

# **INVITATION TO BID**

Sealed bids subject to the conditions contained herein, will be received by the City of Foley until 10:00 a.m. CST on Tuesday, June 25, 2019 and then publicly opened and read in the City of Foley Council Chamber, 407 East Laurel Avenue, Foley, Alabama 36535 for furnishing all labor, incidental materials and performing all work for:

#### FOLEY LIBRARY ROOF AND MASONRY RESTORATION LABOR & INCIDENTAL MATERIAL CONTRACT Requisition No. ENG-062519

Drawings & specifications may be obtained at Foley City Hall, 407 East Laurel Avenue, Foley, Alabama, 36535, by calling (251) 943-1545, or, the bid may be downloaded from the City's website at http://www.cityoffoley.org.

A mandatory pre-bid meeting will be held in the Council Chambers at Foley City Hall at 10:00 a.m. CST on Tuesday, June 18, 2019. In the pre-bid meeting, the City will review the scope of work and the desired result. <u>Immediately following the pre-bid meeting, a site visit will be made.</u>

To be eligible for consideration, bids must be submitted on complete original proposal forms found in the Bid package. The specifications and all executed bid forms must be submitted in a sealed envelope, clearly marked, identifying the bid and the date of the bid opening. The Bidder's Alabama State Contractor's License Number shall be on the outside of the envelope. If hand delivering, the bid envelope must be "Date and Time" stamped at the receptionist's desk when the bid packages are turned in. It shall be the sole responsibility of the bidder to assure receipt of the bid at the Foley City Hall prior to the published time for the bid opening.

The City of Foley reserves the right to accept or reject any or all bids and to waive technical errors if, in the City's judgment, the best interests of the City will thereby be promoted.

# Rachel Keith

Project Manager City of Foley, Alabama

#### BID FORM CITY OF FOLEY, ALABAMA OFFICE OF PURCHASING AGENT

#### REQUISITION NO. ENG-062519 BIDS TO BE OPENED AT: 10:00 A.M. DATE: TUESDAY, JUNE 25, 2019

Sealed bids will be received by the City of Foley, Alabama, at its office in Foley until the above date and time, and then opened as soon thereafter as practicable.

Kachel &	reith
Project Manag	er
***************************************	

SPECIFICATIONS: SEE ATTACHED

If you are unable to furnish an item as specified and desire to offer a substitute, give full description of the item. No errors will be corrected after bids are opened. Substitutions will be treated as "approved equivalent or equal" which is discussed in paragraph 1.05 of the bid documents *GENERAL CONDITIONS*. Please refer to Paragraph 1.05 prior to offering any substitutions. No prices shall include State or Federal Excise Tax. Tax exemption certificates furnished upon request. City reserves the right to accept or reject all bids or any portion thereof.

We are in a position to complete this project per the attached quote within \_\_\_\_\_ days after

receipt of notice to proceed. Any attachment hereto is made and becomes a part of this inquiry and must be signed by Bidder.

I hereby affirm I have not been in any agreement or collusion among bidders or prospective bidders in restraint of freedom of competition, by agreement to bid at fixed price or to refrain from bidding, or otherwise. I am not currently engaged in, nor will engage in, any boycott of a person or entity based in or doing business with a jurisdiction with which the State of Alabama can enjoy open trade.

THIS BID MUST BE NOTARIZED	FIRM:
Sworn to and subscribed before me this the day of , 2019.	BY: Signature accepted in ink only
	STREET ADDRESS:
NOTARY PUBLIC	CITY: STATE:
BIDS MADE OUT IN PENCIL <u>WILL NOT</u> BE ACCEPTED.	TERMS: FOR CASH PAYMENT WITHOUT REGARD TO DATE OF REMITTANCE
ALL BIDDERS MUST USE OUR BID FORM	(S). REQUISITION NUMBER AND OPENING DATE AND T

ALL BIDDERS MUST USE OUR BID FORM(S). REQUISITION NUMBER AND OPENING DATE AND TIME MUST BE PRINTED ON THE OUTSIDE OF THE SEALED ENVELOPE ALONG WITH CURRENT STATE OF ALABAMA GENERAL CONTRACTORS LICENSE NUMBER (If applicable). IF SUBMITTING MORE THAN ONE BID, EACH BID MUST BE IN SEPARATE ENVELOPES.



# FOLEY LIBRARY ROOF AND MASONRY RESTORATION LABOR & INCIDENTAL MATERIAL CONTRACT Requisition No. ENG-062519

The City of Foley is soliciting proposals for Foley Library Roof and Masonry Restoration. The Foley Public Library is located at 319 E. Laurel Avenue, Foley, AL 36535.

Upon receipt of bids, it will be the decision of the Foley City Council to award or not award the bid.

#### General Requirements

All public works bidders must file with their bids either a cashier's check drawn on an Alabama bank or a bid bond executed by a surety company duly authorized and qualified to make bonds in the State of Alabama and made payable to the City of Foley in the amount of five (5%) percent of the Contractor's bid but in no event more than \$10,000, and shall have a current State of Alabama General Contractors License. Furthermore, any Contractor that desires to bid as prime Contractor must have the appropriate major classifications of license per Section 230-X-.27 of the State of Alabama Licensing Board for General Contractors Administrative Code.

If awarded the bid and prior to beginning work, the Contractor is required to have a current City of Foley Business License, furnish a Certificate of General Liability Insurance and Workers Compensation Insurance, and proof of Automobile General Liability Insurance. Insurance Certificate provided to the City shall list the City of Foley as an additional insured. A performance bond and Payment Bond must be executed upon award of the bid with a penalty equal to one hundred (100%) percent of the amount of the contract price. If the successful bidder's award amount is \$50,000.00 or greater, a background check will be performed per City of Foley Ordinance No. 1029-08, General Conditions, Section 1.14.

All bidders bidding in amounts exceeding that established by the State Licensing Board for General Contractors must be licensed under the provisions of Title 34, Chapter 8, Code of Alabama, 1975, and must provide evidence by including a copy of his or her current license in the sealed envelope in which the proposal is delivered.

Proof of E-Verify documentation in the form of a copy of the signed Memorandum Of Understanding (MOU) generated upon completion of the E-Verify program shall be submitted with the bid.

It will be the Contractor's responsibility to obtain required permits and to schedule all required inspections.

#### Additional Information

All questions related to this bid must be documented through email and should be sent to Rachel Keith at rkeith@cityoffoley.org no later than 96 hours prior to the scheduled bid opening. No questions will be addressed by any means other than email. Answers will be emailed to all bidders in the event that

clarification is required. If further clarification is needed about a particular product bid or change within the bid, an Addendum will be emailed stating the change.

Bid packets may be sent or hand delivered to the City of Foley, 407 East Laurel Avenue, Foley, Alabama 36535 *or* mailed to P.O. Box 1750, Foley, Alabama 36536

Section 39-3-5, Code of Alabama, requires that preference be given to Alabama resident contractors when awarding certain public works contracts to the same extent as required by the laws of a non-resident bidder's home state: "In awarding the Contract, preference will be given to Alabama resident contractors and a nonresident bidder domiciled in a state having laws granting preference to local contractors shall be awarded the Contract only on the same basis as the nonresident bidder's state awards contracts to Alabama contractors bidding under similar circumstances.".



# **GENERAL CONDITIONS**

To insure acceptance, all bidders submitting bids to the City of Foley shall be governed by the following conditions, attached specifications, and bid form(s) unless otherwise specified. Bids <u>not</u> submitted on the bid form(s) provided may be rejected, and bids <u>not</u> complying with these conditions will be subject to rejection.

#### 1.0 Intent of Specifications:

It is the intent of the specifications attached hereto to set forth and describe certain item(s) or service(s) to be purchased by the City of Foley including all materials, equipment, machinery, tools, apparatus, and means of transportation (meaning freight costs) necessary to provide these items or services.

#### 1.01 Legal Requirements:

All applicable provisions of Federal, State, County and local laws including all ordinances, rules and regulations shall govern the development, submittal and evaluation of all bids received in response to these specifications, and shall govern any and all claims between person(s) submitting a bid response hereto and the City of Foley, by and through its officers, employees and authorized representatives. A lack of knowledge by the bidder concerning any of the aforementioned shall not constitute a cognizable defense against the legal effect thereof.

#### 1.02 <u>Sealed Bids</u>:

The specifications and all executed bid forms must be submitted in a sealed envelope. All proposals must be signed by an authorized representative of the bidder. In the event more than one bid opening is scheduled for the same date and time, do not include bids concerning different sets of specifications within the same envelope. The face of the envelope shall be plainly marked identifying the bid requisition number and opening date and time. It shall be the sole responsibility of the bidder to assure receipt of bid at the Purchasing Office prior to the published time for the bid opening. No bid will be opened that is received after closing time for receipt of bids, nor will any offers by telephone, fax, or any electronic means be accepted.

#### 1.03 Exceptions to Specifications:

During the drafting of written specifications, a sincere effort is made to describe products and services best suited to the needs of the City; however, in order that fair consideration is given in evaluating bids, all exceptions to or deviations from the specifications as written must be noted and fully explained. The Mayor and City Council are the final authority in determining the acceptability of any exceptions to specifications.

#### 1.04 Discounts:

Terms offering a discount for prompt payment will be considered in determining the low bid. The discount period shall begin whenever (1) the conditions of the specifications have been fully met and the product or service judged acceptable to the City of Foley or (2) a correct invoice and other required documents have been received, whichever is later. Discounts offered for a period of less than thirty (30) days will not be considered in determining the low bid.

#### 1.05 Approved Equivalents or Equals:

Any manufacturer's names, trade names, brand names, model numbers, etc. listed in the specifications are for information only and not intended to limit competition. The bidder may offer any brand for which he is an authorized representative that meets or exceeds the specifications as written. If the bid is based on an "approved equivalent or equal" item, supportive information in the form of manufacturer's printed literature or brochures, sketches, diagrams and/or complete specifications must accompany the bid. The bidder must explain in detail the reasons why the proposed equivalent or equal will meet specifications and not be considered an exception thereto. The City of Foley reserves the right to determine acceptance of proposed equivalent or equal item.

#### 1.06 <u>Bid Withdrawals</u>:

Bids may be withdrawn by written request received from bidders prior to the time fixed for opening but no bid may be withdrawn after closing time for receipt of bids for a period of sixty (60) days. Negligence on the part of the bidder in preparing the bid confers no right for the withdrawal of the bid after it has been opened.

#### 1.07 <u>Rejection of Bids</u>:

The City of Foley reserves the right to accept or reject any or all bids, to award bids on a split-order basis, to waiver any minor bid irregularities, technicalities, or informalities, and to re-advertise for bids when deemed in the best interest of the City of Foley.

If there is any reason for believing that collusion exists among the bidders, any or all proposals may be rejected, and those participating in such collusion may be barred from submitting bids on the same or other work with the City of Foley.

#### 1.08 <u>Delivery</u>:

Bid quotations shall include all freight cost to Foley, Alabama to point(s) specified herein or specified at the time the purchase order is placed. No title to the item(s) ordered nor any risk of loss shall be passed to the City of Foley until after receipt of delivery has been acknowledged by an authorized representative of the City of Foley.

1.09 <u>Taxes</u>:

The City of Foley, a Municipal Corporation, is a tax exempt entity per Section 40-23-4(11), Code of Alabama 1975. The City of Foley is exempt from all state and local sales taxes. This should <u>not</u> be construed to mean that contractors or suppliers doing business with the City of Foley are exempt from paying tax (General Conditions, Section 1.11 Permits and Taxes).

#### 1.10 Licenses, Registration and Certificates:

A City of Foley Business License must be obtained within ten days of bid award. Each bidder must provide proof of State required competency certifications whenever applicable to engage in the business of contracting (or special contracting if the work to be performed necessitates a particular type of specialty contractor) in the City of Foley.

#### 1.11 <u>Permits and Taxes</u>:

The contractor shall procure all permits, pay all charges, fees and taxes and give all notices necessary and incidental to the due and lawful prosecution of the work.

#### 1.12 <u>Compliance with Federally Funded Programs:</u>

The successful bidder shall assure the City of compliance with any and all special provisions (if applicable) contained in the contract being bid. These provisions may include but are not limited to maintaining a Drug-Free Workplace, compliance with Clean Air and Water Laws and Regulations, and compliance with Equal Opportunity and Non-Segregated Facilities guidelines.

#### 1.13 Proof of Liability & Worker's Comp Insurance:

If applicable, Proof of Liability and/or Worker's Comp Insurance must be included in the bid packet. If a company is not covered by Worker's Comp Insurance, labor and material charges should be separated on the bid/proposal. This should be done in order for the City to determine the Worker's Comp rate (in accordance with the City's current Worker's Comp fee schedule) that will be deducted from payment to the company performing the work.

#### 1.14 <u>Background Check</u>:

The bid award of "Public Works" projects over \$50,000 will be contingent upon the results of a background check of the successful low bidder as stated in Ordinance No. 1029-08. According to this ordinance, the City of Foley will take criminal histories into account when deciding whether a low bidder is qualified to do work for the City.

#### 1.15 <u>Disqualification</u>:

The City can disqualify a company based upon the results of a background check or if the company has been prohibited from contracting with another government agency as stated in Ordinance No. 1029-08.

If, in the opinion of The City of Foley, a sealed bid contains false or misleading statements or references that do not support a function, attribute, capability, or condition as contended by Company, the sealed bid may be disqualified from further consideration.

#### 1.16 Expenses:

Expenses for developing sealed bids and addressing information requests herein are solely and entirely the responsibility of Company and shall not be chargeable in any manner to the City of Foley.

#### 1.17 <u>Beason-Hammon Act</u>:

Must be in compliance with the Beason-Hammon Alabama Taxpayer and Citizen Protection Act, Act No. 2011-535 dealing with immigration (Immigration Act).

#### 1.18 <u>Alabama Immigration Law</u>:

The Contractor receiving the bid award must abide by the Alabama Immigration Law (also referred to as "Act 2011-535" and codified in State law as Title 31, Chapter 13 of the Code of Alabama 1975) and as it was amended by Act #2012-491 that was signed by Governor Bentley on May 18, 2012.

#### 1.19 Local Bid Preference:

The City of Foley has accepted the local bid preference guidelines established in Act 2015-293 and allows these guidelines to be utilized when appropriate, on a case by case basis. The local preference area has been established per Resolution 15-2369-RES and is defined as the area within the police jurisdiction of the City of Foley. Bid awards may be made to local vendors in this area if their submission is within 5% of a lower bid submitted by a vendor outside of this area and a 10% preference is extended if the lower bidder is located outside the state.

#### "The City of Foley encourages all vendors to list job openings with Job Services of Alabama."

## PROJECT MANUAL

FOR

## FOLEY LIBRARY

# "ROOF AND MASONRY RESTORATION"

# LABOR & INCIDENTAL MATERIALS CONTRACT

CITY OF FOLEY, ALABAMA 407 EAST LAUREL AVE FOLEY, ALABAMA 36535

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# SECTION 00300 - BID FORM

PRO	DJECT ID:	"Foley Library Roof	and Masonry Restoration"
Bid	Date:		
BID	ТО	CITY OF FOLEY, A 407 EAST LAUREL FOLEY, ALABAMA	AVE
BID	FROM:		
H 2. H a t	Bid Price, and Substantia BIDDER acknowledges a. Bid will remain subj b. BIDDER will sign an	ally Complete within <u>4</u> that: ect to acceptance for 60 nd submit Agreement v	) days after the day of Bid opening; vithin 15 days of OWNER'S NTP;
Ĺ	Date	Numb	which is hereby acknowledged; er
	BASE BID Perform Roof and Maso	nry restoration.	<u>\$</u>
4. U	JNIT PRICING		
а			<u>\$</u>
b	<ul> <li>Remove &amp; replace w ing, per Square Foot, bid quantities, credit</li> </ul>	, in addition to base	<u>\$</u>
С	c. Remove and replace 22g Type B steel, pe addition to base bid o unused portion.	r Square Foot, in	<u>\$</u>

	d. Remove and replace deteriorated plywood, 5/8" ext. grade, per Square Foot, in addition to base bid quantities, credit unused portion.	<u>\$</u>	
5.	SUBMITTED BY:	, on	, 2019.
6.	COMPANY NAME:		

#### SECTION 00800 - SUPPLEMENTARY CONDITIONS

#### 1.0 CONTRACT TIME AND LIQUIDATED DAMAGES

- A. Contract Time: <u>45</u> Work Days, from Notice to Proceed to Substantial Completion.
- B. Liquidated Damages: Shall be \$150.00 per day and subject to the following;
  - 1. Contract Work Day defined as:
    - a. 40F and rising,
    - b. **50% or less, chance-of-precipitation, weather reporting stations:** Foley Airport, Weather Underground
    - c. Monday to Saturday.
  - 2. Substantial Completion shall occur on the Date of Manufacturer's Punch List.
  - 3. Project shall be complete after receipt of Manufacturer's Warranty.

# SECTION 01024 – QUANTITY ALLOWANCES

## 1.0 BASE BID QUANTITIES

A.	Remove and replace unbonded membrane flashing.	Include 20 LF in Base Bid.
В.	Replace deteriorated nailer for atop parapet wall w/ new (2) 2x4s sandwiched between (2) layers 5/8" plywood all components anchored 12" oc into wood and structure.	Include 50 LF in Base Bid.
C.	Remove & replace wet insulation: & roofing, 3.0" polyiso, ½" cover Board, 2 ply mod bit.	Include 100 SF in Base Bid.
D.	Remove and replace deteriorated steel deck w/ new 22 gauge Type B.	Include 30 SF in Base Bid.

### SECTION 01360 - MANUFACTURER WARRANTY CERTIFICATION

Description: IBC Code and Watertightness-Warranty DESIGN compliance document from Roof Restoration System Manufacturer, copy provided to Owner and Contractor prior to award.

- 1. Project: \_\_\_\_\_
- 2. Manufacturer:
- 3. Contractor
- 4. Definitions:
  - a. "Substrate": Any surface the new roof, wall and skylight restoration system is applied to, including existing roof membranes, deck, perimeter nailers, sheet metal and masonry walls.
  - b. "Restoration System": The complete repair system including Coatings, Sheet Metal, Prefabricated Metal Panels, Fabrics, Membranes, Adhesives, Mastics, Sealants, Primers, Attachments (fasteners), and Insulations.
- 5. SUBSTRATE: We have reviewed existing Substrates and have provided Contractor with the preparation and attachment information necessary for Restoration System application to SUBSTRATE in accordance with IBC Code, and Warranty requirements.
- 6. RESTORATION SYSTEM DESIGN: We have provided Contractor with DESIGN for Restoration System compliance with IBC Code and Warranty requirements.
- 7. WORKMANSHIP: We will support Contractor throughout installation with weekly site visits during installation, with reports noting agreement/disagreement with Contractor's workmanship per IBC Code and warranty requirements.

Sincerely,

Manufacturer Representative PRINT NAME Date

Manufacturer Representative SIGNATURE

### SECTION 07540 – ROOF AND MASONRY RESTORATION

#### PART 1 - GENERAL

### 1.1 <u>RELATED DOCUMENTS</u>:

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

#### 1.2 <u>SUMMARY</u>

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 liquid applied restoration system for field and flashings.

#### 1.3 <u>SYSTEM DESCRIPTION</u>

A. It is the intent of this specification to install a long-term liquid-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 <u>SUBMITTALS</u>

- 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
      - (1) Safety Factor: 1.65
      - (2) Test Method: ASTM E-1592.
    - c. SMACNA 5<sup>th</sup> 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 liquid 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 <u>PRE-INSTALLATION CONFERENCE</u>

- 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 liquid 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 50% 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 Owner, the manufacturer shall supply to the Owner their 10 (5+5) 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 "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 Membrane, Metal and Masonry Restorations and Replacements. Warranties from multiple Manufacturers are not acceptable.
  - 9. Standard manufacturer's warranty shall be amended to require that the Laws of the State of Alabama shall govern all such warrantees and guarantees.
- B. Contractor will submit a five year warranty using Alabama Building Commission form as specified.

## PART 2 - PRODUCTS

## 2.1 <u>ACCEPTABLE MANUFACTURERS</u>

- 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 <u>LIQUID RESTORATION SYSTEM</u>

- A. High build multi-purpose solvent-based liquid waterproofing membrane designed to maintain, restore and upgrade the performance of existing smooth-surface bituminous membranes. Note that acrylic or water-based products are not allowed.
  - 1. Density @ 77F ASTM D1475 10 lbs/gal
  - 2. Viscosity @ 77F Brookfield #5 15,000/25,000 cP
  - 3. Elongation ASTM D412 275%
  - 4.Coverage RateWet Film ThicknessDry Film Thickness4.0 gal / poly / 3.5 gal123 mils (64/11/56)100 mils
- B. Polyester: Continuous reinforcement to repair cracks, seams and joints, used in conjunction with coating.

1.	Elongation	ASTM D 1682	44%
2.	Tearing Strength	ASTM D 1682	17 lbs
3.	Tensile		75 lbs.
4.	Weight		3 oz/sq. yd

# C. Asphaltic primer: Where required by Manufacturer.

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

D. 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

E. 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 Con	ntent	5.0%

#### F. Base Sheet/Base Flashing Base Ply:

1.	Prope	rties: Finished Membrane, ASTM D-5147 at	2 in/min. @ 73.4 <u>+</u> 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

## G. Modified Membrane Field/Modified Membrane Flashing Top Ply:

1.	Proper	ties: Finished Membrane, ASTM D-5147 at	2 in/min. @ 73.4 <u>+</u> 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

## H. Cold Process Adhesive: Per manufacturer's requirements.

- I. Surfacing; white ceramic granules.
- J. Self Adhering Membrane Underlayment: per manufacturer's requirements.

## 2.3 <u>SHEET METAL</u>

- A. New metal coping to be provided and receive full warranty coverage by the manufacturer issuing warranty.
- B. Metal Type; G-90 Kynar Steel, 24 ga minimum.
- C. Continuous cleat; G90 galvanized steel, 22 ga. minimum.
- D. ANSI-SPRI ES-1 compliant.

## PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Examine substrate surfaces to receive liquid-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 <u>GENERAL INSTALLATION REQUIREMENTS</u>

- 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 <u>LEAD PLUMBING BOOTS</u>

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

## 3.5 <u>BLISTER REPAIRS</u>

- 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.

## 3.6 VERTICAL MEMBRANE FLASHING

- A. Replace unbonded membrane flashing where required for warranty.
- B. Vertical Laps; Prime substrate, apply aluminized asphalt mastic reinforced with fiberglass mesh.
- C. Horizontal Laps; Provide asphalt mastic transition from field to horizontal base of flashing for smooth transition of field polyester.
- D. Apply two coats aluminum coating at one (1) gallon per square per coat.

## 3.7 <u>REPLACE WET INSULATION</u>

- A. Remove and replace wet insulation to steel deck.
- B. Install new matching thickness insulation and cover board.
- C. Install new two ply modified bitumen roof.
- D. Include removal and replacement of drain stripping and lead flashing where included within designated "wet roof areas".
- E. Include adjacent vertical membrane flashing where within or adjacent to designated "wet roof areas".

## 3.8 <u>LIQUID-APPLIED MEMBRANE APPLICATION</u>

- 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 Base Coat throughout Field and Flashing at three and one-half (4.0) gallons per square.
- G. Apply continuous polyester reinforcement throughout roof system.

- H. Apply Top Coat throughout Field and Flashing at three and one-half (3.5) gallons per square.
- I. Surfacing;
  - 1. Broadcast ceramic granules into wet coating at sixty (60) pounds per square. Sweep all loose granules on roof and in gutters and grounds, and discard.
  - 2. Paint vertical membrane flashings with two coats manufacturer's aluminum coating at one-half (½) gallon per square, per coat.

## 3.9 MASONRY EXPANSION JOINT SEALANT

- A. Rake existing sealants and backer rod from joints.
- B. Apply removable tape to both sides of joint for cleanup.
- C. Install new sealant at 1/2" minimum depth.
- D. Tool sealant flush.
- E. Remove tape and clean away excess sealant.

#### 3.10 NEW METAL COPING

- A. Remove existing coping, membrane underlayments and cleats.
- B. Install new metal coping per manufacturer warranty and code requirements.

### 3.11 FINAL INSPECTION

- A. At completion of roofing installation and associated work Contractor shall schedule meeting with 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 a 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.

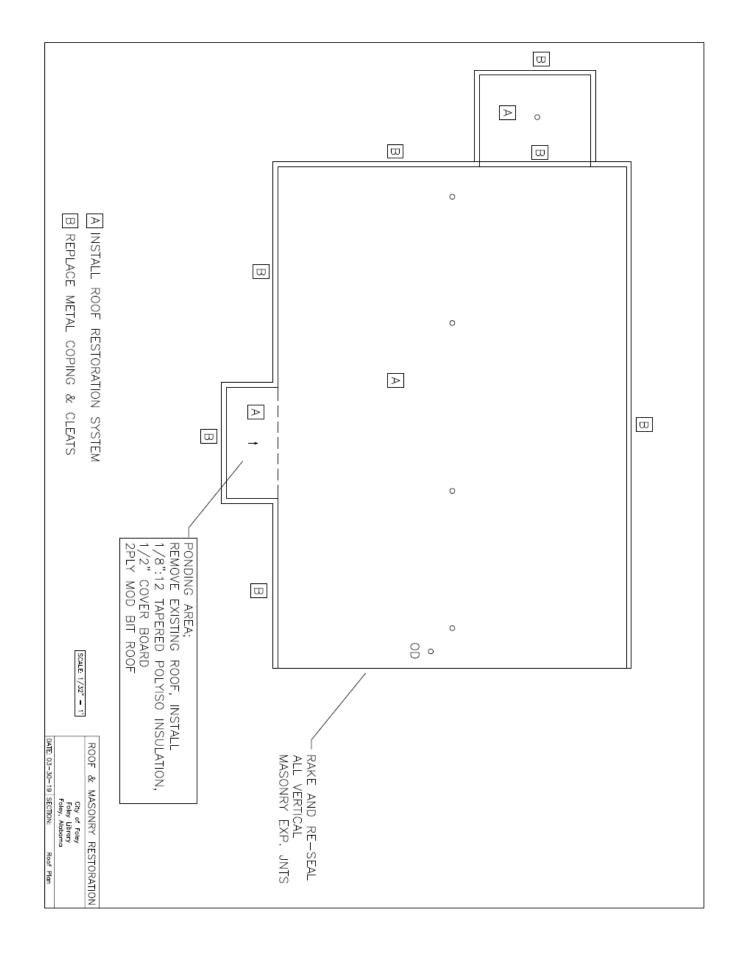
## 3.12 OWNER PURCHASED MATERIALS

A. Owner shall provide materials and quantities listed below, Contractor shall be responsible for receiving all quantities at jobsite, hoisting to rooftop, and subsequent storage.

- B. Contractor shall be responsible for purchase of any additional materials and quantities required to complete Specification and issue of manufacturer's warranty. Under no circumstances shall owner be responsible for ordering additional materials beyond those originally provided.
- C. All unused Owner-purchased materials shall remain the possession of Owner.
- D. All materials shall be kept covered from weather and set atop pallet at all times.
- E. Contractor shall be responsible for initiating and coordinating receipt of the shipment of Owner Provided Materials, including unloading and staging.

F.	Owner Provided Materials		
	Garland "Energizer K Plus FR"	5gal pail	<u>115 pails</u>
	Garland "GRIP Polyester"	10 sq roll	9 rolls
	Garland Standard Roofing Granules	60# bag	<u>82 bags</u>

#### END OF ROOF AND MASONRY RESTORATION



# City of Foley Foley Public Library Moisture Survey

407 E. Laurel Ave Foley, AL 36535

April 5, 2019



Construction & Engineering LLC 5815 I-10 Industrial Parkway Theodore, Alabama 36582 PH:(3520 575-8602 Fax: (251) 653-5803 E-mail: <u>laengineering2@gmail.com</u>

# Construction and Fabrication, Inc.

5815 I-10 Industrial Parkway Theodore, Alabama 36582

Work: (352) 575-8602 Fax: (251) 653-5803 laengineering2@gmail.com

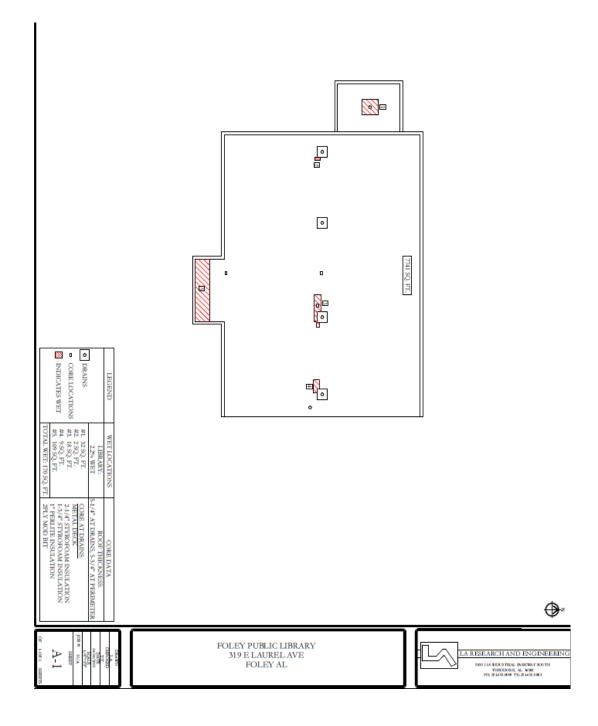
#### Moisture Survey Summary

#### Existing Conditions

- 1. Existing roof is a 2ply Mod Bit over Perlite Insulation over 2 layers of Styrofoam Insulation over a metal deck. See drawing for specific insulation thickness. There are 6 drains in the Field, 4 of which showed moisture present. A coating has been applied at 4 drain locations and at wet location #5. The coating is well adhered to the underlying membrane and peeled up granules when removed. The interply adhesion was fair in the Field and no blisters were observed.
- Approximately 2.2% (170 / 7741) of the existing roof area is wet. Industry rule of thumb is complete tear-off when 25% or greater roof insulation is wet, and since we are well below this threshold owner can leave majority of the existing roof in place after roof repairs to remove the wet insulation have been performed.
- 3. Existing coating obstructs the ability to determine how water was able to enter roof but it is assumed to be unbonded lap seams in ponding areas.
- 4. A FLIR E6 camera and a Protimeter BLD5365 moisture meter were used for the survey. A total of 3 cores were taken to verify the instruments were accurate and visually verify wet insulation. 2 cores were taken in indicated dry locations and showed no trapped moisture. 1 core was taken in indicated wet locations and showed water trapped between the plies and saturated Perlite Insulation. The Protimeter was used to verify the presence of moisture in all wet locations.

#### Recommendations

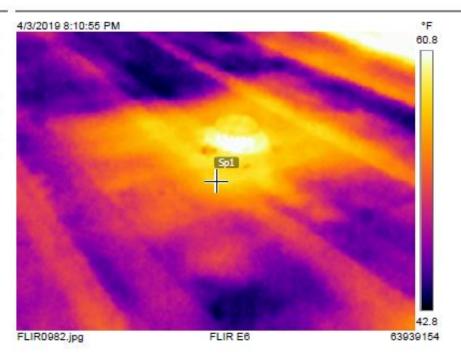
- The following recommendations are based on consultation with manufacturer relationships and existing site conditions.
  - Repair: As a minimum, wet insulation and associated membrane should be removed and replaced.
  - b. Restoration: Restoration of existing roof is a cost effective option due to the small amount of wet insulation. Professional roof restorations with integrated design, product and workmanship have an expected life of 15-20 years and then frequently can be rerestored in year 20.





Measureme	nts
Sp1	55.1 °F
Parameters	
Emissivity	0.95
Refl. temp.	70 °F

Wet location #1

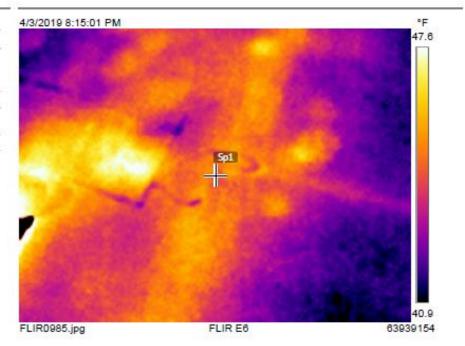




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Measuremen Sp1	44.5 °F
Parameters	
Emissivity	0.95
Refl. temp.	70 °F





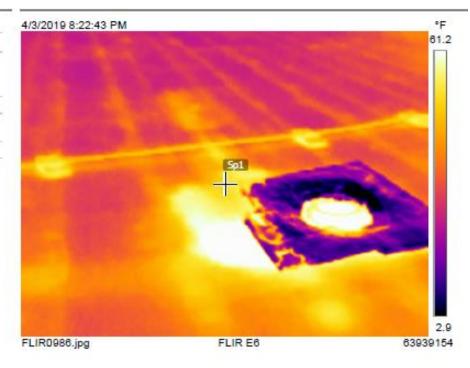


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Sp1	51.3 °F
Parameters	
Emissivity	0.95
Refl. temp.	70 °F

Wet location #3





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Measuremen	nts
Sp1	54.7 °F
Parameters	
Emissivity	0.95
Refl. temp.	70 °F

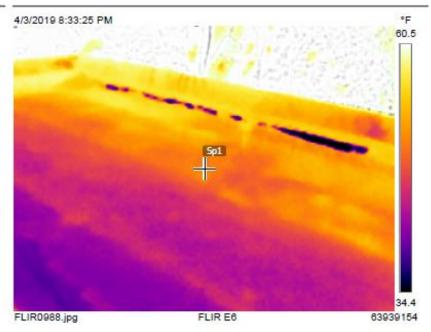




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Measureme	nts
Sp1	52.9 °F
Parameters	
Emissivity	0.95
Refl. temp.	70 °F
Note	
Wet location #5	



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#### Note

Core showed water trapped between plies and saturated Perite Insulation.





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