

INVITATION TO BID

STATE OF ALABAMA

COUNTY OF BALDWIN

NOTICE IS HEREBY GIVEN that the County Commission of Baldwin County, Alabama, will receive bids in the Purchasing Office on **March 2, 2015 at 1:00 P.M.**, for the **Re-Roofing of the Baldwin County Foley Satellite Courthouse for the Baldwin County Commission**. Bids will be opened **March 2, 2015 at 1:30 P.M.**, in the **Purchasing Conference Room located in the Annex III Building at 257 Hand Avenue, Bay Minette, Alabama**. Bids received after **March 2, 2015 at 1:00 P.M.**, deadline will not be considered. All times to be determined solely by the clock on the wall of Purchasing Conference Room. For all purposes and uses herein, a bid and all required paperwork is "received" at the time and date indicated on the Purchasing Office file stamp which shall be impressed on the face of all such documents when and as presented at the Purchasing Office.

PRE-BID CONFERENCE

A mandatory **Pre-Bid Conference** will be held at the Baldwin County Satellite Courthouse in the Commission Conference Room 1 at 201 East Section Avenue, Foley, Alabama, on **February 23, 2015, at 10:30 A.M.** **ALL INTERESTED BIDDERS MUST ATTEND**. Contractors will not be allowed to submit a bid for this project if they or a representative of their company does not attend the Pre-Bid Conference.

SEE ATTACHED SPECIFICATIONS

This invitation package consists of **NINETEEN (19)** pages. Bidders shall verify they have received all pages as indicated. If all pages have not been received, then it is the responsibility of the bidder to contact the Purchasing Manager, Wanda Gautney at (251) 580-2520 phone, (251) 580-2536 fax.

GENERAL BID INFORMATION

Bidders shall carefully read all parts of the invitation package with its accompanying schedules and attachments, if any. Bidders shall direct all requests for explanation or additional information concerning the meaning or interpretation of the conditions or attached specifications of this invitation to Wanda Gautney in writing or e-mail (wgautney@baldwincountyal.gov) in sufficient time for reply before submission date of bids. The Commission cannot, and does not, guarantee that such inquiries sent by mail or e-mail will be received timely or prior to the required submission date and time. It is the responsibility of the bidder to contact the Purchasing Manager, Wanda Gautney at (251) 580-2520 if a reply is not received.

The use of specific names and numbers in the specifications is not intended to restrict the bidder or any seller or manufacturer, but is solely for the purpose of indicating the type, size and quality of materials, product services, or equipment considered best suited for Baldwin County.

Contact initiated by a potential bidder with a County Official will be only as specifically set out in this invitation. Any other contact with a County Official initiated by a potential bidder or bidder regarding this bid, **between the date of this invitation and the date of bid award**, shall be deemed and treated as an attempt to unduly influence the bid award, and may be grounds for rejection of the bid submitted by the bidder initiating such other contact, at the discretion of the Baldwin County Commission.

BIDDER QUALIFICATIONS

All Bidders, must be in, and remain, and by submitting a bid represent that they are and will remain, in compliance with all applicable Federal, Alabama State, County and municipal laws, regulations, resolutions and ordinances. In particular, and without limitation, all bidders must be and remain licensed and permitted in accordance with The Code of Alabama Title 10, concerning corporations doing business within Alabama, Title 34, dealing with licensing for businesses, and Title 40, concerning licenses and taxation, unless otherwise exempt. All bidders shall be prepared to timely submit to the County non confidential evidence or documentation demonstrating that they are presently licensed and permitted under Alabama law. Such non confidential evidence or documentation is encouraged to be submitted with the Bid Package.

The bidder expressly acknowledges, to and for the benefit of the Baldwin County Commission, that this Agreement may be funded with **federal grant monies** and, therefore, bidder expressly warrants and agrees that it shall at all times comply with all applicable federal, state, local and municipal laws and regulations. For more information about the Federal regulations visit the website <http://www.gpoaccess.gov/index.html> Code of Federal Regulations.

All bidders must provide proof of proper certification of authority, and any required registration, to transact business in this State, in order to perform work for the Baldwin County Commission. Bidder's Registration Number shall be provided on the Bid Response Form. The phone number for the Alabama Secretary of State is (334) 242-5324, Corporate Division.

All vendors, contractors and grantee are required to comply with the Alabama Immigration Law under Sections 31-13-9 (a) and (b) of the Code of Alabama. Forms and documents will be included with award documents. Information and forms can be found on the Baldwin County Commission's Purchasing website under E-Verify at www.baldwincountyal.gov

PREPARING THE BID

Bids must be typed or handwritten in ink. A bid submitted in pencil unacceptable. The Bid Guarantee and Bid Response Form must be the original paperwork; copies are not acceptable. All required paperwork must be received in the sealed Bid Package.

These specifications exhibit the general intent and purpose of Baldwin County regarding this bid; and they shall be so considered by the bidders. Accordingly, the bidder admits and agrees that said specifications are not complete in every detail. The bidder also

agrees that the work and materials not indicated, or expressly mentioned in these specifications, but which are reasonably necessary for the full and faithful performance of the item(s) bid in accordance with the full and faithful intent, will be included in the bid and incorporated in the work the same as if fully and expressly indicated and specified.

The Bidders shall list on a separate sheet of paper any variations from, or exceptions to, the conditions and specifications of this bid. The exceptions shall be labeled **“EXCEPTION(S) TO BID CONDITIONS AND SPECIFICATIONS,”** and shall be attached to the front of the bid inside the Bid Package. Additional features and/or capabilities not included in the specifications may be included in the bid.

To facilitate the bid evaluation and tabulation, bids should be submitted with specifications identified in the order in which they appear in this document. If applicable, the bidder will provide cost in two (2) categories:

(1) Cost using material as specified.

(2) Cost using material as specified of at least 25% recycled material, if available.

It is the intent of the Commission to award bids which include recycled material when not prohibitive in cost and when in compliance with all other terms and conditions of the Alabama Competitive Bid Law.

IF THE TOTAL PROPOSED BID AMOUNT EXCEEDS \$10,000.00, A BID GUARANTEE OF AT LEAST 5% OF THE PROPOSED BID AMOUNT, NOT TO EXCEED \$10,000.00, WILL BE INCLUDED WITH THE BID. Such bid guarantee shall be a bid bond (individual or annual, provided, that bonding is available for such services, equipment or materials), postal money order, certified check, cashier's check, Letter of Credit, or certain bonds or note of the United States. This is required by the Alabama Competitive Bid Law, Title 41, Chapter 16, **Code of Alabama 1975**, as amended; **no exceptions will be allowed.**

SUBMITTING THE BID

In the event that a bidder is financing the product(s) through another agency other than itself, the financing agency must sign the Bid Response Form along with the bidder. A copy of the financing agreement and all conditions must be included with the Bid Response Form. The bidder and the Financing Agency will be held to the requirements stated in the Invitation to Bid. Any assignment of the financing agreement must be approved by the financing agency and the County Commission. Failure to disclose the financing information and all conditions will disqualify the Bidder at the County's discretion.

Bidders that are returning a **NO BID** statement shall write on the outside of the Bid Package, the **Bid Number (i.e. WG15-06)** with **“NO BID”** written underneath. The Bid Package will not be opened in public, but it will be noted that the bidder did respond.

Bids may be hand delivered at any time prior to the bid opening date and time to the Baldwin County Purchasing Office, Annex III Building, 257 Hand Avenue, ATTN.: Wanda Gautney, (mailing) **312 Courthouse Square-Suite 15, Bay Minette, Alabama 36507**. The Commission cannot guarantee that bids sent by mail or courier will be received will be received on or before the bid opening day and time as required. Bids received after the deadline shall not be accepted and shall be returned.

All bids received must be in a sealed envelope plainly marked, “WG15-06” “RE-ROOFING OF THE BALDWIN COUNTY SATELLITE COURTHOUSE.” Bids submitted by “Express/Overnight” services must be in a separate inner envelope/package sealed and identified as stated in the previous sentence. Bidders and any other interested individuals are invited to attend the bid opening.

BID AWARD

The Baldwin County Commission, at its discretion, may offer an extension of the Contract awarded to the successful bidder for an additional period not to exceed twelve (12) months or until such time that a new contract can be bid and awarded. Any extension will be at the same prices, terms and conditions. Any extension must have the written approval of both the County and Awarded Bidder within sixty (60) days prior to the expiration of the original contract.

All factors stated in this invitation package will be considered in determining the successful bidder, and any omission(s) of the stated requirements may be cause for rejection of the bid (s), all as determined solely by the Baldwin County Commission.

The County Commission reserves the right to study bids as to their correctness and may award the bid within a thirty (30) day period but the County Commission reserves the right to extend the bid award for an additional thirty (30) days until an award decision can be made.

The Baldwin County Commission reserves the right to reject any and all bids, to waive any informality in bids, and to accept in whole or in part, such bid or bids, solely at its discretion.

TITLE 39/CODE OF AL 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 four 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.

NOTE: Any failure to fully comply with this section or any applicable laws of the State of Alabama 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.

Done this 20th day of January, 2015.

Charles F. Gruber s/s
CHARLES F. GRUBER, Chairman
Baldwin County Commission

BID #WG15-06 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 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 of awarding the contract in whole or in part, according to the best interest of the County.

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.

LAWS AND REGULATIONS

The bidders 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/PAYMENT BOND

A Performance Bond in one-hundred percent (100%) of the total amount of the project will be provided prior to any work beginning. A Labor and Material Bond at least fifty percent (50%) 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 license. **Alabama General Contractors License Number must be listed on the outside of your bid package.**

CONTRACTORS AND SUBCONTRACTORS AND INSURANCE

The Contractor shall not commence work under this contract until all the required insurance has been obtained. Such insurance must be 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 so obtained and approved.

COMPENSATION INSURANCE

The 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 with limits not less than \$1,000,000.00, combined single limit, for bodily injury and property damage liability for each occurrence, plus \$500,000.00 personal and advertising injury. 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, for 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 \$500,000.00 per occurrence bodily injury and property damage, \$1,000,000.00 aggregate.

HOLD HARMLESS PROVISION

The contractor shall at all times indemnify and save harmless the County and its Departments, their officers and employees, against all liability, claim of liability, loss, cost or damage, including, death, and loss of services, on account of any injury to persons or property, occurring from any cause whatsoever in the construction work involved in the contract, and will at his expense defend on behalf of the County and its departments, their officers and employees, either or all, any suit brought against them or any of the, arising from any such cause.

The obligations of the Contractor under this Paragraph shall not extend to the liability of the departments, its agents or employees arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications, or (2) the giving of or the failure to give direction or instruction by the county's departments, its agents or employees provided such giving or failure to give is the primary cause of the injury or damage.

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.

TIME OF COMPLETION

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

Project must be completed within **NINETY (90) days** of notification to proceed. Unless work is hampered by long periods of inclement weather, or by due proof of material unavailability, the Baldwin County Commission will assess a penalty in the amount of 1/2 of 1% of the total contract for each normal work week beyond the agreed completion date.

PROTECTION

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

GUARANTEE

Provide to Owner a 30 year, Limited Material Warranty, and provide a two (2) year Water tightness Warranty covering labor and materials 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 and materials. 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

Final payment shall be withheld until provisions of the specifications are met as stated on page 4, Title 39, Section (f) of the bid, 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 COMMISSION

The Contact person for the Baldwin County Commission will be Junius Long, at (251)295-3133.

BID #WG15-06 RESPONSE FORM

Re-Roofing of the Baldwin County Foley Satellite Courthouse

Date: _____

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

Company Name: _____

Address: _____

Company Rep _____

(Rep. Name Typed or Printed)

Position: _____

Phone: _____

Fax: _____

Contractor's License Number _____

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

State of Alabama)
County of Baldwin)

CONTRACT FOR PROFESSIONAL AND 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 PROVIDER, (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 employs, and the PROVIDER agrees to perform for the COUNTY, those professional and construction 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 Contract, 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 #WG15-06”**, the same being expressly incorporated herein by reference, and without limitation will encompass:

“All provision and conditions and/or specifications listed/stated in Competitive Bid #WG15-06 named, Re-Roofing of the Baldwin County Foley Satellite Courthouse 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 may terminate this contract, with or without cause or reason, by giving ten (10) days written notice of such to the PROVIDER. 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 Contract and shall not be demanded by PROVIDER or paid by COUNTY.

XX. Direct Expenses. Compensation to PROVIDER for work shall be \$ _____. 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 full execution, and the same shall terminate upon either the expiration of ninety (90) days of notification to proceed 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 of 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, and costs, 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 or termination of this Contract.

XXV. Number of Originals. This Contract shall be executed with three (3) originals, each 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.

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

COUNTY

ATTEST:

_____/_____
CHARLES F. GRUBER, Chairman /Date

_____/_____
RON CINK /Date
Budget Director/Interim County Administrator

State of Alabama)

County of Baldwin)

I, _____, a Notary Public in and for said County, in said State, hereby certify that, Charles F. Gruber, whose name as Chairman of Baldwin County Commission, and Ron Cink, whose name as Budget Director/Interim 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 seal on this the _____ day of _____, 2015.

Notary Public
My Commission Expires

SIGNATURE PAGE AND NOTARY PAGE TO FOLLOW

PROVIDER:

Insert Name

_____/_____
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 _____, 2015.

Notary Public
My Commission Expires

PROJECT MANUAL

FOR

BALDWIN COUNTY COMMISSION

“FOLEY COURTHOUSE BUILDING ENVELOPE REPAIRS”

BALDWIN COUNTY COMMISSION

312 COURTHOUSE SQUARE

BAY MINETTE, AL. 36507

PROJECT MANUAL
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SECTION 0400

BID FORM

PROJECT IDENTIFICATION: "Foley Courthouse Building Envelope Repairs"
BID TO: Baldwin County Commission

BID FROM: _____

1. The undersigned BIDDER agrees, if this Bid is accepted, to enter into an agreement with OWNER, in the form included in the Bidding Documents, to perform and furnish the Work as specified or indicated in the Bidding Documents for the Bid Price and within the Bid Times indicated in this Bid and in accordance with the 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. BASE BID \$ _____

4. UNIT PRICING

- a. Replace decking, SF \$ _____

- b. Replace deteriorated fascia board PT, match existing dimension. BF \$ _____

- c. Replace wet insulation with new specified thickness & type, per SF. \$ _____

5. SUBMITTED BY: _____, on _____, 2014

6. COMPANY NAME: _____

SECTION 01360a

QUALITY CONTROL SUBMITTALS; MANUFACTURER SITE REVIEW

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

- 1. Owner: _____
- 2. Project: _____
- 3. Manufacturer: _____
- 4. Contractor _____
- 5. Definitions:

- a. "Substrate": Any surface the new Roof System is applied to, including existing roof (if retrofit), deck, perimeter nailers, and masonry walls.
- b. "Roof System": The complete roof including Surfacing (coatings and/or aggregates), Sheet Metal, Membranes, Adhesives, Mastics, Primers, Attachments (fasteners), and Insulations.

- 6. SUBSTRATE: We have reviewed existing Substrates and have provided Contractor with the preparation and attachment information necessary for Roof System application to SUBSTRATE in accordance with Factory Mutual, IBC Code, and Watertightness-Warranty requirements.
- 7. ROOF DESIGN: We have provided the Contractor with ROOF DESIGN for Roof System compliance with Factory Mutual, IBC Code and Watertightness-Warranty requirements.
- 8. SHEET METAL DETAILS: We have provided the Contractor with SHEET METAL DETAILS necessary for Roof System compliance with Factory Mutual, IBC Code and Watertightness-Warranty requirements.

Sincerely,

Manufacturer Representative PRINT NAME

Date

Manufacturer Representative SIGNATURE

SECTION 01360b

QUALITY CONTROL SUBMITTALS; CODE REVIEW

Description: Code and Warranty compliance document to be filled out by Roof System Manufacturer.

- 1. Owner: _____
- 2. Project: _____
- 3. Manufacturer: _____
- 4. Contractor: _____

-
- 5. Code Section: 1504.1, "Wind Resistance of Roofs", ASCE-7 Calculations
 - A. Project Wind Loads: Zone 1: _____ Zone 2: _____
Zone 3: _____ Zone 4: _____ Zone 5: _____ (psf)
 - B. Perimeter Edge Zone Width: _____ ft. _____ in.
 - C. Perimeter Edge Pressures (psf): Outward: _____
Upward: _____

-
- 6. Code Section: 1504.3.1, "Wind Resistance of Non-Ballasted Roofs...Other Roof Systems".

- A. Zone 1
 - 1. Test Procedure (choose which):
FM 4470/4450 _____ UL 580 _____ UL 1897 _____
 - 2. Ultimate Load: Zone 1: _____ psf
 - 3. Test-Run Number: _____
- B. Zone 2
 - 1. Test Procedure (choose which):
FM 4470/4450 _____ UL 580 _____ UL 1897 _____
 - 2. Ultimate Load: Zone 2: _____ psf
 - 3. Test-Run Number: _____
- C. Zone 3
 - 1. Test Procedure (choose which):
FM 4470/4450 _____ UL 580 _____ UL 1897 _____
 - 2. Ultimate Load: Zone 3: _____ psf
 - 3. Test-Run Number: _____
- D. Zone 4
 - 1. Test Procedure (choose which):
FM 4470/4450 _____ UL 580 _____ UL 1897 _____
 - 2. Ultimate Load: Zone 4: _____ psf
 - 3. Test-Run Number: _____
- E. Zone 5
 - 1. Test Procedure (choose which):
FM 4470/4450 _____ UL 580 _____ UL 1897 _____
 - 2. Ultimate Load: Zone 5: _____ psf

3. Test-Run Number: _____

F. Per FM or UL Testing, provide exact tested roof assembly meeting Site Pressures.

	Manufacturer	Product Name
1. Top Ply:	_____	_____
2. Middle Ply:	_____	_____
3. Base Ply:	_____	_____
4. Cover Board:	_____	_____
5. Attachment:	_____	_____
6. Taper Insul:	_____	_____
7. Attachment:	_____	_____
8. Base Insul:	_____	_____
9. Attachment:	_____	_____
10. Primer:	_____	_____
11. Deck Type:	_____	_____

7. Code Section: 1504.4.5, "Edge Securement for Low Slope Roofs".

A. Coping

- 1. Manufacturer: _____
- 2. Product Name: _____
- 3. Testing Agency: _____
- 4. Maximum Ultimate Load
 - a. Outward _____
 - b. Upward _____
- 5. Coping Description
 - a. Metal Type: _____
 - b. Outside Fascia Length: _____
 - c. Horizontal (Wall) Width: _____
 - d. Inside Fascia Length: _____
 - e. Coping Gauge: _____
 - f. Fastener (into Coping)
 - 1. Fastener Type _____
 - 2. Fastener Length _____
 - 3. Fastener Spacing _____
- 6. Cleat Description
 - a. Metal Type: _____
 - b. Cleat Gauge: _____
 - c. Fascia Length, Max.: _____
 - d. Kickout Length, Min.: _____
 - e. Fastener (into Cleat)
 - 1. Fastener Type _____
 - 2. Fastener Length _____
 - 3. Fastener Spacing _____

B. Metal Edge

- 1. Manufacturer: _____
- 2. Product Name: _____
- 3. Testing Agency: _____

- 4. Maximum Ultimate Load
 - a. Outward _____
 - b. Upward _____
- 5. Metal Edge Description
 - a. Metal Type: _____
 - b. Outside Fascia Length, Max.: _____
 - c. Horizontal Flange Width, Max.: _____
 - d. Kickout Length, Min.: _____
 - e. Return-Hem Length, Min.: _____
 - f. Metal Edge Gauge: _____
 - g. Fastener (into Metal Edge Flange)
 - 1. Fastener Type _____
 - 2. Fastener Length _____
 - 3. Fastener Spacing _____
- 6. Cleat Description
 - a. Metal Type: _____
 - b. Cleat Gauge: _____
 - c. Fascia Length, Max.: _____
 - d. Kickout Length, Min.: _____
 - e. Fastener (into Cleat)
 - 1. Fastener Type _____
 - 2. Fastener Length _____
 - 3. Fastener Spacing _____

- 8. Code Section: 1507.10.1, "Slope".

	YES	NO
a. Positive slope has been designed so that the roof installation will not create a ponding water warranty exclusion?	_____	_____

I have reviewed Specifications and Code requirements and hereby CERTIFY that the roof design submitted in this Form complies with the performance requirements of IBC Chapter 15 and our Warranty.

Sincerely,

 Manufacturer Representative (PRINT NAME)

 Date

 Manufacturer Representative (SIGNATURE)

SECTION 01445

MANUFACTURER'S FIELD SERVICES

Description: Factory Mutual, IBC Code and Watertightness-Warranty WORKMANSHIP compliance document from Roof System Manufacturer, copy provided to Owner and Contractor.

- 1. Owner: _____
- 2. Project: _____
- 3. Manufacturer: _____
- 4. Contractor _____
- 5. Definitions:

- a. "Substrate": Any surface the new Roof System is applied to, including existing roof (if retrofit), deck, perimeter nailers, and masonry walls.
- b. "Roof System": The complete roof including Surfacing (coatings and/or aggregates), Sheet Metal, Membranes, Adhesives, Mastics, Primers, Attachments (fasteners), and Insulations.

- 6. SUBSTRATE: I have visited the Jobsite weekly during construction and am satisfied that the SUBSTRATES are acceptable for Roof System application and in compliance with Factory Mutual, IBC Code, and Watertightness-Warranty requirements.
- 7. ROOF CONSTRUCTION: I have visited the Jobsite weekly during construction and am satisfied that the ROOF CONSTRUCTION is in compliance with Factory Mutual, IBC Code, and Watertightness-Warranty requirements.
- 8. SHEET METAL DETAILS: I have visited the Jobsite weekly during construction and am satisfied that the SHEET METAL DETAILS are in compliance with Factory Mutual, IBC Code, and Watertightness-Warranty requirements.

Sincerely,

Manufacturer Representative PRINT NAME

Date

Manufacturer Representative SIGNATURE

SECTION 07310
ASPHALT SHINGLES

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.
- B. Related work specified elsewhere includes the following:
 - 1. Section 07550 - "Modified Bitumen Roofing"

1.1 SUMMARY

- A. This Section includes removal of existing asphalt shingles, metal edge flashing and sheet metal vents and stacks, down to top of existing decking, installation of the new asphalt shingle roofing system, and in part, the following:
 - 1. Provide asphalt shingle roof system, installed over one-layer self-adhering base sheet over existing lumber decking;
 - a. Removal of all exposed sealants, shingles, deteriorated decking, roofing cement, and similar materials - then cleaning, preparation and replacement with new sealant; and all related work;
 - b. To include in part, metal base flashings, metal edge flashings, and metal counter flashings.
 - c. Re-attachment of the existing lumber decking per IRC requirements.
 - d. Repairs to Rafter Lookouts using steel ties.
 - e. Repairs to vertical wood fascia board.
 - 2. Removal and replacement of existing wood deck where indicated on Plans.
 - 3. Repairs to Rafter Lookouts mechanically attached with steel ties.
 - 4. Repairs to vertical wood fascia board.

1.3 REFERENCES

- A. ASTM A 653/A 653M - Standard Specification for Steel Sheet, Zinc Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- B. ASTM B 209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
- C. ASTM C 794 – Standard Test Method for Adhesion-in-Peel of Elastomeric Joint Sealants
- D. ASTM C 1549 - Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer.
- E. ASTM D 412 - Standard Test Method for Vulcanized Rubber and Thermoplastic Elastomers Tension
- F. ASDTM D 1970 – Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment of Ice Dam Protection
- G. ASTM D 3018 - Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules.
- H. ASTM D 3161 - Standard Test Method for Wind-Resistance of Asphalt Shingles (Fan-Induced Method).
- I. ASTM D 3462 – Standard Specification for Asphalt Shingles Made From Glass Felt and Surfaced with Mineral Granules.
- J. ASTM D 4586 - Standard Specification for Asphalt Roof Cement, Asbestos-Free.
- K. ASTM E 96 – Standard Test Methods for Water Vapor Transmission of Materials
- L. ASTM E 903 – Standard Test Method for Solar Absorptance, Reflectance, and Transmission of Materials Using Integrating Spheres
- M. UL 790 - Tests for Fire Resistance of Roof Covering Materials.
- N. UL 997 - Wind Resistance of Prepared Roof Covering Materials.
- O. Asphalt Roofing Manufacturers Association (ARMA)
- P. National Roofing Contractors Association (NRCA)

1.4 SUBMITTALS

- A. Submit copies of Manufacturer's product data sheets, detail drawings and samples for each type of roofing product.
- B. Submit Shingle and/or Underlayment Manufacturer's intent to comply with the Quality Assurance inspection requirements indicated, signed by full-time employee of Manufacturer.
- C. Provide shop drawings showing construction details and interfacings between shingle roof and other roof types not covered under this section.
- D. Submit a list of ALL construction-related lawsuits in the past five (5) years involving the Contractor's Company or any Principal of the Company, whether settled by Parties or by Judgment. The list shall provide the Plaintiff Name, the Defendant Name, the County of Jurisdiction, and the Nature of the Dispute. Inaccurate reporting of lawsuits is grounds for immediate rejection of Contractor's Bid.

1.5 WARRANTY

- A. Provide to the owner a 30 year, Limited Manufacturer's Material Warranty.
 - 1. Wind Warranty: 130 mph
 - 2. Algae Warranty: 10 years
 - 3. Non-Prorated Period: 10 years
- B. Provide a two (2) year Watertightness Warranty from Contractor, covering labor and materials.
- C. On-line warranty tracking accessible by Owner, shall be provided as a part of this Contract, by Shingle or Underlayment Manufacturer.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Provide all primary roofing products, including shingles, underlayments, sheet metal, and ventilation meeting specification.
- B. Shingle and/or Underlayment Manufacturer is to provide quality control site visits during construction a minimum of 1 day per week, with inspection reports and photographs provided weekly to Architect, noting deviations from Specification.
- C. Installer Qualifications:
- D. Installer must be approved for installation of all roofing products to be installed under this section.

- E. Installer must be a certified Authorized Contractor of the Manufacturer(s) of the primary roofing products.
- F. Installer must be designated to be an 'upper tier' Authorized Contractor where they have completed a program instituted by Manufacturer which is at least one designation higher than an 'Authorized Contractor'. This would be "Master Elite" by GMAC or an equivalent program.
- G. In lieu of being an 'Elite' Contractor as required in #3 above, Installer may provide a reference list of five (5) different completed Projects with at least one (1) being at least five (5) years old, with contact names provided for verification.

1.7 REGULATORY REQUIREMENTS

- A. Provide a roofing system achieving an Underwriters Laboratories (UL) Class A fire classification.
- B. Provide a roofing system achieving an ENERGYSTAR rating.
- C. Install all roofing products in accordance with all federal, state and local building codes.
- D. All work shall be performed in a manner consistent with current OSHA guidelines.
- E. Installer shall follow all Municipality requirements for licensing and insurance, including Performance and Payment Bonds, Workman's Compensation Insurance, Liability Insurance, Automobile Insurance, and City Business Licenses.

1.8 PREINSTALLATION MEETING

- A. General: A mandatory pre-installation meeting will be held, to be attended by Owner, Roofing Contractor, any subcontractors, and Manufacturer of primary roofing products. Meeting shall be called for by the Roofing Contractor.
- B. Timing: The meeting shall take place prior to the start of the roofing installation.
- C. Topics: Certified contractor and manufacturer's representative shall review all pertinent requirements for the project, including but not limited to, scheduling, weather considerations, project duration, details, and requirements for the specified warranty.

1.9 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 GAFMC's recommendations. Store all rolls 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 MANUFACTURERS

- A. Shingle Manufacturers: GAF Materials Corporation, Owen's Corning, or preapproved equal.
- B. Underlayment, Sheet Metals, Mastics and Sealants Manufacturer: Garland Company, Tremco or Ecology.
- C. Questions regarding technical specification for any portion of this Project must be submitted to Engineer 10 days prior to Bid Date. Bidders will be notified of clarifications at least three days prior to Bid Date.
LA Research & Engineering

Attention: Albert McEachern Jr. P.E.
AMcE2000@aol.com
5815 I-10 Industrial Parkway South
Theodore, AL 36582

2.2 SHINGLES

- A. Self-sealing, granule surfaced, asphalt shingle with a strong fiberglass reinforced core and a mineral granule surfacing. Architectural laminate styling provides a wood shake appearance with a 5" or 5 5/8" exposure. Meets ASTM D 3018, ASTM D 3161, and ASTM D 3462; UL 790 Class A rated with UL 997 Wind Resistance Label. Timberline 30 Shingles, by GAFMC or the specified or pre-approved equals.

- B. Color: Manufacturer's standard colors.

2.3 HIP AND RIDGE SHINGLES

- A. High profile self-sealing hip and ridge cap shingle matching the color of selected roof shingle. Each bundle covers approx. 33 lineal feet. TimberCREST Distinctive Ridge Cap Shingles, by GAFMC, or the specified or pre-approved equals.
- B. Starter Strip: Self-sealing starter course. Each strip measures 17" tall by 40" wide. One bundle covers approximately 100 lineal feet when used with shingles with less than a 6" exposure and 50' when used with shingles with greater than a 6" exposure. Universal Starter Strip Shingles, by GAFMC or the specified or pre-approved equals.

2.4 MEMBRANES AND MISCELLANEOUS MATERIALS

- A. Base sheet.
 - 1. "Viking AOB", by Commercial Innovations
 - 2. "PowerPly SA FR Base Sheet", by Tremco.
 - 3. "ERS-900-B/VR", by Ecology.
- B. Asphalt Mastic
 - 1. "Flashing Bond", by Garland Company
 - 2. "Polyroof", by Tremco.
 - 3. "ERS-304-MB", by Ecology.
- C. SEBS Asphalt Mastic
 - 1. "GarlaFlex" by Garland Company
 - 2. "Polyroof", by Tremco.
 - 3. "ERS-304-MB", by Ecology.
- D. "Greenlock XL", polyether sealant by Garland or preapproved equal.
- E. "RmerLine", 24 ga. Kynar coated steel, meeting ANSI-SPRI ES-1 requirements.

2.5 NAILS

- A. Shingle Nails for Wood Deck
 - 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 3/4" L.
 7. Lumber, all thicknesses: Minimum 1.0" L.
- B. Shingle Nails for Gypsum Composite Deck ("Loadmaster")
1. Type: "Loc Nail"
 2. Shank Type: Serrated legs
 3. Corrosion Resistance: Zinc-plated steel
 4. Length: 1-3/8" length.
- C. Nails for Wood Deck Re-Attachment into Rafters
1. Type: #8
 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:
 - a. 5/8" plywood: Minimum 1-1/2" L.
 - b. 5/4" lumber: Minimum 2-1/2" L.
- D. "Cap Nails" shall be an integrated cap with nail, not plastic, not less than 1-inches length and 1-inches 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.

2.6 SHEET METAL FLASHING

- A. 24 gauge hot-dip galvanized steel sheet, Kynar-coated Finish, complying with ASTM A 653/A 653M, G90/Z275.
- B. Profile and length to match existing, with kickout and return hem.
- C. Vertical face shall match existing profile and length. Deck flange shall be minimum 2" width.
- D. Continuous Cleats shall be 22 ga hot-dip galvanized steel, with kickout, fastened 6" oc.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until the roof deck has been properly prepared. If roof deck preparation is the responsibility of another installer, notify the architect or building owner of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Remove all existing roofing down to the roof deck.
- B. Verify that the deck is dry, sound, clean and smooth. It shall be free of any depressions, waves, and projections. Cover with sheet metal, all holes over 1 inch (25 mm) in diameter, cracks over 1/2 inch (12 mm) in width, loose knots and excessively resinous areas.
- C. Replace damaged deck with new materials, matching existing dimension.
- D. Clean deck surfaces thoroughly prior to installation of underlayment and self-adhering membrane.
- E. At areas that receive eave protection membrane, fill knotholes and cracks with latex filler.

3.3 SHEET METAL

- A. Fabricate and install per specified Details, Manufacturer's Details, and SMACNA. The more stringent Detail shall govern.
- B. Remove and replace all sheet metal stacks and vents.
- C. Remove and replace all metal edge flashing.

3.4 UNDERLAYMENT APPLICATION

- A. General:
 - 1. Install continuous self-adhering modified membrane over entire deck.
 - 2. Install using methods recommended by Manufacturer, in accordance with local building codes. When local codes and application instructions are in conflict, the more stringent requirements shall take precedence.
 - 3. Install specified self-adhering membrane at all Rakes, Ridges, Eaves, Base Flashings and Penetrations.
 - 4. Install specified organic base sheet attached to deck using approved nails, in a grid pattern of 12 inches between the sidelaps, with 6" spacing at the sidelaps, lapping over top of self-adhering membrane.
- B. Eaves:

1. Install eaves edge metal flashing tight with fascia boards; lap joints 2 inches (50 mm) and seal with plastic cement; nail at the top of the flange.
2. Install specified self-adhering membrane up the slope from eaves edge a full 36 inches or to at least 24 inches (610 mm) beyond the interior “warm wall”. Lap ends 6 inches (150 mm) and fully adhere.

C. Valleys:

1. Install specified self-adhering membrane centered on the valley. Lap ends 6 inches (150 mm) and seal.

D. Roof Deck:

1. Install one layer of shingle underlayment perpendicular to slope for proper water shedding.
2. On roofs sloped at more than 4 in 12, lap horizontal edges at least 2 inches (50 mm) and at least 2 inches (50 mm) over eaves protection membrane.
3. On roofs sloped between 2 in 12 and 4 in 12, lap horizontal edges at least 19 inches (480 mm) and at least 19 inches (485 mm) over eaves protection membrane.
4. Lap ends at least 4 inches (100 mm). Stagger end laps of each layer at least 36 inches (915 mm).
5. Lap shingle underlayment over valley self-adhering membrane at least 6 inches (150 mm).

E. Penetrations, Walls and Rakes:

1. Vent pipes: Install a 24 inch square piece of specified self-adhering membrane lapping over roof deck underlayment; seal tightly to pipe with SEBS Asphalt Mastic.
2. Vertical walls: Install specified self-adhering membrane extending at least 12 inches up the wall and 24 inches on to the roof surface. Lap the membrane over the roof deck underlayment.
3. Rake Edges: Install specified self-adhering membrane over metal edge flashing, and roof deck underlayment; set tight to rake boards; lap joints at least 2 inches (50 mm) and seal with SEBS Asphalt Mastic; secure with nails.

3.5 INSTALLATION OF SHINGLES

A. General

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

B. Placement and Nailing

1. Beginning with the starter strip, trim shingles so that they "nest" within the shingle located beneath it. This procedure will yield a first course that is typically 3" to 4" rather than a fully exposed shingle.
2. Laterally, offset the new shingles from the existing keyways, to avoid waves or depressions caused by excessive dips in the roofing materials.
3. Using the bottom of the tab on existing shingles, align subsequent courses.
4. Secure with 6 nails per shingle.
5. Placement of nails varies based on the type of shingle specified. Consult the application instructions for the specified shingle for details.
6. Nails must be driven flush with the shingle surface. Do not overdrive or underdrive the nails.
7. Shingle offset varies based on the type of shingle specified. Consult the application instructions for the specified shingle for details.
8. **All shingles must be hand-nailed; pneumatic nailguns are prohibited.**

C. Eaves

1. Shingles shall overhang no more than 3/8" and no less than flush with drip edge.
2. Starter course of shingles shall be set in an 8-inch wide continuous bed of asphalt mastic.
3. Fasten Drip-Edge Flange with specified nails, 6" oc staggered.

D. Rakes

1. Install shingles per details, set in a 8" wide continuous bed of asphalt mastic.

E. Valleys

1. Install valleys using the "Concealed Clip With Metal Valley" method:
2. Install concealed cleats 12" oc, engaging return-hem of valley, with fasteners located outside of Valley Flashing.
3. Snap diverging chalk lines on the metal flashing, starting at 3 inches each side of top of valley, spreading at 1/8 inch per foot to the eaves.
4. Run shingles to chalk line.
5. Trim last shingle in each course to match the chalk line; do not trim shingles to less than 12 inches wide.
6. Apply a 6 inch wide strip of asphalt mastic under ends of shingles, sealing them to the metal flashing.
7. Starter course of shingles shall be set in an 8-inch wide continuous bed of asphalt mastic.

F. Penetrations

1. All Penetrations are to be flashed according to Manufacturer, ARMA and NRCA application instructions and construction detail.
2. All pipes shall be flashed with lead one-piece sleeve type, not less than 2.5 lbs per square foot thickness, with 4" flange.
3. All penetrations shall receive 6" wide continuous application of asphalt mastic, prior to application of shingles.

3.6 VENTILATION

- A. Install manufacturer's ridge venting, conforming to warranty requirements.

3.7 PROTECTION

- A. Protect installed products from foot traffic until completion of the project.
- B. Any roof areas that are not completed by the end of the workday are to be protected from moisture and contaminants.

END OF SECTION 07310

SECTION 07550

MODIFIED BITUMEN ROOFING

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. Prepare substrates for installation of roofing system. Provide all labor, equipment, and materials to install modified bitumen roof system over the properly prepared substrate, in accordance with the Project Manual.

1.2 REFERENCES

ASCE 7 – 05	Minimum Design Loads for Buildings and Other Structures
ANSI-SPRI ES-1	Wind Design Standard for Edge Systems Used with Low Slope Roof Systems
IBC	International Building Code
ASTM D - 41	Specification for Asphalt Primer Used in Roofing, Dampproofing, and Waterproofing
ASTM D - 312	Specification for Asphalt Used in Roofing
ASTM D - 451	Test Method for Sieve Analysis of Granular Mineral Surfacing for Asphalt Roofing Products
ASTM D - 1079	Terminology Relating to Roofing, Waterproofing, and Bituminous Materials
ASTM D - 2178	Specification for Asphalt Glass Felt Used in Roofing and Waterproofing
ASTM D - 2822	Specification for Asphalt Roof Cement
ASTM D - 2824	Specification for Aluminum-Pigmented Asphalt Roof Coating
ASTM D - 4601	Specification for Asphalt-Coated Glass Fiber Base Sheet Used in Roofing
ASTM D - 5147	1991 Test Method for Sampling and Testing Modified Bituminous Sheet Materials
ASTM E - 108	Test Methods for Fire Test of Roof Coverings
FM	Factory Mutual
NRCA	National Roofing Contractors Association
UL	Underwriters Laboratories
WH	Warnock Hersey

1.3 SUBMITTALS

WITHIN 24 HOURS OF BID, APPARENT LOW BIDDER SHALL;

- A. Submit Section 01360a and 1360b (Manufacturer's wind uplift calculations and substrate acceptance) per International Building Code (IBC), Chapter 15, Section 1504, ASCE 7 reviewed by the roofing system manufacturer's State-licensed structural engineer, for Roof System and Perimeter Sheet Metal.
- B. Submit sample of Manufacturer's 30 year, single-source, labor and materials warranty.
- C. Submit Manufacturer's certification that it is in compliance with Section 3.1 and will issue the requested Warranty for the specified Scopes of Work for each individual section.

AFTER AWARD, AWARDEE SHALL PROVIDE THE FOLLOWING;

- D. Submit Manufacturer's certification that the roof system furnished is compliant with Factory Mutual as well as ASCE 7 Wind Uplift Pressures.
- E. Submit Manufacturer's ANSI SPRI ES-1 approval showing compliance per IBC, Chapter 15, Section 1504.
- F. Submit Manufacturer's calculations demonstrating compliance with ASHRAE 90.1.
- G. Submit Manufacturer's State-licensed engineer-stamped Plumbing calculations verifying roof drain size and overflow drain size are adequate per Code requirements.
- H. Submit Product Data Sheets for each type of product specified include manufacturer's technical product data, installation instructions, and recommendations for each type of roofing product required. Include data substantiating that materials comply with specified requirements.
- I. Submit Installer Certificate from Manufacturer confirming specialization in the specified roof application with minimum 5 years experience and approved for warranty issuance.
- J. Upon request, submit a sample of each product.
- K. Submit Applicator's Project Approval certifying that work has been installed in accordance with specifications and manufacturer's written instructions.
- L. Certification of Net Worth (Total Assets minus Total Liabilities) of Warrantor, to be at least 50 times the project cost, as assurance of future warranty obligations.
- M. Certified copy of ISO 9001 compliance.

CLOSE-OUT DOCUMENTS, AWARDEE SHALL PROVIDE THE FOLLOWING;

- N. Submit Section 01445 (Manufacturer's Field Services), demonstrating installation's compliance with Contract Documents, Codes and Warranty requirements.

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. This requirement is meant to ensure financial responsiveness for future Warranty obligations to Owner.
- 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, law suits, court appointed actions, 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 Owner 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 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.

1.7 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 warranty for Reroof, and a (10) year warranty for Restorations, non-prorated, turnkey support for Warranty period.
 - 1. Manufacturer (not contractor or consultant) 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.
 - 5. No exclusion for improper roof design.
 - 6. Manufacturer shall provide letter approving construction as being in compliance with specifications and warranty requirements.
 - 7. A single source warrantor is required for all Membrane Reroof and Restorations utilized for this project. Warranties from multiple Manufacturers are not acceptable.
- B. Contractor will submit a two year warranty 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 The Garland Company, Tremco, or Ecology 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. Any item or materials submitted as meeting the specifications must comply in all respects as to the quality and performance, including job site investigation of the brand name specified.

The Architect shall be the sole judge as to whether or not an item submitted as an equal is truly equal. Should the contractor choose to submit on the equal basis, he shall assume all risk involved, monetary or otherwise, should the Architect find it unacceptable.

2.2 Provide one of the roof systems listed below using the specified products with FM Approved labels intact;

Garland (Basis of Design)

a.	RoofNav Approval #:	272767-48859-0
b.	Top Membrane:	Versiply Mineral, by Garland
c.	Adhesive:	Hot asphalt
d.	Underlayment 1	Glasfelt, per Approval
e.	Adhesive:	Hot asphalt
f.	Underlayment 2	Glasfelt, per Approval
g.	Adhesive:	Hot asphalt
h.	Top Insulation:	SECUROCK per Approval
i.	Adhesive:	Hot asphalt
j.	Bottom Insulation:	Polyisocyanurate per Approval
k.	Attachment:	OMG #14 Heavy Duty, 5.5"L, by OMG

Tremco

a.	RoofNav Approval #:	285495-50209-0
b.	Top Membrane:	POWERply Supreme FR, by Tremco
c.	Adhesive:	POWERply Modified Hot Melt Adhesive, by Tremco
d.	Underlayment:	THERMglass Type IV, by Tremco
e.	Adhesive:	POWERply Modified Hot Melt Adhesive, by Tremco
f.	Underlayment:	THERMglass Type IV, by Tremco
g.	Adhesive:	POWERply Modified Hot Melt Adhesive, by Tremco
h.	Top Insulation:	SECUROCK by United States Gypsum Company
i.	Adhesive:	Tremco Low Rise Foam Insulation Adhesive, by Tremco
j.	Bottom Insulation:	Polyisocyanurate per Listed FM Approval
k.	Attachment:	OMG #14 Heavy Duty, 5.5"L, by OMG

Ecology

a.	RoofNav Approval #:	44085-50411-0
b.	Top Membrane:	ERS-556 GR FR, by Ecology
c.	Adhesive:	Hot Asphalt
d.	Underlayment 1:	ERS-513, by Ecology
e.	Adhesive:	Hot Asphalt
f.	Underlayment 2:	ERS-403, by Ecology
g.	Adhesive:	Hot Asphalt
h.	Top Insulation:	SECUROCK per Approval
i.	Adhesive:	Hot Asphalt
j.	Bottom Insulation:	Polyisocyanurate per Approval
k.	Attachment:	Dekfast #14, by SFS Intec

2.3 DESCRIPTION

- A. Modified bituminous roofing work including but not limited to:
1. Prime wall and curb surfaces where adhering membrane to substrate.
 2. Attachment of Red Rosin sheet and ASTM D-4601 Type II fiberglass Base Sheet, for all nailable decks.

3. Attach insulation and pressure-treated nailers to flush with adjacent new roof insulation.
4. Two plies of ASTM D-2178 Type IV glass fiber roofing felt bonded to the prepared substrate with hot bitumen, at a rate of 25-30 lbs. per square.
5. The hot bitumen will consist of ASTM D-312 Type III steep asphalt.
6. All flashings will be set in bitumen and will be one ply of a double coated Polyester/Fiberglass/Polyester base sheet covered by an additional layer of modified bitumen membrane.
7. The modified membrane for flashing installation will be:
A 135 mil mineral surfaced SBS (Styrene Butadiene-Styrene) rubber modified roofing membrane, with dual fiberglass scrim and polyester mat.
8. The modified membrane for field installation will be:
A 135 mil mineral surfaced SBS (Styrene Butadiene-Styrene) rubber modified roofing membrane, with dual fiberglass scrim.

2.4 SURFACINGS

- A. Flashing Laps: Aluminized asphalt mastic reinforced with fiberglass mesh.
- B. Bleedout: Imbed loose roofing granules as supplied by modified membrane manufacturer.

2.5 RELATED MATERIALS

A. WOOD NAILERS

1. Lumber: pressure-treated, no warps, matching thickness of adjacent insulation.
2. Plywood: exterior grade

B. ROOF INSULATION

1. Polyisocyanurate; straight and tapered insulation
2. Gypsum insulation; ½" thickness.
3. Cant strip; asphalt coated wood fiber

C. NAILS AND FASTENERS: Non-ferrous metal or galvanized steel, except that hard copper nails shall be used with copper; aluminum or stainless steel nails shall be used with aluminum; and stainless steel nails shall be used with stainless steel. Fasteners used to attach base sheet shall have pullout resistance and fastening pattern necessary to comply with Factory Mutual I-90 wind uplift requirements.

1. Base Sheet

- a. To Wood Decks: Ring-shank Nails, 1" length, 1" diameter integral cap-head.

- b. To Lightweight Concrete Decks: Split-shank, 1-3/4" length, 2.7" diameter head-plates.
 - c. To Gypsum Plank Decks: As required by FM Approvals.
2. Insulation
- a. To Steel Decks (22 ga steel min. 30KSI): #14-13 Sentry Plus Five, 3" plate, 472 lbs Ultimate Pullout minimum, 1" penetration. Or as listed in Approvals meeting ASCE 7 site pressures.
 - b. To Wood Decks (5/8" plywood, NOT OSB): #14-13 Sentry Plus Five, 3" plate, 516 lbs Ultimate Pullout minimum, full penetration. Or as listed in Approvals meeting ASCE 7 site pressures.
 - c. To Wood Decks (2x lumber, NOT OSB): #14-13 Sentry Plus Five, 3" plate, 742 lbs Ultimate Pullout minimum, 1" penetration. Or as listed in Approvals meeting ASCE 7 site pressures.
3. Membrane Flashing
- a. To Membrane Flashing to Wood: Nails, 1" length, 1" diameter cap-head.
 - b. To Membrane to Masonry: Pre-drill, then expansion fasteners, length as required for minimum 1" penetration.
4. Sheet Metal
- a. Metal Edge Flange to Wood: Annular nails, 1" length, 3/8" diameter cap-head. Hot dipped galvanized steel, for corrosion resistance.
 - b. Coping/Fascia Metal to Wood: Self-tapping sheet metal screws, with rubber washers, length as required for minimum 1" penetration.
 - c. Metal Counterflashing to Masonry: Pre-drill, then expansion fasteners with lead shield, 1/4" diameter with length as required for minimum 1" penetration.
5. Lumber
- a. To Masonry: Pre-drill, then Tapcon, 1/4" diameter, length as required for minimum 1" penetration.
 - b. To Steel, 22ga 30KSI Minimum: #14-13 Sentry Plus Five, 3844 lbs Ultimate Pullout minimum, 1" penetration.
 - c. To Steel, 1/4" steel: #12-24 HWH Tek/5, 1" penetration.

D. SHEET METAL:

All sheet metal shall be covered under manufacturer's warranty.

- 1. Equipment Support Caps 24 gauge steel, galvalume, Kynar finish per Architect.

- | | | |
|-----|-----------------------------------|--|
| 2. | Counterflashings | 24 gauge steel, galvalume, Kynar finish per Architect. |
| 3. | Drain Flashings | 4 lbs sq/ft. Common Desilverized Pig Lead (ASTM B-29) |
| 4. | Plumbing Vent Flashings | 4 lbs sq/ft. Common Desilverized Pig Lead (ASTM B-29) |
| 5. | Pitch Pans & Bonnets | 24 gauge steel, galvalume, Kynar finish per Architect. |
| 6. | Metal Edges | In compliance with ANSI/SPRI and unless required otherwise, use 24 gauge steel, galvalume, Kynar finish per Architect. |
| 7. | Copings | In compliance with ANSI/SPRI and unless required otherwise, use 24 gauge steel, galvalume, Kynar finish per Architect. |
| 8. | Continuous Cleats | In compliance with ANSI/SPRI and unless required otherwise, use 22 gauge steel, galvalume, mill finish. |
| 9. | Gutters & Downspouts | In compliance with SMACNA for dimension and spacing, .040 aluminum, Kynar finish per Architect. |
| 10. | Miscellaneous Pre-finished Metal: | 24 gauge steel, galvalume, Kynar finish per Architect. |
- E. ELASTOMERIC HEAVY BODIED WALL COATING; "Tuff Coat" by Garland or approved equal.
- F. ROOF COATING. Where specified:
1. Supplied by primary manufacturer issuing warranty.
 2. 10 year watertightness warranty.
 3. Single component, aliphatic polyurea, surfaced with granules.
 4. "White Star" by Garland, or approved equal.

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.
- B. For all Roof Sections receiving a warranted Roof or Restoration system over existing insulation, Manufacturer shall perform an Infrared Scan, provided to Owner and Design

Professional, as a condition of the re-use of existing insulation. No re-use of existing insulation shall be allowed without Manufacturer's Infrared Scan.

- C. Manufacturer shall perform all investigation and design-review for existing constructions as necessary to ensure its proposed and installed roof systems are in compliance with Specification, Code and Warranty requirements.

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. Insurance/Code Compliance: Where required, install and test modified bitumen roofing system to comply with governing code regulations and specified insurance requirements.
- C. Protect other work from spillage of modified bitumen roofing materials, and prevent liquid materials from entering or clogging drains and conductors. Replace or restore other work damaged by installations of modified bituminous roofing system work.
- D. Coordinate installing roofing system components so that insulation and roofing plies are not exposed to precipitation or left exposed overnight. Provide cut offs at end of each day's work to cover exposed ply sheets and insulation with two (2) plies of #15 organic felt set in full moppings of bitumen and with joints and edges sealed with roofing cement. Remove cut offs immediately before resuming work.
- E. Asphalt Bitumen Heating: Heat and apply bitumen according to EVT Method as recommended by NRCA. Do not raise temperature above minimum normal fluid-holding temperature necessary to attain EVT (plus 5 °F at point of application) more than 1 hour prior to time of application. Determine flash point, finished blowing temperature, EVT, and fire-safe handling temperature of bitumen either by information from manufacturer or by suitable test. Do not exceed recommended temperature limits during bitumen heating. Do not heat to a temperature higher than 25° below flash point. Discard bitumen that has been held at temperature exceeding finishing blowing temperature (FBT) for more than 3 hours. Keep kettle lid closed except when adding bitumen.
- F. Bitumen; Mopping Weights: For interply mopping, apply bitumen at the rate of approximately 25 lb of asphalt per roof square (plus or minus 25 percent on a total job average basis).
- G. Substrate Joint Penetrations: Prevent bitumen from penetrating substrate joints, entering building, or damaging roofing system components or adjacent building construction.
- H. Apply roofing materials as specified herein unless recommended otherwise by manufacturer's instructions. Keep roofing materials dry before and during application. Do not permit phased construction. Complete application of roofing plies, modified sheet and flashing in a continuous operation. Begin and apply only as much roofing in one day as can be completed that same day.
- I. Cut-Offs: At end of each day's roofing installation, protect exposed edge of incomplete work, including ply sheets and insulation. Provide temporary covering of two (2) plies of #15 organic roofing felt set in full moppings of bitumen with joints and edges sealed.

3.3 ROOF DECKS

- A. Inspect exposed deck for compliance with ASCE-7.

- B. Provide additional attachments prescribed for compliance with ASCE-7.

3.4 ROOF INSULATION

- A. Mechanically fasten insulation with fasteners and plates used in Approvals meeting ASCE 7 requirements.
- B. Install 3.5" polyisocyanurate insulation mechanically fastened per ASCE-7.
- C. Install tapered insulation system as needed for minimum 1/8" slope.
- D. Install 48" sumps for all drains, using tapered insulation miter cut.
- E. Install ½" gypsum board insulation mechanically fastened per ASCE-7.
- F. Fastener information;
 - 1. As required by Manufacturer Pre-bid submittals.

3.5 FELT PLY INSTALLATION

- A. Fiberglass Plies: Install (2) two fiberglass ply sheets in 25 lbs. per square of bitumen shingled uniformly to achieve two plies throughout over the prepared substrate. Shingle in proper direction to shed water on each area of roof.
- B. Lap ply sheet ends eight inches. Stagger end laps twelve inches minimum.
- C. Extend plies two inches beyond top edges of cants at wall and projection bases.
- D. Install base flashing ply to all perimeter and projections details.

3.6 HPR MODIFIED MEMBRANE APPLICATION

- A. The modified membrane shall then be solidly bonded to the base layers with specified asphalt at the rate of 35 lbs. per 100 square feet.
- B. The roll must push a puddle of asphalt in front of it with asphalt slightly visible at all side laps. Care should be taken to eliminate air entrapment under the membrane.
- C. Apply pressure to all seams to ensure that the laps are solidly bonded to substrate.
- D. 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. The modified membrane shall be laid in the same direction as the underlayers, but the laps shall not coincide with the laps of the base layers.
- E. Apply asphalt no more than five feet ahead of each roll being embedded.
- F. Extend membrane 2" beyond top edge of all cants in full moppings of the specified asphalt as shown on the drawings.

3.7 FLASHING MEMBRANE INSTALLATION (GENERAL)

- A. 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.

- B. 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. Allow primer to dry tack free.
- C. 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.
- D. The entire sheet of flashing membrane must be solidly adhered to the substrate.
- E. Seal all vertical laps of flashing membrane with a three course application of Flashing Bond Mastic and fiberglass mesh. Surface with aluminum, applied at one (1) gallon per square, per coat, two coat pass.
- F. Counter flashing, cap flashings, expansion joints, and similar work, shall be installed where recommended by Manufacturer for its Warranty issue.
- G. 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.

3.8 SHEET METAL INSTALLATION

A. FABRICATION

- 1. Shop-fabricate work to greatest extent possible. Comply with details shown, and with applicable requirements of SMACNA and other industry practices.
- 2. Fabricate for waterproof and weather-resistant performance with expansion provisions for running work, sufficient to permanently prevent leakage, damage or deterioration of work.
- 3. Form exposed sheet metal work without excessive oil-canning, buckling and tool marks, true to line and levels as indicated, with exposed edges folded back to form hems.

B. PITCH PANS

- 1. Clean inside of pan with steel wool, to remove oil.
- 2. Fabricate metal pans according to best practices of the trade, squaring off base flange of pitch pan. Solder all joints. Provide hems at top of pan.

C. PITCH PAN BONNETS

- 1. Circular penetrations to receive bonnet band sealed, with joint caulked.
- 2. Where penetration to receive bonnet is not circular (i.e. angle iron), install lead bonnets turned down over pan. Apply caulk to joint of rain bonnet.
- 3. Bonnet to have minimum 150° angle, from top vertical leg to cover-portion.

D. COPING

- 1. All drip edges to be hemmed, with a kickout.
- 2. Fabricate lap seam, with backer membrane underneath each coping joint and corners.

E. EQUIPMENT SUPPORT CAP

1. Install equipment support cap, fabricated in one piece. Fabricate at a width to allow sufficient space for two (2) ply membrane flashing installation to run between wood substrate and support cap.
2. Fabricate lap seam for all equipment support laps. All drip edges to be hemmed, with a kickout.

F. METAL EDGE

1. Coal Tar Gravelled Roofs: Gravel guard lip to be 1.5" height. Fascia length to match existing. Flange to be minimum 4". All drip edges to be hemmed, with a kickout.
2. Asphalt Gravelled Roofs: Gravel guard lip to be 3/4" height. Fascia length to match existing. Flange to be minimum 4". All drip edges to be hemmed, with a kickout.
3. Smooth Surface Roofs: Gravel guard lip to be 1/2" height. Fascia length to match existing. Flange to be minimum 4". All drip edges to be hemmed, with a kickout.
4. Restrain outside edge of metal fascia, using continuous cleats, mechanically fastened on the vertical face every 8" oc.

G. GUTTERS & DOWNSPOUTS

1. All roofs sloped to drain over roof edge, shall receive new gutters and downspouts.
2. Gutters shall be installed with Straps and Brackets, 36" oc staggered, unless site calculations demonstrate Brackets are not required.
2. Gutter expansion joints, dimension and gauge shall be in compliance with SMACNA.
3. Downpouts shall be calculated for dimension and spacing in compliance with SMACNA. Straps shall be provided every 10' oc. located at downspout-joints.

3.9 CLEANING

- A. Remove drippage of bitumen from all walls, windows, floors, ladders, and finished surfaces.
- B. In areas where finished surfaces are soiled by asphalt or any other sources of soiling caused by work of this section, consult manufacturer of surfaces for cleaning advice and conform to their instructions.

3.10 FINAL INSPECTION

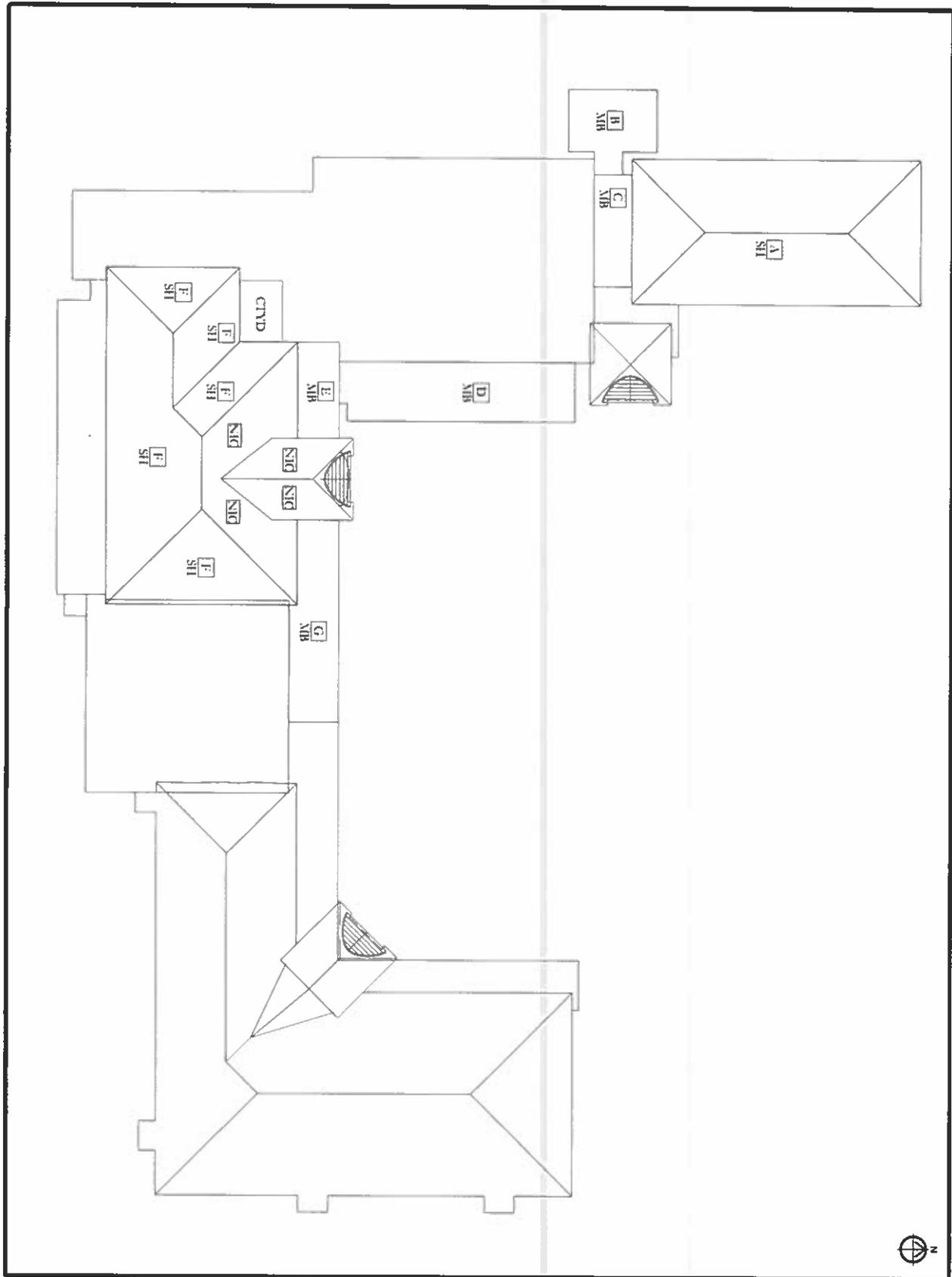
- A. At completion of roofing installation and associated work, meet with Installer, installer of associated work, Owner, roofing system manufacturer's representative, and other representatives directly concerned with the performance of the roofing system.
- B. Manufacturer to walk roof surface areas of the building, inspect perimeter building edges as well as flashing of roof penetrations, walls, curbs and other equipment. Manufacturer to list all items requiring correction or completion and furnish copy of list to each party attending.

- C. The Roofing System Manufacturer reserves the right to request a thermographic scan of the roof during final inspection to determine if any damp or wet materials have been installed. The thermographic scan shall be provided by the Roofing Contractor at a negotiated price.
- D. The Roofing System Manufacturer reserves the right to request core cuts at no additional charge, to verify correct construction and adherence to specification.
- E. Repair or replace (as required) deteriorated or defective work found at time above inspection to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- F. The Contractor is to notify the Owner upon completion of corrections.
- G. Following the final inspection, acceptance will be made in writing by the material manufacturer.

3.11 SCOPE OF WORK

- A. Subject to compliance with Section 3.1, perform the following.
- B. Section "A"; Remove and replace shingle roof, underlayments, sheet metal and penetration flashings.
- C. Section "B"; Install Restoration, subject to Section 3.1
- D. Section "C"; Replace Roof, retrofit approved subject to Section 3.1.
- E. Section "D"; Replace Roof, retrofit approved subject to Section 3.1.
- F. Section "E"; Replace Roof to deck.
- G. Section "F"; Remove and replace shingle roof, underlayments, sheet metal and penetration flashings.
- H. Section "G"; Replace Roof to deck.
- I. Wall Waterproofing; At all rooftop EIFS walls abutting roof sections within this Contract, install two coats Manufacturer's heavy-bodied elastomeric coating, standard color, per Owner approval.

END OF SECTION 07550



R-1	
DATE	11/11/2011
BY	WJL
CHECKED BY	WJL
SCALE	AS SHOWN
PROJECT	FOLEY COURTHOUSE ANNEX
CLIENT	BALDWIN COUNTY COMMISSION
ADDRESS	200 E SECTION STREET
CITY	FOLEY, AL

BALDWIN COUNTY COMMISSION
 FOLEY COURTHOUSE ANNEX
 200 E SECTION STREET
 FOLEY AL



LA RESEARCH AND ENGINEERING
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