

BID #WG25-29 SPECIFICATIONS

All workmen and equipment shall be furnished by the Contractor.

No bid may be withdrawn for a period of thirty (30) days following the bid opening unless approved by the Baldwin County Commission, Bay Minette, Alabama.

PREPARATION OF BIDS

Forms furnished, or copies thereof shall be used and strict compliance with the requirement of the invitation, these instructions and the general specifications for the project are necessary. Special care should be exercised in the preparation of bids. Bidders must make their own estimates of the structure and difficulties attending the proposed contract, including local conditions, uncertainty of weather, quantities and all other contingencies. All designations and prices shall be fully and clearly set forth. The proper blank spaces in the bid and quantity forms shall be suitably filled in.

BIDS FOR ALL OR PART

The County reserves the right to award the contract in whole or in part, according to the best interest of the County.

AWARD

Award will be made to the lowest responsible bidder meeting the specifications. Quality, conformity with specifications, service and experience are among the factors that will be considered in determining the responsive bidder. It is the intent to award the bid to the lowest responsible bidder based on cumulative total of Bid Options awarded.

BIDDERS QUALIFICATIONS

The County may make such investigations as they deem necessary to determine the ability of the bidders to furnish all materials, and the bidder shall furnish to the County all such information and data for this purpose as the County may request. The County reserves the right to reject any bid if the evidence submitted, or investigation of such bidder, fails to satisfy the County that such bidder is properly qualified to carry out the obligations of the contract and to furnish all materials contemplated therein. Conditional bids will not be accepted.

“ALABAMA GENERAL CONTRACTORS LICENSE NUMBER MUST BE CLEARLY LISTED ON THE OUTSIDE OF THE VENDOR BID ENVELOPE”

LAWS AND REGULATIONS

The bidder's attention is directed to the fact that all applicable state laws, municipal ordinances, and rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.

POWER OF ATTORNEY

Attorneys-in-fact who sign bid bonds must file with each bond a certified and effectively dated copy of their power of attorney.

PERFORMANCE BOND

A Performance Bond in one hundred percent (100%) of the total amount of the project will be provided prior to any work beginning. The Contractor must furnish to the County at the time of the signing of the Contract a certificate of insurance coverage as provided in the specifications. Bidder(s) must have a Contractor's License issued by the Alabama State Licensing Board for General Contractors under the provision of Title 34, Chapter 8, Code of Alabama. Bidder(s) shall submit a copy of their license.

TRAFFIC CONTROL, SAFETY ITEMS

Contractors should erect all warning signs, and provide the appropriate personnel, if required, and all other items required to safely handle traffic through the work area. Traffic Control Devices shall be provided by the Contractor. Traffic Control Devices provided must comply with MUTCD.

CONTRACTORS AND SUBCONTRACTORS AND INSURANCE

The Contractor shall not commence work under this contract until all the required insurance has been obtained by the Contractor and approved by the County. Nor shall the Contractor allow any Subcontractor to commence work on his subcontract until the insurance required of the Subcontractor has been obtained and approved.

COMPENSATION INSURANCE

Contractor shall procure and shall maintain during the life of this contract Workmen's Compensation Insurance for all of his employees to be engaged in work on the project under his contract, and, in case of any such work sublet, the Contractor shall require the Subcontractor similarly, to provide Workmen's compensation Insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by the Contractor's Workmen's Compensation Insurance. In case a class of employees engaged in hazardous work on the project under this contract is not protected under the Workmen's Compensation Statute, the Contractor shall provide and shall cause each Subcontractor to provide adequate employer's general liability insurance for the protection of such of his employees as are not otherwise protected. The Baldwin County Commission, its Departments and its employees shall be named as additional insured.

CONTRACTOR'S PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE

The Contractor shall procure and shall maintain during the life of this contract a Comprehensive Liability Policy providing bodily injury and property damage coverage on an occurrence basis including damages arising from blasting explosion or collapse, mechanical equipment digging in streets or highways, and including completed operations, independent contractors and contractual general liability. Insurance shall be contractual general liability \$500,000.00 per occurrence bodily injury and property damage; \$5,000 per person medical payments or medical expense; \$500,000.00 per occurrence bodily injury and property damage; \$5,000 per person medical payments or medical expense; \$500,000.00 personal and advertising injury; \$50,000.00 fire damage (any one firm); \$1,000,000.00. The Baldwin County Commission, its Departments and its employees shall be named as additional insured.

The Contractor agrees to maintain such coverage as is required in this section for a period of one (1) year from the date of acceptance of the work by the County or at the date of the final amounts owed the Contractor by the County, whichever occurs first.

COMPREHENSIVE AUTOMOBILE LIABILITY INSURANCE

The Contractor agrees to carry a Comprehensive Automobile Liability Policy providing bodily injury liability on an occurrence basis and providing property damage liability on an accident

basis. This policy shall protect the Contractor against all liability arising out of the use of automobiles, both private, passenger and commercial, regardless of whether such vehicles shall be owned by the Contractor, owned by others or hired. Limits of liability for Comprehensive Automobile Liability Insurance shall be \$1,000,000.00 combined single limit bodily injury and property damage each occurrence. The Baldwin County Commission, its departments and its employees shall be named as additional insured.

COUNTY'S PROTECTIVE LIABILITY INSURANCE

The Contractor shall at his expense provide County's protective Liability policies issued in the names of the County and its departments covering their liability for operation of the Contractor. These policies shall provide limits of liability in the amount of \$1,000,000.00 per occurrence bodily injury and property damage, \$1,000,000.00 aggregate.

HOLD HARMLESS PROVISION

Provider shall indemnify, defend and hold County and its Commissioners, affiliates, employees, agents, and representatives (collectively "County") harmless from and against any and all claims, demands, liabilities, damages, losses, judgments, costs, and expenses including, without limitations, attorneys' fees, for any and all personal injury (including death) and property damage of any kind or nature whatsoever, incurred by, asserted against, or imposed upon County, as a result of or in any manner related to provision of services hereunder, or any act or omission, by Provider. The Contractor shall provide the COUNTY with proof of general liability coverage including the COUNTY as an additional insured. This indemnification shall survive the expiration of this Contract.

SUBCONTRACTOR'S PUBLIC LIABILITY & PROPERTY DAMAGE INSURANCE

The Contractor shall require each of his Subcontractors to produce and maintain during the life of his subcontract, Subcontractor's Public Liability and Property Damage Insurance of the type specified in the above paragraph hereof, in amounts approved by the County.

Three (3) executed copies of each subsequent endorsement affecting the coverage of policies and of each cancellation shall be forwarded to the County.

SAFETY STANDARDS AND ACCIDENT PREVENTION

With respect to all work performed under this Contract, the Contractor shall:
Comply with the safety standards provisions of applicable laws, building and construction codes as required by the Associated General Contractors of America, and the requirements of OSHA (Occupational Safety and Health Act). Exercise every precaution at all times for the prevention of accidents and the protection of persons (including employees) and property. The Contractor shall furnish and maintain sufficient and adequate danger signals, lights, barriers, etc., as necessary to prevent accidents and to protect the work site. These items are Considered incidental and are considered as part of the Contract.

TIME OF COMPLETION

Work shall begin within fifteen (15) days after award of contract, or as soon as weather conditions permit, unless otherwise notified.

Projects must be completed within **ONE HUNDRED AND TWENTY (120) days** of notification to proceed. **Unless work is hampered by long periods of inclement weather, or delayed by proof of material unavailability, the Baldwin County Commission will assess a penalty in the amount of 3% of the total contract amount for each normal work week beyond the agreed completion date.** Substantial Completion shall occur on the Date of Manufacturer's Punch List. Project shall be complete after receipt of Manufacturer's Warranty.

PROTECTION

- 1) Protect the completed roof system as required in order that the design criteria are met.
- 2) Protect all adjacent surfaces from possible spillage, marring or staining in the process of installation.

GUARANTEE

Contractor will provide a two (2) year Water Tightness Warranty covering labor by the Contractor on work as specified, which shall commence from the date of acceptance. This guarantee shall cover any and all defects in the workmanship. This warranty is exclusive of:

- 1) Physical damage by the Owner and/or other trades.
- 2) "Acts of God" - fire, civil commotion, natural catastrophes or vandalism.

CLEANUP

Accumulated debris shall be removed periodically to assure maximum safety and sanitation at all times. At the time of completion, the Contractor shall remove all excess material and debris from the site and leave all roof surfaces free from accumulations of dirt, debris and other extraneous materials.

FINAL PAYMENT

The Contractor, immediately after the completion of the contract, shall give notice of said completion by an advertisement in some newspaper of general circulation in the local area, for a period of three (3) successive weeks. Proof of publication of said notice shall be made by the Contractor to the County, by affidavit of the publisher and a printed copy of the notice published. The advertisement of completion shall provide that any person having claims for labor and/or materials are requested to file notice of such claims with the County. The final payment shall not be made upon the contract until the expiration of 30 days after the completion of the notice and including all necessary cleanup, and the Baldwin County Commission receives written verification of completion and intent to warranty job, by the Manufacturing Company.

COORDINATION WITH BALDWIN COUNTY

The Contact person for the Baldwin County Commission will be Wanda Gautney, at (251) 580-2520.

DRAWINGS

The drawings are attached.

BID #WG25-29 RESPONSE FORM

Labor & Incidental Materials for Roof Replacement & Maintenance to Various County Buildings

Date: _____

Out of State _____ or _____ If yes, _____
Yes No Registration Number

Company Name: _____

Address: _____

Company Rep. _____
(Rep. Name Typed or Printed)

Position: _____

Email address: _____

Phone: _____

Fax: _____

Contractor's License Number _____

(License Issued by the Alabama State Licensing Board for General Contractors)

**“ALABAMA GENERAL CONTRACTORS LICENSE NUMBER MUST BE CLEARLY
LISTED ON THE OUTSIDE OF THE VENDOR BID ENVELOPE”**

PROJECT MANUAL

FOR

BALDWIN COUNTY COMMISSION

“ROOF REPAIRS AND MAINTENANCE TO VARIOUS BUILDINGS

LABOR & INCIDENTAL MATERIALS CONTRACT

BALDWIN COUNTY COMMISSION
312 COURTHOUSE SQUARE
BAY MINETTE, AL. 36507

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SECTION 00400

BID FORM

PROJECT IDENTIFICATION: "Roof Replacement and Maintenance To Various Buildings,
Labor & Incidental Materials Contract"

BID TO: Baldwin County Commission

BID FROM: _____

1. The undersigned BIDDER agrees, if this Bid is accepted, to enter into an agreement with OWNER, to perform the Work as specified for the Bid Price and within the Bid Times indicated and in accordance with other terms and conditions of the Contract Documents.
2. In submitting this Bid, BIDDER represents, per Agreement, that:
 - a. This Bid will remain subject to acceptance for 30 days after the day of Bid opening;
 - b. The Owner has the right to reject this Bid;
 - c. BIDDER accepts the provisions of the Instructions and Supplementary Instructions to Bidders regarding disposition of Bid Security;
 - d. BIDDER will sign and submit the Agreement with the Bonds and other documents required by the Bidding Requirements within 15 days after the date of OWNER'S Notice of Award;
 - e. BIDDER has received the following Addenda receipt of which is hereby acknowledged;
Date Number

3. **SINGLE AWARD; Owner will award to a single Low Bidder based on cumulative total of Bid Options awarded (there will not be multiple awardees).**

- | | |
|--|----------|
| 4. Bid Option #1 – "Robertsdale Brats"
[Metal Restoration] | \$ _____ |
| 5. Bid Option #2 – "Commission at Admin A"
[BUR Gravel Restoration] | \$ _____ |
| 6. Bid Option #3 – "Commission at Admin B"
[Mod Bit Restoration] | \$ _____ |
| 7. Bid Option #4 – "Commission at Admin D"
[Shingle Reroof] | \$ _____ |
| 8. Bid Option #5 – "Bay Minette Probate" | \$ _____ |

[Mod Bit Restoration]

9. Bid Option #6 – “Fairhope Courthouse A” [Mod Bit Reroof] \$ _____
10. Bid Option #7 – “Fairhope Courthouse C” [Mod Bit Reroof] \$ _____
11. Bid Option #8 – “Fairhope Courthouse D” [Mod Bit Restoration] \$ _____
12. Bid Option #9 – “Fairhope Courthouse E” [Mod Bit Reroof] \$ _____
13. Bid Option #10 – “Fairhope Courthouse F” [Mod Bit Reroof] \$ _____
14. Bid Option #11 – “Fairhope Courthouse G” [Mod Bit Restoration] \$ _____
15. Bid Option #12 – “Fairhope Courthouse H” [Mod Bit Reroof] \$ _____
16. Bid Option #13 – “BCC Jail” [New Drain Strainers] \$ _____

17. UNIT PRICING – Owner can add/delete quantities from the Contract as required. Note that locations identified below are known areas provided for convenience and additional areas may be uncovered during the work.

- a. Cut out and replace isolated blisters and defects.

50 SF @ _____ per SF = \$ _____ Included in EACH Membrane Roof Restoration, Bid Options #2, 3, 5, 8, 11.

- b. Apply sealants, pop rivets or fasteners to misc. sheet metal flashing including coping, counterflashings, or gutters, 24” stretchout.

20 LF @ _____ per LF = \$ _____ Included in EACH Membrane Roof Restoration, Bid Options #2, 3, 5, 8, 11.

- c. Replace misc. sheet metal flashing including coping, counterflashings, or gutters, 24” stretchout.

20 LF @_____per LF = \$_____ **Included in EACH Membrane Roof Restoration, Bid Options #2, 3, 5, 8, 11.**

- d. Replace damaged gutter with new gutter, straps and brackets matching existing.

20 LF @_____per LF = \$_____ **Included in Bid Option #1 (Rbts Brats)**

- e. Cut out and replace misc. deteriorated lead flashing at plumbing vent.

4 Unit @_____per LF = \$_____ **Included in Bid Option #8 (FH Courthouse)**

- f. Remove and replace deteriorating sealant at surface mount counterflashing.

100 LF @_____per LF = \$_____ **Included in Bid Option #5 (BM Probate)**

- g. Remove and replace internal drain assembly, re-install 2ply membrane sump.

2 Unit @_____per LF = \$_____ **Included in Bid Option #2 (Comm Adm)**

- h. Cut out and replace unbonded metal edge stripping

50 LF @_____per LF = \$_____ **Included in Bid Option #2 (Comm Adm)**

- i. Install new cast-iron drain strainers.

5 Unit @_____per LF = \$_____ **Included in Bid Option #13 (BCC Jail)**

18. SUBMITTED BY: _____, on _____, 2024

19. COMPANY NAME: _____

SECTION 00100 - Scope of Work

- A. Code Summary
1. Manufacturer's engineer shall review all wind and plumbing code requirements and issue letter that submitted roof system is IBC (International Building Code, and Watertightness Warranty compliant.)
- B. Contract Time; Awardee(s) shall have **one hundred and twenty (120) days** to complete all Work.
- C. Contractor Qualifications. Contractor shall provide evidence of all of the following requirements.
1. A local office within 100 miles of project site, business in the same location for 2 years prior to project date.
 2. In-house sheet metal fabrication facilities at the same or adjacent physical address as main office.
 3. Specialty Trade - Roofing experience;
 - a. Contractor must have at least 4 full-time employees who each allocate 90% of their time towards roofing and waterproofing projects.
 - b. **Contractor must have performed at least \$1M in "Roofing Projects" annually for the past 5 years, where the owner's Notice To Proceed lists 1) Contractor's name, 2) the project title mentions the word "Roofing" or "Reroofing", and 3) award amount.**
- D. Pre-Roofing Conference: Convene a pre-roofing conference approximately two (2) weeks before scheduled commencement of work, for each building with the crews and foreman that will be involved in the Work. The conference will discuss owner site requirements as well as technical requirements. Provide a sign-in sheet for each of the crew members and foremen. Maintain the same crews and foremen for the duration of the Work. Any subsequent crew and/or foreman changes will require an additional prejob conference, with any associated costs to be paid by Contractor.
- E. Summary of Work
1. Robertsdale Brats Robertsdale Metal Roof Restoration
 - a. Scrape loose sealants and mastics, pressure wash existing roof.
 - b. Repair damaged sheet metal trim and/or gutters.
 - c. Apply sealant and mastic reinforcement at fasteners, laps and curbs.
 - d. Apply two coats elastomeric coating throughout.
 2. Comm. at Admin "A" Bay Minette Gravel BUR Restoration
 - a. Spud back and remove gravel from roof surface.
 - b. Remove & replace internal drain assemblies.
 - c. Repair or replace unbonded perimeter membrane stripping.
 - d. Install new flood coat & gravel.

3. Comm. at Admin “B” Bay Minette Mod Bit Restoration
 - a. Reinforce laps then install asphaltic polyurethane coating over entire roof area surfaced with standard granules.
 - b. Reinforce ponding locations.
 - c. Repair or replace vertical membrane flashing per Plans and Specifications.
 - d. Apply sealant to metal edge throughout.
4. Comm. at Admin “D” Bay Minette Shingle Reroof
 - a. Remove existing shingle roof to deck.
 - b. Replace deteriorated deck, mechanically fasten 3/8” plywood.
 - c. Repair or replace “sagging beam”.
 - c. Install synthetic underlayment and self adhering membrane as specified.
 - d. Install new sheet metal flashing throughout.
 - e. Install new 3-tab architectural laminate 30 year shingles with 6 nails per shingle.
5. Bay Minette Probate Bay Minette Mod Bit Restoration
 - a. Reinforce laps then install asphaltic polyurethane coating over entire roof area surfaced with standard granules.
 - b. Repair or replace vertical membrane flashing per Plans and Specifications.
 - c. Apply sealant to metal edge throughout.
6. Fairhope Courthouse “A” Bay Minette Mod Bit Reroof
 - a. Remove existing membrane roof to the deck.
 - c. Install new polyiso, crickets, and drain sumps.
 - d. Install new one-half inch (½”) gypsum coverboard mechanically fastened.
 - e. Install new PT lumber at perimeters.
 - f. Install new 2ply cold process mod bit.
 - g. Install new metal edge and sheet metal flashing.
 - h. Follow manufacturer’s details as required for warranty.
7. Fairhope Courthouse “C” Bay Minette Mod Bit Reroof
 - a. Remove existing membrane roof to the deck.
 - c. Install new polyiso, crickets, and drain sumps.
 - d. Install new one-half inch (½”) gypsum coverboard mechanically fastened.
 - f. Install new 2ply cold process mod bit.
 - g. Install new coping and sheet metal flashing.
 - h. Follow manufacturer’s details as required for warranty.
8. Fairhope Courthouse “D” Bay Minette Mod Bit Restoration
 - a. Reinforce laps then install asphaltic polyurethane coating over entire roof area surfaced with standard granules.
 - b. Repair or replace sheet metal per Plans and Specifications.
 - b. Repair or replace vertical membrane flashing per Plans and Specifications.
 - c. Apply sealant to metal edge throughout.
9. Fairhope Courthouse “E” Bay Minette Mod Bit Reroof

- a. Remove existing membrane roof to the deck.
- b. Install new vapor barrier.
- c. Install new polyiso, crickets, and drain sumps, adhered.
- d. Install new one-half inch (½") gypsum coverboard adhered.
- e. Install new PT lumber at perimeters.
- f. Install new 2ply cold process mod bit.
- g. Install new edge metal and sheet metal flashing.
- h. Follow manufacturer's details as required for warranty.

10. Fairhope Courthouse "F" Bay Minette Mod Bit Reroof

- a. Remove existing membrane roof to the deck.
- c. Install new polyiso, crickets, and drain sumps.
- d. Install new one-half inch (½") gypsum coverboard mechanically fastened.
- f. Install new 2ply cold process mod bit.
- g. Install new coping and sheet metal flashing.
- h. Follow manufacturer's details as required for warranty.

11. Fairhope Courthouse "G" Bay Minette Mod Bit Restoration

- a. Reinforce laps then install asphaltic polyurethane coating over entire roof area surfaced with standard granules.
- b. Repair or replace sheet metal per Plans and Specifications.
- b. Repair or replace vertical membrane flashing per Plans and Specifications.
- c. Apply sealant to metal edge throughout.

12. Fairhope Courthouse "H" Bay Minette Mod Bit Reroof

- a. Remove existing membrane roof to the deck.
- c. Install new polyiso, crickets, and drain sumps.
- d. Install new one-half inch (½") gypsum coverboard mechanically fastened.
- e. Install new PT lumber at perimeters.
- f. Install new 2ply cold process mod bit.
- g. Install new metal edge and sheet metal flashing.
- h. Follow manufacturer's details as required for warranty.

H. Sheet Metal; all sheet metal flashing shall be 24 gauge Kynar coated G90 steel, unless otherwise indicated, covered under manufacturer's warranty.

I. Contractors must confirm all existing footages, roof construction, and material quantity takeoffs.

J. Owner Purchased Materials

- 1. Owner shall provide materials and quantities listed below, Contractor shall be responsible for receiving all materials at jobsite, hoisting to rooftop, subsequent storage, and final installation.
 - a. Manufacturer shall separate Owner-Purchased Materials by Bid Option to ensure owner can verify material quantities at point of delivery and for internal accounting purposes. This includes separating each Bid Option's

materials on separate pallets, separately invoiced with separate bills of lading.

2. Contractor shall be responsible for purchase of any additional materials and quantities required to comply with specification and manufacturer warranty. Under no circumstances shall owner be responsible for ordering additional materials beyond the originally provided Owner Purchased Materials.
 - a. Manufacturer shall separate Contractor-Purchased Materials from Owner Purchased materials and also separate by Bid Option, to ensure contractor can verify material quantities at point of delivery and for internal accounting purposes. This includes separating each Bid Option's materials on separate pallets, separately invoiced with separate bills of lading.
 - b. Contractor Bid Options having small quantities can be grouped together on the same pallet to minimize shipping costs if each Bid Option is labeled on the pallet and Bill of Lading itemizes the separate Bid Options within the combined pallet. Grouped Bid Options should remain separately invoiced.
3. All unused Owner-purchased materials shall remain the possession of Owner.
4. All materials shall be kept covered from weather and set atop pallet at all times.
5. Owner Purchased Materials – Bid Option #1 – “Robertsdale Brats Metal Roof”

	<u>Product</u>	<u>Unit Size</u>	<u>Coverage</u>	<u>Qty</u>
a.	CPR Top Ct			12
b.	CPR Base Ct			12
c.	CPR Seam Sealer BG			5
d.	CPR Seam Sealer TG			2
e.	Tuff Stuff MS			10
f.	GRIP Polyester 4” Soft			2

6. Owner Purchased Materials – Bid Option #2 – “Commission at Admin A - Gravel”

	<u>Product</u>	<u>Unit Size</u>	<u>Coverage</u>	<u>Qty</u>
a.	WeatherScreen			37
b.	Stressply Plus FR Mineral			4
c.	FlexBase 80			3
d.	Flashing Bond			6
e.	Garla-Prime			2

7. Owner Purchased Materials – Bid Option #3 – “Commission at Admin B – Mod Bit”

	<u>Product</u>	<u>Unit Size</u>	<u>Coverage</u>	<u>Qty</u>
a.	GarlaPrime			1
b.	Energizer LO			5
c.	GRIP Polyester			1
d.	Standard Granules			8
e.	Tuff Flash LO			2
f.	GarlaBrite			1
g.	Silver Flash			1
h.	GarMesh			1
i.	GarlaFlex Mastic			2

j.	GarlaFlex		2
k.	Tuff Stuff MS		5
8.	Owner Purchased Materials – Bid Option #4 – “Commission at Admin D - Shingle”		
	<u>Product</u>	<u>Unit Size</u>	<u>Coverage</u>
a.	QuickFelt		7
b.	R-Mer Seal		9
c.	Flashing Bond		7
d.	Greenloc Structural Adhs		1
9.	Owner Purchased Materials – Bid Option #5 – “Bay Minette Probate”		
	<u>Product</u>	<u>Unit Size</u>	<u>Coverage</u>
a.	Garla-Prime		23
b.	Energizer LO		111
c.	GarlaBrite		3
d.	SilverFlash		3
e.	GarMesh		2
f.	GarlaFlex Mastic		1
g.	GarlaFlex Tubes		4
h.	Tuff Stuff MS		10
i.	Standard Granules		224
j.	GRIP Polyester		8
k.	Tuff Stuff MS		10
10.	Owner Purchased Materials – Bid Option #6 – “Fairhope Courthouse A”		
	<u>Product</u>	<u>Unit Size</u>	<u>Coverage</u>
a.	Stressply Plus FR Mineral		39
b.	Flexbase 80		31
c.	Weatherking		29
d.	Insul-Lock		37
e.	Insul-Lock Primer		3
f.	GarlaPrime		2
g.	Flashing Bond		4
h.	SilverFlash		1
i.	GarMesh		1
j.	GarlaBrite		1
k.	Tuff Stuff MS		6
11.	Owner Purchased Materials – Bid Option #7 – “Fairhope Courthouse C”		
	<u>Product</u>	<u>Unit Size</u>	<u>Coverage</u>
a.	Stressply Plus FR Mineral		14
b.	Flexbase 80		11
c.	Weatherking		10
d.	Insul-Lock		12
e.	Insul-Lock Primer		1

f.	GarlaPrime	1
g.	Flashing Bond	2
h.	SilverFlash	1
i.	GarMesh	1
j.	GarlaBrite	1
k.	Tuff Stuff MS	5

12. Owner Purchased Materials – Bid Option #8 – “Fairhope Courthouse D”

	<u>Product</u>	<u>Unit Size</u>	<u>Coverage</u>	<u>Qty</u>
a.	GarlaPrime			14
b.	Flashing Bond			2
c.	Energizer LO			63
d.	GRIP Polyester			1
e.	Standard Granules			113
f.	GarlaBrite			2
g.	SilverFlash			2
h.	GarMesh			1
i.	GarlaFlex			7
j.	GarlaFlex Mastic			2
k.	Stressply Plus FR Mineral			1

13. Owner Purchased Materials – Bid Option #9 – “Fairhope Courthouse E”

	<u>Product</u>	<u>Unit Size</u>	<u>Coverage</u>	<u>Qty</u>
a.	Stressply Plus FRMineral			12
b.	Flexbase 80			9
c.	HPR Torch Base			8
d.	Weatherking			9
e.	Insul-Lock			11
f.	Insul-Lock Primer			1
g.	GarlaPrime			1
h.	Flashing Bond			2
i.	Tuff Stuff MS			3

14. Owner Purchased Materials – Bid Option #10 – “Fairhope Courthouse F”

	<u>Product</u>	<u>Unit Size</u>	<u>Coverage</u>	<u>Qty</u>
a.	Stressply Plus FR Mineral			6
b.	Flexbase 80			4
c.	Weatherking			3
d.	Insul-Lock			4
e.	Insul-Lock Primer			1
f.	GarlaPrime			1
g.	Flashing Bond			2
h.	SilverFlash			1
i.	GarMesh			1
j.	GarlaBrite			1

15. Owner Purchased Materials – Bid Option #11 – “Fairhope Courthouse G”

	<u>Product</u>	<u>Unit Size</u>	<u>Coverage</u>	<u>Qty</u>
a.	GarlaPrime			1
b.	Flashing Bond			0
c.	Energizer LO			3
d.	GRIP Polyester			1
e.	Standard Granules			3
f.	GarlaBrite			1
g.	SilverFlash			1
h.	GarMesh			1
i.	GarlaFlex			1
j.	GarlaFlex Mastic			1

16. Owner Purchased Materials – Bid Option #12 – “Fairhope Courthouse H”

	<u>Product</u>	<u>Unit Size</u>	<u>Coverage</u>	<u>Qty</u>
a.	Stressply Plus FR Mineral			6
b.	Flexbase 80			4
c.	Weatherking			3
d.	Insul-Lock			4
e.	Insul-Lock Primer			1
f.	GarlaPrime			1
g.	Flashing Bond			2
h.	SilverFlash			1
i.	GarMesh			1
j.	GarlaBrite			1

SECTION 06100 - ROUGH CARPENTRY

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. Provide the wood products necessary to complete the roofing work in accordance with the Project Manual

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. Section 07552 "Modified Membrane Roofing"

1.3 REFERENCES

- A. ASTM D - 1079 Terminology Relating to Roofing, Waterproofing, and Bituminous Materials
- B. Lumber Standards: American Softwood Lumber Standard PS 20-70 by the U.S. Department of Commerce.
- C. Plywood Standards: U.S. product Standard PSI-74/ANSI A 199.1 or latest APA Performance Standards for American Plywood Association.
- D. ASTM E - 108 Test Methods for Fire Test of Roof Coverings
- E. ASCE -7 American Society of Civil Engineering, Minimum Design Loads for Buildings and Other Structures
- F. FM Factory Mutual
- G. NRCA National Roofing Contractors Association
- H. UL Underwriters Laboratories
- I. WH Warnock Hersey

1.4 SUBMITTALS

- A. Provide submittals for lumber or plywood materials upon request.

1.5 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Use experienced installers.
- B. Lumber Standards: Comply with American Softwood Lumber Standard PS 20-70 by the U.S. Department of Commerce.

- C. Plywood Standards: Comply with U.S. product Standard PSI-74/ANSI A 199.1 or latest APA Performance Standards for American Plywood Association.
- D. Factory Marking: Mark each piece of lumber or plywood to indicate type, grade, agency providing inspection service.
- E. Size and Shape: Dress lumber 4 sides (S4S) and work to shapes and patterns shown. Nominal sizes shown and specified refer to undressed lumber dimensions. Detailed dimensions show actual lumber size required.

1.6 DELIVERY STORAGE AND HANDLING

- A. Time delivery and installation of carpentry work to avoid delaying other trades whose work is dependent on or affected by the carpentry work. Keep materials dry during delivery and storage
- B. Store lumber and plywood in stacks with provisions for air circulation within stacks. Protect bottom of stacks against contact with damp or wet surfaces.
- C. Protect exposed materials against water and wind. Remove damaged or unsuitable material from the job site.

1.7 MANUFACTURER'S INSPECTIONS

- A. Follow provisions in other Sections.

1.8 PROJECT CONDITIONS

- A. Follow provisions in other Sections.

1.9 SEQUENCING AND SCHEDULING

- A. Follow provisions in other Sections.

1.10 WARRANTY

- A. Follow provisions in other Sections.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Provide nailers, wood blocking and plywood as necessary to complete roofing work as directed by governing codes, roof manufacturer, and plans and specifications.

2.2 DESCRIPTION

- A. Construction Lumber: ACQ Pressure Treated, Standard Grade Douglas Fir, Western Larch, Western Hemlock (WWPA or WCLB) or No. 2 dimension Southern Pine (SPIB).
- B. Exterior Type Plywood: APA Rated sheathing, EXT.
- C. Bucks, Nailers, Blocking, Etc.: Treated No. 2 common grade of any WWPA or WCLA species or No. 2 Southern Pine(SPIB).
- D. Anchorage and Fastenings: Proper type, size material and finish for each application.
- E. Quality: Sound, seasoned, well manufactured materials of longest practical lengths and sizes to minimize joints. Free from warp which cannot be easily corrected by anchoring and attachment. Discard material with defects which would impair quality of work.

2.3 NAILS AND FASTENERS

- A. Fasteners: Use fasteners as dictated by Factory Mutual Wind Uplift requirements of Data Loss Sheet 1-49, meeting ASCE 7.
- B. Fasteners for attachment into steel structure
 - 1. Type: Teks5 Hex-Head Screw.
- C. Fasteners for wood to wood attachments.
 - 1. 8d, hot dip galvanized.
 - 2. #12 coated screws, minimum 1-1/4" imbedment in lumber or minimum length to provide through-penetration in plywood.
- D. Fasteners for wood to concrete; Drive Pins, Expansion Fasteners, Rawl Spikes or Tapcons, minimum 1-1/4" imbedment.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify measurements and dimensions shown before proceeding with carpentry work.
- B. Examine supporting structure where carpentry work is to be installed. Do not proceed with installation until unsatisfactory conditions have been corrected.
- C. Correlate location of nailers, blocking and similar supports for attached work.

- D. Scribe and cope as required for accurate fit of carpentry work to other work.

3.2 GENERAL INSTALLATION REQUIREMENTS

- A. Provide nailers, blocking and sleepers where shown on the drawings and details, or required for attachment of other work.
- B. Attach to substrate securely as required to support applied loading. Countersink bolts and nuts flush with surfaces.
- C. Securely attach wood nailers to substrates in accordance with Factory Mutual Loss Prevention Data Sheet 1-49 and as required by ASCE 7.
- D. Provide washers under bolt heads and nuts in contact with wood.
- E. Select fasteners of size that will not penetrate members where opposite side will be exposed to view or will receive finish material.
- F. Make tight connections between members. Install fasteners without splitting of wood; predrill as required. Do not drive threaded friction type fasteners; turn into place. Tighten bolts and lag screws at installation and retighten as required.

3.3 METAL EDGE AT INSULATED ROOF SYSTEMS:

- A. Horizontal pressure treated wood nailers, minimum four inch (4") nominal width, are to be stacked atop each other to a total thickness as needed for flush transition between adjacent insulation boards and roof-edge.

3.4 EQUIPMENT CURBS

- A. All curbs are required to have a nailable wood surface, to provide positive attachment of the Membrane Flashing System.
- B. All curb-heights are to be raised with additional nailers as needed to provide an eight (8) inch membrane flashing height.

3.5 HVAC CURBS

- A. Curbs shall be raised to provide 8" minimum flashing height after tapered insulation system installation.
- B. Raise curbs with additional nailers attached to top of curb.

END OF SECTION 06100 – ROUGH CARPENTRY

SECTION 07310 – SHINGLE ROOFING

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. Removal of existing shingle roofing, base sheets, imbedded sheet metals and loose nails. Installation of continuous underlayment, new shingles, metal drip edge, hip and ridge shingles, and shingle repairs for adjacent membrane roof transitions.

1.2 SUBMITTALS

- A. Manufacturer's signed Shop Drawings, containing;
 - 1. Site Pressures for Field (ASCE-7) and Perimeter (ANSI-SPRI ES-1).
 - 2. Scope of Work for IBC and Warranty Compliance.
 - 3. CAD drawn details (Field, Flashings, Metal Edge, and Curbs, dimensioned), showing fastener types and spacing, and interfacing for coatings, reinforcements, mastics and sealants.
 - 4. Roof Plan scaled, with construction notes as needed.
 - 5. Design Summary
 - a. IBC-2021
 - b. ASCE 7-16
 - c. Safety Factor: 1.65
 - d. Test Method: ASTM E-1592.
 - e. SMACNA 5th Edition or later.
- B. Submit Section 01360 Manufacturer Site Certification demonstrating compliance with specified warranty requirements and non-compliance shall be grounds for rejection of Bid.
- C. Truss Repairs (if any); Submit engineer's Truss Repair Letter listing approved products and procedures for any truss repairs.
 - 1. Provide engineer's post installation letter verifying proper truss repairs have been completed.
- D. Submit Product Data Sheets for each type of product specified.
- E. Show evidence that the Installer specializes in shingle reroofing with a minimum 5 years experience and who is certified by roofing system manufacturer.
- F. Manufacturer's Warranties
 - 1. Sample of Shingle Manufacturer's twenty (30) year limited Warranty.
 - 2. Sample of Underlayment Manufacturer's ten (10) year Limited Materials Warranty.

1.3 MANUFACTURER'S INSPECTIONS

- A. When the project is in progress, Manufacturer will provide the following:
 - 1. Keep the Architect/Owner informed as to the progress and quality of the work observed.
 - 2. Provide job site inspections a minimum of two days per week, with written inspection reports of observations.
 - 3. Report to the Owner in writing, any failure or refusal of the Contractor to correct unacceptable practices called to the Contractor's attention.
 - 4. Confirm, after completion of the project and based on manufacturer's observations and tests, that manufacturer has observed no applications procedures in conflict with the specifications other than those that may have been previously reported and corrected.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Store all products in manufacturer's unopened, labeled packaging until they are ready for installation.
- B. Store products in a covered, ventilated area, at temperature not more than 110 degrees F (43 degrees C); do not store near steam pipes, radiators, or in direct sunlight.
- C. Store bundles on a flat surface. Maximum stacking height shall not exceed Manufacturer's recommendations. Store all roll goods on end.
- D. Store and dispose of solvent-based materials in accordance with all federal, state and local regulations.
- E. Proceed with work only when existing and forecasted weather conditions will permit work to be performed in accordance with Manufacturer's recommendations

PART 2 - PRODUCTS

2.1 SHINGLE ROOF

- A. Shingle Manufacturers: GAF, Certainteed, Atlas, or Owen's Corning.
 - 1. Color and profile shall be selected by Owner based on availability.
 - 2. Self-sealing, granule surfaced, asphalt shingle with a fiberglass reinforced core and a mineral granule surfacing. Architectural laminate styling providing a wood shake appearance with a 5" or 5 5/8" exposure. Meets ASTM D 3018 Type 1, ASTM D 3161 Class F, ASTM D 3462, and ASTM D 7158 Class H.
 - 3. Hip & Ridge Shingles.
 - 4. Starter Roll.

- B. Underlayment, Sheet Metals, Mastics and Sealants Manufacturer: Garland, Ecology or Hyload.
 - 1. Continuous Underlayment
 - “Viking Quickfelt”, by Garland.
 - “Hybase MF-95-SS”, by Hyload.
 - “ERS-408”, by Ecology.
 - 2. Self-Adhering Membrane
 - “RmerSeal”, by Garland.
 - “Hybase SAM”, by Hyload.
 - “ERS-900-B/VR”, by Ecology.
 - 3. Sheet Metal: ANSI-SPRI ES-1 tested, for Drip Edge, Jamb and Head Flashing.
 - “RmerLine”, by Garland.
 - Hyload Metals, by Hyload.
 - Ecology Metals, by Ecology.
 - 4. Mastic
 - a. “Flashing Bond”, by Garland.
 - b. “Hyload Flashing Membrane Adhesive”, by Hyload.
 - c. “ERS-304-MB”, by Ecology.

2.2 **NAILS AND FASTENERS**

- A. Shingle Nails for Wood Deck
 - 1. Type: 3d, 12 ga, 1-1/4”L
 - 2. Shank Type: Annular ring shank nails
 - 3. Shank Quantity: Minimum 20 rings per inch,
 - 4. Head Diameter: Minimum 3/8-inch (9.5 mm)
 - 5. Corrosion Resistance: Hot dipped galvanized, meeting ASTM G85
 - 6. Meeting ASTM F1667-21
 - 7. Length: 5/8” plywood: Minimum 3/4” L.
 - 8. Lumber, all thicknesses: Minimum 1.0” L.
- B. Nails for Wood Deck Re-Attachment into Rafters
 - 1. Type: 8d
 - 2. Shank Type: Annular ring shank nails
 - 3. Shank Quantity: Minimum 20 rings per inch,
 - 4. Head Diameter: Minimum 3/8-inch (9.5 mm)
 - 5. Corrosion Resistance: Hot dipped galvanized, meeting ASTM G85
 - 6. Length:
 - 5/8” plywood: Minimum 2” L.
 - 5/4” lumber: Minimum 2-1/2” L.
- C. “Cap Nails” shall be an integrated cap with nail, 1-inch length and 1-inch diameter and of not less than 32 gage (0.010 inch) sheet metal. ' Cap Nail shall be tested for corrosion resistance in compliance with ASTM G 85. All of cartons shall be labeled to note compliance with the corrosion resistance requirements.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Review Manufacturer's Shop Drawings onsite with Manufacturer's representative and coordinate during weekly site visits, as required for Warranty.
- B. If truss repairs are to be performed, submit engineer's Truss Repair Letter listing approved products and procedures for any truss repairs.
 - 1. Provide engineer's post installation letter verifying proper truss repairs have been completed.

3.2 DEMOLITION

- A. Remove all existing roofing, underlayments and imbedded metals and rubber base flashings, down to the roof deck.
- B. Imbedded metals shall include plumbing boots, gas exhaust vents, drip edge, valley metal and all other metals attached or adhered to the roof deck.

3.3 DECK REPAIRS

- A. Where required, install new matching thickness wood decking attached 6" oc at all trusses.
- B. Where existing roof deck is lumber planking, install continuous layer of three-eighths inch (3/8") plywood decking, attached 6" oc in twenty four inch (24") oc rows.

3.4 DECK REATTACHMENTS

- A. Provide additional deck reattachments per IBC and IRC and as provided by Manufacturer's Shop Drawings.
- B. Reattach existing decking to a 6" oc finish, typically.

3.5 SYNTHETIC UNDERLAYMENT

- A. Install synthetic underlayment mechanically fastened with cap head nails throughout the field, held back where self-adhering membrane is to be installed.

3.6 SELF-ADHERING UNDERLAYMENT

- A. Install thirty-six inch (36") width self-adhering underlayment at all perimeters, to include eaves, jambs, gables, hips, ridges, curbs and valleys.

3.7 EAVES

- A. Install new drip edge nailed at 3” oc staggered.
- B. Apply asphalt primer to the drip edge flange.
- C. Install starter roll continuous at eave flange.

3.8 HEAD TRIM

- A. Install starter roll.
- B. Install shingles as specified.
- C. Install Head trim fabricated and attached per manufacturer’s recommendations.

3.9 PLUMBING BOOTS

- A. Remove and replace existing lead plumbing boots with new boots.

3.10 SHINGLE INSTALLATION

- A. Install per manufacturer’s instructions.
- B. Install 6 nails per shingle.

3.11 CLEANING

- A. Remove bitumen drippage from all walls, windows, floors, ladders, and finished surfaces.
- B. Remove loose debris from grounds at the end of each work day.

END OF SECTION 07310 – SHINGLE ROOFING

SECTION 07540 - FLUID APPLIED RESTORATION FOR BITUMINOUS ROOFING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Provide moisture scan, then demolition and replacement of wet roof materials, and all metal edge, with warranted interfaces between smooth modified bitumen and metal edge. Provide preparation and priming for fluid applied restoration system for field and flashings.

1.3 SYSTEM DESCRIPTION

- A. It is the intent of this specification to install a long-term fluid-applied roof system that meets or exceeds all current NRCA guidelines as stated in the most recent edition of the NRCA Roofing and Waterproofing Manual.

1.4 SUBMITTALS

- A. Manufacturer's signed Shop Drawings containing;
 - 1. Site Pressures for Field (ASCE-7) and Perimeter Metal (ANSI-SPRI ES-1).
 - 2. Scope of Work for IBC and Warranty Compliance.
 - 3. CAD drawn details (Field, Flashings, Metal Edge, and Curbs, dimensioned), showing fastener types and spacing, and interfacing for coatings, reinforcements, mastics and sealants.
 - 4. Roof Plan scaled, with construction notes as needed.
 - 5. Design Summary
 - a. IBC-2015
 - b. ASCE 7-10
 - (i) Safety Factor: 1.65
 - (ii) Test Method: ASTM E-1592.
 - c. SMACNA 5th Edition or later.
- B. Submit Section 01360 Manufacturer Site Certification demonstrating compliance with specified warranty requirements and non-compliance shall be grounds for rejection of Bid.

- C. Submit certification that the roof system furnished is Tested and Approved by Factory Mutual as a Class 1A roof system, or Listed by Underwriters Laboratories or Warnock Hersey for external fire tests of ASTM E - 108 Class A.
- D. Submit Product Data Sheets for each type of product specified.
- E. Show evidence that the Installer specializes in fluid applied membrane roof restorations with a minimum 5 years experience and who is certified by roofing system manufacturer.
- F. Provide a sample of each product.
- G. Unexecuted Manufacturer's warranty.
- H. Certified copy of ISO 9001 compliance.

1.5 QUALIFICATIONS

- A. Installer: Company specializing in roof restoration with a minimum five [5] years experience and certified by roofing system manufacturer as qualified to install manufacturer's roofing materials.
- B. Installer's Field Supervision: Maintain a full-time Supervisor/Foreman on job site during all phases of roofing work and at any time roofing work is in progress. Maintain proper supervision of workmen. Maintain a copy of the specifications in the possession of the Supervisor/Foremen and on the roof at all times.
- C. Immediately correct roof leakage during construction. If the Contractor does not respond within twenty four (24) hours, the Owner has the right to hire a qualified contractor and backcharge the original contractor.
- D. Insurance Certification: Assist Owner in preparation and submittal of roof installation acceptance certification as may be necessary in connection with fire and extended coverage insurance on roofing and associated work.

1.6 PRE-INSTALLATION CONFERENCE

- A. Pre-Roofing Conference: Convene a pre-roofing conference approximately two (2) weeks before scheduled commencement of restoration system application and associated work.
- B. Require attendance of installer of each component of associated work, installers of deck or substrate construction to receive roofing work, installers of rooftop units and other work in and around roofing which must precede or follow roofing work (including mechanical work if any), Owner, roofing system manufacturer's representative, and other representatives directly concerned with performance of

the Work, including (where applicable) Owner's insurers, testing agencies and governing authorities. If equipment of substantial size is to be placed on the roof, the Mechanical Contractor must also attend this meeting.

- C. Objectives of conference shall include:
1. Review foreseeable methods and procedures related to roofing work.
 2. Tour representative areas of roofing substrates (decks) inspect and discuss condition of substrate, roof drains, curbs, penetrations and other preparatory work performed by others.
 3. Review structural loading limitations of deck and inspect deck for loss of flatness and for required attachment.
 4. Review roofing system requirements (drawings, specifications and other contract documents).
 5. Review required submittals both completed and yet to be completed.
 6. Review and finalize construction schedule related to roofing work and verify availability of materials, installer's personnel, equipment and facilities needed to make progress and avoid delays.
 7. Review required inspection, testing, certifying and material usage accounting procedures.
 8. Review weather and forecasted weather conditions and procedures for coping with unfavorable conditions, including possibility of temporary roofing (if not mandatory requirement).
 9. Record discussion of conference including decisions and agreements (or disagreements) reached and furnish copy of record to each party attending. If substantial disagreements exist at conclusion of conference, determine how disagreements will be resolved and set date for reconvening conference.
 10. Review notification procedures for weather or non-working days.
 11. Establish acceptable methods of protecting the finished roof if any trades must travel across or work on or above any areas of the finished roof.

1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver products to site with seals and labels intact, in manufacturer's original containers, dry and undamaged.
- B. Do not leave unused materials on the roof overnight or when roofing work is not in progress unless protected from weather and other moisture sources.
- C. It is the responsibility of the contractor to secure all material and equipment on the job site. If any material or equipment is stored on the roof, the contractor must make sure that the integrity of the deck is not compromised at any time. Damage to the deck caused by the contractor will be the sole responsibility of the contractor and will be repaired or replaced at his expense.

1. Handle and store roofing materials and place equipment in a manner to avoid significant or permanent damage to deck or structural supporting members.
- D. Refer to Division 1 Sections “Summary of Work” and “Special Conditions,” for additional information and requirements.

1.8 MANUFACTURER’S INSPECTIONS

- A. Require attendance of roofing materials manufacturers’ representatives at site during installation of the fluid membrane system. Perform field inspection and testing as required.
 1. Keep the Owner informed as to the progress and quality of the work as observed.
 2. Provide job site inspections a minimum of two days a week.
 3. Report to the Owner in writing any failure or refusal of the Contractor to correct unacceptable practices called to the Contractor’s attention.
 4. Confirm after completion that manufacturer has observed no applications procedures in conflict with the specifications other than those that may have been previously reported and corrected.
- B. Correct defects or irregularities discovered during field inspection.
- C. Keep wet film gauges on-hand at all times during the application process to ensure proper coverage.

1.9 PROJECT CONDITIONS

- A. Weather Condition Limitations: Do not apply roofing system during inclement weather or when a 40% chance of precipitation or greater is expected.
- B. Proceed with roofing work only when existing and forecasted weather conditions will permit unit of work to be installed in accordance with manufacturer’s recommendations and warranty requirements.
- C. Materials shall be stored at room temperature until immediately prior to application. Discontinue the application if the material cannot be stored at a temperature, which permits even distribution during application.
- D. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed during same day.
- E. When applying materials with spray equipment, take precautions to prevent over spray and/or solvents from damaging or defacing surrounding walls, building surfaces, vehicles or other property. Care should be taken to do the following:
 1. Close air intakes into the building.

2. Have a dry chemical fire extinguisher available at the jobsite.
 3. Post and enforce “No Smoking” signs.
- F. Avoid inhaling spray mist; take precautions to ensure adequate ventilation.
 - G. Protect completed roof sections from foot traffic for a period of at least 48 hours (at 75F and 50% relative humidity) or until fully cured.
 - H. Take precautions to ensure that materials do not freeze.
 - I. Minimum temperature for application is 40F and rising.

1.10 SEQUENCING AND SCHEDULING

- A. Sequence installation of restoration system with related units of work specified in other sections to ensure that roof assemblies including roof accessories, flashing, trim and joint sealers are protected against damage from effects of weather, corrosion and adjacent construction activity.
- B. Fully complete all roofing field assembly work each day. Phased construction will not be accepted.

1.11 WARRANTIES AND GUARANTEES

- A. Upon completion of installation, and acceptance by the Owner and Owner, the manufacturer shall supply to the Owner their 10 year watertightness warranty.
 1. Manufacturer annual site visits during warranty period, with maintenance recommendations, no charge.
 2. Manufacturer (not contractor or consultant) leak response.
 3. No “Blanket Voiding” for storm events.
 4. No more than one required inspection and renewal period.
 5. No exclusion for improper roof design or construction.
 6. No exclusion for manufacturer’s own site inspections.
 7. A single manufacturer/warrantor shall be utilized for all Membrane, Metal and Masonry Restorations and Replacements. Warranties from multiple Manufacturers are not acceptable.
- B. Contractor will submit a five year warranty using Alabama Building Commission form as specified.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. When a particular trade name or performance standard is specified it shall be indicative of a standard required.

- B. Provide products as manufactured by Garland, Ecology or Hyload.
- C. Approved manufacturer must comply in all respects as to the quality and technical performance of the products specified.

2.2 FLUID APPLIED RESTORATION SYSTEM

- A. High build multi-purpose solvent-based asphaltic polyurethane fluid applied waterproofing membrane designed to maintain, restore and upgrade the performance of existing smooth-surface bituminous membranes. Acrylic or water-based products are not allowed.

1.	Non-Volatile	ASTM C1250	82%
2.	Density @ 77F	ASTM D1475	9.4 lbs/gal
3.	Viscosity @ 77F	Brookfield #5	6500 cP
4.	Elongation @ 77F	ASTM D412	1100%
5.	Coverage Rate Laps		
	Coverage Rate	Wet Film Thickness	Dry Film Thickness
	3.0 gal / sq.	48 mils	40 mils
6.	Coverage Rate Field		
	Coverage Rate	Wet Film Thickness	Dry Film Thickness
	3.0 gal / sq.	48 mils	40 mils
- B. Polyester Fabric: Reinforcement for membrane laps in ponding areas and tie-ins used in conjunction with mastics and coatings.

1.	Elongation	ASTM D 1682	44%
2.	Tearing Strength	ASTM D 1682	17 lbs
3.	Tensile Strength		75 lbs.
4.	Weight		3 oz/sq. yd
- C. Fiberglass Mesh: Reinforcement for mastics at vertical flashing laps.

1.	Tensile Strength	Warp Threads	75 min.
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- D. Asphaltic primer: For substrates to receive new coatings, vertical membrane flashings and field membranes including existing roofs, masonry and carpentry.

1.	Viscosity Zahn Cup	ASTM D-4212	18-21 sec
2.	Distillation	ASTM D-402	
	a. Volume @ 380 F		55%
	b. Penetration of Residue mm/10		10-30
3.	Wet Film Thickness		8-16 mils
- E. Asphalt Mastic: Cold applied trowel grade asphalt mastic for interply adhesive.

1.	Density	ASTM D-1475	8.3 lb./gal
2.	Viscosity @ 77F		7 sec

- F. SEBS Modified Asphalt Mastic or Sealant Grade; high performance rubberized asphalt for critical areas and cap sheet repairs.
- | | | | |
|----|-----------------|-------------------|--------------------|
| 1. | Elongation | ASTM D-412 | 800% |
| 2. | Density | ASTM D-1475 | 8.25 lb./gal |
| 3. | Viscosity @ 77F | Mobilometer 1500g | 400,000-600,000 cP |
- G. Reflective Asphalt Mastic: Aluminized asphalt mastic for all exposed surfaces, meeting the following requirements [“roof cement” coated with granules or aluminum is not allowed].
- | | | | |
|----|---------------------------|-------------------|-------------|
| 1. | Reflectivity | | 60% |
| 2. | Density | ASTM D-1475 | 8.3 lb./gal |
| 3. | Viscosity @ 77F | Mobilometer 1500g | 9-11 sec |
| 4. | Pre/Post Recycled Content | | 5.0% |
- H. Base Sheet/Base Flashing Base Ply:
- | | | | |
|----|---|--|---------------|
| 1. | <u>Properties:</u> Finished Membrane, ASTM D-5147 at 2 in/min. @ 73.4 ± 3.6° F. | | |
| a. | Tensile Strength | | MD and XD 100 |
| | lbf/in. | | |
| b. | Tear Strength | | MD and XD 100 |
| | lbf/in. | | |
| c. | Low Temperature Flexibility | | Passes -20 °F |
- I. Modified Membrane Field/Modified Membrane Flashing Top Ply:
- | | | | |
|----|---|--|---------------|
| 1. | <u>Properties:</u> Finished Membrane, ASTM D-5147 at 2 in/min. @ 73.4 ± 3.6° F. | | |
| a. | Tensile Strength | | MD and XD 310 |
| | lbf/in. | | |
| b. | Tear Strength | | MD and XD 500 |
| | lbf/in. | | |
| c. | Low Temperature Flexibility | | Passes -30 °F |
- J. Cold Process Adhesive: Per manufacturer’s requirements.
- K. Surfacing; white ceramic granules.
- L. Self-Adhering Membrane Underlayment: per manufacturer’s requirements.
- M. Moisture-curing, single-component, modified silane adhesive sealant.
- | | | | |
|----|----------------------|----------------------|---------|
| 1. | Tensile Strength | ASTM D-412 | 225 psi |
| 2. | Elongation, Ultimate | ASTM D-412 | 500% |
| 3. | Weep & Sag | ASTM C920, max 3/16” | Passes |
| 4. | Hardness, Shore A | ASTM C-920, 15-50 | 30 |
- N. Non-Fibered Aluminum Paint: Highly reflective asphalt-based aluminum paint for exposed surfaces, meeting the following requirements:

1.	Solar Reflective Index	Initial	77
2.	Density	ASTM D-1475	8.51 lb./gal
3.	Non-Volatile	ASTM D-2824	45% min.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrate surfaces to receive fluid-applied membrane and associated work and conditions under which roofing will be installed. Do not proceed with roofing until unsatisfactory conditions have been corrected in a manner acceptable to Installer.
- B. Review ASTM C-1153 moisture scan report with Owner and Manufacturer onsite.

3.2 GENERAL INSTALLATION REQUIREMENTS

- A. Cooperate with manufacturer, inspection and test agencies engaged or required to perform services in connection with installing the roof system.
- B. Protect other work from spillage of roofing materials and prevent materials from entering or clogging drains and conductors. Replace or restore other work damaged by installation of the modified bituminous roofing system.
- C. Properly prepare and apply manufactured components and products, in strict accordance with each manufacturer's current written instructions and recommendations.
- D. Apply roofing materials as specified herein unless recommended otherwise by manufacturer's current written instructions and recommendations. Keep roofing materials dry during application. Do not permit phased construction.

3.3 PROTECTION

- A. Protect Parking Lots, Sidewalks and Perimeter Mansards from drippage and staining.
- B. Contractor is to take photographs of all existing staining and drippage to Parking Lots, Sidewalks and Perimeter Mansards and provide to Owner prior to beginning the Work. All stains not shown by prior photograph will be removed at Contractor's expense.
- C. Cover HVAC intakes with two layers of carbon filter wrap in all areas where paint and coating fumes may enter the interior.

3.4 PRIMER

- A. Apply asphalt primer for all tie-in locations, repairs, and coatings for field and vertical membrane flashings.

3.5 LEAD PLUMBING BOOTS

- A. Install new 4lb lead boot inserts, c-clamped to existing pipe.

3.6 BLISTER REPAIRS

- A. Manufacturer is to mark all defect locations with orange paint prior to beginning with coating application.
- B. Cut out unbonded membrane areas.
- C. Apply approved asphalt primer.
- D. Apply one-ply cold-applied modified bitumen membrane.

3.7 MEMBRANE LAPS, FIELD AND FLASHING

- A. Pre-treat all field and flashing laps with coatings and mastics to provide a smooth transition across the lap.
- B. At isolated locations where coating will not hold a build including heavily alligatored laps and steep transitions, apply trowel grade SBS mastic at three (3) gallons per square for contouring.
- C. Typical; apply asphaltic polyurethane coating at three (3) gallons per square.
 - 1. Brush up into the lap so a continuous application of coating is present across the lap.

3.8 EXISTING VERTICAL MEMBRANE FLASHING

- A. All vertical membrane base flashing laps should be reinforced with new reflective asphalt mastic reinforced with fiberglass mesh, if none exists.
- B. Coat with asphaltic polyurethane coating at three (3) gallons per square.
- C. Allow 30 day cure.
- D. Surface with two coats non-fibered aluminum paint.

3.9 SEAL METAL EDGE LIP

- A. Apply SBS asphaltic sealant-grade into joint at membrane stripping termination along the metal edge lip.

3.10 EXISTING ROOF DRAINS

- A. Scrape existing sealant and apply new SBS sealant/mastic to underside of membrane-to-drain-bowl interface.

3.11 REINFORCED LAPS IN PONDING AREAS

- A. Apply asphalt primer at $\frac{3}{4}$ gallon per square.
- B. Apply SEBS mastic base coat at 3.0 gallons per square.
- C. Apply four inch (4") polyester mesh reinforcement along all side and end laps.
- D. Apply SEBS mastic top coat at 2.5 gallons per square.

3.12 FLUID-APPLIED MEMBRANE APPLICATION (COATING)

- A. Remove all unattached equipment to allow cleaning and coating system application underneath.
- B. Clean the entire roof and cladding by removing all dirt, algae, paint, oil, talc, rust or foreign substance. Scrub heavily soiled areas with a brush. Allow roof to dry before continuing.
- C. Install new Membrane Flashings where required by Manufacturer for Warranty.
- D. Replace wet insulation and membrane where required by Manufacturer for Warranty.
- E. Apply primer throughout roof.
- F. Apply Coat throughout Field at three (3.0) gallons per square.
- G. Surfacing;
 - 1. Broadcast ceramic granules into wet coating at sixty (70) pounds per square.
 - 2. Sweep all loose granules on roof and in gutters and grounds, and discard.
 - 3. Paint vertical membrane flashings with two coats manufacturer's aluminum coating at one-half ($\frac{1}{2}$) gallon per square, per coat.

3.13 METAL SKIRTS FOR COPING

- A. Install new metal skirts in conjunction with flashing repairs where existing metal coping is to remain in place.

3.14 FINAL INSPECTION

- A. At completion of roofing installation and associated work Contractor shall schedule meeting with Owner, Owner, and roofing system manufacturer's representative.
- B. All parties shall tour roof work areas and provide punch list to Contractor of areas (if any) needing repair or replacement.
- C. Contractor shall repair or replace deteriorated or defective work found at time of above inspection as required to produce an installation which is free of damage, and in compliance with specification and warranty requirements.
- D. Contractor shall notify the Owner and Manufacturer's Representative upon completion of corrections and schedule a final inspection.
- E. Following the final inspection, Manufacturer shall provide written notice of acceptance of the installation for warranty.

END OF FLUID APPLIED RESTORATION FOR BITUMINOUS ROOFING

SECTION 07542 - FLUID APPLIED RESTORATION FOR METAL ROOFS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Perform preparation and metal flashing repairs followed by application of a fluid applied membrane roof installed to the existing structural metal roof system, per manufacturer's instructions and code compliance.

1.2 SUBMITTALS

- A. Submit copy of Manufacturer's testing and certification for the specified system.
- B. Submit a copy of manufacturer's 10 year warranty.
- C. Provide evidence that manufacturer's representative has minimum ten (10) years experience with the specified fluid applied roof system.
- D. Contractor's two (2) year watertightness warranty.

1.3 QUALITY ASSURANCE

- A. All products shall be provided or approved by a single Manufacturer.
- B. The system shall be installed by an approved applicator of the Manufacturer.
- C. All materials shall be installed as per accepted roofing practice and in strict accordance with Manufacturer's written specifications. Any deviation must be approved, in writing, by Manufacturer.
- D. Manufacturer shall provide site inspections of the Work in progress, a minimum of two (2) days per week, and issuing inspection reports to contractor on a weekly basis. General comments of the progress of the Work shall be included. All deviations from specification shall be photographed with explanations. Site visits shall be coordinated with Owner's Representative upon request. All reports shall be turned in to Owner at job close-out.

1.4 WARRANTY

- A. Provide manufacturer's standard limited Warranty signed by an authorized representative of the fluid applied roofing system manufacturer, on form published with current product literature as of date of Contract Documents.

1. Warranty shall cover, in part, leakage or failure caused by improper workmanship or materials, to include insulation, insulation adhesives, fasteners, membrane adhesives, field membranes, flashing membranes, and sheet metal flashing.
2. Warranty Period: Manufacturer's standard 2-year limited warranty.
3. Warranty shall have no provision for permanent voiding of the entire future warranty obligations.
4. Warranty shall not charge Owner for leak investigation or storm event inspection costs for any reason.
5. Warranty shall not exclude liability for manufacturer's design support and site inspections required by these specifications.
6. Warranty is allowed to be modified into specification compliance by rider, signed by manufacturer's full time employee.
7. Installer shall provide manufacturer with a two (2) year warranty covering roofing system installation and water tightness.

1.5 STORAGE AND HANDLING

- A. All materials, except bulk deliveries, shall be delivered in the manufacturer's original containers. The containers shall be sealed and display the manufacturer's original label(s).
- B. All liquid materials shall be stored in a cool, dry, shaded area during hot weather or in a dry, heated area during cold weather. Roll goods and granules shall be stored in a clean, temperature controlled area. Any materials exposed to the elements shall be elevated above the ground and covered by a tarpaulin. Materials must not be exposed to excessive heat or direct flame.
- C. Materials shall be handled so as to minimize damage or contamination with moisture or foreign matter. Solvent based materials are combustible. Keep containers closed when the materials are not in use. Wear sunglasses to prevent eye damage and use suntan lotion to prevent sunburn when applying white reflective coating.

1.6 JOB CONDITIONS

- A. Roofing materials shall not be applied during inclement weather and the installation shall not proceed in the event that precipitation is probable during application.
- B. Coatings shall be stored at room temperature until immediately prior to use when the ambient temperature is 40° F or below, including wind chill. Discontinue the application of coatings if the material can not be stored at temperatures which permit even distribution during application.

- C. When applying materials with spray equipment, take precautions to prevent overspray from damaging or defacing surrounding walls, building surfaces, vehicles or other property.
- D. Avoid inhaling spray mist; take precautions to ensure adequate ventilation.
- E. The completed roof system must be protected from foot traffic until fully cured.

1.7 WARRANTY

- A. Provide 10 year limited watertightness warranty from manufacturer, covering labor and materials for leakage.
- B. Warranty shall not charge Owner for site visit for any reason.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Provide a fluid applied roof system compatible with metal roofing, approved by manufacturer for the specific site conditions.
 - 1. Base Coat
 - a. Base: Solvent
 - b. Elongation (ASTM D-412) 500%
 - c. Tensile Strength (ASTM D-412) 350 psi
 - 2. Top Coating
 - a. Color: White
 - b. Base: Solvent
 - c. Elongation (ASTM D-412) 600%
 - d. Tensile Strength (ASTM D-412) 600 psi
 - e. SRI, Initial: 106
 - 3. Fabric Reinforcement
 - a. Woven polyester reinforcement
 - 4. Trowel Grade Mastic
 - a. Base: Solvent
 - b. Elongation (ASTM D-412) 400%
 - c. Tensile Strength (ASTM D-412) 600 psi
 - 5. Sealant
 - a. Base: Modified Silane
 - b. Elongation (ASTM D-412) 500%
 - c. Tensile Strength (ASTM D-412) 225 psi

PART 3 - EXECUTION

3.1 INSPECTION

- A. A pre-job conference between owner, applicator and manufacturer shall be conducted prior to the start of the roofing installation.
- B. The applicator shall inspect the roof prior to the roofing application to verify that there are no conditions which will inhibit the proper application of the fluid applied roof system. The applicator must verify the acceptability of the pre-engineered metal panel over which the materials are to be applied. The fluid applied roof system is a maintenance system for structural metal roof systems.

3.2 CLEANING AND PREPARATION

- A. Any and all defects such as deteriorated roof decks, rust perforations, etc., must be repaired or replaced prior to the application of the coating system.
- B. The surface must be clean, dry and free of loose scale, rust, dirt, mold, mildew, dust and debris.
- C. Powerwashing to remove all loose rust or scale is required. Use a high volume air broom or compressed air to remove residual dust. Observe all applicable OSHA regulations.
- D. Excessively rusted areas must be treated with a quick drying red oxide rust primer prior to the application of the coating system. The primer should be permitted to dry completely before coatings are applied.
- E. Fasteners: Replace all missing fasteners with a slightly larger fastener. All loose fasteners must be tightened. Field Fasteners: Apply trowel grade mastic over fastener-heads. Flashing/Curb Fasteners: Apply sealant over fastener-head.

3.3 FABRIC REINFORCEMENT; GENERAL

- A. Consult manufacturer for fabric reinforcement requirements.

3.4 FASTENERS

- A. In no case should polyester fabric be applied over tops of fastener-heads.
- B. Each fastener-head shall be re-tightened or replaced if spun-out.
- C. Each fastener-head shall receive application of trowel grade mastic or caulk-grade sealant.
- D. Where specified, cut-outs in the polyester should be made for each individual fastener-head. At the base of each fastener-head, coating and polyester shall butt up to the caulk-grade sealant.

3.5 CURB REPAIR

- A. Apply metal primer per manufacturer's instructions.
- B. Apply sealant over all critical areas and uneven substrates.
- C. Coat the horizontal flange-lap minimum 6 inch width with coating applied at a minimum rate of two gallons per 100 sq. ft. Embed polyester into the coating and top dress with additional application of coating applied at a minimum rate of two gallons per 100 sq. ft.
- D. Consult manufacturer for use of polyester reinforcement.

3.6 VALLEY

- A. Apply sealant at critical areas and uneven substrates, and continuous application into valley trim crevice.
- B. Coat the horizontal flange-lap minimum 6 inch width with coating applied at a minimum rate of two gallons per 100 sq. ft. Embed polyester into the coating and top dress with additional application of coating applied at a minimum rate of two gallons per 100 sq. ft.
- C. Consult manufacturer for use of polyester reinforcement.

3.7 HORIZONTAL LAPS

- A. Do not use polyester reinforcement that would create a 'buckwater' lap, without consulting with Manufacturer for alternatives.
- B. Apply sealant between the panel laps, not over the top of the laps.
- C. Follow manufacturer's instructions regarding polyester usage based on site conditions, it may be necessary to treat only horizontal laps that have experienced previous leakage.

3.8 TRIM LEAKAGE (RIDGE, RAKE)

- A. At trim having slope of one (1) inch per foot or greater, coat both sides of the trim-lap, minimum 6 inch width, with trowel grade mastic at a minimum rate of one and one-half (1-1/2) gallons per 100 sq. ft. Embed polyester into the coating and top dress with trowel grade mastic at a rate of one to two gallons per 100 sq. ft.

3.9 FIELD APPLICATION: WHITE ELASTOMERIC COATING SYSTEM

- A. The installation must start at the ridge and proceed towards the gutter or lower edge. Apply Base Coat at a rate of one and one-half (1-1/2) gallons per 100 sq. ft. over the entire roof surface. Allow the coating to dry completely.
- B. Apply Top Coat over the entire roof surface at a minimum rate of one and one-half (1-1/2) gallons per 100 sq. ft.
- C. Permit the roof system to cure for ten to thirty days or until such time as the surface will support traffic without deformation or tracking.

END OF SECTION 07542 - FLUID APPLIED RESTORATION FOR METAL ROOFING

SECTION 07545 - FLUID APPLIED RESTORATION FOR GRAVEL BUILT UP ROOF

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Provide moisture scan, then demolition and replacement of wet roof materials, and all metal edge, with warranted interfaces between smooth modified bitumen and metal edge. Provide preparation and priming for fluid applied restoration system for field and flashings.

1.3 SYSTEM DESCRIPTION

- A. It is the intent of this specification to install a long-term fluid-applied roof system that meets or exceeds all current NRCA guidelines as stated in the most recent edition of the NRCA Roofing and Waterproofing Manual.

1.4 SUBMITTALS

- A. Manufacturer's signed Shop Drawings containing;
 - 1. Site Pressures for Field (ASCE-7) and Perimeter Metal (ANSI-SPRI ES-1).
 - 2. Scope of Work for IBC and Warranty Compliance.
 - 3. CAD drawn details (Field, Flashings, Metal Edge, and Curbs, dimensioned), showing fastener types and spacing, and interfacing for coatings, reinforcements, mastics and sealants.
 - 4. Roof Plan scaled, with construction notes as needed.
 - 5. Design Summary
 - a. IBC-2015
 - b. ASCE 7-10
 - (i) Safety Factor: 1.65
 - (ii) Test Method: ASTM E-1592.
 - c. SMACNA 5th Edition or later.
- B. Submit Section 01360 Manufacturer Site Certification demonstrating compliance with specified warranty requirements and non-compliance shall be grounds for rejection of Bid.

- C. Submit certification that the roof system furnished is Tested and Approved by Factory Mutual as a Class 1A roof system, or Listed by Underwriters Laboratories or Warnock Hersey for external fire tests of ASTM E - 108 Class A.
- D. Submit Product Data Sheets for each type of product specified.
- E. Show evidence that the Installer specializes in fluid applied membrane roof restorations with a minimum 5 years experience and who is certified by roofing system manufacturer.
- F. Provide a sample of each product.
- G. Unexecuted Manufacturer's warranty.
- H. Certified copy of ISO 9001 compliance.

1.5 QUALIFICATIONS

- A. Installer: Company specializing in roof restoration with a minimum five [5] years experience and certified by roofing system manufacturer as qualified to install manufacturer's roofing materials.
- B. Installer's Field Supervision: Maintain a full-time Supervisor/Foreman on job site during all phases of roofing work and at any time roofing work is in progress. Maintain proper supervision of workmen. Maintain a copy of the specifications in the possession of the Supervisor/Foremen and on the roof at all times.
- C. Immediately correct roof leakage during construction. If the Contractor does not respond within twenty four (24) hours, the Owner has the right to hire a qualified contractor and backcharge the original contractor.
- D. Insurance Certification: Assist Owner in preparation and submittal of roof installation acceptance certification as may be necessary in connection with fire and extended coverage insurance on roofing and associated work.

1.6 PRE-INSTALLATION CONFERENCE

- A. Pre-Roofing Conference: Convene a pre-roofing conference approximately two (2) weeks before scheduled commencement of restoration system application and associated work.
- B. Require attendance of installer of each component of associated work, installers of deck or substrate construction to receive roofing work, installers of rooftop units and other work in and around roofing which must precede or follow roofing work (including mechanical work if any), Owner, roofing system manufacturer's representative, and other representatives directly concerned with performance of

the Work, including (where applicable) Owner's insurers, testing agencies and governing authorities. If equipment of substantial size is to be placed on the roof, the Mechanical Contractor must also attend this meeting.

- C. Objectives of conference shall include:
1. Review foreseeable methods and procedures related to roofing work.
 2. Tour representative areas of roofing substrates (decks) inspect and discuss condition of substrate, roof drains, curbs, penetrations and other preparatory work performed by others.
 3. Review structural loading limitations of deck and inspect deck for loss of flatness and for required attachment.
 4. Review roofing system requirements (drawings, specifications and other contract documents).
 5. Review required submittals both completed and yet to be completed.
 6. Review and finalize construction schedule related to roofing work and verify availability of materials, installer's personnel, equipment and facilities needed to make progress and avoid delays.
 7. Review required inspection, testing, certifying and material usage accounting procedures.
 8. Review weather and forecasted weather conditions and procedures for coping with unfavorable conditions, including possibility of temporary roofing (if not mandatory requirement).
 9. Record discussion of conference including decisions and agreements (or disagreements) reached and furnish copy of record to each party attending. If substantial disagreements exist at conclusion of conference, determine how disagreements will be resolved and set date for reconvening conference.
 10. Review notification procedures for weather or non-working days.
 11. Establish acceptable methods of protecting the finished roof if any trades must travel across or work on or above any areas of the finished roof.

1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver products to site with seals and labels intact, in manufacturer's original containers, dry and undamaged.
- B. Do not leave unused materials on the roof overnight or when roofing work is not in progress unless protected from weather and other moisture sources.
- C. It is the responsibility of the contractor to secure all material and equipment on the job site. If any material or equipment is stored on the roof, the contractor must make sure that the integrity of the deck is not compromised at any time. Damage to the deck caused by the contractor will be the sole responsibility of the contractor and will be repaired or replaced at his expense.

1. Handle and store roofing materials and place equipment in a manner to avoid significant or permanent damage to deck or structural supporting members.
- D. Refer to Division 1 Sections “Summary of Work” and “Special Conditions,” for additional information and requirements.

1.8 MANUFACTURER’S INSPECTIONS

- A. Require attendance of roofing materials manufacturers’ representatives at site during installation of the fluid membrane system. Perform field inspection and testing as required.
 1. Keep the Owner informed as to the progress and quality of the work as observed.
 2. Provide job site inspections a minimum of two days a week.
 3. Report to the Owner in writing any failure or refusal of the Contractor to correct unacceptable practices called to the Contractor’s attention.
 4. Confirm after completion that manufacturer has observed no applications procedures in conflict with the specifications other than those that may have been previously reported and corrected.
- B. Correct defects or irregularities discovered during field inspection.
- C. Keep wet film gauges on-hand at all times during the application process to ensure proper coverage.

1.9 PROJECT CONDITIONS

- A. Weather Condition Limitations: Do not apply roofing system during inclement weather or when a 40% chance of precipitation or greater is expected.
- B. Proceed with roofing work only when existing and forecasted weather conditions will permit unit of work to be installed in accordance with manufacturer’s recommendations and warranty requirements.
- C. Materials shall be stored at room temperature until immediately prior to application. Discontinue the application if the material cannot be stored at a temperature, which permits even distribution during application.
- D. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed during same day.
- E. When applying materials with spray equipment, take precautions to prevent over spray and/or solvents from damaging or defacing surrounding walls, building surfaces, vehicles or other property. Care should be taken to do the following:
 1. Close air intakes into the building.

2. Have a dry chemical fire extinguisher available at the jobsite.
 3. Post and enforce “No Smoking” signs.
- F. Avoid inhaling spray mist; take precautions to ensure adequate ventilation.
 - G. Protect completed roof sections from foot traffic for a period of at least 48 hours (at 75F and 50% relative humidity) or until fully cured.
 - H. Take precautions to ensure that materials do not freeze.
 - I. Minimum temperature for application is 40F and rising.

1.10 SEQUENCING AND SCHEDULING

- A. Sequence installation of restoration system with related units of work specified in other sections to ensure that roof assemblies including roof accessories, flashing, trim and joint sealers are protected against damage from effects of weather, corrosion and adjacent construction activity.
- B. Fully complete all roofing field assembly work each day. Phased construction will not be accepted.

1.11 WARRANTIES AND GUARANTEES

- A. Upon completion of installation, and acceptance by the Owner and Owner, the manufacturer shall supply to the Owner their 10 year watertightness warranty.
 1. Manufacturer annual site visits during warranty period, with maintenance recommendations, no charge.
 2. Manufacturer (not contractor or consultant) leak response.
 3. No “Blanket Voiding” for storm events.
 4. No more than one required inspection and renewal period.
 5. No exclusion for improper roof design or construction.
 6. No exclusion for manufacturer’s own site inspections.
 7. A single manufacturer/warrantor shall be utilized for all Membrane, Metal and Masonry Restorations and Replacements. Warranties from multiple Manufacturers are not acceptable.
- B. Contractor will submit a five year warranty using Alabama Building Commission form as specified.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. When a particular trade name or performance standard is specified it shall be indicative of a standard required.

- B. Provide products as manufactured by Garland, Ecology or Hyload.
- C. Approved manufacturer must comply in all respects as to the quality and technical performance of the products specified.

2.2 **FLUID APPLIED RESTORATION SYSTEM**

- A. High build multi-purpose solvent-based fluid applied waterproofing adhesive designed to maintain, restore and upgrade the performance of existing gravel-surface bituminous membranes. Note that acrylic or water-based products are not allowed.

1.	Viscosity @ 77F	20-25 sec
2.	Density @ 77F	9.1 lbs/gal
3.	Asphalt Content (ASTM D4479)	63%
4.	<u>Coverage Rate</u> <u>Wet Film Thickness</u> <u>Dry Film Thickness</u>	
	7.0 gal	114 mils 71 mils
- B. Asphaltic primer: For substrates to receive new coatings, vertical membrane flashings and field membranes including existing roofs, masonry and carpentry.

1.	Viscosity Zahn Cup	ASTM D-4212	18-21 sec
2.	Distillation	ASTM D-402	
	a. Volume @ 380 F		55%
	b. Penetration of Residue mm/10		10-30
3.	Wet Film Thickness		8-16 mils
- C. Asphalt Mastic: Cold applied trowel grade asphalt mastic for interply adhesive.

1.	Density	ASTM D-1475	8.3 lb./gal
2.	Viscosity @ 77F		7 sec
- D. SEBS Modified Asphalt Mastic or Sealant Grade; high performance rubberized asphalt for critical areas and cap sheet repairs.

1.	Elongation	ASTM D-412	800%
2.	Density	ASTM D-1475	8.25 lb./gal
3.	Viscosity @ 77F	Mobilometer 1500g	400,000-600,000 cP
- E. Base Sheet/Base Flashing Base Ply:

1.	<u>Properties:</u> Finished Membrane, ASTM D-5147 at 2 in/min. @ 73.4 ± 3.6° F.	
	a. Tensile Strength	MD and XD 100 lbf/in.
	b. Tear Strength	MD and XD 100 lbf/in.
	c. Low Temperature Flexibility	Passes -20 °F
- F. Modified Membrane Field/Modified Membrane Flashing Top Ply:

1. Properties: Finished Membrane, ASTM D-5147 at 2 in/min. @ 73.4 ± 3.6° F.
 - a. Tensile Strength MD and XD 310 lbf/in.
 - b. Tear Strength MD and XD 500 lbf/in.
 - c. Low Temperature Flexibility Passes -30 °F
- G. Cold Process Adhesive: Per manufacturer's requirements.
- H. Moisture-curing, single-component, modified silane adhesive sealant.
 1. Tensile Strength ASTM D-412 225 psi
 2. Elongation, Ultimate ASTM D-412 500%
 3. Weep & Sag ASTM C920, max 3/16" Passes
 4. Hardness, Shore A ASTM C-920, 15-50 30

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrate surfaces to receive fluid-applied membrane and associated work and conditions under which roofing will be installed. Do not proceed with roofing until unsatisfactory conditions have been corrected in a manner acceptable to Installer.
- B. Review ASTM C-1153 moisture scan report with Owner and Manufacturer onsite.

3.2 GENERAL INSTALLATION REQUIREMENTS

- A. Cooperate with manufacturer, inspection and test agencies engaged or required to perform services in connection with installing the roof system.
- B. Protect other work from spillage of roofing materials and prevent materials from entering or clogging drains and conductors. Replace or restore other work damaged by installation of the modified bituminous roofing system.
- C. Properly prepare and apply manufactured components and products, in strict accordance with each manufacturer's current written instructions and recommendations.
- D. Apply roofing materials as specified herein unless recommended otherwise by manufacturer's current written instructions and recommendations. Keep roofing materials dry during application. Do not permit phased construction.

3.3 PROTECTION

- A. Protect Parking Lots, Sidewalks and Perimeter Mansards from drippage and staining.
- B. Contractor is to take photographs of all existing staining and drippage to Parking Lots, Sidewalks and Perimeter Mansards and provide to Owner prior to beginning the Work. All stains not shown by prior photograph will be removed at Contractor's expense.
- C. Cover HVAC intakes with two layers of carbon filter wrap in all areas where paint and coating fumes may enter the interior.

3.4 LEAD PLUMBING BOOTS

- A. Install new 4lb lead boot inserts, c-clamped to existing pipe.

3.5 BLISTER REPAIRS

- A. After gravel removal, Manufacturer is to mark all defect locations with orange paint prior to beginning with coating application.
- B. Cut out unbonded membrane areas.
- C. Apply approved asphalt primer.
- D. Apply one-ply cold-applied modified bitumen membrane, edges troweled smooth.

3.6 DRAIN INSTALLATION

- A. Spud gravel in four foot (4') by four foot (4') area around drain. Remove unbonded and torn stripping plies.
- B. Install roof drain flashing and membrane stripping per roof system manufacturer's approved details and shop drawings.
- C. Install new cast-iron strainers for all broken, missing, or plastic strainers. Re-use existing cast-iron strainers in good condition.

3.7 METAL EDGE STRIPPING

- A. Identify existing unbonded metal edge stripping to be replaced.
- B. Install new 2-ply metal edge stripping per manufacturer shop drawings and warranty requirements.

3.8 LIQUID-APPLIED MEMBRANE APPLICATION

- A. Wet vacuum existing gravel from rooftop and dispose offsite.
- B. Remove residual debris with blower and broom and dry-vacuum.
- C. Replace wet insulation and membrane where required by Manufacturer for Warranty.
 - 1. Spud, prime, install two-ply membrane field roof system in asphalt mastic.
- D. Remove and replace identified unbonded membrane stripping.
 - 1. Remove existing membrane stripping.
 - 2. Prime substrate at one-half (1/2) gallons per square.
 - 3. Install new 2-ply membrane stripping set in asphaltic mastic.
- E. Remove residual debris from repair operations with blower, broom and dry-vacuum.
- F. Apply fluid applied restoration adhesive at seven (7.0) gallons per square.
- G. Apply gravel surfacing at five hundred and fifty (550) pounds per square.

3.9 FINAL INSPECTION

- F. At completion of roofing installation and associated work Contractor shall schedule meeting with Owner, Owner, and roofing system manufacturer's representative.
- G. All parties shall tour roof work areas and provide punch list to Contractor of areas (if any) needing repair or replacement.
- H. Contractor shall repair or replace deteriorated or defective work found at time of above inspection as required to produce an installation which is free of damage, and in compliance with specification and warranty requirements.
- I. Contractor shall notify the Owner and Manufacturer's Representative upon completion of corrections and schedule a final inspection.
- J. Following the final inspection, Manufacturer shall provide written notice of acceptance of the installation for warranty.

END OF FLUID APPLIED RESTORATION FOR BITUMINOUS ROOFING

SECTION 07550 - MODIFIED BITUMEN ROOFING

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. Remove existing roofs to deck, prepare substrates for installation of modified bitumen membrane roof system.

1.2 REFERENCES

- A. ASCE 7 Minimum Design Loads for Buildings and Other Structures
- B. ANSI-SPRI ES-1 Wind Design Standard for Edge Systems Used with Low Slope Roof Systems
- C. IBC International Building Code
- D. ASTM D - 41 Specification for Asphalt Primer Used in Roofing, Dampproofing, and Waterproofing
- E. ASTM D - 312 Specification for Asphalt Used in Roofing
- F. ASTM D - 451 Test Method for Sieve Analysis of Granular Mineral Surfacing for Asphalt Roofing Products
- G. ASTM D - 1079 Terminology Relating to Roofing, Waterproofing, and Bituminous Materials
- H. ASTM D - 2822 Specification for Asphalt Roof Cement
- I. ASTM D - 2824 Specification for Aluminum-Pigmented Asphalt Roof Coating
- J. ASTM D - 5147 1991 Test Method for Sampling and Testing Modified Bituminous Sheet Materials
- K. ASTM E - 108 Test Methods for Fire Test of Roof Coverings
- L. FM Factory Mutual
- M. NRCA National Roofing Contractors Association
- N. UL Underwriters Laboratories
- O. WH Warnock Hersey

1.3 SUBMITTALS

- A. Manufacturer's signed Shop Drawings containing;
 - 1. Site Pressures for Field (ASCE-7) & Perimeter Metal (ANSI-SPRI ES-1).
 - 2. Scope of Work for IBC and Warranty Compliance.
 - 3. CAD drawn details (Field, Flashings, Metal Edge, and Curbs, dimensioned), showing fastener types and spacing, and interfacing for coatings, reinforcements, mastics and sealants.
 - 4. Roof Plan scaled, with construction notes as needed.
 - 5. Design Summary
 - a. IBC-2021
 - b. ASCE 7-16
 - (i) Safety Factor: 1.65

- (ii) Test Method: ASTM E-1592.
- c. SMACNA 5th Edition or later.
- B. Submit Section 01360 Manufacturer Site Certification demonstrating compliance with specified warranty requirements and non-compliance shall be grounds for rejection of Bid.
- C. Submit certification that the roof system furnished is Tested and Approved by Factory Mutual as a Class 1A roof system, or Listed by Underwriters Laboratories or Warnock Hersey for external fire tests of ASTM E - 108 Class A.
- D. Submit Product Data Sheets for each type of product specified.
- E. Show evidence that the Installer specializes in membrane reroofing with a minimum 5 years experience and who is certified by roofing system manufacturer.
- F. Provide a sample of each product.
- G. Unexecuted Manufacturer's warranty.
- H. Certified copy of ISO 9001 compliance.

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Roofing system manufacturer shall have a minimum of 10 years experience in manufacturing modified bitumen roofing products in the United States and be ISO 9001 certified.
- B. Manufacturer shall have a minimum Net Worth (Assets minus Liabilities) equal to 50 times the cost of this Project to ensure financial responsiveness for future Warranty obligations.
- C. Installer Qualifications: Installer (Roofing) shall be specializing in modified bituminous roof application with minimum 5 years experience and who is certified by the roofing system manufacturer as qualified to install manufacturer's roofing materials.
- D. It is the intent of this specification to provide a roof system with an external fire rating. The descriptions given below are general descriptions. The insulation, recovery board, and other components shall be as required by the membrane manufacturer to provide a Class A fire resistance rating.
- E. Installer's Field Supervision: Require Installer to maintain a full-time Supervisor/Forman on the job site during all phases of modified bituminous sheet roofing work and at any time roofing work is in progress: proper supervision of

workmen shall be maintained. A copy of the specification shall be in the possession of the Supervisor/Foremen and on the roof at all times.

- F. It shall be the Contractor's responsibility to respond immediately to correction of roof leakage during construction.
- G. Disqualification of Bidders: A Bidder can be disqualified by the Owner for any of the following reasons, but not limited to:
 - 1. The failure to attend the Pre-Bid conference at the time and place so described under Bidding Dates.
 - 2. Incorrect use of the "Proposal" as provided by the Architect/Owner. Any changes in said format shall be accepted by the Architect/Owner only when requested and approved in writing prior to the bid opening. Changes in the Proposal after the opening of the bids will not be accepted.
 - 3. Lack of proficiency as shown by past work or incomplete work under other contracts which, in the judgment of the Architect/Owner, might hinder or prevent the prompt completion of additional work if so awarded or any involvement in any legal actions which relate to past or present performance. This includes, but is not limited to, lawsuits, court appointed actions, disputes and/or ongoing litigation.
- H. Insurance Certification: Assist Owner in preparation and submittal of roof installation acceptance certification as may be necessary in connection with fire and extended coverage insurance on roofing and associated work.
- I. Pre-application Roofing Conference: Approximately 2 weeks before scheduled commencement of modified bitumen sheet roof system and associated work, meet at Project site with Installer, installer of each component of associated work, installers of deck or substrate construction to receive roofing work, installers of rooftop units and other work in the around roofing that must precede or follow roofing work (including mechanical work if any), Owner, roofing system manufacturer's representative, and other representatives directly concerned with performance of the Work, including (where applicable) Owner's insurers, test agencies, and governing authorities. Objectives to include:
 - 1. Review foreseeable methods and procedures related to roofing work.
 - 2. Tour representative areas of roofing substrates (decks), inspect and discuss condition of substrate, roof drains, curbs, penetrations, and other preparatory work performed by other trades.
 - 3. Review structural loading limitations of deck and inspect deck for loss of flatness and for required attachment.
 - 4. Review roofing systems requirements (drawings, specifications, and other contract documents).
 - 5. Review required submittals, both completed and yet to be completed.
 - 6. Review and finalize construction schedule related to roofing work and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.

7. Review required inspection, testing, certifying, and material usage accounting procedures.
8. Review weather and forecasted weather conditions and procedures for coping with unfavorable conditions, including possibility of temporary roofing (if not a mandatory requirement).
9. Record (contractor) discussion of conference, including decisions and agreements (or disagreements) reached, and furnish copy of record to each party attending. If substantial disagreements exist at conclusion of conference, determine how disagreements will be resolved and set date for reconvening conference.
10. Review notification procedures for weather or non-working days.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver products to site with seals and labels intact, in manufacturer's original containers, dry and undamaged.
- B. Store and handle roofing sheets in a dry, well-ventilated, weather-tight place to ensure no possibility of significant moisture exposure. Store rolls of felt and other sheet materials on pallets or other raised surface. Stand all roll materials on end. Cover roll goods with a canvas tarpaulin or other breathable material (not polyethylene).
- C. Do not leave unused rolled goods on the roof overnight or when roofing work is not in progress unless protected from weather and other moisture sources.
- D. Handle and store materials or equipment in a manner to avoid significant or permanent deflection of deck.

1.6 MANUFACTURER'S INSPECTIONS

- A. When the project is in progress, the Roofing System Manufacturer will provide the following:
 1. Keep the Architect informed as to the progress and quality of the work observed.
 2. Provide job site inspections a minimum of three days per week, with written inspection reports of observations.
 3. Report to the Architect in writing, any failure or refusal of the Contractor to correct unacceptable practices called to the Contractor's attention.
 4. Confirm, after completion of the project and based on manufacturer's observations and tests, that manufacturer has observed no applications procedures in conflict with the specifications other than those that may have been previously reported and corrected.

1.7 PROJECT CONDITIONS

- A. Weather Condition Limitations: Do not apply roofing membrane during inclement weather or when a 40% chance of precipitation is expected.
- B. Do not apply roofing insulation or membrane to damp deck surface.
- C. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed during same day.
- D. Proceed with roofing work only when existing and forecasted weather conditions will permit unit of work to be installed in accordance with manufacturer's recommendations and warranty requirements.

1.8 SEQUENCING AND SCHEDULING

- A. Sequence installation of modified bituminous sheet roofing with related units of work specified in other sections to ensure that roof assemblies, including roof accessories, insulation, flashing, trim, and joint sealers, are protected against damage from effects of weather, corrosion, and adjacent construction activity.
- B. All work must be fully completed on each day. Phased construction will not be accepted.

1.9 WARRANTY

- A. Roof System Manufacturer upon completion of installation, and acceptance by the Owner and Architect, will supply to the Owner a thirty (30) year no dollar limit non-prorated warranty, turnkey support for Warranty period, warranty to include membranes, adhesives, sealants, insulation, and sheet metal.
 - 1. Manufacturer annual site visits during warranty period, with maintenance recommendations, no charge.
 - 2. Manufacturer (not contractor or consultant) leak response.
 - 3. No "Blanket Voiding" for storm events.
 - 4. No "Blanket Voiding" for lack of Owner maintenance or log.
 - 5. No more than one required inspection and renewal period.
 - 6. No exclusion for improper roof design or construction.
 - 7. No exclusion for manufacturer's own site inspections.
 - 8. A single manufacturer/warrantor shall be utilized for all waterproofing elements including membranes and sheet metal, warranties from multiple Manufacturers are not acceptable.
 - 9. Manufacturer roofing warranty language listing another state legal venue must be amended to be governed by the laws of the State of Alabama.
- B. Contractor will submit a five year warranty using Alabama Building Commission form as specified.

PART 2 - PRODUCTS

2.1 **GENERAL**

- A. When a particular trade name or performance standard is specified it shall be indicative of a standard required.
- B. Provide products as manufactured by Garland Company, Ecology Roof Systems, or Hyload, provided that each manufacturer submits systems which meet the specification in its entirety. Submitted systems which do not meet specification in its entirety, will be rejected.
- C. Contractor shall be allowed to bid cold, hot or torch application in compliance with specification.

2.2 **BITUMINOUS MATERIALS**

- A. Asphalt Primer: V.O.C. compliant, ASTM D-41.
- B. Asphalt Roofing Mastic: V.O.C. compliant, ASTM D-2822, Type II.
- C. Cold Process Asphalt: Shall meet manufacturer's requirements and tested Approval.

2.3 **SHEET MATERIALS**

- A. Modified Membrane Base Ply:
 - 1. **Properties:** ASTM D-5147 at 2 in./min. @ $73.4 \pm 3.6^{\circ}$ F.
 - a. Tensile Strength MD and XD 100 lbf/in.
 - b. Tear Strength MD and XD 100 lbf/in.
 - c. Low Temperature Flexibility Passes -20 °F
- B. Modified Membrane Top Ply:
 - 1. **Properties:** ASTM D-5147 at 2 in./min. @ $73.4 \pm 3.6^{\circ}$ F.
 - a. Tensile Strength MD and XD 310 lbf/in.
 - b. Tear Strength MD and XD 500 lbf/in.
 - c. Low Temperature Flexibility Passes -30 °F
 - d. SRI 65
- C. Vapor Retarder:
 - 1. **Properties:** ASTM D 6147 at 2 in./min. @ $73.4 \pm 3.6^{\circ}$ F.
 - a. Tensile Strength MD and XD 210 lbf/in.
 - b. Tear Strength MD and XD 300 lbf/in.
 - c. Low Temperature Flexibility Passes -30 °F

2.4 **SURFACINGS**

- A. Flashing Laps: Aluminized asphalt mastic reinforced with fiberglass mesh.
- B. Heat Weld: No bleedout allowed, all side and end laps to be heat welded with Lyster Gun.

2.5 RELATED MATERIALS

- A. Wood Nailers
 - 1. Lumber: New pressure-treated, no warps, to match thickness of adjacent insulation.
 - 2. Plywood: Exterior grade.
- B. Roof Insulation:
 - 1. Polyisocyanurate Base Layers; 4.5" total minimum thickness, in two layers unless mechanically fastened to deck.
 - 2. Polyisocyanurate Tapered; Where required for minimum drainage requirements.
 - a. Crickets shall have minimum 22 degrees upslope angle from valley line.
 - b. Drain sumps shall be 48" min. width x 1/4":12 tapered insulation.
 - 3. Gypsum Board; 1/2" x 4' x 8'; "Securock" or equal.
 - 4. Cant Strip; asphalt coated wood fiber, torch applications shall be primed perlite.
 - 5. Insulation adhesive primer; required over bituminous residues (primers, etc..)
 - 6. Insulation adhesive; per manufacturer tested Assembly.
- C. Nails and Fasteners:
 - 1. Membrane to Wood; 1.0" integral steel cap head nails.
 - 2. Membrane to Masonry; Expansion Fasteners or Tapcons, minimum 1-1/4" imbedment.
 - 3. Insulation Screws; #14 min., FM coated, 3.0" plates, minimum length to provide 1.0" min. through-penetration of deck.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrate surfaces to receive modified bitumen sheet roofing system and associated work and conditions under which roofing will be installed. Do not proceed with roofing until unsatisfactory conditions have been corrected in a manner acceptable to Installer.

3.2 GENERAL INSTALLATION REQUIREMENTS

- A. Cooperate with manufacturer, inspection and test agencies engaged or required to perform services in connection with installing modified bitumen roofing system.
- B. Protect other work from spillage of modified bitumen roofing materials. Replace or restore other work damaged by installations of modified bituminous roofing system work.
- C. Coordinate installing roofing system components so that insulation and roofing plies are not exposed to precipitation or left exposed overnight. Provide temporary tie-ins at the end of each work day.
- D. Substrate Joint Penetrations: Prevent bitumen from penetrating substrate joints, entering building, or damaging roofing system components or adjacent building construction.

3.3 ROOF DECKS

- A. Repair existing damaged deck as needed.

3.4 “FAIRHOPE COURTHOUSE - STEEL DECK”

- A. Remove existing roofing system and rigid insulation and imbedded sheet metals, down to deck.
- B. Raise and replace nailers as necessary to provide minimum eight inch (8”) flashing heights
- C. Install new polyisocyanurate insulation.
 - 1. Minimum finish thickness as specified,
 - 2. Maximum board dimension shall be two and one-half inches (2-1/2”) by four foot (4’) by four foot (4’).
- D. Install new polyisocyanurate tapered insulation crickets as specified between all drains and primary scuppers.
- E. Install new 1/2” gypsum cover board, four foot (4’) by eight foot (8’).
- F. Install 2-ply Modified Bitumen cold process roofing system, compatible with hot-air welding.
- G. All bitumen and mastics held back from selvage edge and end laps adhered in mastic and side laps hot-air welded with a Leister Gun or equivalent.
- H. Complete all related work for a watertight roofing system with the required 30-year warranty.

3.5 “FAIRHOPE COURTHOUSE – CONCRETE DECK”

- A. Remove existing roofing system and rigid insulation and imbedded sheet metals, down to deck.
- B. Raise and replace nailers as necessary to provide minimum eight inch (8”) flashing heights
- C. Fully adhered vapor retarder to a primed surface per manufacturer requirements.
- D. Install new polyisocyanurate insulation.
 - 1. Minimum finish thickness as specified,
 - 2. Maximum board dimension shall be two and one-half inches (2-1/2”) by four foot (4’) by four foot (4’).
- E. Install new polyisocyanurate tapered insulation crickets as specified between all drains and primary scuppers.
- F. Install new ½” gypsum cover board, four foot (4’) by eight foot (8’).
- G. Install 2-ply Modified Bitumen cold process roofing system, compatible with hot-air welding.
- H. All bitumen and mastics held back from selvage edge and end laps adhered in mastic and side laps hot-air welded with a Leister Gun or equivalent.
- I. Complete all related work for a watertight roofing system with the required 30-year warranty.

3.6 VAPOR RETARDERS (CONCRETE DECKS):

- A. Vapor Retarder: One ply specified Base Sheet or as approved by Manufacturer.

3.7 INSULATION MATERIALS:

- A. General: Provide preformed, roofing insulation boards that comply with requirements, selected from manufacturer’s standard sizes and of thicknesses indicated.
- B. Cover Board: Applied over insulation, pre-approved equivalent to “DensDeck Prime”, as manufactured by Georgia-Pacific, or “Securock Glass-Mat Roof Board” as manufactured by USG; 1/2 inch (13 mm) thick; Type X.

- C. Rigid and Tapered Polyisocyanurate Board Insulation: Rigid, cellular polyisocyanurate thermal insulation with core formed by using HCFC's as blowing agents to comply with ASTM C 1289, classified by facer type as follows:
1. Available Manufacturers:
 - a. Apache Products
 - b. Atlas Energy Products
 - c. Dow
 - d. Firestone
 - e. Primary Roofing System manufacturer.
 2. Facer Type: Type II, felt on both major surfaces.
 3. Total Minimum Thickness: Four and one-half inches (4-1/2") minimum, meeting ASHRAE 90.1, or greater minimum thickness if so indicated on the Drawings.
 - b. Steel Decks: minimum polyisocyanurate.
 4. Tapered Insulation: Use polyisocyanurate insulation tapered insulation for all taper locations indicated and where otherwise required to achieve proper slope and drainage.
 5. Tapered Insulation Crickets: Cricket dimension shall create a minimum 22 degree angle measured from drain valley line to cricket valley line.
 6. Roof Drain Sumps: Minimum forty eight inch (48") by forty eight inch (48"), one-quarter inch in 12", (1/4":12), miter cut tapered polyisocyanurate.
- E. Accessories: Provide installation accessories, joint treatments, slip sheets, and/or other materials necessary for proper installation, in compliance with manufacturer's current written instructions and recommendations.
- F. Comply with any warranty or other special requirements of manufacturer of primary roofing system which relate to insulation.

3.8 INSULATION ACCESSORIES:

- A. General: Furnish roofing insulation accessories recommended by insulation manufacturer for intended use and compatible with sheet roofing material.
- B. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions of FM 4470; Designed for screw fastening of the required insulation board to deck, tested by manufacturer for required pullout strength, and acceptable to roofing system manufacturer.
- C. Substrate Joint Tape (if required): 6 or 8 inches wide, coated, glass-fiber joint tape.

3.9 BASE PLY INSTALLATION

- A. Install (1) one SBS Base Sheet fully adhered per manufacturer's recommendations. Shingle in proper direction to shed water on each area of roof.

- B. Turn the base ply down the perimeter edge to cover wood nailers minimum two inches (2.0”).
- C. Lap ply sheet ends eight inches. Stagger end laps twelve inches minimum.
- D. Extend Ply to top of cants at wall and projection bases.
- E. Apply pressure to entire sheet including along entire side and end laps to ensure full adhesion to substrate.

3.10 MODIFIED MEMBRANE APPLICATION

- A. Install (1) one SBS Modified Bitumen Sheet fully adhered per manufacturer’s recommendations. Shingle in proper direction to shed water on each area of roof.
- B. The roll must push a puddle of adhesive in front of it with asphalt slightly visible at all side laps. Care should be taken to eliminate air entrapment under the membrane.
- C. Terminate top ply at the horizontal edge, do not turn down the vertical edge. Trowel edge to butter the leading edge.
- D. Terminate top ply in a miter-cut along hips, provide 24” wide modified bitumen “ridge cap”, in 12’ max lengths set in mastic, laps heat-welded.
- E. Apply pressure to entire top ply including along entire side and end laps to ensure full adhesion to Base Ply.
- F. Subsequent rolls of modified shall be installed across the roof as above with a minimum of 4" side laps and 8" end laps. The end laps shall be staggered twelve inches minimum. The modified membrane shall be laid in the same direction as the Base Ply, but the laps shall not coincide with the laps of the base layers.
- G. Apply adhesive no more than five feet ahead of each roll being embedded.
- H. Extend membrane to top of cants.
- I. HEAT WELD all side laps, and seal end laps with asphalt mastic.
 - 1. Scratch granules into membrane compound with a torch, prior to adhering end laps.

3.11 HVAC CURBS

- A. Curbs shall be raised to provide 8” minimum flashing height after insulation system installation.

- B. **Disconnect** electrical conduit from exhaust fan motors.
- C. Raise curbs with additional nailers attached to top of curb.
- D. **Reconnect** electrical conduit to fan motors.

3.12 **ROOF DRAINS**

- A. **Replace missing drain strainers with new cast aluminum strainers.**
- B. Replace broken clamping rings with new.
- C. Install flexible flashing and membrane strippings per manufacturer detail, set in asphalt mastic that is carried onto drain bowl.

3.13 **FLASHING MEMBRANE INSTALLATION (GENERAL)**

- A. All vertical membrane flashings shall be cold process to control bleedout.
- B. All curb, wall and parapet flashings shall be sealed with an application of mastic and mesh on a daily basis. No condition should exist that will permit moisture entering behind, around, or under the roof or flashing membrane.
- C. Prepare all walls, penetrations and expansion joints to be flashed and where shown on the drawings, with asphalt primer at the rate of one gallon per 100 square feet.
- D. The modified membrane will be used as the flashing membrane and will be adhered to an underlying base flashing ply, and nailed off 8" O.C. at all vertical surfaces.
- E. The entire sheet of flashing membrane must be solidly adhered to the substrate.
- F. Seal all vertical laps of flashing membrane with a three course application of aluminized mastic and fiberglass mesh.
- G. Counter flashing, cap flashings, expansion joints, and similar work, shall be installed where recommended by Manufacturer for its Warranty issue.
- H. Roof accessories, miscellaneous sheet metal accessory items, including piping vents and other devices to be coordinated with modified bituminous roof system work are in other sections.

3.14 **CLEANING**

- A. Remove drippage of bitumen from all walls, windows, floors, ladders, and finished surfaces.
- B. Remove loose debris from grounds **at the end of each work day.**

3.15 FINAL INSPECTION

- C. At completion of roofing installation and associated work, Contractor shall provide written notification to Architect, Owner and Manufacturer of completed work status and request a punch list.
- D. All respective parties shall provide a copy of their punch lists to Contractor within 10 days of contractor's written request.
- E. Manufacturer shall provide unlimited follow up site visits until it issues written acceptance of the completed work and intention to warranty, copy to Architect, Owner and Contractor.

END OF SECTION 07550 – MODIFIED BITUMEN ROOFING

SECTION 07600 - FLASHING AND SHEET METAL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to work of this Section.

1.2 SUMMARY:

- A. This Section includes sheet metal flashing profiles for membrane reroofing, retrofit roofing, membrane roof restorations and shingle roofing.

1.3 SUBMITTALS:

- A. General: Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections.
- B. Product data for Flashing, Sheet Metal and Accessories: Manufacturer's current technical product data, installation instructions and general recommendations for each specified sheet material, fabricated product, coating system, and color selection data.
- C. Upon request, provide samples of the following flashing, sheet metal, and accessory items:
 - 1. 12-inch-long samples of factory-fabricated products exposed as finished work. Provide complete with specified factory finish.
 - 2. Physical samples for color selections, where color selection is required.
- D. Shop drawings showing layout, profiles, methods of joining, and anchorages details, including major counterflashings, trim/fascia units, expansion joint systems, and other fabricated work. Provide layouts at 1/4-inch scale and details at 3-inch scale.
- E. Provide written assurance each sheet metal product is to be incorporated into the roofing warranty.

1.4 PROJECT CONDITIONS:

- A. Coordinate work of this section with interfacing and adjoining work for proper sequencing of each installation. Ensure best possible weather resistance and durability of work and protection of materials and finishes.

1.5 WARRANTY:

- A. Sheet metal flashing watertightness shall be warranted by the primary membrane roof manufacturer.
- B. Provide twenty (20) year finish warranty.

PART 2 - PRODUCTS

2.1 ROOFING SHEET METAL, TRIM UNITS, & FLASHING

- A. Provide sheet metal flashing compliant with IBC 1504 and ANSI-SPRI ES-1, and in compliance with 01360 manufacturer warranty certifications.
- B. Fabricate of **minimum 24-gauge** metal, with minimum 40,000 p.s.i. yield, with **2-coat** full strength (70-percent) Kynar 500 resin finish.
- C. Provide one of the following base metals, to be the same base metal used for other sheet metal applications and systems:
 - 1. ASTM A 792 aluminum-zinc allow coated steel sheet (“Galvalume”), or
 - 2. ASTM A 653, G-90 (galvanized) zinc-coated steel sheet.
- D. Sheet Metal Profiles:

1. Coping/Curb Caps	24 gauge Kynar standard finish G90 steel.
2. Counterflashings	24 gauge Kynar standard finish G90 steel.
3. Plumbing Vent Flashings	4lb lead
4. Pitch Pans & Bonnets	24 gauge Kynar standard finish G90 steel.
5. Continuous Cleats	22 gauge steel, G90 mil finish or one gauge thicker than fascia.
6. Gutter & Downspouts:	24 gauge Kynar standard finish G90 steel.
7. Metal Edge:	24 gauge Kynar standard finish G90 steel or as specified on Plans if a thicker gauge.
- E. Colors: As selected by Owner after Bid Date, from manufacturer’s standard non-metallic colors; Minimum 15 colors to selection.

2.2 FASTENERS

- A. Sheet Metal to Wood, Imbedded; 3/8” head, #10, 1-1/4” length, hot-dip galvanized.
- B. Sheet Metal to Wood, Exposed; #12-14 HWH Sheet Metal Screw with neopreme washer, 1-1/4” length, hot-dip galvanized or FM coating.

2.3 LEAD FLASHING (AT PLUMBING VENT STACKS):

- A. 4-pound lead sheet, fabricated to extend 4 inches minimum onto roof and turn down 1 inch minimum down inside vent stacks.
 - 1. For metal roofing, provide counterflashing over vent stacks, curbs, and other penetrations' flashings in same material and color as metal roofing.

2.4 MISCELLANEOUS MATERIALS AND ACCESSORIES:

- A. Solder:
 - 1. For use with steel or copper: Provide 50 - 50 tin/lead solder (ASTM B 32), with rosin flux.
 - 2. For use with stainless steel: Provide 60 - 40 tin/lead solder (ASTM B 32), with acid-chloride type flux, except use rosin flux over tinned surfaces.
- B. Fasteners: Same metal as flashing/sheet metal or other non-corrosive metal as recommended by sheet manufacturer. Match finish of exposed heads with material being fastened.
- C. Bituminous Coating: SSPC - Paint 12, solvent-type bituminous mastic, nominally free of sulfur, compounded for 15-mil dry film thickness per coat.
- D. Mastic Sealant: Polyisobutylene; nonhardening, nonskinning, non-drying, nonmigrating sealant.
- E. Elastomeric Sealant: Generic type recommended by manufacturer of metal and fabricator of components being sealed and complying with requirements for joint sealants as specified in Section 07900 - "Joint Sealers."
- F. Metal Accessories: Provide sheet metal clips, straps, anchoring devices, and similar accessory units as required for installation of work, matching or compatible with material being installed, noncorrosive, size and gage required for performance.

2.5 FABRICATED UNITS:

- A. General Metal Fabrication: Shop-fabricate work to greatest extent possible. Comply with details shown and with applicable requirements of SMACNA "Architectural Sheet Metal Manual" and other recognized industry practices. Fabricate for waterproof and weather-resistant performance, with expansion provisions for running work, sufficient to permanently prevent leakage, damage, or deterioration of the work. Form work to fit substrates. Comply with material manufacturer instructions and recommendations for forming material. Form exposed sheet metal work without excessive oil-canning, buckling, and tool marks, true to line and levels indicated, with exposed edges folded back to form hems.
 - 1. Provide matching materials and finish for fascia metal covering, flashing, counterflashing and trim.

- B. Seams: Fabricate nonmoving seams in sheet metal with standing seam at exposed tops and lapped side or edge seams. For metal other than aluminum, tin edges to be seamed, form seams, and solder. Form aluminum seams with epoxy seam sealer. Pop-riquet joints for additional strength where required and at vertical faces.
- C. Separations: Provide for separation of metal from noncompatible metal or corrosive substrates by coating concealed surfaces at locations of contact, with bituminous coating or other permanent separation as recommended by manufacturer/fabricator.

PART 3 - EXECUTION

3.1 INSTALLATION REQUIREMENTS:

- A. General: Except as otherwise indicated, comply with manufacturer's current written installation instructions and recommendations, with SMACNA "Architectural Sheet Metal Manual," and reviewed submittals and shop drawings.
 - 1. Install manufactured, bought-out items in accordance with manufacturer's current written instructions and recommendations.
 - 2. Anchor units of work securely in place by methods indicated, providing for thermal expansion of metal units; conceal fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weatherproof.
- B. Underlayment: Where stainless steel or aluminum is to be installed directly on cementitious or wood substrates, install a slip sheet of red rosin paper and a course of polyethylene underlayment.
- C. Bed flanges of work in a thick coat of bituminous roofing cement where required for waterproof performance.
- D. Install counterflashing in reglets, by snap-in seal arrangement for anchorage and filling reglet with mastic or elastomeric sealant, as indicated and depending on degree of sealant exposure, or if not indicated, as recommended by referenced standards, flashing and roofing manufacturers, and otherwise as required for the intended application.
- E. Flashing:
 - 1. Comply with manufacturer's current written instructions and recommendations for installation of all systems components in all applications indicated on the Drawings, and as otherwise required by project conditions.
 - 2. At any parapet wall and roof curbs applications, extend flashing continuous, over top of wall or curb, and turn down one inch (1")

minimum on exterior side of wall and mechanically anchor in place at side of top of wall, below and concealed by continuous metal clip anchor (acting as termination bar) and metal cap flashing or coping, and down over top edge of roofing flashing material at roof side.

3.2 CLEANING AND PROTECTION:

- A. Clean exposed metal surfaces, removing substances that might cause corrosion of metal or deterioration of finishes.
 - 1. Repair damaged metal and metal finishes air-drying touch-up paint.
 - 2. Replace damaged flashing and sheet metal work which cannot be repaired and when finish repair and restoration is not acceptable to Engineer.
- B. Protection: Advise Contractor of required procedures for surveillance and protection of flashings and sheet metal work during construction to ensure that work will be without damage or deterioration other than natural weathering at time of Substantial Completion.

3.3 SCOPE

- A. Reroofing: Remove and discard existing sheet metal flashing and install new.
- B. Restorations:
 - 1. Take photographs of condition of all existing sheet metal. Damaged sheet metal will be assumed to have occurred during this Work.
 - 2. Protect and re-use all existing sheet metal flashing.
 - 3. Replace existing sheet metal flashing damaged during the Work.

3.4 COUNTERFLASHINGS

- A. Remove existing counterflashing and clean residual sealants from walls.
- B. Install new counterflashing per manufacturer's shop drawings and warranty requirements.
- C. Surface Mount Counterflashing;
 - 1. Fabricate new counterflashing profile per manufacturer's shop drawings and warranty requirements.
 - 2. Provide 45 degree brake angle for caulk receiver.
 - 3. Install 1.0" butyl tape to backside of counterflashing.
 - 4. Mechanically fasten 8" oc.
 - 5. Apply sealant into caulk receive.
- D. Fascia Counterflashing;
 - 1. Fabricate new counterflashing matching existing profile.

3.5 PLUMBING VENTS

- A. Remove existing plumbing vent flashing and install new prefabricated plumbing vent flashing per manufacturer's shop drawings and warranty requirements.

3.6 METAL EDGE

- A. Reroofing; Remove existing metal edge flashing and install new metal edge flashing per manufacturer's shop drawings and warranty requirements.
- B. Repairs and Restorations; Replace only where identified on Plans.

3.7 GUTTERS AND DOWNSPOUTS

- A. Where identified on Plans, remove and replace gutters and downspouts matching existing profile and in compliance with SMACNA.

3.8 METAL COPING

- A. Repairs and Restorations; Existing Coping to remain in place.
 - 1. New Metal Skirts; Install metal skirt counterflashing behind coping fascia where membrane flashing is to be replaced below.
- B. Reroofs; Existing coping to be replaced with new.
- C. Install new metal coping per code, manufacturer's shop drawings and warranty requirements.

END OF SECTION 07600 - FLASHING AND SHEET METAL

State of Alabama)

County of Baldwin)

CONTRACT FOR PROFESSIONAL & CONSTRUCTION SERVICES

This Contract for **Professional and Construction** Services is made and entered into by and between the County of Baldwin (hereinafter called "COUNTY") acting by and through its governing body, the Baldwin County Commission, and _____ (hereinafter referred to as "PROVIDER").

WITNESSETH:

Whereas,

Whereas,

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein contained the sufficiency of which being hereby acknowledged, PROVIDER and COUNTY do hereby agree as follows:

- I. Definitions. The following terms shall have the following meanings:
 - A. COUNTY: Baldwin County, Alabama
 - B. COMMISSION: Baldwin County Commission
 - C. PROVIDER:
- II. Obligations Generally. The COUNTY hereby retains, and the PROVIDER agrees to perform for the COUNTY, those services as hereinafter set forth. This document shall serve as the binding contract for the services of PROVIDER. PROVIDER shall immediately commence performance of the services outlined herein upon full execution of this Contract. All work shall be commenced and completed in a timely manner as, and at the times, herein set out.
- III. Recitals Included. The above recitals and statements are incorporated as part of this Agreement and shall have the effect and enforceability as all other provisions herein.
- IV. Professional Qualifications. For the purpose of this Contract, the PROVIDER represents and warrants to the COUNTY that it possesses the professional,

technical, and administrative personnel with the specific experience and training necessary to provide the professional services required herein.

- V. No Prohibited Exclusive Franchise. The COUNTY neither perceives nor intends, by this Contract, a granting of an exclusive franchise or violation of Art. I, Section 22 of the Alabama Constitution.
- VI. Representation/Warranty of Certifications, Etc. PROVIDER represents and warrants that PROVIDER is presently certified, licensed and otherwise permitted under all necessary and applicable laws and regulations to perform the services herein, and that PROVIDER shall renew, maintain, and otherwise ensure that all such certifications, licenses, and permits are current and valid, without interruption, for and through completion of the services. The representation and warranty aforesaid is a material inducement to the COUNTY in entering this Contract, and the parties agree that the breach thereof shall be deemed material at the County's option.
- VII. Legal Compliance. PROVIDER shall at all times comply with all applicable Federal, State, local and municipal laws and regulations.
- VIII. Independent Contractor. PROVIDER acknowledges that it is an independent contractor, and PROVIDER shall at all times remain as such in performing the services under this Contract. PROVIDER is not an employee, servant, partner, or agent of the COUNTY and has no authority, whether express or implied, to contract for or bind the COUNTY in any manner. The parties agree that PROVIDER shall be solely responsible for and shall have full and unqualified control over developing and implementing its own means and methods, as it deems necessary and appropriate in providing the aforementioned services, and that the COUNTY's interests herein are expressly limited to the results of said services. PROVIDER is not entitled to unemployment insurance benefits, and PROVIDER is responsible for and obligated to pay any and all federal and state income tax on any monies paid pursuant to this Contract.
- IX. No Agency Created. It is neither the express nor the implied intent of PROVIDER or COUNTY to create an agency relationship pursuant to this Contract. Therefore, the PROVIDER does not in any manner act on behalf of COUNTY and the creation of such a relationship is prohibited and void.
- X. Unenforceable Provisions. If any one or more of the provisions contained herein shall, for any reason, be held to be invalid, illegal or unenforceable in any respect, then such provision or provisions shall be deemed severable from the remaining provisions hereof, and such invalidity, illegality or unenforceability shall not affect any other provision hereof. This Contract shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

- XI. Entire Agreement. This Contract represents the entire and integrated agreement between COUNTY and PROVIDER and supersedes all prior negotiations, representations, or agreements, either written or oral. This Contract may be amended only by written instrument signed by all parties.
- XII. Failure to Strictly Enforce Performance. The failure of the COUNTY to insist upon the strict performance of any of the terms, covenants, agreements and conditions of this Contract shall not constitute, and shall never be asserted by PROVIDER as constituting, a default or be construed as a waiver or relinquishment of the right of the COUNTY to thereafter enforce any such term, covenant, agreement, or condition, but the same shall continue in full force and effect.
- XIII. Assignment. This Contract or any interest herein shall not be assigned transferred or otherwise encumbered by PROVIDER without the prior written consent of the COUNTY, which may be withheld or granted in the sole discretion of the COUNTY.
- XIV. Ownership of Documents/Work. The COUNTY shall be the owner of all copyright or other intellectual property rights in reports, documents and deliverables produced and paid for under this Contract, and to the extent permitted by Alabama law, any such material may be reproduced and reused at the discretion of the COUNTY without payment of further consideration. PROVIDER shall not transfer, disclose, or otherwise use such information for any purpose other than in performance of the services hereunder, without the COUNTY's prior written consent, which may be withheld or granted in the sole discretion of the COUNTY.
- XV. Notice. Notice required herein shall be in writing, unless otherwise allowed, and said notice shall be deemed effective when received at the following addresses:

PROVIDER:

COUNTY: Baldwin County Commission
c/o Chairman
312 Courthouse Square
Suite 12
Bay Minette, AL 36507

- XVI. Services to be Rendered. PROVIDER is retained by the COUNTY as a professionally qualified Contractor. The general scope of work for the services shall include all the terms and Conditions of "**Competitive Bid #WG25-**

29”, the same being expressly incorporated herein by reference, and without limitation will encompass:

“Competitive Bid #WG25-29 – Labor and Incidental Materials for Roof Replacement & Maintenance to Various County Buildings for the Baldwin County Commission”.

- A. PROVIDER will provide ongoing communications with COUNTY regarding this service, including updates, emails and etc. as requested. Additionally, PROVIDER will meet with COUNTY as needed or requested.
- B. PROVIDER is responsible for the professional quality, technical accuracy, timely completion and coordination of all services furnished by or in relation to this Contract.
- C. PROVIDER represents and warrants that its services shall be performed within the limits and standards provided by the COUNTY, in a manner consistent with the level of care and skill ordinarily exercised by similar providers under similar circumstances at the time the services are performed.

XVII. General Responsibilities of the COUNTY.

- A. The COUNTY shall provide reasonable notice to PROVIDER whenever the COUNTY actually observes or otherwise actually becomes aware of any development that affects the scope or time of PROVIDER’s services hereunder or any defect or nonconformance in the work of PROVIDER.
- B. The COUNTY shall pay to PROVIDER the compensation as, and subject to the terms set out below.

XVIII. Termination of Services. The COUNTY or PROVIDER may terminate this contract, with or without cause or reason, by giving ten (10) days written notice of such to the other party. Upon receipt of such notices, PROVIDER shall discontinue its work to the extent specified in the notice.

In the event of termination, the COUNTY shall pay PROVIDER for all services satisfactorily rendered, and for any expenses deemed by COUNTY to be a reimbursable expense incurred pursuant to this Contract and prior to the date of termination.

XIX. Compensation Limited. The compensation to be paid to the PROVIDER shall be the full compensation for all work performed by PROVIDER under this Contract. Any and all additional expenditures or expenses of PROVIDER, not

listed in full within this Contract, shall not be considered as a part of this Agreement and shall not be demanded by PROVIDER or paid by COUNTY.

XX. Direct Expenses. Compensation to PROVIDER for work shall be paid per _____. Said compensation shall be all inclusive, including without limitation, reimbursement of all cost, incidentals and operating expense associated with those directly engaged in performance of the requested services.

XXI. Method of Payment. PROVIDER shall submit invoices to the COUNTY for payment for work performed. Such invoice shall be accompanied by a detailed account of compensation to be paid PROVIDER.

Payment shall be made by the COUNTY within thirty (30) days of the approval of the invoice submitted by the PROVIDER. The COUNTY agrees to review and approve invoices submitted for payment in a timely manner.

XXII. Effective and Termination Dates. This Contract shall be effective and commence immediately upon the same date as its full execution and shall terminate upon either the expiration of not more than **one hundred and twenty (120) days** after the Notice to Proceed is given or upon a written notification thereof received by either party within the required ten (10) day period. [Nothing herein stated shall prohibit the parties from otherwise terminating this Contract according to the provisions herein.]

XXIII. Force Majeure. The Parties hereto shall incur no liability to the other if performance becomes impossible or impracticable by reason on an event or effect that the parties could neither have anticipated nor controlled. This allowance shall include both an act of nature and acts of third parties. Any costs that would otherwise be incurred and/or necessitated by the provisions herein shall be alleviated for either party by such event or effect.

XXIV. Indemnification. Provider shall indemnify, defend and hold County and its Commissioners, affiliates, employees, agents, and representatives (collectively "County") harmless from and against any and all claims, demands, liabilities, damages, losses, judgments, costs, and expenses including, without limitations, attorneys' fees, for any and all personal injury (including death) and property damage of any kind or nature whatsoever, incurred by, asserted against, or imposed upon County, as a result of or in any manner related to provision of services hereunder, or any act or omission, by Provider. Contractor shall provide the COUNTY with proof of general liability coverage including the COUNTY as an additional insured. This indemnification shall survive the expiration of this Contract.

XXV. Number of Originals. This Contract shall be executed with three originals, all of which are equally valid as an original.

- XXVI. Governing Law. This Contract in all respects, including without limitation its formation, validity, construction, enforceability and available remedies, shall be governed by the laws of the State of Alabama, without regard to Alabama conflict of law principles.
- XXVII. Insurance. Prior to performing services pursuant to this Contract, Provider shall carry, with insurers satisfactory to County, throughout the term of hereof, Auto Liability Insurance, including owned, hired and non-owned vehicles, with limits of not less than \$1,000,000, combined single limit, for both bodily injury liability and property damage liability each occurrence; Commercial General Liability Insurance, including all contractual liability hereunder, with limits not less than \$1,000,000, combined single limit, for both bodily injury liability and property damage liability each occurrence, and Worker's Compensation Insurance, meeting the statutory limits of the State of Alabama and Employer's Liability Insurance fully covering all employees and supervisors participating in the work at the subject property site. All liability insurance shall name the County as an additional insured. Prior to commencing operations hereunder, a Certificate of Insurance evidencing such coverage, satisfactory to County, shall be furnished to County, which shall specifically state that such insurance shall provide for at least ten (10) days' notice to County in the event of cancellation, termination or any change in such insurance policies. The workers compensation certificate shall bear an endorsement clearly evidencing a waiver of the right of subrogation against County and County Representatives. Should Provider fail to furnish current evidence upon demand of any insurance required hereunder, or in the event of cancellation, termination or change in any such insurance, County may, at its option, suspend this Contract until insurance is obtained, terminate this Contract immediately without further action, or hold Provider in material default and pursue any and all remedies available.
- XXVIII. Surety: As a material inducement for the County to enter this Contract, any and all bond and/or surety guarantees required by the County in reference to the Project shall be in a form acceptable to the County and shall, without limitation, meet the following requirements:
- (a) Acceptance of Surety. The bond and/or surety document must be reviewed by, and be acceptable to, County staff and approved by the County Commission. In the event that such document is not in an acceptable form at any time prior to or during the effectiveness of this Contract, the services and/or work described in this Contract shall either not commence or immediately cease, depending on the situation. Any project delay that is attributable to the County's acceptance, or non-acceptance, of the bond and/or surety document form shall in no way be consider as a delay caused by the County, and the Contractor and/or Provider waives all rights to claim that any such delay was the fault of the County.
 - (b) Value of Surety. The bond and/or surety guarantee shall be of an

amount equal to or greater than 100 percent of the total cost identified in the bid response.

(c) Term of Surety. Any bond and/or surety guarantees required by the County must be valid at all times during the life of this Contract. Notwithstanding anything written or implied herein to the contrary, in no event shall the bond and/or surety document lapse, terminate, expire, or otherwise become invalid prior to the County, or the County's authorized agent, providing a written Notice to the Provider/Contractor that the Project is in fact completed in all respects. Said Notice from the County or its authorized agent shall not be provided until the County, in its sole discretion, is satisfied that the Project is complete in all respects.

(d) Scope of the Surety. The terms and provisions of any bond and/or surety guarantee provided as part of this Project shall in all respects, without limitation, be consistent and in agreement with, the provisions of this Contract. In the event that the bond and/or surety guarantee is in conflict with this Contract, this Contract shall govern. Neither this section nor this provision limits the duties of the Provider/Contractor to satisfy all of the requirements in this Contract.

XXIX. Title 39/Code of Alabama Compliance. As a condition of any Bid Award and the respective contract(s) pursuant thereto, the County places full reliance upon the fact that it is the sole responsibility of any contractor, person or entity entering into such a contract with Baldwin County for the prosecution of any public works, to ensure that they and/or any of their respective agents comply with all applicable provisions of Title 39-1-1 et seq. Code of AL 1975. More specifically, any contractor, person or entity entering into such a contract with Baldwin County for the prosecution of any public works shall be in compliance with, and have full knowledge of, the following provisions of Title 39:

“(f) The Contractor shall, immediately after the completion of the contract give notice of the completion by an advertisement in a newspaper of general circulation published within the city or county in which the work has been done, for a period of three successive weeks. A final settlement shall not be made upon the contract until the expiration of 30 days after the completion of the notice. Proof of publication of the notice shall be made by the contractor to the authority by whom the contract was made by affidavit of the publisher and a printed copy of the notice published . . .” §39-1-1(f) Code of AL 1975.

“(g) Subsection (f) shall not apply to contractors performing contracts of less than fifty thousand (\$50,000) in amount. In such cases, the governing body of the contracting agency, to expedite final payment, shall cause notice of final completion of the contract to be published one time in a newspaper of general circulation, published in the county of the contracting agency and shall post notice of final completion on the agency's bulletin board for one week, and shall require the contractor to certify under oath that all bills have been paid in full. Final

settlement with the contractor may be made at any time after the notice has been posted for one entire week.” §39-1-1 (g) Code of AL 1975.

XXX. The public works project which is the subject of this invitation to bid is 100% funded by the Baldwin County Commission.

NOTE: Any failure to fully comply with this section or any applicable laws of the State of AL shall be deemed a material breach of the terms of both the Bid Award and the Respective contracts resulting there from. Furthermore, Baldwin County takes no responsibility for resulting delayed payments, penalties, or damages as a result of any failure to strictly comply with Alabama Law.

IN WITNESS WHEREOF, the parties hereto have executed this contract on the last day of execution by the COUNTY as written below.

COUNTY

ATTEST:

MATTHEW P. MCKENZIE /Date
Chairman

ROGER H. RENDLEMAN /Date
County Administrator

State of Alabama)

County of Baldwin)

I, _____ Notary Public in and for said County, in said State, hereby certify that, Matthew P. McKenzie, whose name as Chairman of Baldwin County Commission, and Roger H. Rendleman, whose name as County Administrator, are known to me, acknowledged before me on this day that, being informed of the contents of the Contract for Professional and Construction Services, they, as such officers and with full authority, executed same knowingly and with full authority to do so on behalf of said Commission.

Given under my hand and official seal, this the ____ day of _____, 2025

Notary Public
My Commission Expires

SIGNATURE & NOTARY PAGE TO FOLLOW

PROVIDER:

Insert Provider Name Here

_____/_____
By _____/Date
Its _____

State of Alabama)

County of Baldwin)

I, _____ Notary Public in and for said County and State, hereby certify that _____ as _____ of _____, whose name is signed to the foregoing in that capacity, and who is known to me, acknowledged before me on this day that, being informed of the contents of the foregoing, he executed the same voluntarily on the day the same bears date for and as an act of said _____.

GIVEN under my hand and seal on this the _____ day of _____, 2025.

Notary Public
My Commission Expires