMBER, AND SIZE OF PENETRATIONS.
2. ALL EXISTING ROOF TOP EQUIPMENT, MECHANICAL UNITS, AND OTHER PENETRATIONS TO BE RAISED TO ACHIEVE A MIN. OF 8" FLASHING HEIGHT UNLESS OTHERWISE NOTED.
3. CONTRACTOR TO LOCATE AND IDENTIFY ALL CONDUIT AND EQUIPMENT BELOW ROOF DECK BEFORE ANY CUTTING AND OR DRILLING.
4. CURB / PENETRATIONS 24" OR GREATER ARE TO RECEIVE SADDLES ON THE UP SLOPE SIDE TO HELP FACILITATE DRAINAGE.

KEY NOTES:

1. NEW ROOF HATCH WITH SAFETY GATE AND EASY-UP LADDER ASSIST.
2. NEW MEMBRANE FLASHING TO TIE INTO TRU MEMBRANE SKIRT AND FASTENED WITH GASKETED FASTENERS.
3. VENT HOODS TO BE REMOVED AND REINSTALLED AND STRIPPED IN TO COVER FASTENERS.
4. ALL SURFACE-MOUNTED EQUIPMENT/ITEMS TO BE REMOVED AND REINSTALLED. (ELECTRICAL BOXES, CONDUIT, ETC.)
5. GAS LINES ARE TO BE ADJUSTED AS NEEDED TO ACCOMMODATE NEW ROOF INSULATION HEIGHTS.
6. STORM DETECTION SYSTEM/SIREN TO BE REMOVED AND REINSTALLED.
7. BOTTOM TRIM BOARD TO BE REPLACED WITH NEW PAINTED PLYWOOD TO MATCH. NEW HEADWALL FLASHING TO BE INSTALLED.
8. 22-INCH BAFFLES TO BE INSTALLED IN EACH TRUSS CAVITY TO ALLOW FOR PROPER AIRFLOW. ENSURE CAVITY HAS PROPER AIRFLOW.
9. ALL HEAT TRACE IS TO BE REMOVED AND REINSTALLED.
10. SHEET METAL COVER TO BE INSTALLED AT LOCATIONS WHERE GUTTERS OVERLAP.

N

IRSC

Interstate Roof Systems Consultants, Inc.
Wisconsin(HQ), Illinois, & Colorado
www.irscinc.com

ISSUED DATES:

DESCRIPTION	DATE	DRAFTER
10364.PMSQ26 RP	08/25/26	LJW

PROJECT INFO:

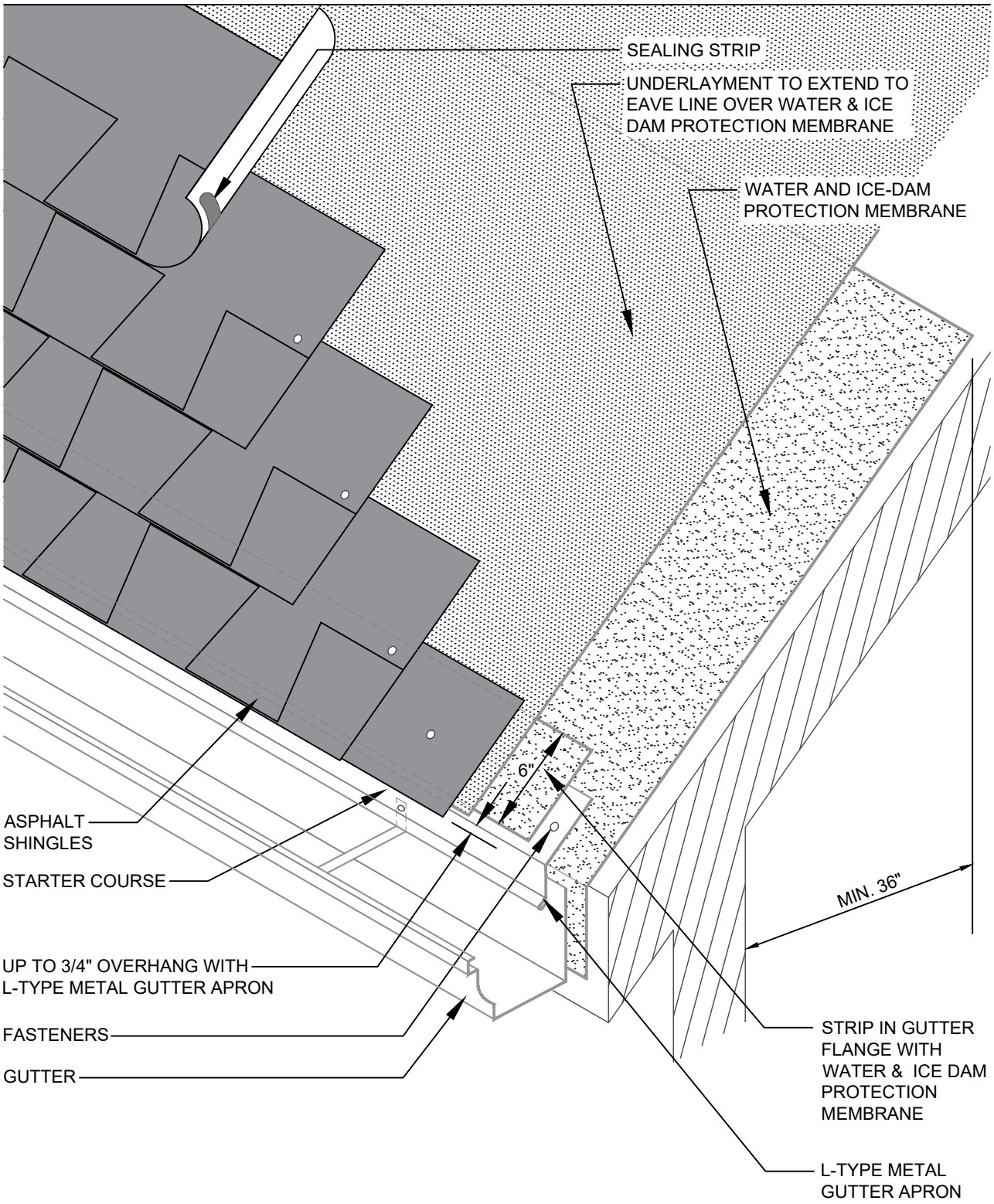
SALT CREEK PARK DISTRICT
TWIN LAKES CLUBHOUSE
1200 E TWIN LAKE DR
PALATINE, IL 60074

IRSC #: 10364.PMSQ26

TITLE: **ROOF PLAN**

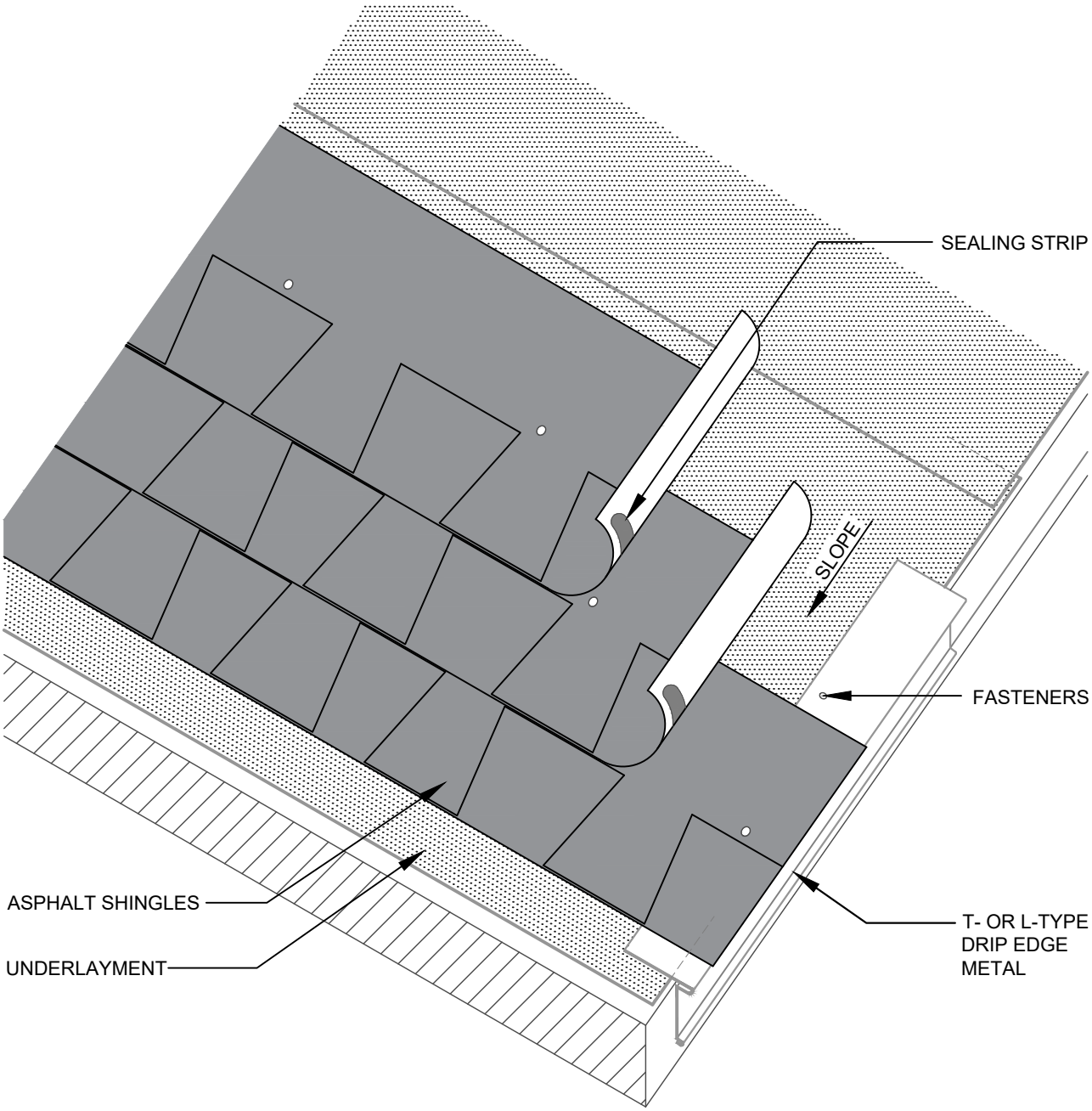
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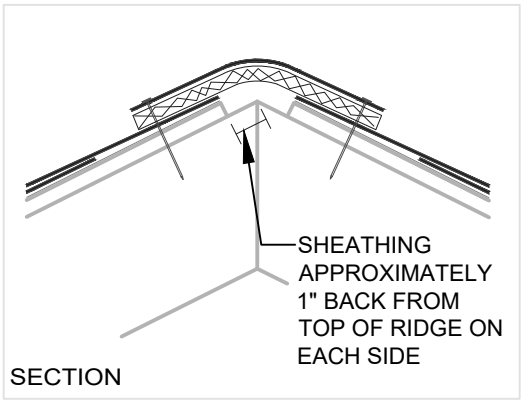


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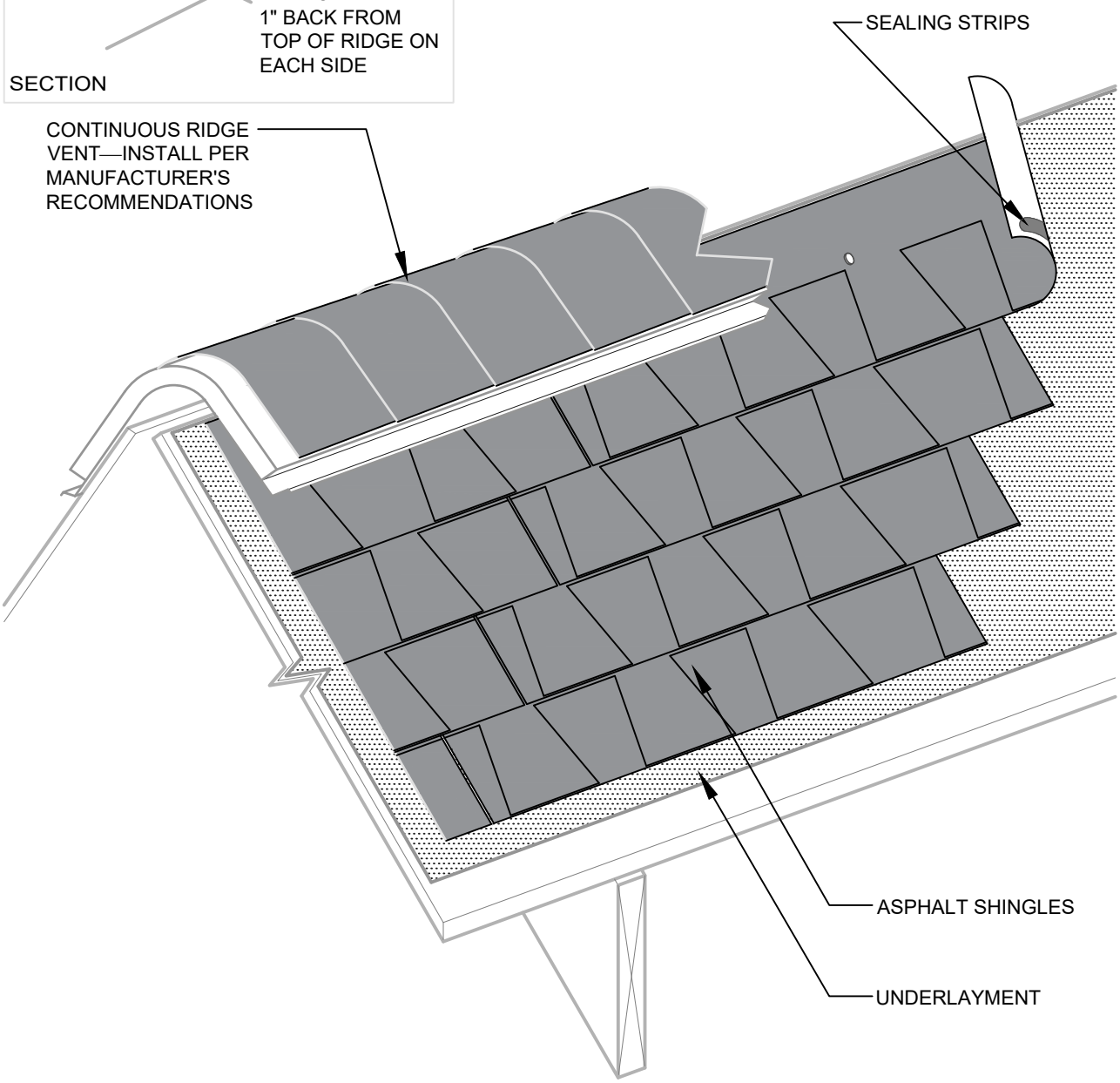
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TWIN LAKES CLUBHOUSE PALATINE, IL		GUTTER EDGE EAVE DETAIL	
PROJECT NO:	DATE:	SCALE:	DRAWING:
10364.PMSQ26	08/2026	N.T.S.	D-01



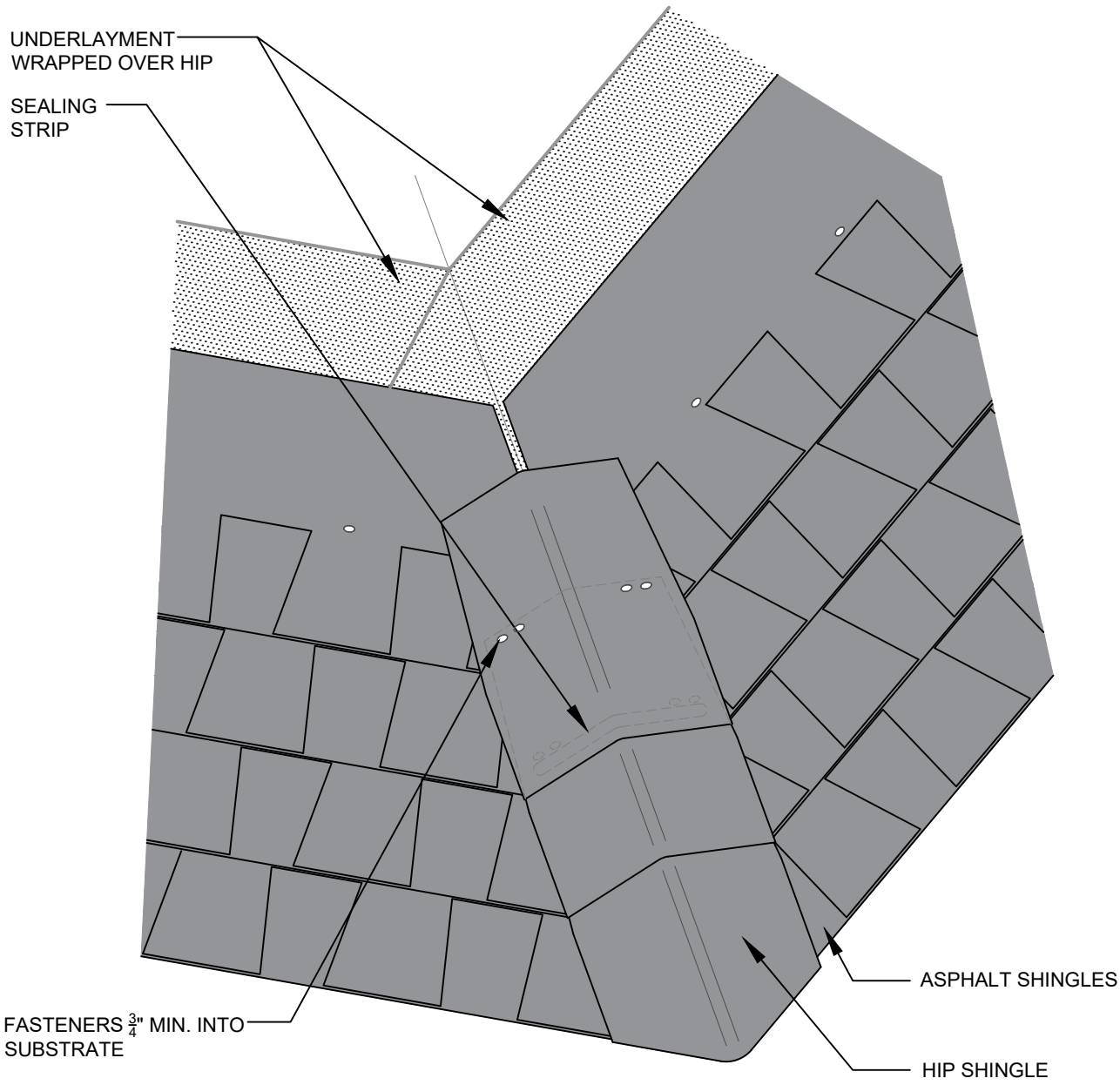
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	PROJECT NO: 10364.PMSQ26	DATE: 08/2026	SCALE: N.T.S.	DRAWING: D-02



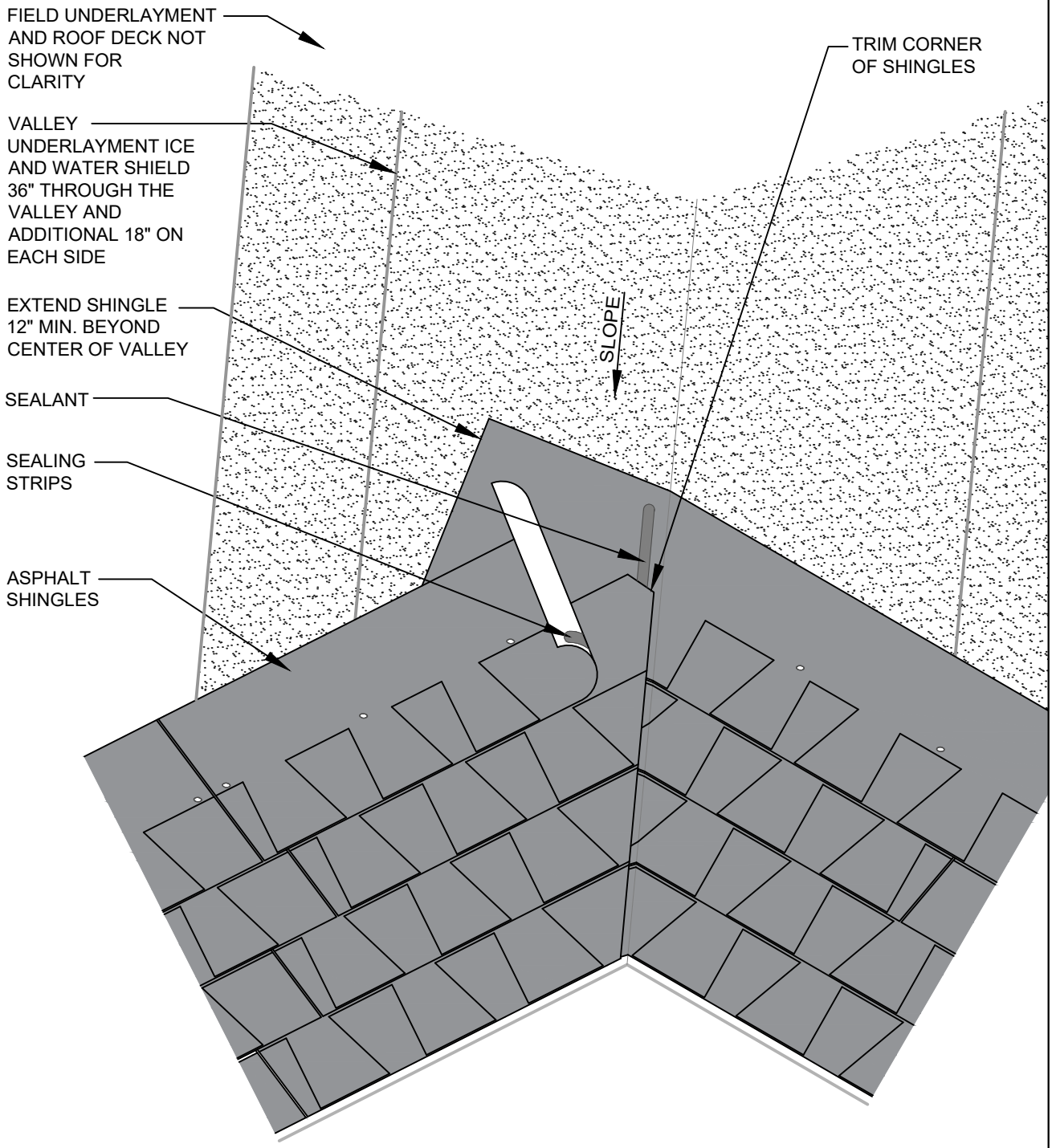
SECTION



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	PROJECT NO: 10364.PMSQ26	DATE: 08/2026	SCALE: N.T.S.	DRAWING: D-03



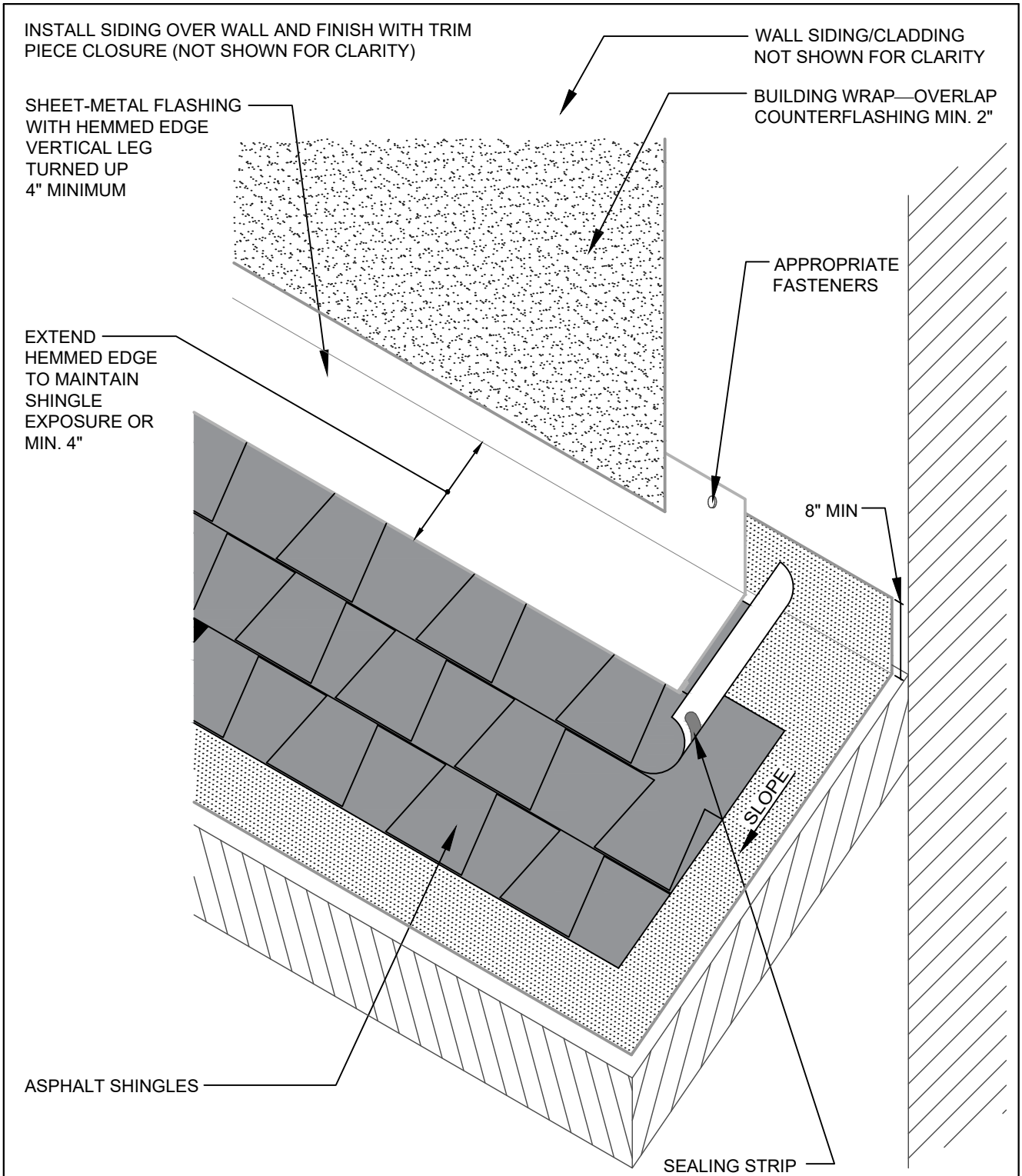
IRSC	PROJECT: TWIN LAKES CLUBHOUSE PALATINE, IL		TITLE: HIP DETAIL
	PROJECT NO: 10364.PMSQ26	DATE: 08/2026	SCALE: N.T.S.	DRAWING: D-04



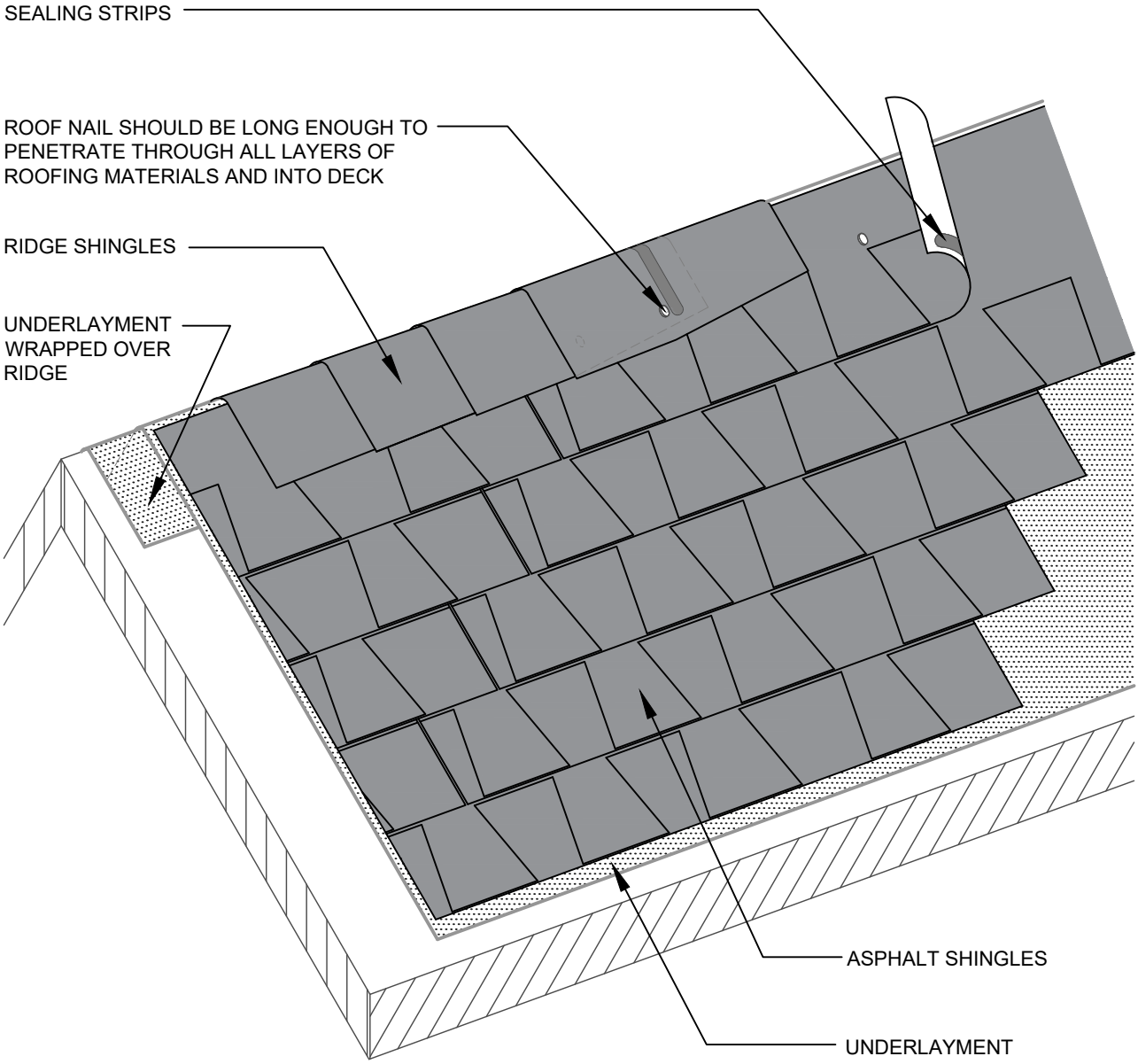
NOTES:

1. VALLEY UNDERLAYMENT TYPE AND NECESSITY MAY VARY DEPENDING ON CLIMATIC CONDITIONS.
2. NO FASTENERS WITHIN 6 INCHES OF VALLEY CENTER.
3. THE CUT SIDE OF THE VALLEY SHOULD BE ON THE SIDE WITH THE GREATEST ROOF AREA.

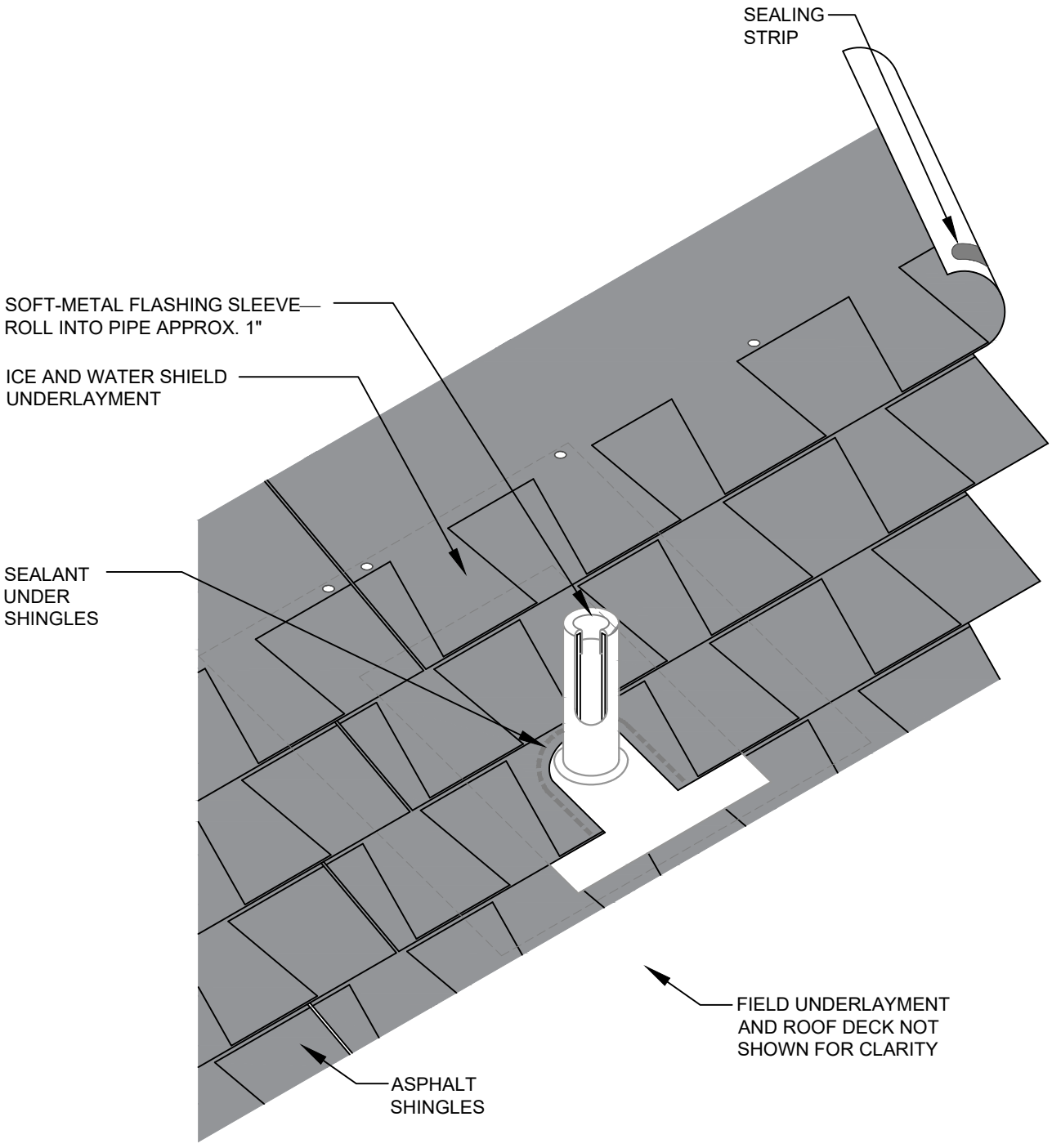
IRSC	PROJECT: TWIN LAKES CLUBHOUSE PALATINE, IL		TITLE: CLOSED CUT VALLEY DETAIL
	PROJECT NO: 10364.PMSQ26	DATE: 08/2026	SCALE: N.T.S.	DRAWING: D-05



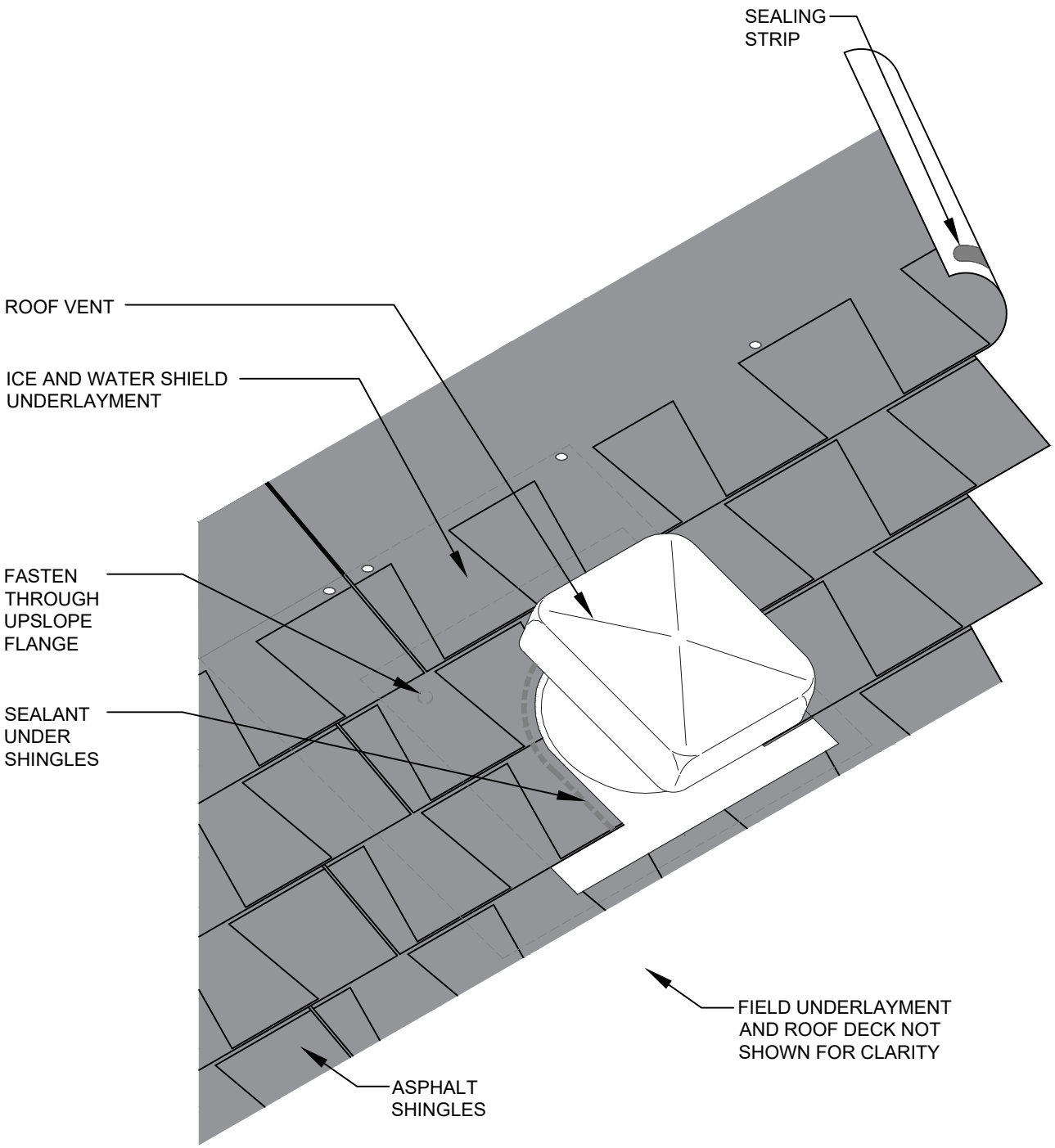
IRSC	PROJECT: TWIN LAKES CLUBHOUSE PALATINE, IL		TITLE: HEADWALL FLASHING DETAIL	
	PROJECT NO: 10364.PMSQ26	DATE: 08/2026	SCALE: N.T.S.	DRAWING: D-06



IRSC	PROJECT: TWIN LAKES CLUBHOUSE PALATINE, IL		TITLE: NON-VENTED RIDGE DETAIL
	PROJECT NO: 10364.PMSQ26	DATE: 08/2026	SCALE: N.T.S.	DRAWING: D-07

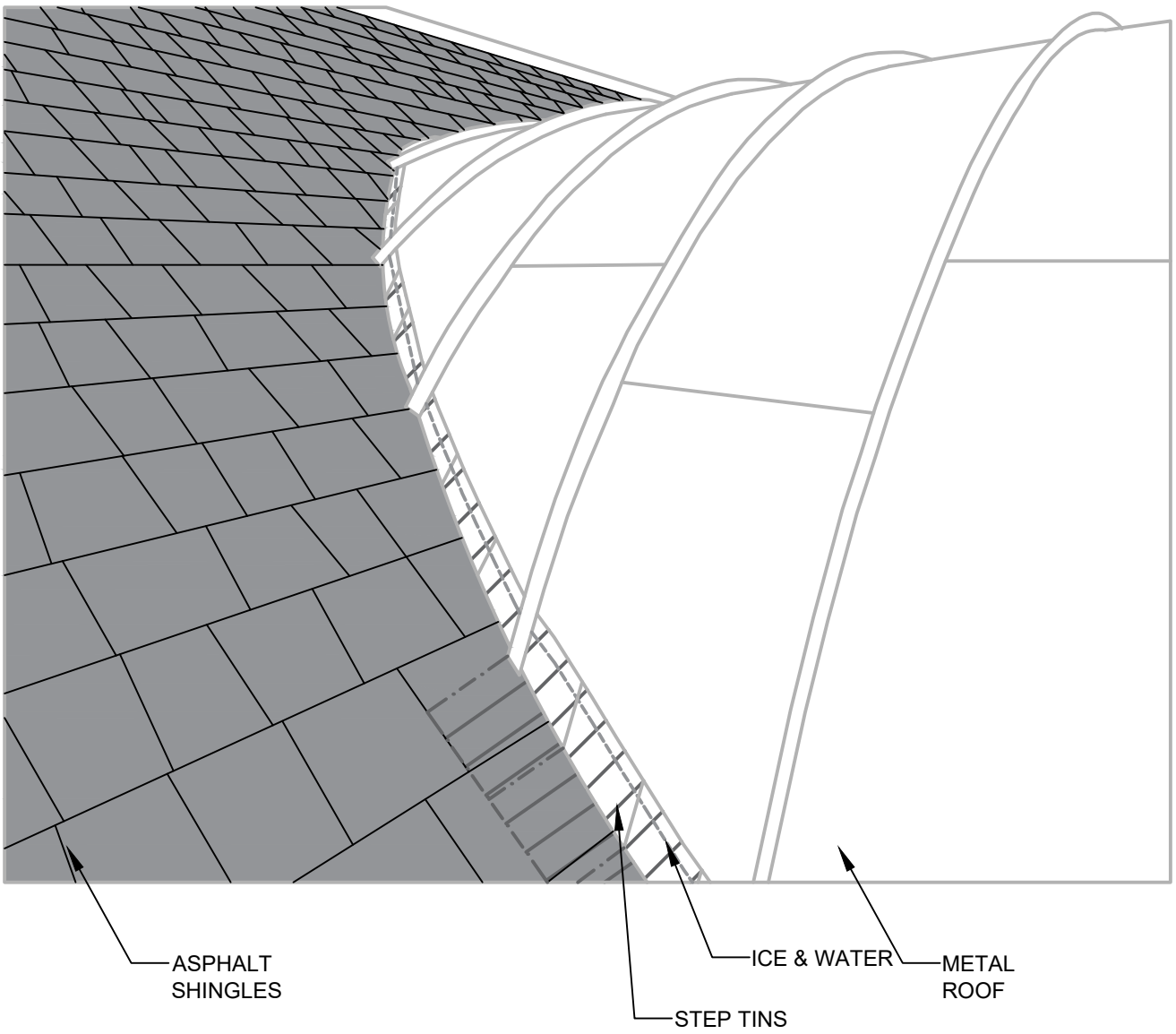


IRSC	PROJECT: TWIN LAKES CLUBHOUSE PALATINE, IL		TITLE: VENT PIPE PENETRATION DETAIL
	PROJECT NO: 10364.PMSQ26	DATE: 08/2026	SCALE: N.T.S.	DRAWING: D-08

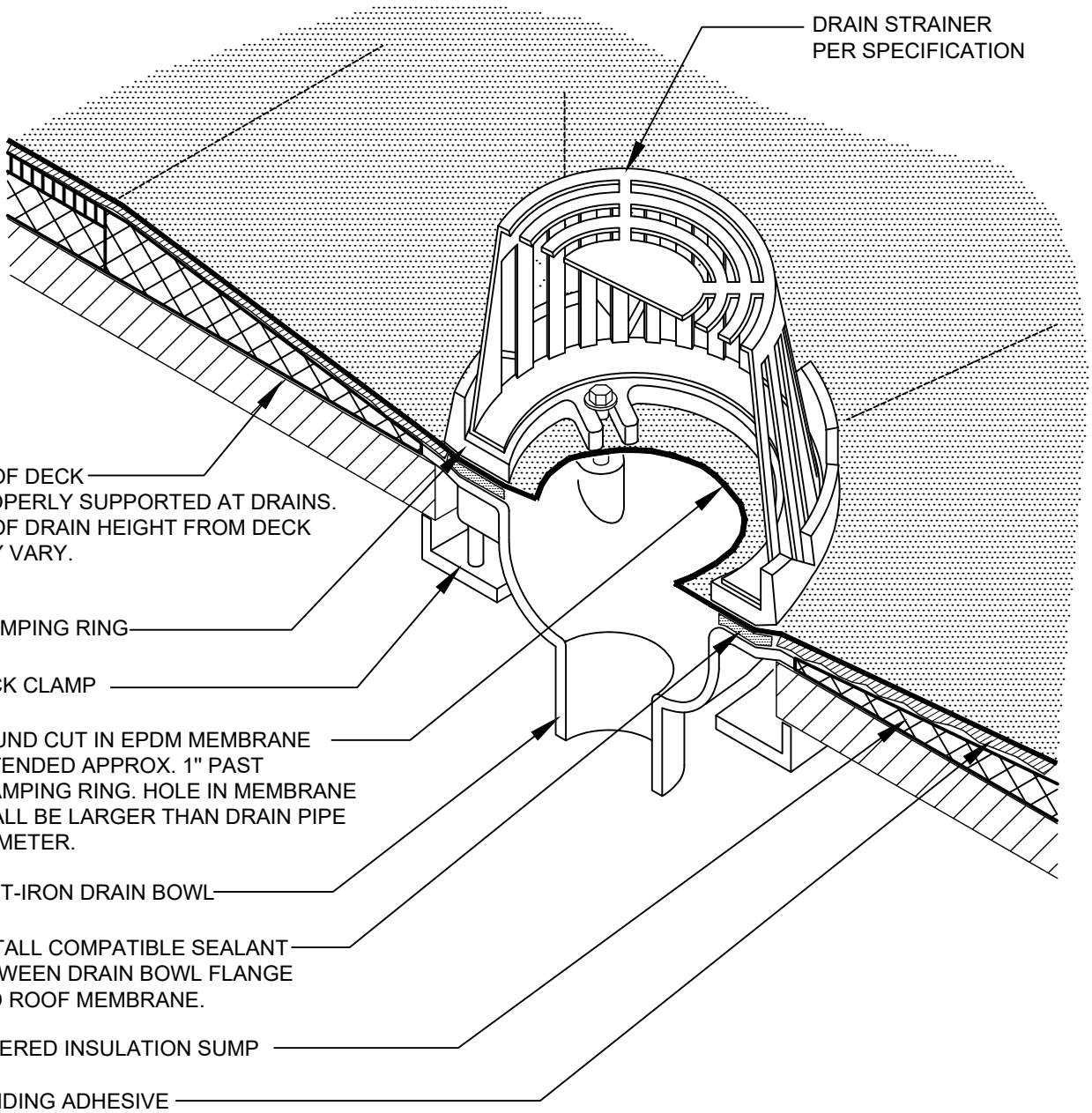


IRSC

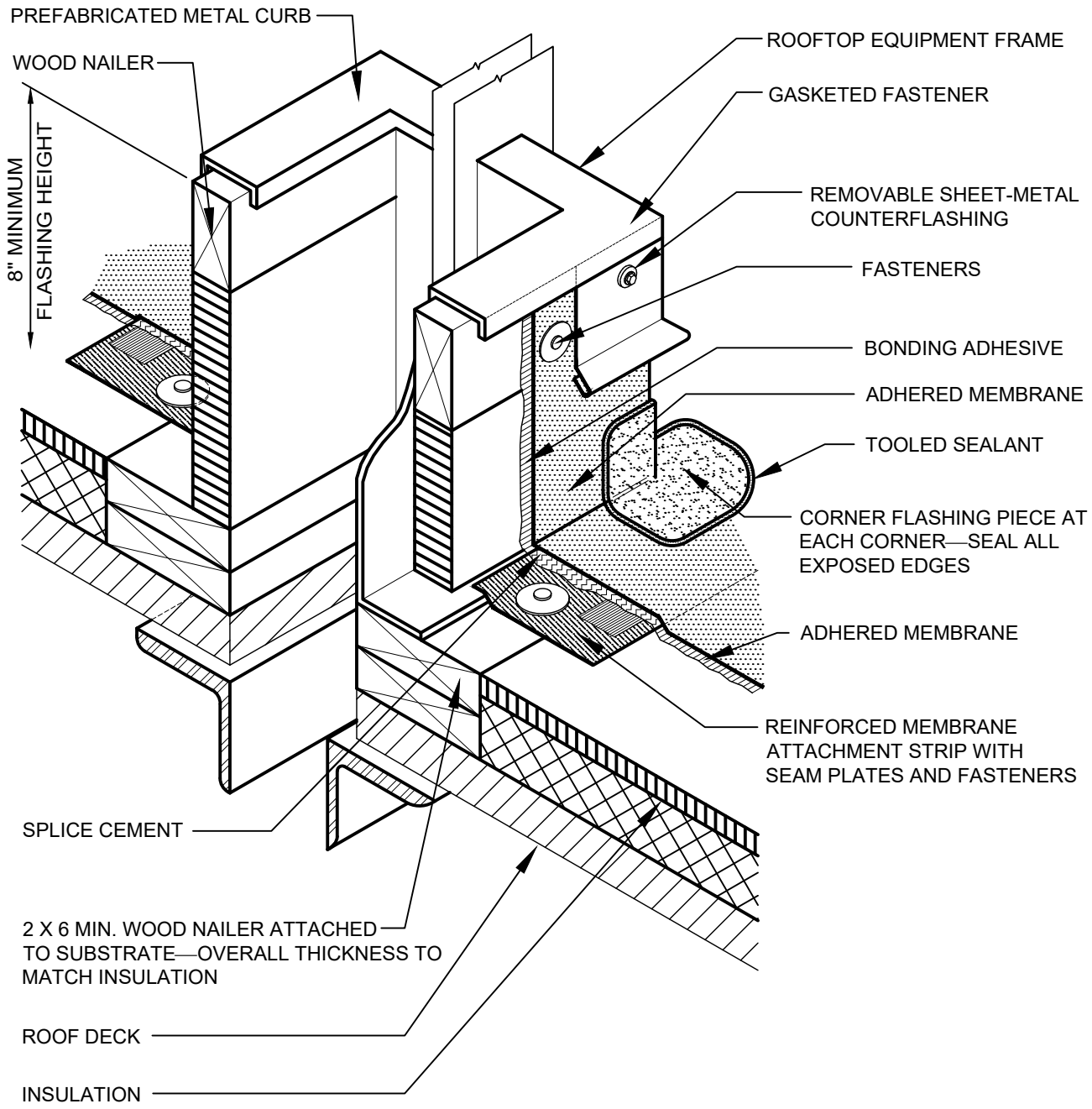
PROJECT:		TITLE:	
TWIN LAKES CLUBHOUSE PALATINE, IL		VENT FLASHING DETAIL	
PROJECT NO:	DATE:	SCALE:	DRAWING:
10364.PMSQ26	08/2026	N.T.S.	D-09



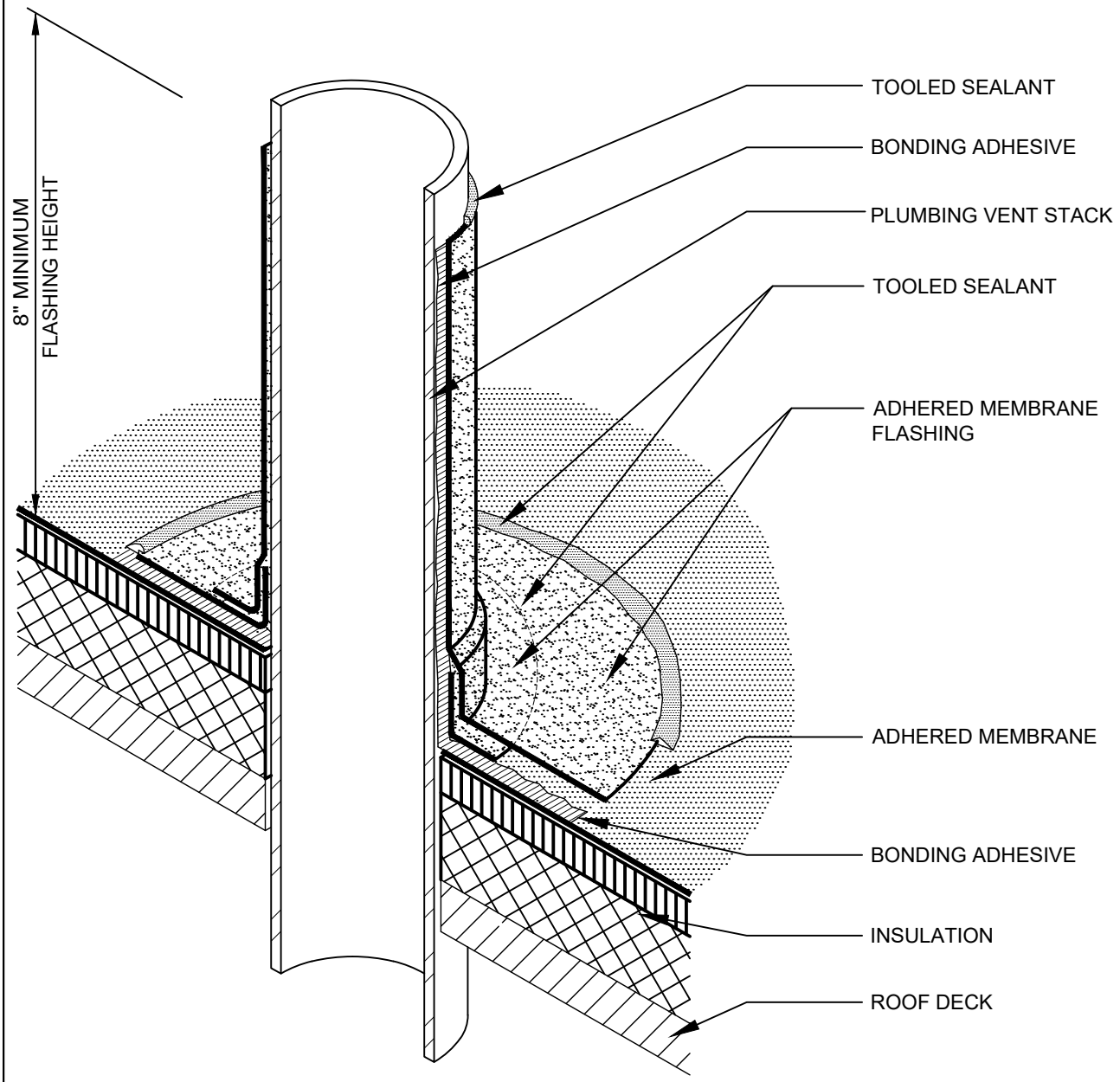
IRSC	PROJECT: TWIN LAKES CLUBHOUSE PALATINE, IL		TITLE: STEP-TINS AT METAL ROOF INTERFACE DETAIL
	PROJECT NO: 10364.PMSQ26	DATE: 08/2026	SCALE: N.T.S.	DRAWING: D-10



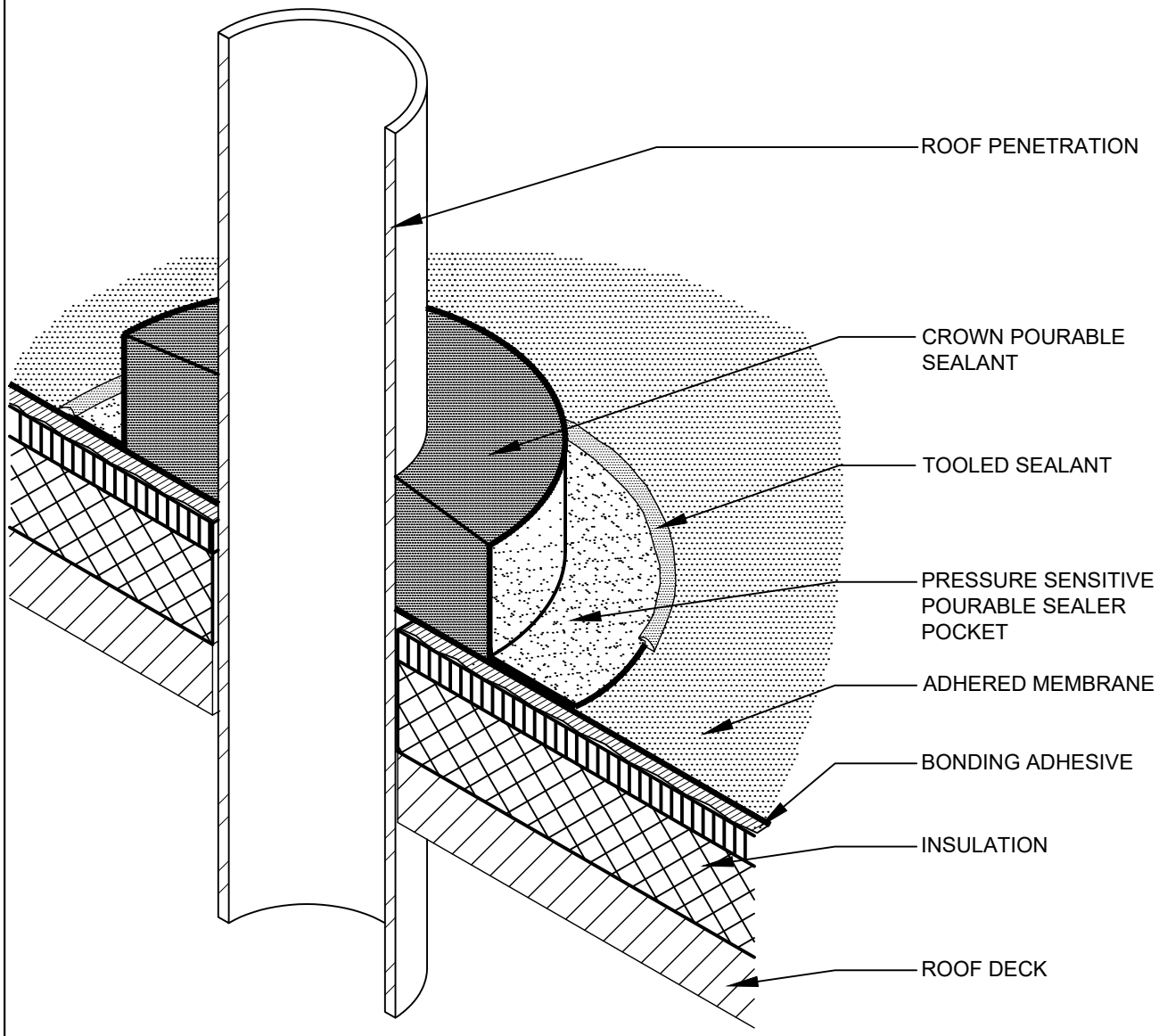
IRSC	PROJECT: TWIN LAKES CLUBHOUSE PALATINE, IL	TITLE: ROOF DRAIN DETAIL (ADHERED SYSTEM)	
	PROJECT NO: 10364.PMSQ26	DATE: 08/2026	SCALE: N.T.S.	DRAWING: D-11



IRSC	PROJECT: TWIN LAKES CLUBHOUSE PALATINE, IL		TITLE: NON-REMOVABLE CURB DETAIL
	PROJECT NO: 10364.PMSQ26	DATE: 08/2026	SCALE: N.T.S.	DRAWING: D-12



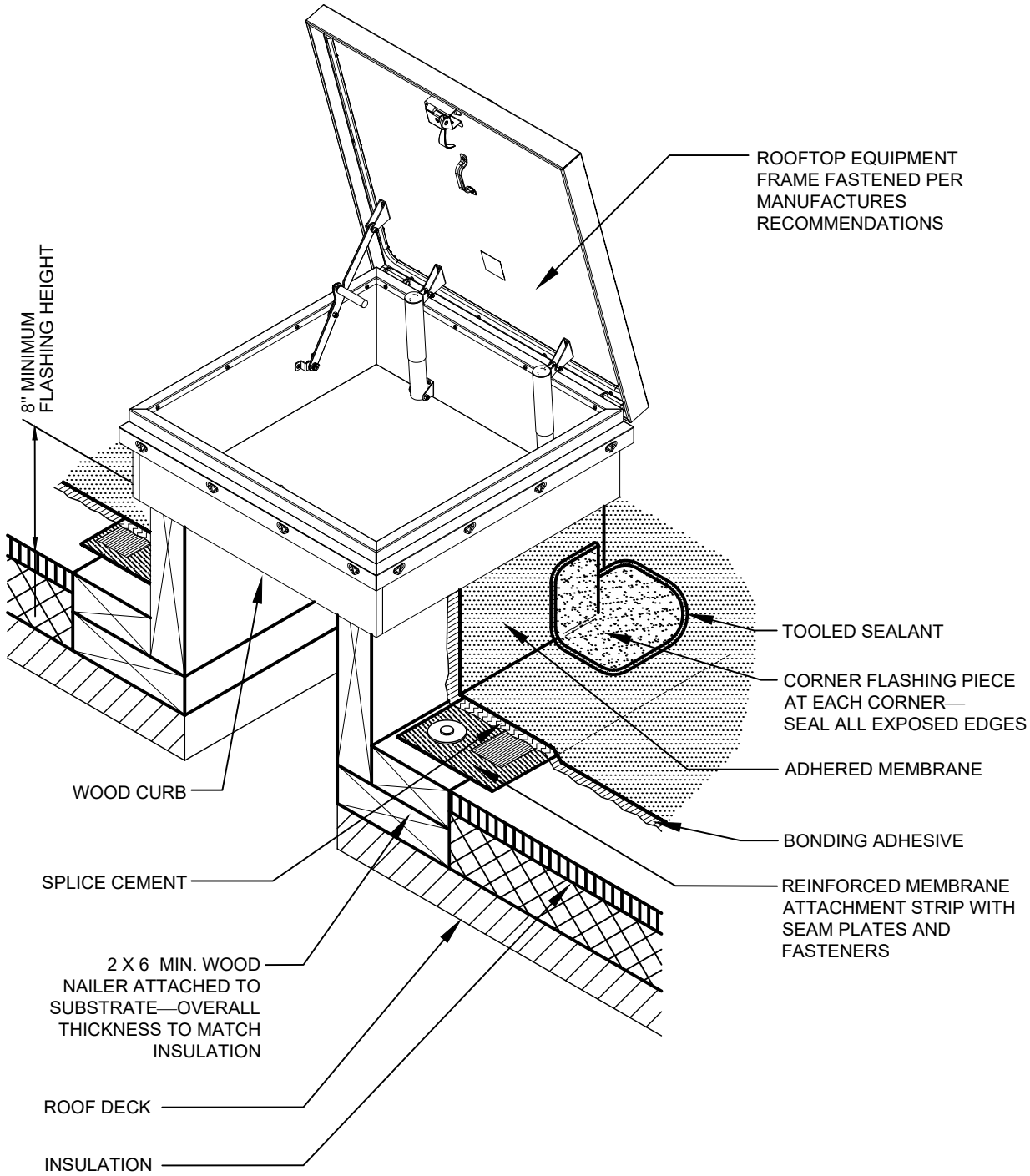
IRSC	PROJECT: TWIN LAKES CLUBHOUSE PALATINE, IL	TITLE: PLUMBING VENT FIELD WRAP DETAIL	
	PROJECT NO: 10364.PMSQ26	DATE: 08/2026	SCALE: N.T.S.	DRAWING: D-13



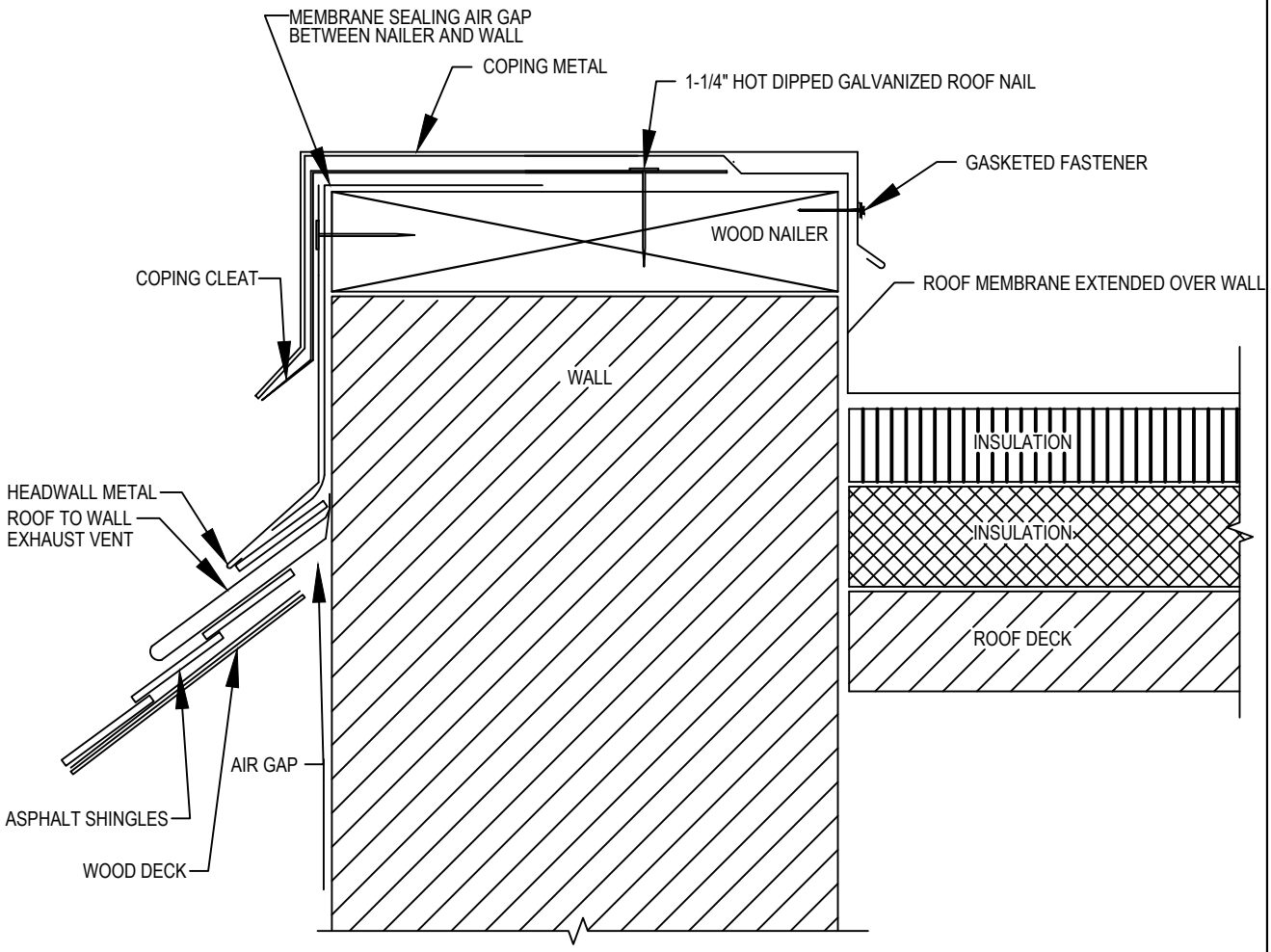
IRSC

PROJECT:	TITLE:
TWIN LAKES CLUBHOUSE PALATINE, IL	PRESSURE SENSITIVE POURABLE SEALER DETAIL

PROJECT NO:	DATE:	SCALE:	DRAWING:
10364.PMSQ26	08/2026	N.T.S.	D-14



IRSC	PROJECT: TWIN LAKES CLUBHOUSE PALATINE, IL		TITLE: HATCH DETAIL
	PROJECT NO: 10364.PMSQ26	DATE: 08/2026	SCALE: N.T.S.	DRAWING: D-15



IRSC	PROJECT: TWIN LAKES CLUBHOUSE PALATINE, IL		TITLE: COPING METAL OVER SHINGLES DETAIL
	PROJECT NO: 10364.PMSQ26	DATE: 08/2026	SCALE: N.T.S.	DRAWING: D-16