



## ST. TAMMANY PARISH

MICHAEL B. COOPER  
PARISH PRESIDENT

**October 27, 2020**

Please find the following addendum to the below-mentioned BID.

**Addendum No.:**3

**Bid#:** 20-20-2

**Project Name:** Mandeville Library Roof

**Bid Due Date:** Wednesday, November 4, 2020

### **GENERAL INFORMATION:**

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1. Due to the pending weather of Hurricane Zeta expected on Wednesday, October 28, 2020, we will reschedule the non-mandatory roof viewing to Friday, October 30, 2020.
  - Mandeville Library 1:00pm - 30 Minutes MAX per Contractor. All Contractor encouraged but not required to review roof. All Contractors are to bring their own ladder and will be escorted on roof with Library Facilities Staff Member.

**End of Addendum # 3**



## ST. TAMMANY PARISH

MICHAEL B. COOPER  
PARISH PRESIDENT

**October 23, 2020**

Please find the following addendum to the below-mentioned BID.

**Addendum No.:** 2

**Bid#:** 20-20-2

**Project Name:** Mandeville Library Roof

**Bid Due Date:** Wednesday, November 4, 2020

### **GENERAL INFORMATION:**

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1. Mandatory Pre-Bid Sign in Sheet. (Attached)
2. NON-MANDATORY Roof Review meeting, **Wednesday, October 28, 2020 1:00pm** – 30 Minutes MAX per Contractor. All Contractor encouraged but not required to review roof. All Contractors are to bring their own ladder and will be escorted on roof with Library Facilities Staff Member.
3. Last day for the Addendum Friday, October 30, 2020 2:00 pm.

### **ATTACHMENTS:**

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1. Mandatory Pre-Bid Sign in Sheet.pdf

**End of Addendum # 2**

844 Girod Street,  
Mandeville, La 70448

**Pre-Bid Sign-In Sheet**  
**MANDEVILLE LIBRARY ROOF**

Name	Company	Email	Phone	Time In	Time Out
1 Kolby McDade	Pastin Roofing	Kolby@pastinroofing.com	225-715-2550	10:50	11:11
2 Guy Huth	LACE SHORE ROOFING & CONSTRUCTION	Guy@laceshorerofing.com	504-410-0822	10:51	11:12
3 Richard Deal	Ray Bros - Inc	Richard@raybrosginc.com	504-858-2473	10:52	11:13
4 Michael Calkins	Roof Tech	mikec@rooftech-ro.com	504-487-1538	10:53	11:13
5 Cesar Pagan	Roofing Solutions	cpagan@roofingsolutions.com	225-384-1201	10:53	11:11
6 Matty Baker	Fische's Inc.	matty@fische'sroofing.com	504-450-2761	10:55	11:11
7 Scott Bell	Bell Roofing Co	scott@bellroof.com	504-415-7167	10:55	11:12
8 SCOTT SCHNEIDER	THE GARLAND CO INC	sschneider@indiegarkandinc.com	225-266-5779	10:55	11:10
9 Rutherford	STPG	rfields@STPG.ORG	985-888-2792	10:50	11:25
10 Rob Arze	Pontchartrain Constructors	Robert.louis@rc.com	985-327-9769	11:00	11:20
11 Brent Coeiger	STPL	brent@stpl.us	985-276-2461	11:00	11:21
12 Kelly LeFaca	STPL	Kelly@stpl.us	985-249-0961	11:00	11:20

Tanya DiMaggio  
Jenny Mayer STPL  
John Bennett STPL

Tanya@stpl.us  
jenny@stpl.us  
john@stpl.us

985-624-1931  
985-674-5871  
985-778-1821

11:00  
11:00  
11:20

Page 1 of 2  
mayerj@stpl.us  
john@stpl



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October 14, 2020"

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Addendum No03"

Bid#< 42/42/4" " "

Project Name<O cpf gxkmg'Nkdtct { "Tqqh" " "

Bid Due Date<"Y gf pguf c { .P qxgo dgt "6."4242" " "

GENERAL INFORMATION:

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- 60 *Add* öUgevkqp"32/"O cpf gxkmg'Nkdtct { "Tqqh'kpur gevkap" T gr qt vö'vq'y g'Dkf " Rtqr qucrö" \*Cwcej gf +"
- 70 *Add* "öUgevkqp"33"Uj kpi rg'F gvckuö'vq'y g'Dkf 'Rtqr qucrö" \*Cwcej gf +"

ATTACHMENTS:

- 30 Ugevkqp"23"Vcdrg"qh'EqpvgpvT gxlugf 0 f h"
- 40 Ugevkqp"25"Uwo o ct { "qh'Y qtmI'Nkdtct { "Tqqh'Ur gekhlecvkpu" T gxlugf 0 f h"
- 50 Ugevkqp"2; "Tqqh'O gcuwt go gpvT gr qt vö f h"
- 60 Ugevkqp"32"O cpf gxkmg'Nkdtct { "Tqqh'kpur gevkap" T gr qt vö f h"
- 70 Ugevkqp"33"Uj kpi rg'F gvckuö f h"

End of Addendum # 1"

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Section 01

Table of Contents  
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**Section 03**  
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**Summary of Work**

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" **IV.** QVJ GT"TGSG WKTGO GP VU"\*cu'cr r nkedrg+"'  
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"""" " **When not otherwise specified herein, all work and materials shall conform to  
the requirements of the Louisiana Department of Transportation and  
Development hereafter called LDOTD (2006 Edition of Louisiana Standard  
Specifications for Roads and Bridges).**

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Section 03  
Library Roof Specifications

**ARCHITECTURAL ASPHALT SHINGLES**

**PART 1- GENERAL**

**1.1 SCOPE OF WORK**

- A. Provide all labor, equipment, and materials to install the roof system over the properly prepared substrate.
- B. The asphalt shingle system shall not consist of no less than one layer of the specified underlayment and 30 year, algae resistant, laminated shingles.
- C. Fabricate and install new drip edge and related sheet metal flashings.

**1.2 RELATED SECTIONS**

- A. Drawings and general provisions of the Contract, including General Supplementary Conditions and Division 1 Specification Sections apply to this section.
- B. Related work specified elsewhere:
  - 1. Section 06100 - Rough Carpentry
  - 2. Section 07600 - Flashing and Sheet Metal

**1.3 REFERENCE STANDARDS**

- A. Asphalt Roofing Manufacturer's Association (ARMA)
- B. American Society for Testing Materials (ASTM)  
ASTM D 3018- Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules.
- C. National Roofing Contractor's Association (NRCA)  
Roofing and Waterproofing Manual-Steep Roofing
- D. Underwriters' Laboratories (UL):
  - 1. UL-263 Fire Tests of Building Constructions and Materials.
  - 2. UL-580 Tests for Uplift Resistance of Roof Assemblies.
  - 3. UL-790 Tests for Fire Resistance of Roof Covering Materials.

**1.4 SUBMITTALS**

- A. Underwriter's Laboratories (UL) Certification  
UL 790: The test report shall clearly show a rating of Class A roofing material.
- B. Certificates. Evidence of acceptance of shingle manufacturer stating their acceptance of the specification for compliance with their shingle system.
- C. Product Data. Indicate shingles, underlayment and accessory materials or other proposed materials.
- D. Manufacturer's Installation Manual: Including installation sequence, special instructions, and Material Safety Data Sheets (MSDS).
- E. Samples: Provide full-scale samples of the following materials and system components. Samples shall be of identical material type, thickness, width, and material grade as the system specified for this project. Sample shall be the color chosen for the project.

**1.5 INSTALLER QUALIFICATIONS**

- A. Successful contractor is required to maintain a full-time supervisor/foreman who is on the job-site at all times during installation of new roof system. Foreman must have a minimum of five (5) years experience with the installation of system similar to that specified.
- B. If required, fabricator/installer shall submit work experience and evidence of adequate financial responsibility. The owner's representative reserves the right to inspect fabrication facilities in determining qualifications.

**1.6 DELIVERY, STORAGE, AND HANDLING.**

- A. Manufacturer's responsibility:
  - 1. Deliver the products in manufacturer's original containers, with wrappers in a dry undamaged condition with seals and labels intact. Include test report data necessary.
- B. Installer's responsibility:
  - 1. Store materials in weather protected environment clear of the ground and moisture.
  - 2. Store rolled goods on end on a clean, sound pallet. Materials shall be protected against moisture.
  - 3. Do not store more materials on the roof than can be installed within two days.
  - 4. Inspect materials upon delivery. Reject and remove physically damaged or marred material from project site.

**1.7 WARRANTIES.**

- A. Owner shall receive THIRTY (30) YEAR WARRANTY from manufacturer of shingles covering ALL of the following criteria. Multiple warranties are NOT acceptable.
  - 1. Installer's 2-year warranty covering workmanship from deck to underlayment to shingles.
  - 3. Manufacturer's Limited Warranty: Shingles shall come with and be warranted by the material manufacturer for a period of 30 years.
  - 4. Warranties shall commence on date of substantial completion.

**PART 2- PRODUCTS**

**2.1 PREMIUM GRANULAR SHINGLES**

- A. Thirty year, Architectural, algae resistant laminated shingle. Color to be determined by Architect.

**2.2 RELATED MATERIALS**

- A. Hip and Ridge: Shingles shall come pre-cut from factory.
- B. Underlayment: Viking UDL Pro-Grade PS (2 sq roll) by The Viking Group, Scott Schneidewind (225) 266-5179 or approved equal.
- C. Ice and Water Shield: RMer Seal by The Garland Company, Inc. or approved equal.
- D. Nails. Nails shall be 11-gauge wire minimum, 5/16-inch head minimum and length to give proper penetration. (Longer nails will be necessary for hip and ridge application).
- E. Flashing Cement. Trowel grade asphalt based roof cement for use as edge and valley sealant; Flashing Bond by The Garland Company, Inc. or pre-approved equal.
- F. Eave Metal/Drip Edge/Gutter/Downspouts): Style DL Long. 24 gauge, Prefinished metal color to be determined by Owner by The Garland Company, Inc. or pre-approved equal.

**PART 3- EXECUTION**

**3.1 PREPARATION**

- A. Pre-roofing conference: Prior to beginning shingle roofing work, a pre-roofing conference shall be held to review work to be accomplished.
  - 1. Owner, Contractor and all other subcontractors who have equipment penetrating roof or whose work involves access to roof shall be present.

**3.2 ROOFING INSTALLATION.**

- A. Prepare roof for the installation of asphalt shingles, including:
  - 1. Protect all building surfaces against damage from roofing work.
  - 2. Clean roof deck and maintain free from all deleterious material during roofing application.
  - 3. Verify deck surface to be flat and joints tight. All rotten decking shall be replaced.
- B. Underlayment
  - 1. Install specified underlayment. Ice and Water Shield shall be installed up and over parapet wall extending a minimum of 12" onto the roof surface, in all valleys, at all eaves and at the ridge (minimum 18" cut in these areas).
- C. Shingle Installation
  - 1. General. Application shall be in accordance with the approved shingle manufacturer's latest printed specification and installation guides.

2. Starter Course. Before applying the first course of shingles, a row of shingles with the tabs removed should be applied along the eaves as the starter strip. Align starter course with the outer edge of the building, gutters or eaves as necessary and set in flashing cement.
  3. The nails used in the starter strip shall also penetrate the eave metal/drip edge.
  4. Apply the first course of shingles flush with the starter course (end of tab) but without open tab joints overlapping starter joints (stagger). Nail shingles in accordance with the Manufacturer's printed instructions. In any event, a minimum of six nails is required. Be sure it is laid perfectly straight, checking it regularly during application against a horizontal chalk line.
  5. The shingles shall be overlapped so that there is a 5" exposure and shall remain constant throughout the entire application.
  6. All shingles are to be nailed in place, no stapling is permitted. Nail guns shall be adjusted so that the nails are not overdriven.
- D. Hip and Ridge
1. Install hip and ridge flashing according to current Manufacturer's printed instruction.

### 3.2

#### **SHEET METAL INSTALLATION.**

- A. Install new metal flashing at base of walls and on to the roof surface. Metal flashing to be set in mastic. Metal flashing shall be fabricated with a mechanical break "V" to help minimize oil canning.
- C. Fabricate and install new 26 ga. Pre-finished D-Long drip edge and water diverter at opening as indicated on drawing.
- D. Fabricate and install new lead soil stacks.

**END OF SECTION**

## SECTION 07550

### MODIFIED BITUMINOUS MEMBRANE ROOFING

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Cold Applied 2-Ply SBS Roofing.

##### 1.2 RELATED SECTIONS

- A. Section 06100 - Rough Carpentry.
- B. Section 07220 - Insulation Board: Insulation and fastening.
- C. Section 07600 - Sheet Metal Flashing and Trim: Weather protection for base flashings.

##### 1.3 REFERENCES

- A. ASTM D 41 - Standard Specification for Asphalt Primer Used in Roofing, Dampproofing, and Waterproofing.
- B. ASTM D 312 - Standard Specification for Asphalt used in Roofing.
- C. ASTM D 451 - Standard Test Method for Sieve Analysis of Granular Mineral Surfacing for Asphalt Roofing Products.
- D. ASTM D 1970 - Specification for Sheet Materials, Self-Adhering Polymer Modified Bituminous, Used as Steep Roofing Underlayment for Ice Dam Protection.
- E. ASTM D 1079 Standard Terminology Relating to Roofing, Waterproofing and Bituminous Materials.
- F. ASTM D 1227 Standard Specification for Emulsified Asphalt Used as a Protective Coating for Roofing.
- G. ASTM D 1863 Standard Specification for Mineral Aggregate Used as a Protective Coating for Roofing.
- H. ASTM D 2178 Standard Specification for Asphalt Glass Felt Used in Roofing and Waterproofing.
- I. ASTM D 2822 Standard Specification for Asphalt Roof Cement.
- J. ASTM D 2824 Standard Specification for Aluminum-Pigmented Asphalt Roof Coating.
- K. ASTM D 4601 Standard Specification for Asphalt Coated Glass Fiber Base Sheet Used in Roofing.
- L. ASTM D 5147 Standard Test Method for Sampling and Testing Modified Bituminous Sheet Materials.
- M. ASTM D 6162 Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using a Combination of Polyester and Glass Fiber Reinforcements.

## SECTION 07550

### MODIFIED BITUMINOUS MEMBRANE ROOFING

- N. ASTM D 6163 Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Glass Fiber Reinforcements.
- O. ASTM D 6164 - Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Polyester Reinforcements.
- P. ASTM D 6754 - Standard Specification for Ketone Ethylene Ester (KEE) Sheet Roofing.
- Q. ASTM D 6757 - Standard Specification for Underlayment Felt Containing Inorganic Fibers Used in Steep-Slope Roofing.
- R. ASTM E 108 - Standard Test Methods for Fire Test of Roof Coverings
- S. Factory Mutual Research (FM): Roof Assembly Classifications.
- T. National Roofing Contractors Association (NRCA): Roofing and Waterproofing Manual.
- U. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA) - Architectural Sheet Metal Manual.
- V. Underwriters Laboratories, Inc. (UL): Fire Hazard Classifications.
- W. Warnock Hersey (WH): Fire Hazard Classifications.
- X. ANSI-SPRI ES-1 Wind Design Standard for Edge Systems used with Low Slope Roofing Systems.
- Y. ASCE 7, Minimum Design Loads for Buildings and Other Structures
- Z. UL - Fire Resistance Directory.
- AA. FM Approvals - Roof Coverings and/or RoofNav assembly database.

#### 1.4 DESIGN / PERFORMANCE REQUIREMENTS

- A. Perform work in accordance with all federal, state and local codes.
- B. Exterior Fire Test Exposure: Roof system shall achieve a Class A rating for roof slopes indicated on the Drawings as follows:
- C. Roof System membranes containing recycled or bio-based materials shall be third party certified through UL Environment.
- D. Roof system shall have been tested in compliance with the following codes and test requirements: FM Global, Miami Dade or Florida Building Products or provide stamped engineering calculations that system meets or exceeds the design requirements.

#### 1.5 SUBMITTALS

- A. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation instructions.



## SECTION 07550

### MODIFIED BITUMINOUS MEMBRANE ROOFING

#### 1.6 QUALITY ASSURANCE

- A. Perform Work in accordance with NRCA Roofing and Waterproofing Manual.
- B. Manufacturer Qualifications: Company specializing in manufacturing products specified with documented ISO 9001 certification and minimum of twelve years of documented experience and must not have been in Chapter 11 bankruptcy during the last five years.
- C. Installer Qualifications: Company specializing in performing Work of this section with minimum five years documented experience and a certified Pre-Approved Garland Contractor.
- D. Installer's Field Supervision: Maintain a full-time Supervisor/Foreman on job site during all phases of roofing work while roofing work is in progress.
- E. Product Certification: Provide manufacturer's certification that materials are manufactured in the United States and conform to requirements specified herein, are chemically and physically compatible with each other, and are suitable for inclusion within the total roof system specified herein.
- F. Source Limitations: Obtain all components of roof system from a single manufacturer. Secondary products that are required shall be recommended and approved in writing by the roofing system Manufacturer. Upon request of the Architect or Owner, submit Manufacturer's written approval of secondary components in list form, signed by an authorized agent of the Manufacturer.

#### 1.7 PRE-INSTALLATION MEETINGS

- A. Convene minimum two weeks prior to commencing Work of this section.
- B. Review installation procedures and coordination required with related Work.
- C. Inspect and make notes of job conditions prior to installation:
  - 1. Record minutes of the conference and provide copies to all parties present.
  - 2. Identify all outstanding issues in writing designating the responsible party for follow-up action and the timetable for completion.
  - 3. Installation of roofing system shall not begin until all outstanding issues are resolved to the satisfaction of the Architect.

#### 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store products in manufacturer's unopened packaging with labels intact until ready for installation.
- B. Store all roofing materials in a dry place, on pallets or raised platforms, out of direct exposure to the elements until time of application. Store materials at least 4 inches above ground level and covered with "breathable" tarpaulins.
- C. Stored in accordance with the instructions of the manufacturer prior to their application or installation. Store roll goods on end on a clean flat surface except store KEE-Stone FB 60 rolls flat on a clean flat surface. No wet or damaged materials will be used in the application.

## SECTION 07550

### MODIFIED BITUMINOUS MEMBRANE ROOFING

- D. Store at room temperature wherever possible, until immediately prior to installing the roll. During winter, store materials in a heated location with a 50-degree F (10-degree C) minimum temperature, removed only as needed for immediate use. Keep materials away from open flame or welding sparks.
- E. Avoid stockpiling of materials on roofs without first obtaining acceptance from the Architect/Engineer.
- F. Adhesive storage shall be between the range of above 40-degree F (4-degree C) and below 80-degree F (27-degree C). Area of storage shall be constructed for flammable storage.

#### 1.9 COORDINATION

- A. Coordinate Work with installing associated metal flashings as work of this section proceeds.

#### 1.10 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

### PART 2 PRODUCTS

#### 2.1 MANUFACTURERS

- A. Basis of Design: Garland Company, Inc. (The); 3800 E. 91st St., Cleveland, OH 44105.
- B. The Products specified are intended and the Standard of Quality for the products required for this project. If other products are proposed the bidder must disclose in the bid the manufacturer and the products that they intend to use on the Project. If no manufacturer and products are listed, the bid may be accepted only with the use of products specified.
  - 1. Bidder will not be allowed to change materials after the bid opening date.
  - 2. If alternate products are included in the bid, the products must be equal to or exceed the products specified. Supporting technical data shall be submitted to the Architect/Owner for approval prior to acceptance.
  - 3. In making a request for substitution, the Bidder/Roofing Contractor represents that it has:
    - a. Personally, investigated the proposed product or method, and determined that it is equal or superior in all respects to that specified.
    - b. Will provide the same guarantee for substitution as for the product and method specified.
    - c. Will coordinate installation of accepted substitution in work, making such changes as may be required for work to be completed in all respects.
    - d. Will waive all claims for additional cost related to substitution, which consequently become apparent.
    - e. Cost data is complete and includes all related cost under his/her contract or other contracts, which may be affected by the substitution.
    - f. Will reimburse the Owner for all redesign cost by the Architect for accommodation of the substitution.

## SECTION 07550

### MODIFIED BITUMINOUS MEMBRANE ROOFING

4. Architect/ Owner reserves the right to be the final authority on the acceptance or rejection of any or all bids, proposed alternate roofing systems or materials that has met ALL specified requirement criteria.
5. Failure to submit substitution package, or any portion thereof requested, will result in immediate disqualification and consideration for that contractors request for manufacturer substitution.

#### 2.2 COLD APPLIED 2-PLY ROOF SYSTEM - STRESSPLY, OPTIMAX, OR VERSIPLY

- A. Base (Ply) Sheet: One ply bonded to the prepared substrate with Interply Adhesive:
  1. StressBase 80 or approved equal:
- B. Modified Cap (Ply) Sheet: One ply bonded to the prepared substrate with Interply Adhesive:
  1. StressPly Mineral FR or approved equal:
- C. Flashing Ply Adhesive:
  1. Green-Lock Flashing Adhesive or approved equal:
- D. Base Sheet: Tribase by The Garland Company, Inc. or approved equal.

### PART 3 EXECUTION

#### 3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. Inspect and approve the deck condition, slopes and fastener backing if applicable, parapet walls, expansion joints, roof drains, stack vents, vent outlets, nailers and surfaces and elements.
- C. Verify that work penetrating the roof deck, or which may otherwise affect the roofing, has been properly completed.
- D. If substrate preparation and other conditions are the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

#### 3.2 PREPARATION

- A. General: Clean surfaces thoroughly prior to installation.
  1. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
  2. Fill substrate surface voids that are greater than 1/4-inch-wide with an acceptable fill material.
  3. Roof surface to receive roofing system shall be smooth, clean, free from loose gravel, dirt and debris, dry and structurally sound.
  4. Wherever necessary, all surfaces to receive roofing materials shall be power broom and vacuumed to remove debris and loose matter prior to starting work.
  5. Do not apply roofing during inclement weather. Do not apply roofing membrane to damp, frozen, dirty, or dusty surfaces.
  6. Fasteners and plates for fastening components mechanically to the metal deck shall provide a minimum pullout capacity of 325 lbs. per fastener. Base or ply sheets

## SECTION 07550

### MODIFIED BITUMINOUS MEMBRANE ROOFING

attached with cap nails require a minimum pullout capacity of 40 lb. per nail.

7. Prime decks where required, in accordance with requirements and recommendations of the primer and deck manufacturer.

#### 3.3 INSTALLATION - GENERAL

- A. Install modified bitumen membranes and flashings in accordance with manufacturer's instructions and with the recommendations provided by the National Roofing Contractors Association's Roofing & Waterproofing Manual, the Asphalt Roofing Manufacturers Association, and applicable codes.
- B. General: Avoid installation of modified bitumen membranes at temperatures lower than 40-45 degrees F. When work at such temperatures unavoidable use the following precautions:
  1. Take extra care during cold weather installation and when ambient temperatures are affected by wind or humidity, to ensure adequate bonding is achieved between the surfaces to be joined. Use extra care at material seam welds and where adhesion of the applied product to the appropriately prepared substrate as the substrate can be affected by such temperature constraints as well.
  2. Unrolling of cold materials, under low ambient conditions must be avoided to prevent the likelihood of unnecessary stress cracking. Rolls must be at least 40 degrees F at the time of application. If the membrane roll becomes stiff or difficult to install, it must be replaced with roll from a heated storage area.
- C. Commence installation of the roofing system at the lowest point of the roof (or roof area), working up the slope toward the highest point. Lap sheets shingle fashion so as to constantly shed water
- D. All slopes greater than 2:12 require back-nailing to prevent slippage of the ply sheets. Use ring or spiral-shank 1 inch cap nails, or screws and plates at a rate of 1 fastener per ply (including the membrane) at each insulation stop. Place insulation stops at 16 ft o.c. for slopes less than 3:12 and 4 feet o.c. for slopes greater than 3:12. On non-insulated systems, nail each ply directly into the deck at the rate specified above. When slope exceeds 2:12, install all plies parallel to the slope (strapping) to facilitate backnailing. Install 4 additional fasteners at the upper edge of the membrane when strapping the plies.

#### 3.4 INSTALLATION COLD APPLIED ROOF SYSTEM

- A. Modified Plies: **Cut cap ply sheets into installation lengths and allow plies to relax before installing.** Install in interply adhesive applied at the rate required by the manufacturer. Shingle sheets uniformly over the prepared substrate to achieve the number of plies specified. Shingle in proper direction to shed water on each large area of roofing.
  1. Lap ply sheet ends 8 inches. Stagger end laps 12 inches minimum.
  2. Solidly bond to the base layers with specified cold adhesive at the rate of 2 to 2-1/2 gallons per 100 square feet.
  3. Roll must push a puddle of adhesive in front. Care should be taken to eliminate air entrapment under the membrane. All laps shall be heated welded with Leister Heat Weld Gun.
  4. Install subsequent rolls of modified across the roof as above with a minimum of 4 inch

## SECTION 07550

### MODIFIED BITUMINOUS MEMBRANE ROOFING

side laps and 8 inch staggered end laps. Lay modified membrane in the same direction as the underlayers but the laps shall not coincide with the laps of the base layers.

5. Allow cold adhesive to set for 5 to 10 minutes before installing the top layer of modified membrane.
6. Extend membrane 2 inches beyond top edge of all cants in full application of the cold adhesive as shown on the Drawings.

#### 3.5 CLEANING

- A. Clean-up and remove daily from the site all wrappings, empty containers, paper, loose particles and other debris resulting from these operations.
- B. Remove asphalt markings from finished surfaces.
- C. Repair or replace defaced or disfigured finishes caused by Work of this section.

#### 3.6 PROTECTION

- A. Provide traffic ways, erect barriers, fences, guards, rails, enclosures, chutes and the like to protect personnel, roofs and structures, vehicles and utilities.
- B. Protect exposed surfaces of finished walls with tarps to prevent damage.
- C. Plywood for traffic ways required for material movement over existing roofs shall be not less than 5/8 inch (16 mm) thick.
- D. In addition to the plywood listed above, an underlayment of minimum 1/2 inch (13 mm) recover board is required on new roofing.
- E. Special permission shall be obtained from the Manufacturer before any traffic shall be permitted over new roofing.

#### 3.7 FIELD QUALITY CONTROL

- A. Inspection: Provide manufacturer's field observations at start-up and at intervals of approximately 30 percent, 60 percent and 90 percent completion. Provide a final inspection upon completion of the Work.
  1. Warranty shall be issued upon manufacturer's acceptance of the installation.
  2. Field observations shall be performed by a Sales Representative employed full-time by the manufacturer and whose primary job description is to assist, inspect and approve membrane installations for the manufacturer.
  3. Provide observation reports from the Sales Representative indicating procedures followed, weather conditions and any discrepancies found during inspection.
  4. Provide a final report from the Sales Representative, certifying that the roofing system has been satisfactorily installed according to the project specifications, approved details and good general roofing practice.

#### 3.8 SCHEDULES

- A. Base (Ply) Sheet:
  1. StressBase 80: 80 mil SBS (Styrene-Butadiene-Styrene) rubber modified roofing base sheet reinforced with a fiberglass scrim, performance requirements according to

## SECTION 07550

### MODIFIED BITUMINOUS MEMBRANE ROOFING

ASTM D 5147.

- a. Tensile Strength, ASTM D 5147
    - 1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 100 lbf/in XD 100 lbf/in
    - 2) 50mm/min. @ 23 +/- 2 deg. C MD 17.5 kN/m XD 17.5 kN/m
  - b. Tear Strength, ASTM D 5147
    - 1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 110 lbf XD 100 lbf
    - 2) 50mm/min. @ 23 +/- 2 deg. C MD 489 N XD 444 N
  - c. Elongation at Maximum Tensile, ASTM D 5147
    - 1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 4 % XD 4 %
    - 2) 50mm/min @ 23 +/- 2 deg. C MD 4 % XD 4 %
  - d. Low Temperature Flexibility, ASTM D 5147, Passes -40 deg. F (-40 deg. C)
- B. Modified Cap (Ply) Sheet:
1. StressPly FR Mineral: 145 mil SBS (Styrene-Butadiene-Styrene) mineral surfaced, rubber modified roofing membrane with fire retardant characteristics, and dual fiberglass reinforced scrim. ASTM D 6163, Type III Grade G
    - a. Tensile Strength, ASTM D 5147
      - 1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 225 lbf/in XD 225 lbf/in
      - 2) 50 mm/min. @ 23 +/- 2 deg. C MD 39.0 kN/m XD 39.0 kN/m
    - b. Tear Strength, ASTM D 5147
      - 1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 300 lbf XD 300 lbf
      - 2) (50 mm/min. @ 23 +/- 2 deg. C MD 1335 N XD 1335 N
    - c. Elongation at Maximum Tensile, ASTM D 5147
      - 1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 6% XD 8%
      - 2) 50 mm/min. @ 23 +/- 2 deg. C MD 6% XD 8%
    - d. Low Temperature Flexibility, ASTM D 5147, Passes -15 deg. F (-26 deg. C)
- C. Adhesive:
1. Green-Lock Flashing Adhesive: Brush grade flashing adhesive.
    - a. Non-Volatile Content ASTM D 4479 100 min.
    - b. Density ASTM D 1475 9.5 lbs./gal.  
Flash Point ASTM D 93 400 deg. F

END OF SECTION



# ROOF MEASUREMENT REPORT

844 Girod Street, Mandeville, LA 70448

## Report Contents



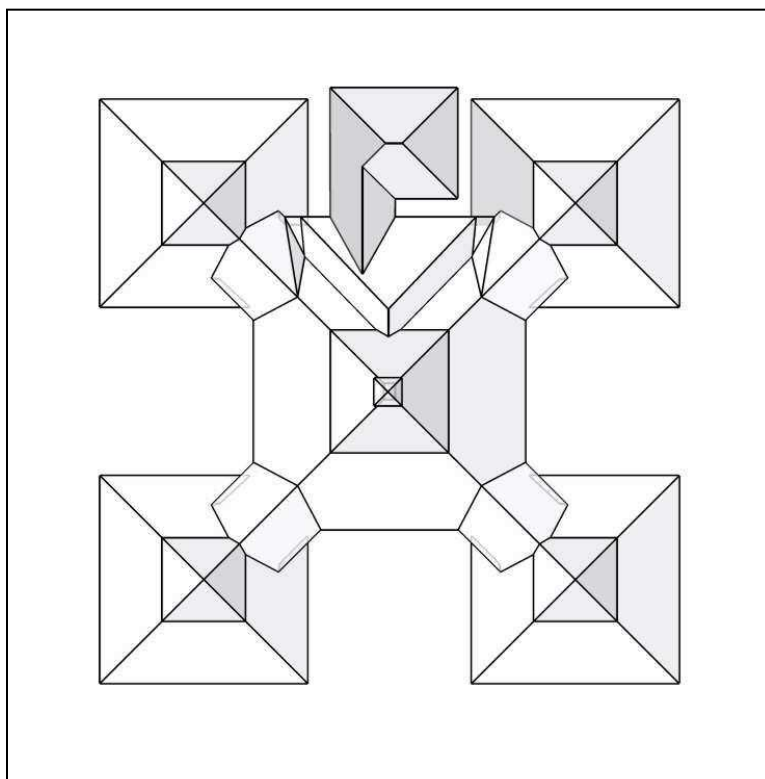
- Images .....1
- Length Diagram.....4
- Pitch Diagram.....5
- Area Diagram .....6
- Penetrations Diagram .....7
- Notes Diagram .....8
- Property Info.....9
- Report Summary.....10

## Report Details

Date:	08/05/2019
Report:	29724109

## Roof Details

Total Area:	13,148 sq ft
Total Roof Facets:	65
Predominant Pitch:	4/12
Number of Stories:	>1
Total Ridges/Hips:	839 ft
Total Valleys:	305 ft
Total Rakes:	0 ft
Total Eaves:	934 ft
Total Penetrations:	49
Total Penetrations Perimeter:	391 ft
Total Penetrations Area:	221 sq ft



In this 3D model, facets appear as semi-transparent to reveal overhangs.

## Contact Us

Contact: Kasey Barnes  
 Company: The Garland Company, Inc.  
 Address: 3800 East 91St  
 Cleveland OH 44105  
 Phone: 225-719-2243

Measurements provided by [www.eagleview.com](http://www.eagleview.com)

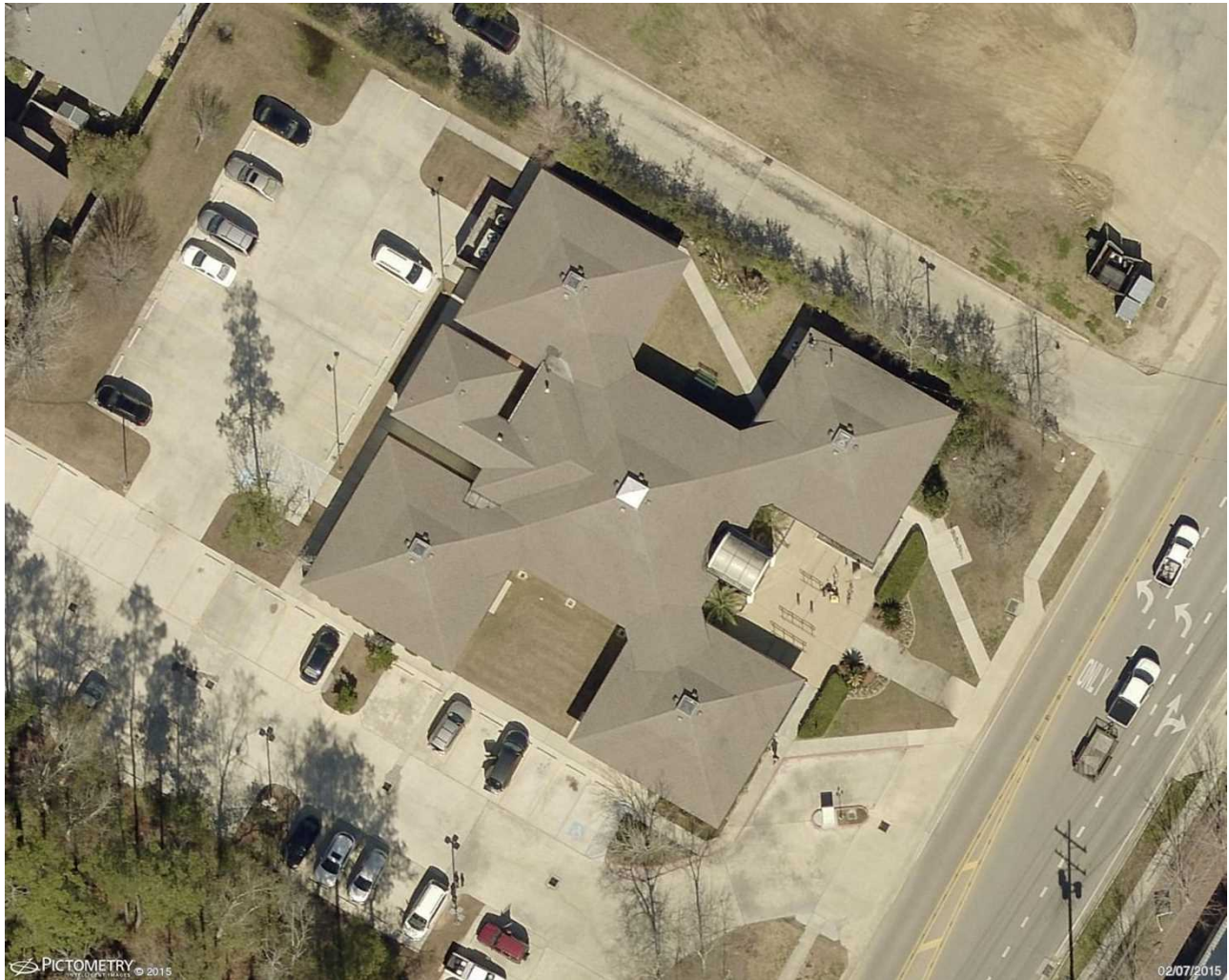


Certified Accurate

[www.eagleview.com/Guarantee.aspx](http://www.eagleview.com/Guarantee.aspx)

## REPORT IMAGES

The following aerial images show different angles of this structure for your reference.



**Top View**



## REPORT IMAGES



**North View**

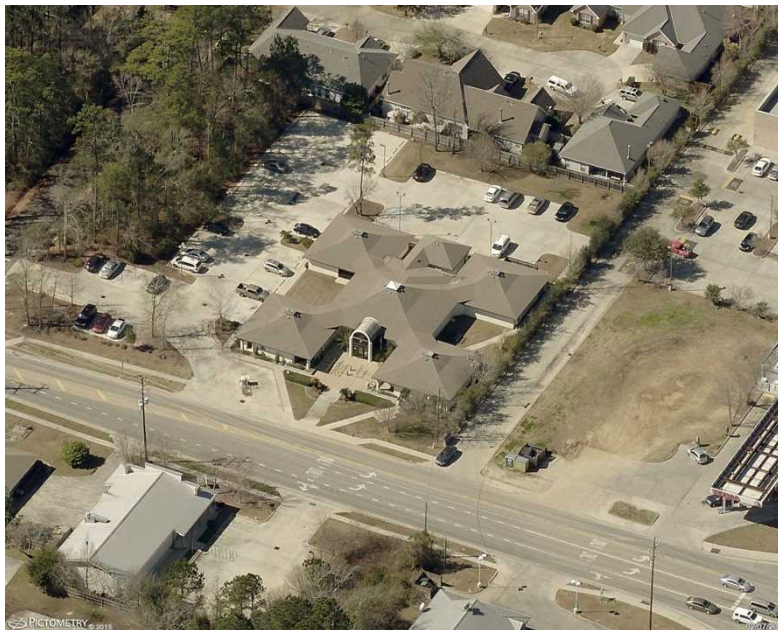


**East View**

## REPORT IMAGES



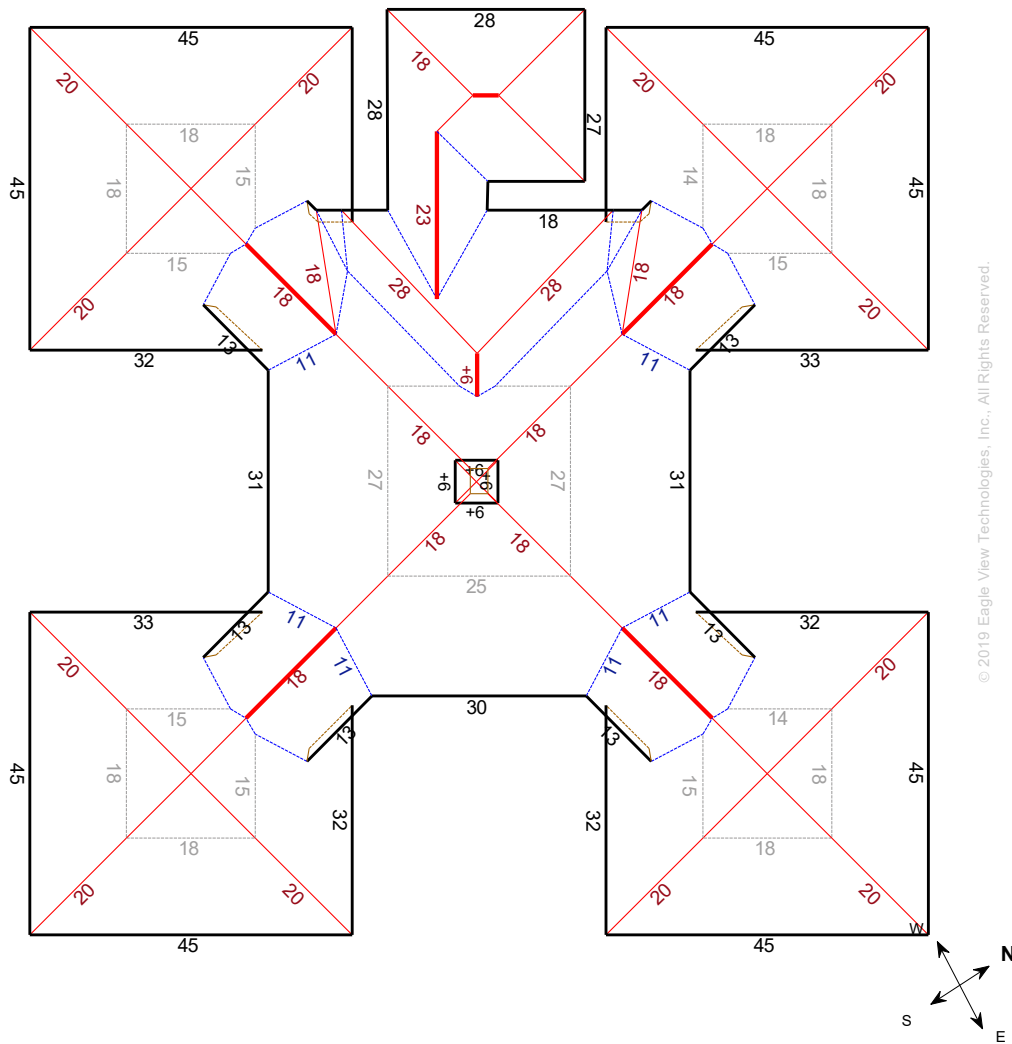
**South View**



**West View**

## LENGTH DIAGRAM

Total Line Lengths:    **Ridges = 105 ft**                      **Valleys = 305 ft**                      **Flashing = 27 ft**                      **Eaves = 934 ft**  
    **Hips = 734 ft**                                      **Rakes = 0 ft**                                      **Step flashing = 68 ft**                      **Parapets = 0 ft**

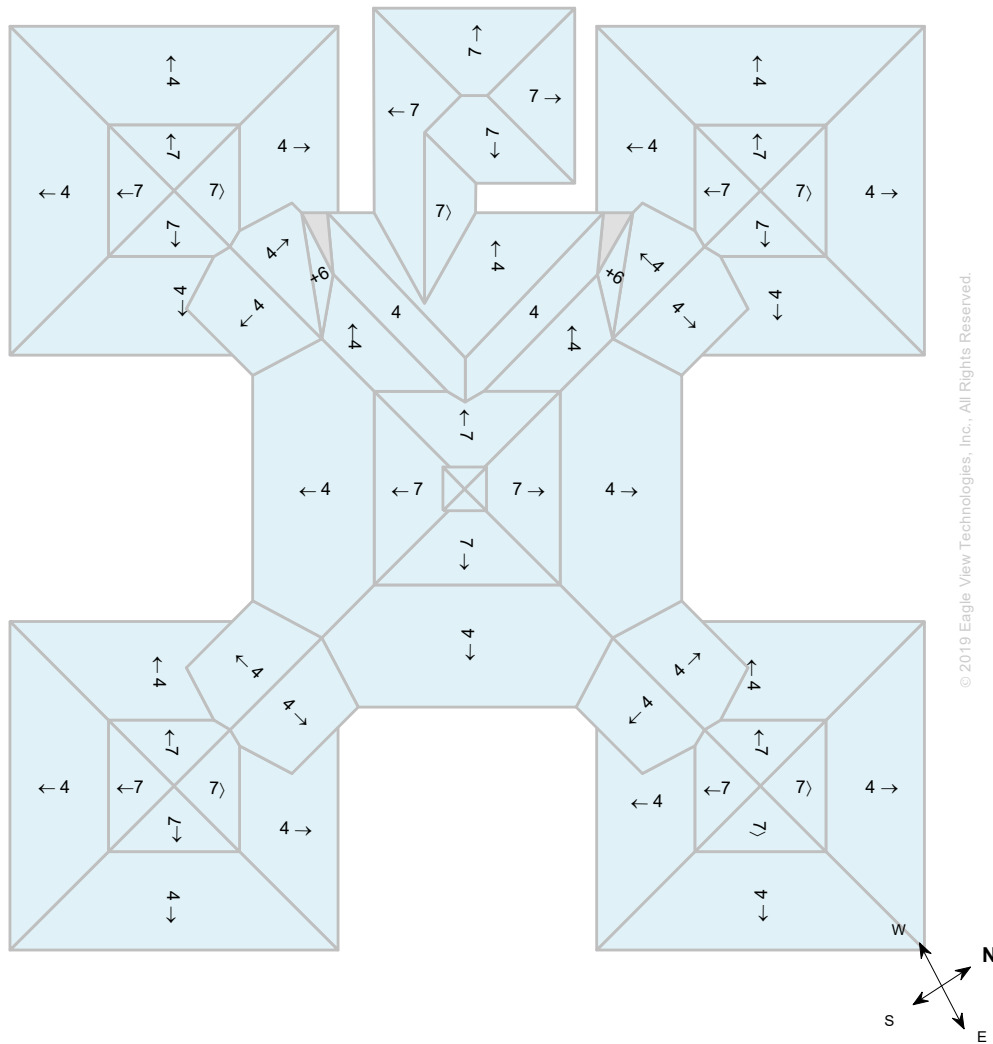


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*Note: This diagram contains segment lengths (rounded to the nearest whole number) over 5 feet. In some cases, segment labels have been removed for readability. Plus signs preface some numbers to avoid confusion when rotated (e.g. +6 and +9).*

## PITCH DIAGRAM

Pitch values are shown in inches per foot, and arrows indicate slope direction. The predominant pitch on this roof is 4/12.



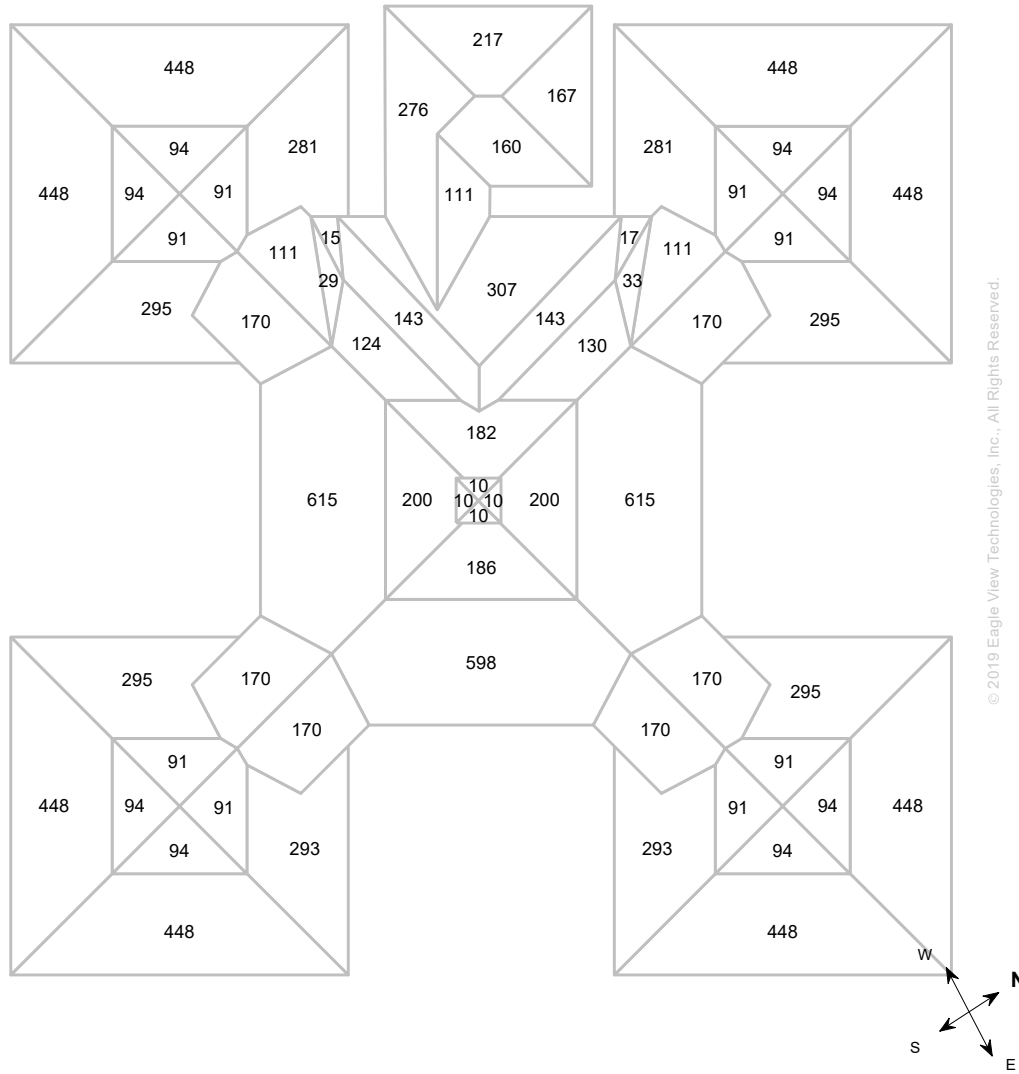
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*Note: This diagram contains labeled pitches for facet areas larger than 20 square feet. In some cases, pitch labels have been removed for readability. Gray shading indicates flat, 1/12 or 2/12 pitches. If present, a value of "F" indicates a flat facet (no pitch).*



## AREA DIAGRAM

Total Area = 13,148 sq ft, with 65 facets.



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*Note: This diagram shows the square feet of each roof facet (rounded to the nearest foot). The total area in square feet, at the top of this page, is based on the non-rounded values of each roof facet (rounded to the nearest square foot after being totaled).*

## PENETRATIONS

### Penetrations Notes Diagram

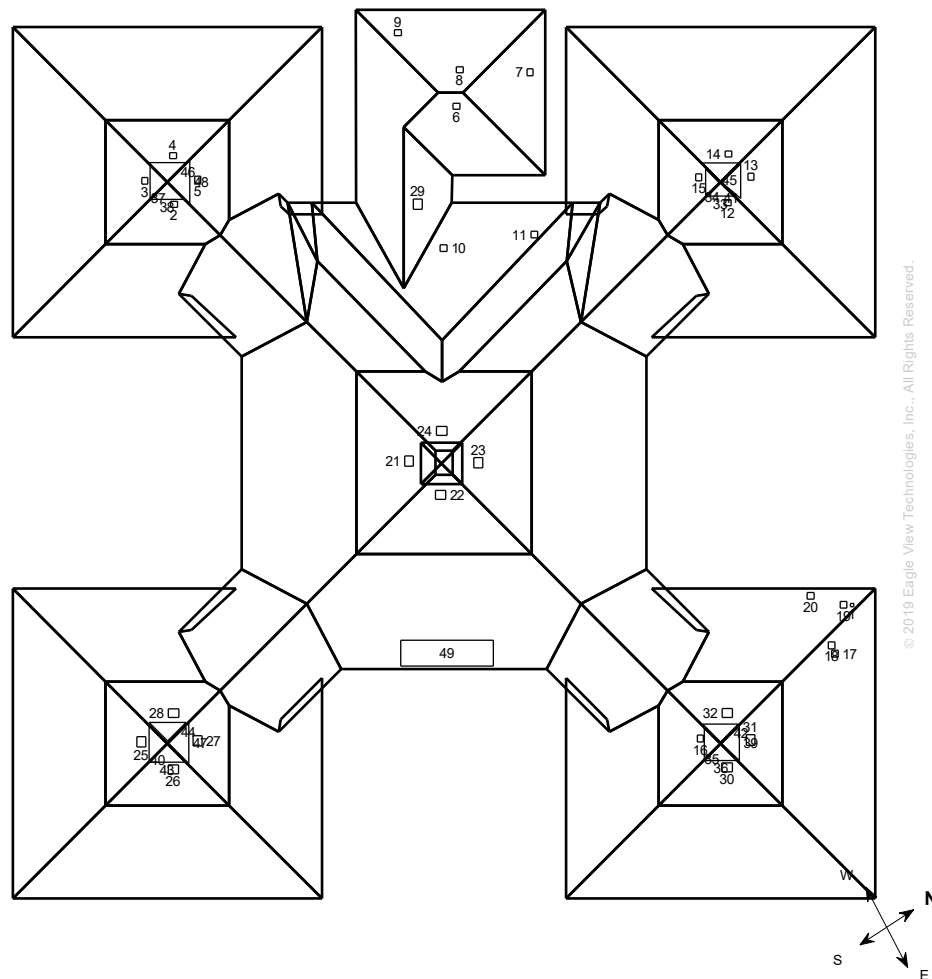
Penetrations are labeled from smallest to largest for easy reference.

Total Penetrations: 49

Total Penetrations Perimeter = 391 ft

Total Penetrations Area: 221 sq ft

Total Roof Area Less Penetrations = 12,927 sq ft

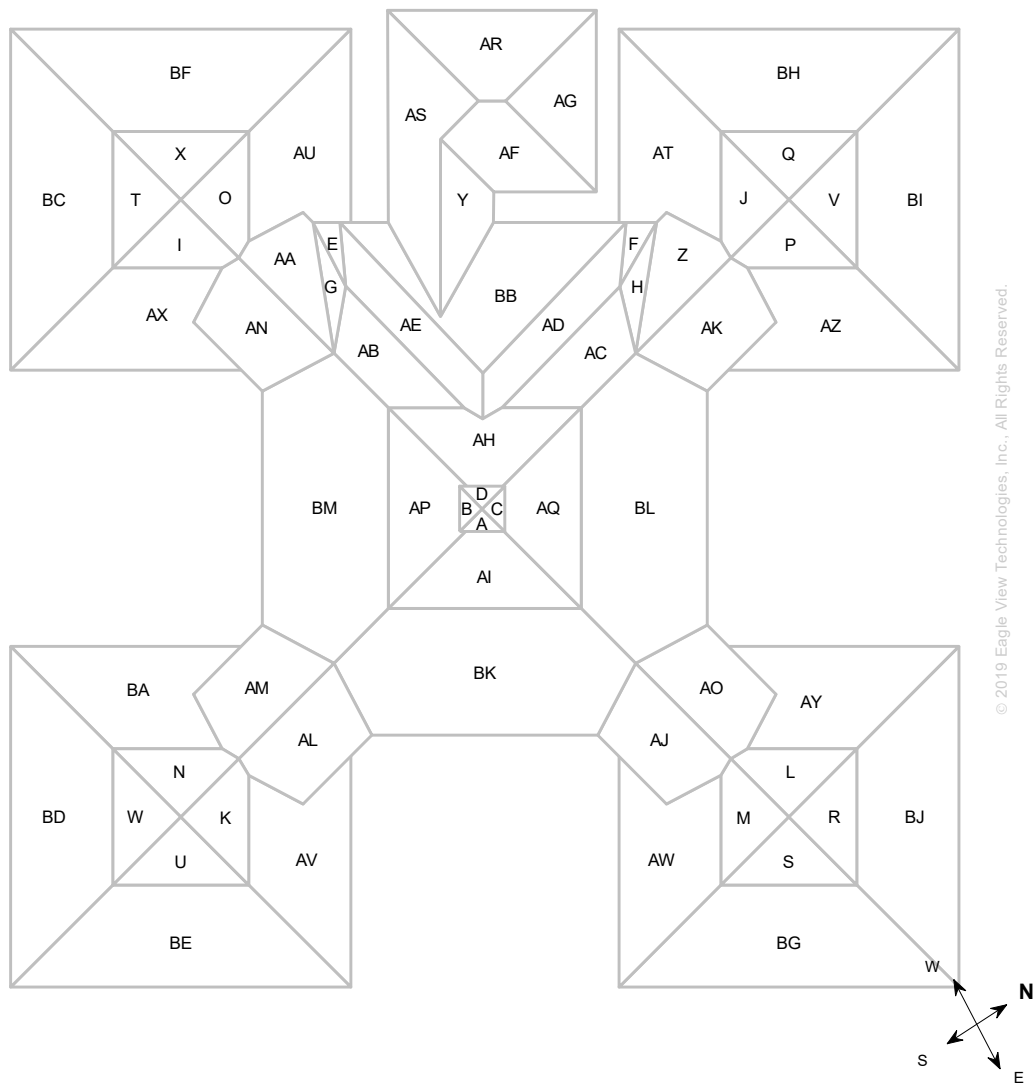


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*Note: Any measured penetration smaller than 3x3 feet may need field verification. Accuracy is not guaranteed. The total penetration area is not subtracted from the total roof area.*

## NOTES DIAGRAM

Roof facets are labeled from smallest to largest (A to Z) for easy reference.



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## Property Info

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### Property Location

Longitude = -90.0624455

Latitude = 30.3628720

Online map of property:

[http://maps.google.com/maps?f=g&source=s\\_q&hl=en&geocode=&q=844+Girod+Street,Mandeville,LA,70448](http://maps.google.com/maps?f=g&source=s_q&hl=en&geocode=&q=844+Girod+Street,Mandeville,LA,70448)

### Property Info

Year Built:

Effective Year Built: \*

\*



### Notes

This was ordered as a commercial property. There were no changes to the structure in the past four years.

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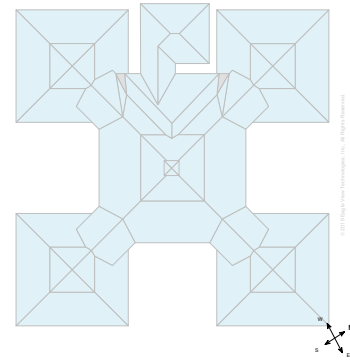


## REPORT SUMMARY

Below is a measurement summary using the values presented in this report.

### Lengths, Areas and Pitches

Ridge.....	105 ft (7 Ridges)
Hips .....	734 ft (48 Hips)
Valleys.....	305 ft (35 Valleys)
Rakes* .....	0 ft (0 Rakes)
Eaves/Starter** .....	934 ft (40 Eaves)
Drip Edge (Eaves + Rakes) .....	934 ft (40 Lengths)
Parapet Walls .....	0 ft (0 Lengths)
Flashing .....	27 ft (12 Lengths)
Step Flashing .....	68 ft (10 Lengths)
Total Area .....	13,148 sq ft
Total Penetrations Area.....	221 sq ft
Total Roof Area Less Penetrations .....	12,927 sq ft
Total Penetrations Perimeter.....	391 ft
Predominant Pitch.....	4/12



Total Roof Facets = 65

\*Rakes are defined as roof edges that are sloped (not level).

\*\* Eaves are defined as roof edges that are not sloped and level.

### Areas per Pitch

Roof Pitches	1/12	4/12	6/12	7/12
Area (sq ft)	32.1	9833.8	62.2	3219.2
% of Squares	0.2%	74.8%	0.5%	24.5%

The table above lists each pitch on this roof and the total area and percent (both rounded) of the roof with that pitch.

### Waste Calculation Table

Waste %	0%	10%	12%	15%	17%	20%	22%
Area (sq ft)	13,148	14,463	14,726	15,120	15,383	15,778	16,041
Squares	131.5	144.6	147.3	151.2	153.8	157.8	160.4

This table shows the total roof area and squares (rounded up to the nearest decimal) based upon different waste percentages. The waste factor is subject to the complexity of the roof, individual roofing techniques and your experience. Please consider this when calculating appropriate waste percentages. Note that only roof area is included in these waste calculations. Additional materials needed for ridge, hip, valley, and starter lengths are not included.



# ROOF MEASUREMENT REPORT

<b>Penetration Table</b>	1	2-20	21-25	26-32	33	34	35	36-37	38	39
Area (sq ft)	0.3	1	2.2	2.3	4.2	4.3	6	6.7	6.8	7.7
Perimeter (ft)	2	4	6	6	9.6	9.8	11.6	12.2	12.3	12.9
	40	41	42	43	44	45	46	47	48	49
Area (sq ft)	7.6	7.9	7.7	7.9	8.4	8.5	8.6	10.3	11.3	54
Perimeter (ft)	13	13	13.2	13.2	13.6	13.6	13.9	15.2	15.9	35

*Any measured penetration smaller than 3x3 feet may need field verification. Accuracy is not guaranteed. The total penetration area is not subtracted from the total roof area.*



Mandeville Library Roof Inspection Report

Prepared By  
Scott Schneidewind

October 10, 2020



# Facility Summary

**Client:** St. Tammany Parish Government

**Facility:** Mandeville Branch Library



## Facility Data

<b>Address 1</b>	844 Girod Street
<b>City</b>	Mandeville
<b>State</b>	Louisiana
<b>ZIP</b>	70448
<b>Type of Facility</b>	Municipal
<b>Square Footage</b>	13,148
<b>Contact Person</b>	Bruce Crouch

## Asset Information

Name	Date Installed	Square Footage	Roof Access
Entire Roof	TBD	13,148	Ladder Needed



# Construction Details

**Client:** St. Tammany Parish Government

**Facility:** Mandeville Branch Library

**Roof Section:** Entire Roof



## Information

<b>Year Installed</b>	TBD	<b>Square Footage</b>	13,148
<b>Slope Dimension</b>	-	<b>Eave Height</b>	10'+
<b>Roof Access</b>	Ladder Needed	<b>System Type</b>	Shingles







# Inspection Report

**Client:** St. Tammany Parish Government

**Facility:** Mandeville Branch Library

**Report Date:** 08/21/2019

**Roof Section:** Entire Roof

## Inspection Information

<b>Inspection Date</b>	08/21/2019	<b>Core Data</b>	No
<b>Inspection Type</b>	Visual Inspection	<b>Leakage</b>	No



*Photo 1*

Overview of the shingle roof area.





*Photo 2*

Overview of a typical ridge.



*Photo 3*

Overview of the shingles over the ridge. Notice the "shiny" appearance where the fibers of the shingles are showing through.





*Photo 4*

Photo of delamination and exposed fibers.



*Photo 5*

Close up of damage to the shingle at the ridge.





*Photo 6*

"Shiny" appearance where the fibers of the shingles are showing through.



*Photo 7*

Close up of the "shiny" areas where the fibers are exposed.





*Photo 8*

All penetrations will receive new flashing.



*Photo 9*

Previous temporary repairs made with a caulking material.



*Photo 10*

Small low sloped areas will be replaced.



*Photo 11*

Small low sloped areas will be replaced. Notice the patchwork where leak repairs were performed.





*Photo 12*

Small low sloped areas will be replaced.






# Solution Options

**Client:** St. Tammany Parish Government

**Facility:** Mandeville Branch Library

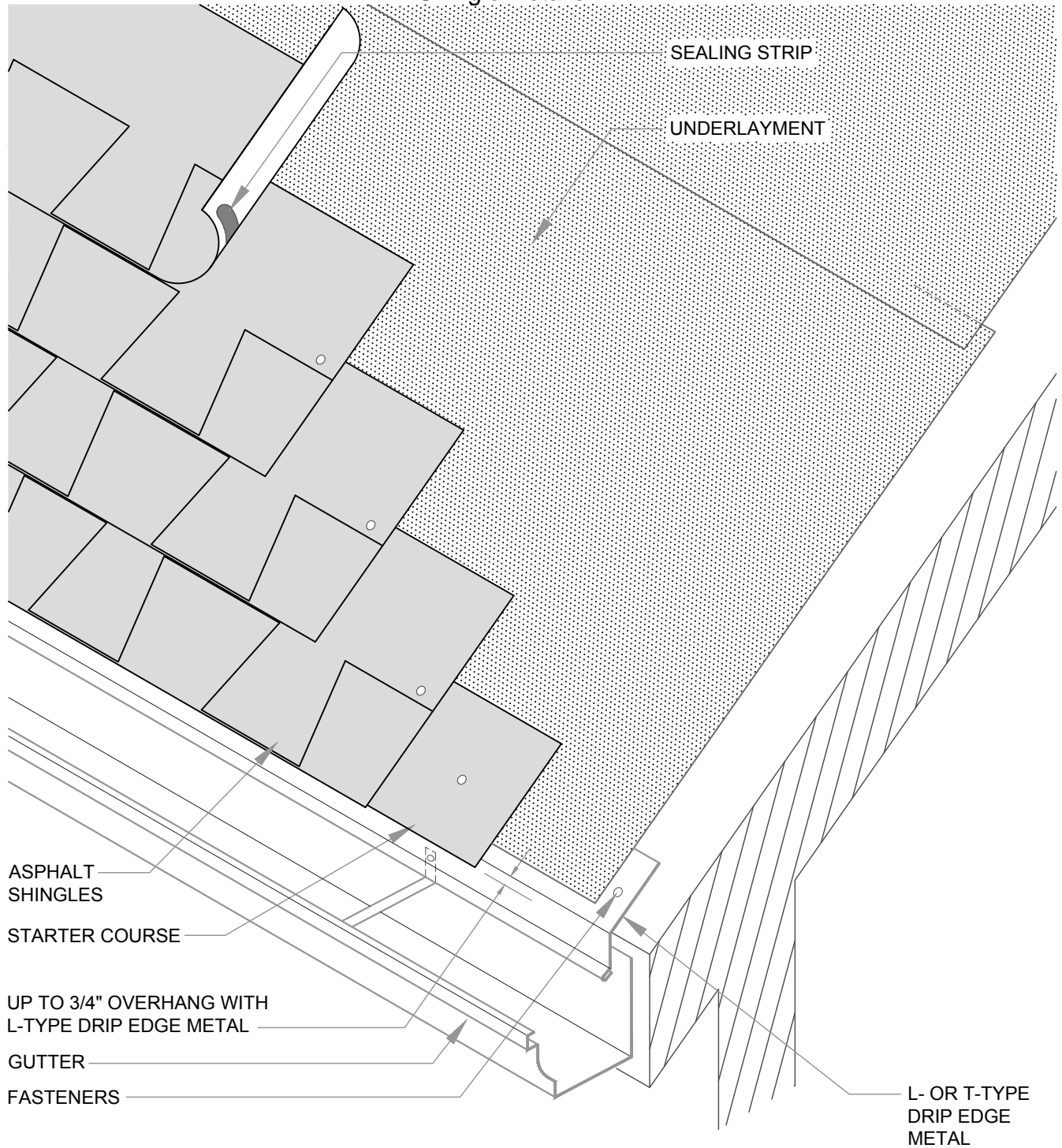
**Roof Section:** Entire Roof

## Replace Options

<b>Solution Option:</b>	Replace 	<b>Action Year:</b>	2019
<b>Square Footage:</b>	13,148	<b>Expected Life (Years):</b>	20
<b>Budget:</b>	-		

1. Remove existing roof membrane and related sheet metal items down to the wood deck.
2. Repair and replace any damaged or rotten decking. Secure loose decking as required.
3. Loose lay red rosin sheet across wood deck at low sloped areas and tack into place.
4. Install specified base sheet over entire wood deck prior to installing shingles and modified roof.
5. Install specified ice and water shield as directed in specifications.
6. At low sloped area, install a two-ply high-performance SBS modified roof assembly in moisture cured adhesive.
7. Set starter shingles in flashing cement.
8. Fabricate and install new metal edge, gutters and downpouts.
9. Install new 30 year architectural shingles.
10. Remove existing skylights and install new sky lights.
11. Inspect roof area with Owner and Owner's rep and make any repairs required.
12. Issue specified warranty.

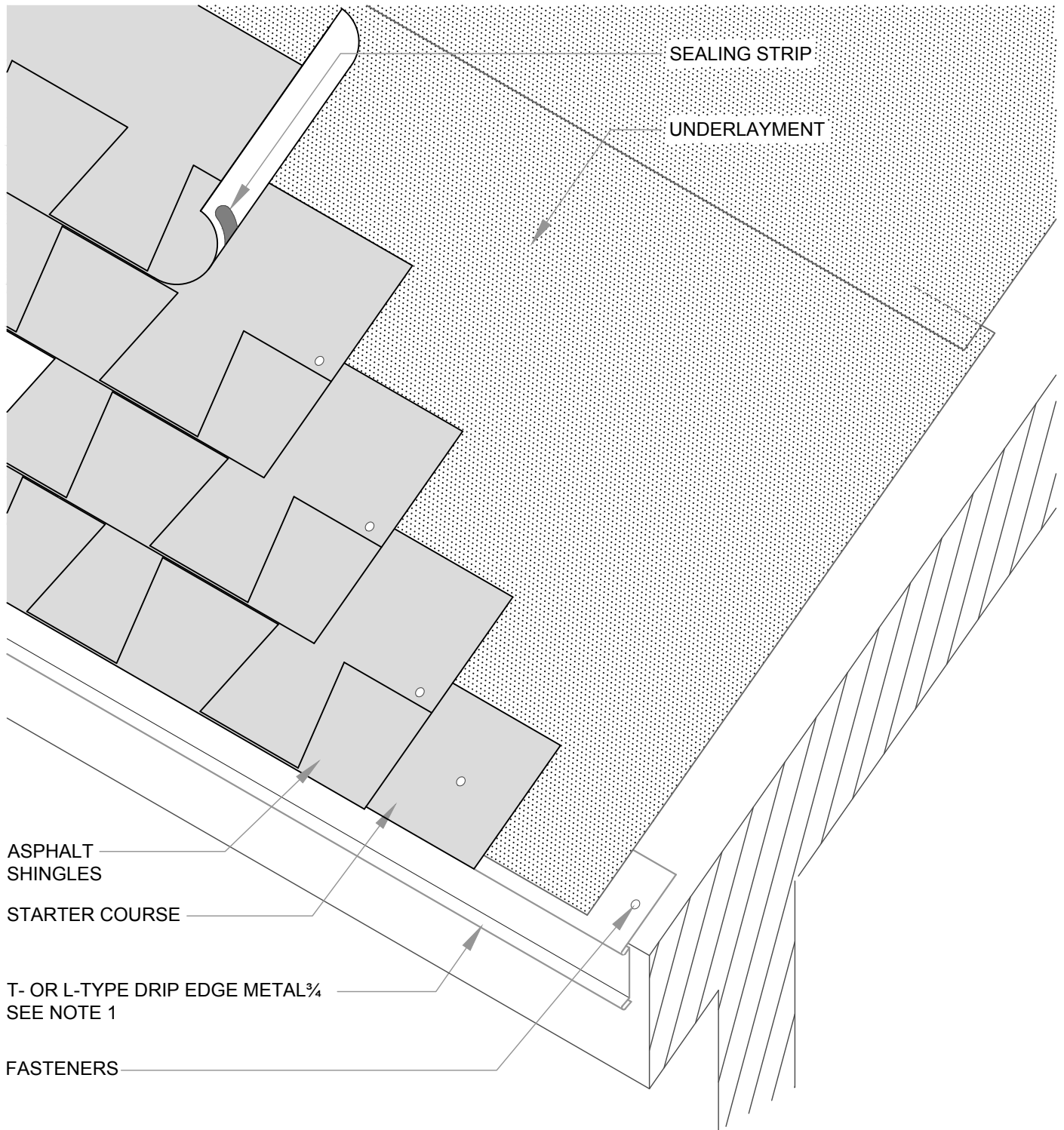
## Section 11 Shingle Details



### NOTES:

1. THIS DETAIL SHOWS ONE TYPE OF GUTTER SUPPORT. GUTTER SECUREMENT AND SUPPORT OPTIONS VARY.
2. REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ADDITIONAL INFORMATION.

**EAVE WITH GUTTER**

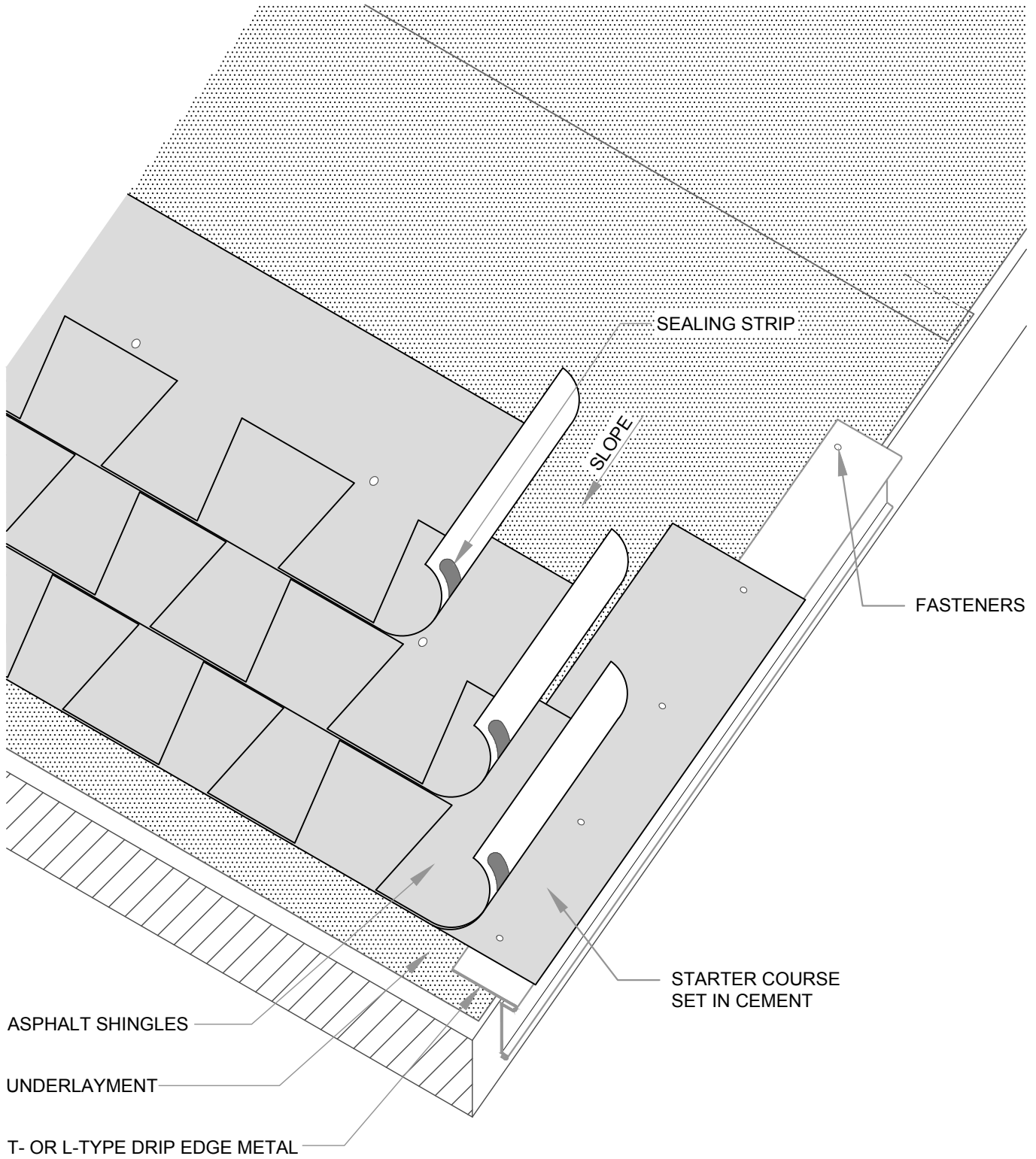


**NOTES:**

1. FOR L-TYPE DRIP EDGE METAL, STARTER COURSE EXTENDS UP TO  $\frac{3}{4}$ " BEYOND THE PERIMETER EDGE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
2. REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ADDITIONAL INFORMATION.

**EAVE**

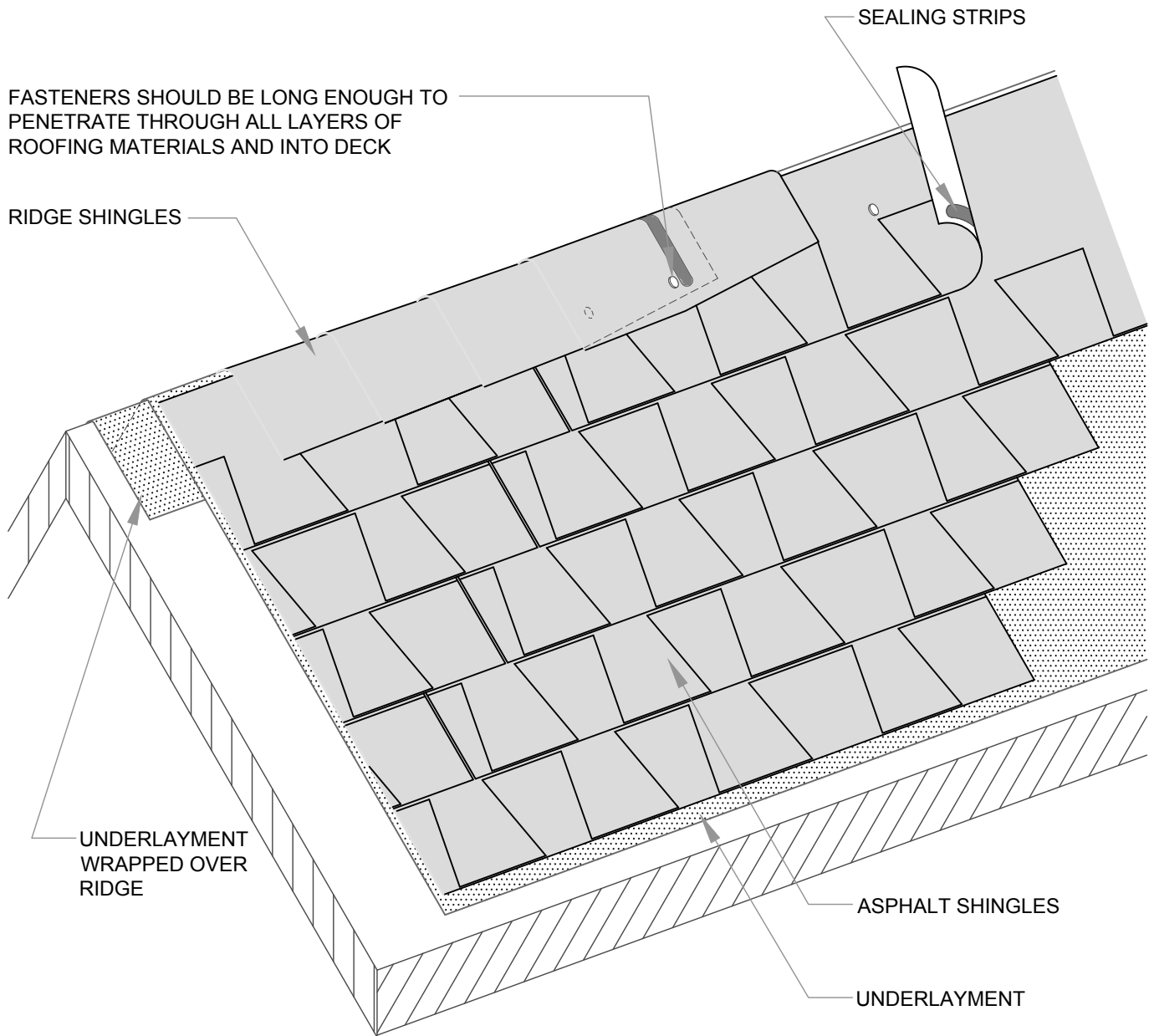




**NOTE:**

1. REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ADDITIONAL INFORMATION.

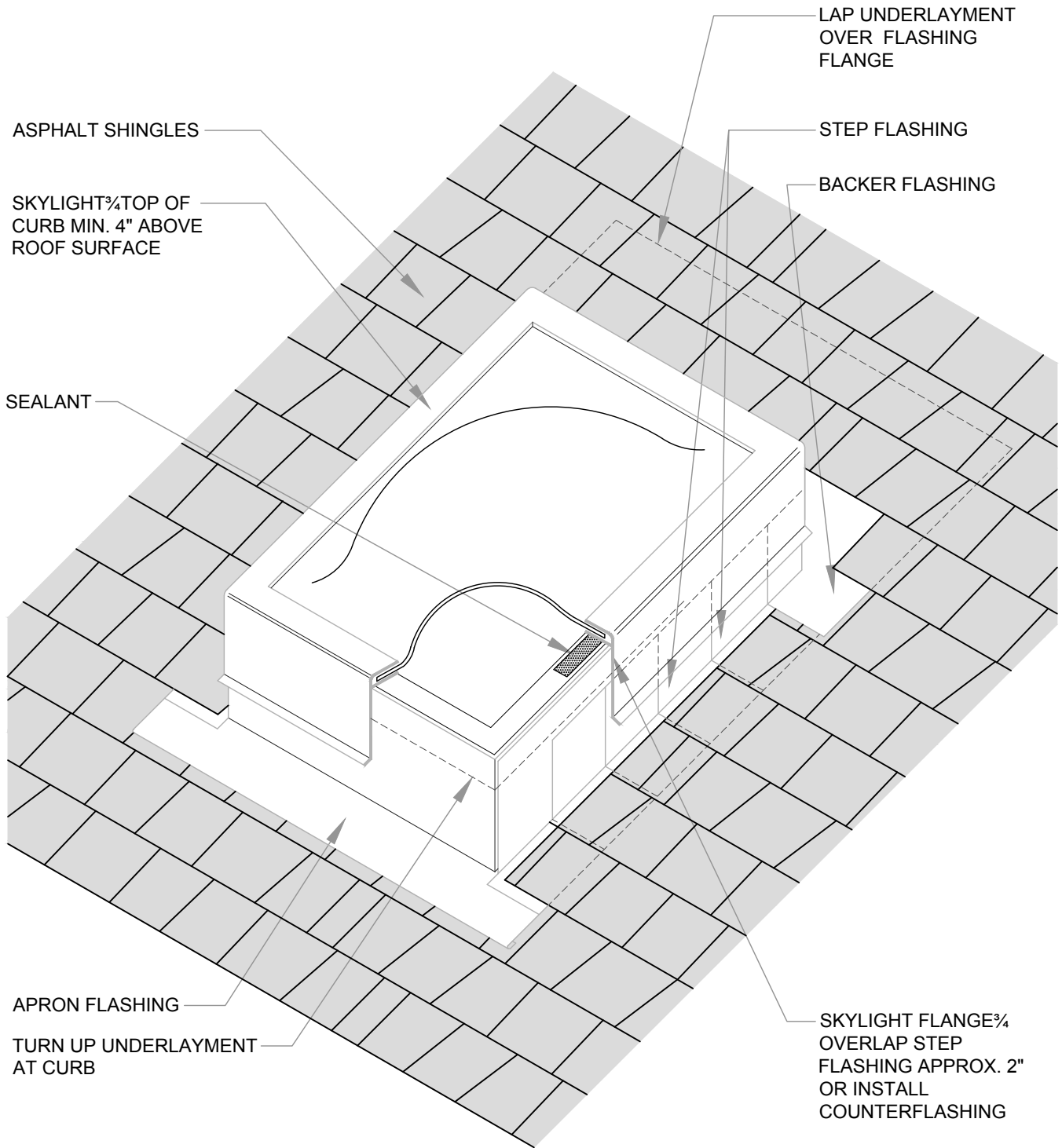
**RAKE WITH STARTER COURSE**



**NOTES:**

1. MOST MANUFACTURERS SUPPLY SPECIAL RIDGE SHINGLES. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ADDITIONAL INFORMATION.

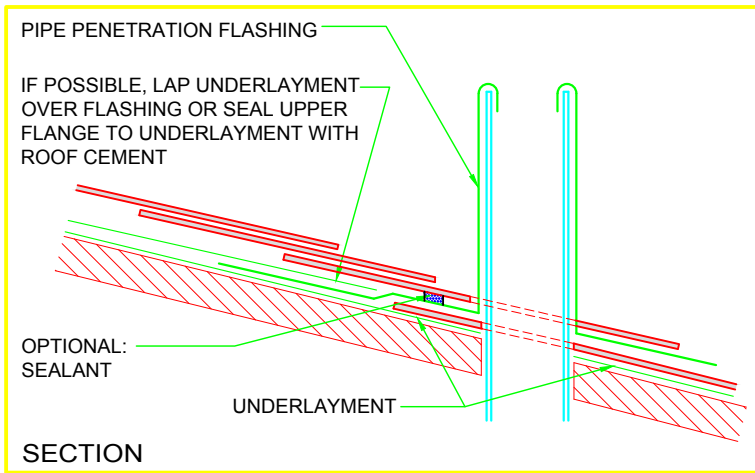
**NON-VENTED RIDGE**



**NOTES:**

1. WHERE DEEMED NECESSARY, HOLD SHINGLES UP ONE COURSE DEPENDING ON ANTICIPATED DEBRIS AND/OR SNOW ACCUMULATION.
2. INSTALL CRICKET AT SKYLIGHTS WIDER THAN 24 INCHES.
3. REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ADDITIONAL INFORMATION.

**CURB-MOUNTED SKYLIGHT**

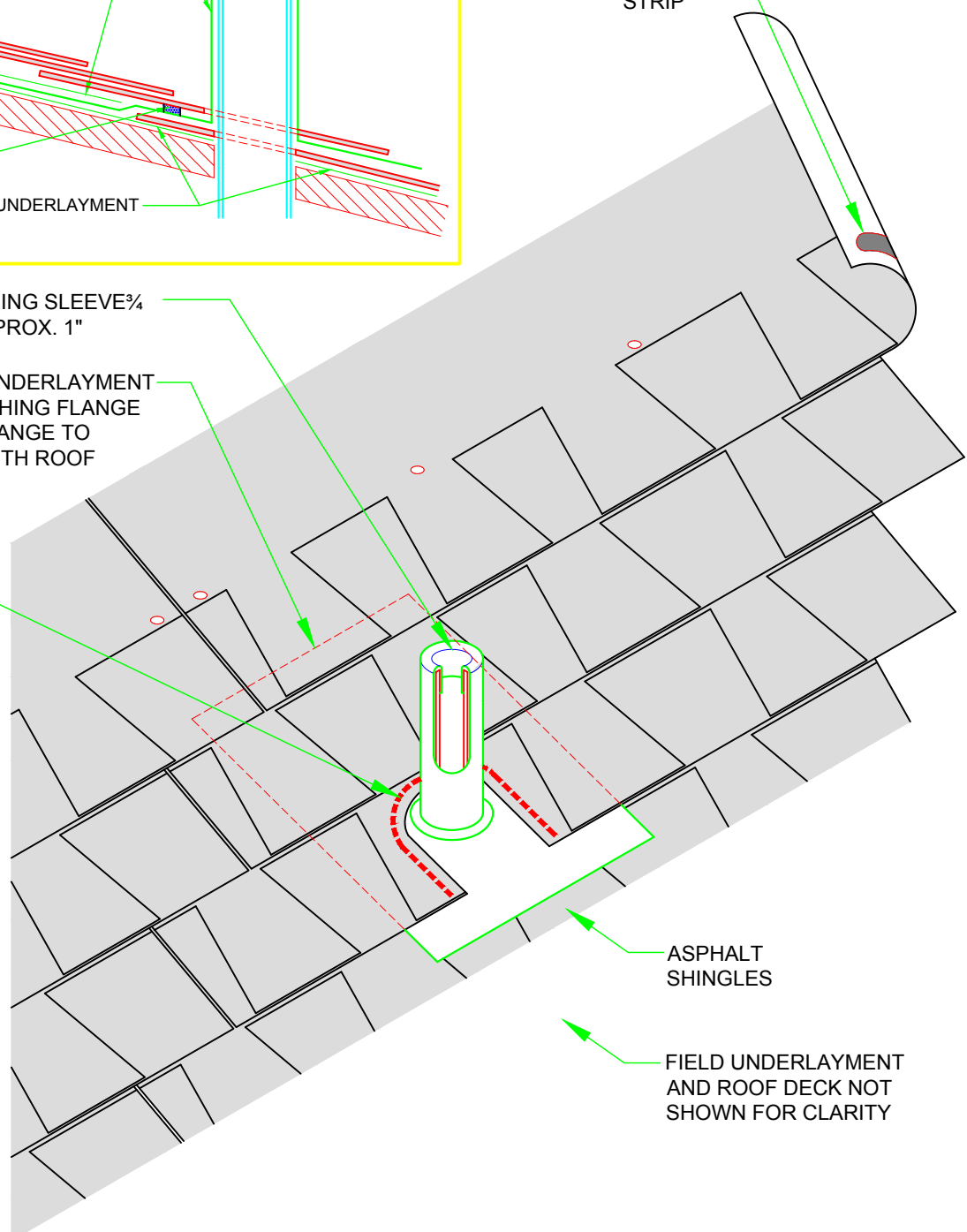


SEALING STRIP

SOFT-METAL FLASHING SLEEVE  $\frac{3}{4}$ "  
ROLL INTO PIPE APPROX. 1"

IF POSSIBLE, LAP UNDERLAYMENT OVER TOP OF FLASHING FLANGE OR SEAL UPPER FLANGE TO UNDERLAYMENT WITH ROOF CEMENT

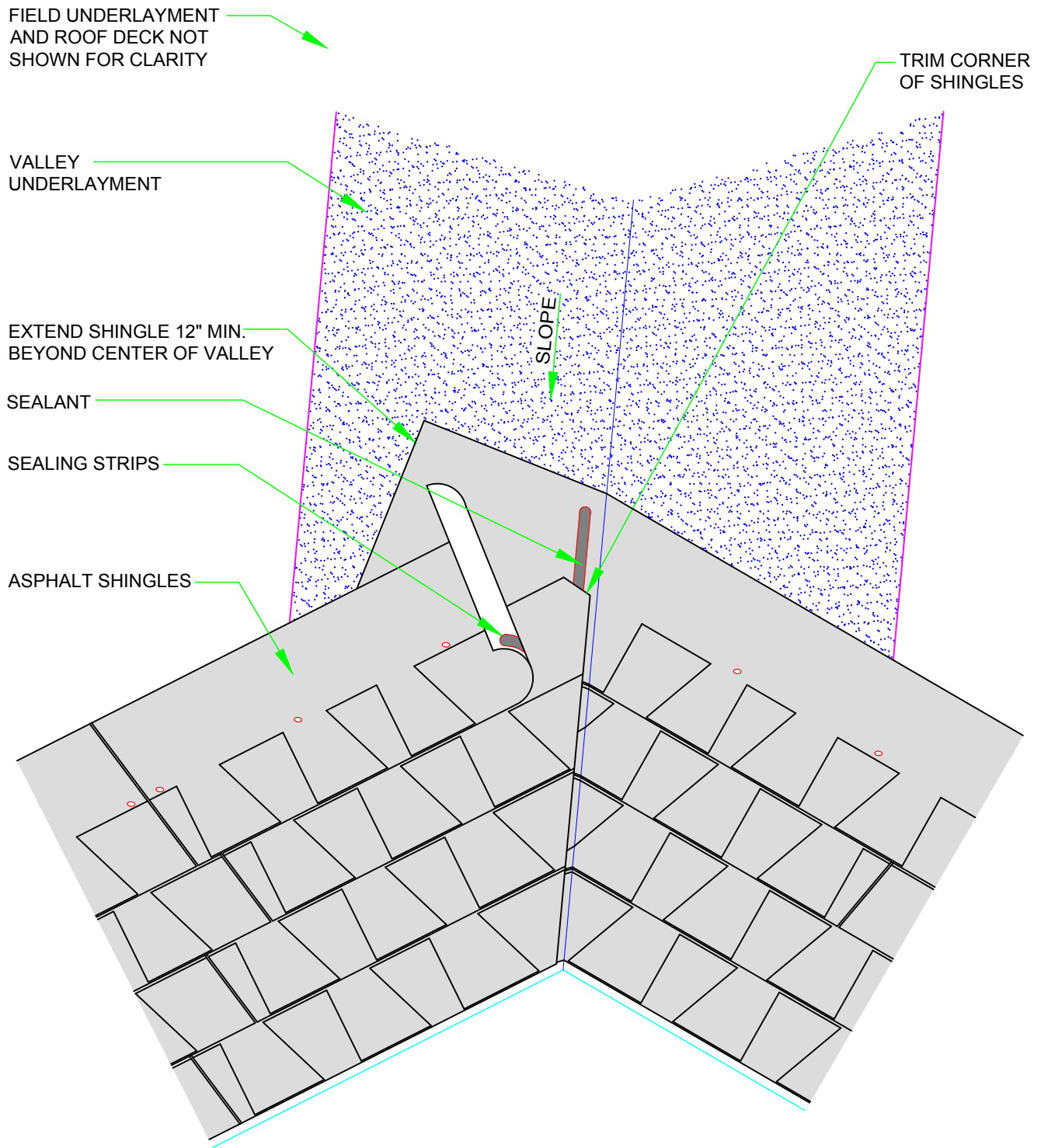
OPTIONAL: SEALANT UNDER SHINGLES



NOTE:

1. REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ADDITIONAL INFORMATION.

## VENT PIPE PENETRATION



**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.
4. REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ADDITIONAL INFORMATION.

**CLOSED-CUT VALLEY**