



Columbia County Public Library Roof Replacement and Repairs Lake City, Florida

Construction Documents

Project Manual

Architect's Project No. 1623

June 27, 2016

Prepared for
Board of County Commissioners
Columbia County, Florida

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Architect

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**Columbia County, Florida
Purchasing Department
General Instructions to Bidders**

These instructions will bind bidders and conditions herein set forth, except as specifically qualified in special bid and contract terms issued with any individual bid.

1. The following criteria are used in determining low responsible bidder:
 - A. The ability, capacity and skill of bidder to perform required service.
 - B. Whether the bidder can perform service promptly or within specified time.
 - C. The character, integrity, reputation, judgment, experience and efficiency of bidder.
 - D. The performance of previous contracts with Columbia County.
 - E. The suitability of equipment or material for county use.
 - F. The ability of bidder to provide future maintenance.
2. Payment Terms are net (30) unless otherwise specified. Favorable terms, discounts, may be offered and will be considered in determining low bids if they are deemed by Purchasing Department to be advantageous to the County.
3. All bids should be tabulated, totaled and checked for accuracy. Unit price will prevail in case of errors.
4. All requested information shall be included in the envelope. All desired information must be included for your bid to receive full consideration.
5. If anything on the bid request is not clear, you should contact the Purchasing Director immediately.
6. A bidders list is available at the Purchasing Office.
7. Quote all prices F.O.B. our warehouse or as specified in bid documents.
8. Each proposal shall be clearly marked on the outside of the envelope including Fed Ex, UPS or other delivery service envelopes, as a sealed bid. The name of the item being bid shall be shown on the outside in full.
9. No responsibility shall attach to any County representative or employee for the premature opening of bids not properly addressed or identified.
10. If only one (1) bid is received, the bid may be rejected and re-advertised or excepted if determined to be in the counties best interest.
11. Bids received late will not be accepted, and the County will not be responsible for late mail delivery.
12. Telephone and facsimile bids will not be acceptable in formal bid openings (sealed bids). Should a bid be misplaced by the County and found later, it will be considered. Any bidder may request and shall receive a receipt showing the day and time any bid is delivered to the appropriate office of the County from the personnel thereof.

13. Bids requiring bid bonds will not be accepted if bond is not enclosed. Cash or certified check will be accepted in lieu of bond except on construction projects where cost exceeds \$40,000.
14. All bidders must be recognized dealers in the materials or equipment specified and is qualified to advise in their application or use. A bidder at any time requested must satisfy the Purchasing Office and the County Manager that he has the requisite organization, capital, plant, stock ability and experience to satisfactorily execute the contract in accordance with the provisions of the contract in which he is interested.
15. Any alterations, erasures, additions, or admissions of required information or any changes to specifications or bidding schedule are done at the risk of the bidder. Any bid will be rejected that has a substantial variation, that is; a variation that affects price, quantity, and quality or delivery date (when delivery is required by a specific time).
16. When requested, samples will be furnished to the County free of expense, properly marked for identification and accompanied by a list where there is more than one (1) sample. The County reserves the right to mutilate or destroy any sample submitted whenever it may be to the best interest of the County to do so for the purpose of testing.
17. The County will reject any material, supplies or equipment that did not meet the specifications, even though the bidder lists the trade names or names of such material on the bid or price quotation form.
18. The unauthorized use of patented articles is done entirely at the risk of the successful bidder.
19. The ESTIMATED QUANTITY given in the specifications or advertisements is for the purpose of bidding only. The County may purchase more or less than the estimated quantity and the vendor must not assume that such estimated quantity is part of the contract.
20. Only the latest model equipment as evidenced by the manufacture's current published literature will be considered. Obsolete models of equipment not in production will not be acceptable. The equipment shall be composed of new parts and materials. Any unit containing used parts or having seen any service other than the necessary tests will be rejected. In addition to the equipment specifically called for in the specification, all equipment catalogued by the manufacturer as standard or required by the State of Florida shall be furnished with the equipment. Where required by the State of Florida Motor Vehicle Code, vehicles shall be inspected and bear the latest inspection sticker of the Florida Department of Revenue.
21. The successful bidder on motor vehicle equipment shall be required to furnish with delivery of vehicle, certificate of origin and any other appropriate documentation as required by the Florida Motor Vehicle Department.
22. Prospective bidders are required to examine the location of the proposed work or delivery and determine, in their own way, the difficulties, which are likely to be encountered in the prosecution of the same.

23. All materials, equipment and supplies shall be subject to rigid inspection, under the immediate supervision of the Purchasing Department, its designee and /or the department to which they are delivered. If defective material, equipment, or supplies are discovered, the contractor, upon being instructed by the Purchasing Department or designee, shall remove, or make good such material, equipment, or supplies without extra compensation. It is expressly understood and agreed that the inspection of materials by the County will in no way lessen the responsibility of the Contractor release him from his obligation to perform and deliver to the County Sound and satisfactory materials, equipment, or supplies. The Contractor agrees to pay the costs of all tests upon defective material, equipment, or supplies or allow the costs to be deducted from any monies due him from the County.
24. Unless otherwise specified by the Purchasing Department all materials, supplies, or equipment quoted herein must be delivered within thirty (30) days from the day of notification or exceptions noted on bid sheets.
25. A contract will not be awarded to any corporation, firm, or individual who is, from any cause, in arrears to the County or who has failed in former contracts with the County to perform work satisfactorily, either to the character of the work, the fulfillment or guarantee, or the time consumed in completing the work.
26. Reasonable grounds for supposing that any bidder is interested in more than one proposal for the same item will be considered sufficient cause for rejection of all proposals in which he is interested.
27. Submitting a proposal when the bidder intends to sublet the contract may be a cause for rejection of bids or cancellation of the contract by the County Manager.
28. Unless otherwise specified the County reserves the right to award each items separately or on a lump sum basis whichever is in the best interest of the County.
29. The County reserves the right to reject any and/or all quotations, to waive any minor discrepancies in the bids for all bidders equally, quotations, or specifications, when deemed to be in the best interest of the County and also to purchase any part, all or none of the materials, supplies, or equipment specified.
30. Failure of the bidder to sign the bid or have the signature of an authorized representative or agent on the bid proposal in the space provided will be cause for rejection of the bid. Signature must be written in ink. Typewritten or printed signatures will not be acceptable.
31. Any bidder may withdraw his bid at any time before the time set for the opening of the bids. No bid may be withdrawn in the thirty- (30) day period after bids are opened.

32. It is mutually understood and agreed that if at any time the Purchasing Department or designee shall be of the opinion that the contract or any part thereof is unnecessarily delayed or that the rate of progress or delivery is unsatisfactory, or that the contractor is willfully violating any of the conditions or covenants of the agreement, or executing the same in bad faith, the Purchasing Department or his designee shall have the power to notify the aforesaid contractor of the nature of the complaint. Notification shall constitute delivery of notice, or letter to address given in the proposal. If after three (3) working days of notification the conditions are not corrected to the satisfaction of the Purchasing Director, he shall thereupon have the power to take whatever action he may deem necessary to complete the work or delivery herein described, or any part thereof, and the expense thereof, so charged, shall be deducted from any paid by the County out of such monies as may become due to the said contractor, under and by virtue of this agreement. In case such expense shall exceed the last said sum, then and in that event, the bondsman or the contractor, his executors, administrators, successors, or assigns, shall pay the amounts of such excess to the County on notice made by the Purchasing Department or his designee of the excess due.
33. If the bidder proposes to furnish any item of foreign make or product, he shall write "foreign" together with the name of the originating country opposite such item on a proposal.
34. Any complaint from bidders relative to the invitation to bid or attached specifications shall be made prior to the time of opening bids; other wise, the bidder waives any such complaint.
35. Contracts may be cancelled by the County with or without cause on thirty- (30) days advance written notice.
36. All contractors submitting bids for road projects in excess of \$150,000 must be pre-qualified with the Florida Department of Transportation and shall provide proof of such qualification upon request.
37. Any bidder affected adversely by an intended decision with respect to the award of any bid, shall file with the Purchasing Department for Columbia County, a written notice of intent to file a protest not later than seventy-two (72) hours (excluding Saturdays, Sundays and legal holidays), after the posting of the bid tabulation. Protest procedures may be obtained in the Purchasing Department.
38. A person or affiliate who has been placed on the convicted vendor's list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to Columbia County, may not submit a bid on a contract with Columbia County for the construction or repair of a public building or public work, may not submit bids on leases of real property to Columbia County, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with Columbia County, and may not transact business with Columbia County for a period of 36 months from the date of being placed on the convicted vendor list.
39. Vendor/Contractor shall utilize the U.S. Department of Homeland Security's E-Verify system, in accordance with the terms governing use of the system, to confirm the employment eligibility of;
 - A. all persons employed by the Vendor/Contractor during the term of the Contract to perform employment duties within Florida; and
 - B. all persons, including subcontractors, assigned by the Vendor/Contractor to perform work pursuant to the contract with the County.

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SECTION 00 2113

INSTRUCTIONS TO BIDDERS

PART 1 - DEFINITION OF TERMS: Whenever in this Project Manual the following term(s) are used, their intent and meaning shall be interpreted as follows:

1.1 OWNER

COLUMBIA COUNTY, FLORIDA
POST OFFICE BOX 1529
LAKE CITY, FLORIDA 32056-1529

1.2 BUILDING CODE ADMINISTRATOR

A. The Building Code Administrator, licensed by the Department of Professional Regulation as a Building Official.

1.3 CONTRACTOR

A. Individual, firm, partnership or corporation entering into a construction Contract to perform as "General" or "Prime" Contractor the work specified in the Contract Documents.

1.4 ARCHITECT

A. The firm of Kail Partners Architecture & Interiors, P.O. Box 359055, Gainesville, Florida, 32635-9055.

1.5 SUBCONTRACTOR

A. Individual, firm, partnership or corporation entering into an agreement to furnish materials and labor for the work specified and described in the Contract Documents. Subcontractors shall have a current occupational license for the State of Florida, as applicable.

1.6 MANUFACTURER OR SUPPLIER

A. Individual, firm, partnership or corporation entering into an agreement to furnish materials only for the work specified and described in the Contract Documents.

1.7 BIDDER

A. Individual, firm, partnership or corporation submitting a proposal for the work contemplated.

1.8 PROJECT

A. Work specified and described in the Contract Documents.

1.9 ADDENDA

A. Written and/or graphic revisions issued prior to the award and execution of the Contract which modify and/or interpret the Contract Documents by additions, deletions, clarifications or corrections. Addenda will become part of the Contract Documents when the Contract is awarded and executed.

1.10 CONTRACT DOCUMENTS

A. Consist of the Contract, the Project Manual, Drawings, Addenda issued prior to the award and execution of the Contract, and Change Orders issued after the award and execution of the Contract, and such other documents as are made a part of same by reference in the Contract Documents.

1.11 PROPOSAL

- A. The forms, including all items related to, envelopes and other information pertaining to the complete bid, complete and properly executed, which the Bidder has submitted as his Proposal for the work contemplated.
 - 1. Base Bid: The sum stated in the Proposal for which the Bidder offers to perform the work described in the Contract Documents as the base, to which work may be added to or deducted from for sums stated in Alternate Bids.
 - 2. Alternate Bid: An amount stated in the Proposal to be added to or deducted from the amount of the Base Bid if the corresponding change in Project scope or materials or methods of construction described in the Contract Documents is accepted.
 - 3. Unit Price: An amount stated in the Proposal as a price per unit of measurement for materials and labor or services as described in the Contract Documents.

1.12 DRAWINGS

- A. The official plans and other Drawings or reproductions thereof, pertaining to the work to be performed, with index of Drawings on Sheet G-1.

1.13 PROJECT MANUAL

- A. Written and graphic data bound together for Specifications.

1.14 BUILDING PERMIT

- A. Issued to the Contractor after requirements of the application process have been satisfied and compliance with the appropriate Codes and Standards have been achieved. Construction Plans and Specifications shall be submitted for review by the Building Code Administrator for the issuance of a Building Permit.

1.15 CONTRACT

- A. The Owner-Contractor Agreement consisting of: the agreement text preceding the signature of the parties, the Certificates of Insurance and other documents as may be required by the Contract Documents.

1.16 APPLICATION FOR PAYMENT

- A. Statement of amounts claimed by Contractor as payments due on account of work performed or materials suitably stored.

1.17 ARCHITECT'S ACCEPTANCE

- A. Architect's acknowledgement that a material is acceptable or in accordance with Contract requirements.

1.18 RECORD DRAWINGS

- A. Drawings made during progress of construction illustrating how various elements of the work were actually installed.

1.19 CHANGE ORDER

- A. A work order, issued after the award and execution of the Contract, prepared by the Architect, signed by the Owner authorizing a change in the scope of the work during construction.

1.20 FIELD REPRESENTATIVE

- A. A person in the field designated to represent a responsible party during construction.

1.21 SCHEDULE OF VALUES

- A. A statement furnished to the Architect by the Contractor reflecting the amounts to be allotted for the principal parts of the work. It is to serve as a guide for reviewing the Contractor's Applications for Payment.

1.22 SHOP DRAWINGS AND PRODUCT DATA

- A. Drawings, diagrams, illustrations, schedules, performance charts, brochures and other data prepared by the Contractor or Subcontractor, manufacturer, supplier or distributor, which illustrate how specific portions of the work shall be fabricated, erected and/or installed.

1.23 SAMPLES

- A. Physical examples furnished by the Contractor which illustrate materials, equipment or workmanship, and which establish standards by which the work will be reviewed.

1.24 TIME OF COMPLETION

- A. The number of calendar days, or the actual date, by which the work is required to be completed.

PART 2 - EXAMINATION

2.1 DRAWINGS, PROJECT MANUAL AND PROJECT SITE AND PRE-BID CONFERENCE

- A. Bidders are required to examine the Drawings, Project Manual and Addenda to become familiar with work to be performed under the Contract.
- B. Bidders are encouraged to visit the project site to become familiar with the local conditions that may affect the work to be performed, and the equipment, materials and labor required.
- C. Pre-Bid Conference: Bidders are encouraged to attend a Pre-Bid Conference on the date, time and place set forth. This Pre-Bid Conference will be held in order to review the scope of work of the Contract Documents and to allow questions to be asked by the Bidders. If deemed necessary, Architect will then issue an Addendum to the Drawings and Project Manual to change, modify or explain any decisions or other information that comes out at this Pre-Bid Conference.

PART 3 - CLARIFICATION TO BIDDERS

3.1 CLARIFICATION

- A. No oral clarification in regard to the meaning of Drawings and Project Manual and no oral instructions will be given before the award and execution of the Contract. Discrepancies, omissions or doubts as to the meaning of Contract Documents shall be given in writing to the Architect for interpretation not later than five calendar days prior to Bid Date.

PART 4 - FAMILIARITY WITH LAWS

4.1 KNOWLEDGE OF LAWS

- A. The Bidder shall be familiar with Federal, State, and Local laws, ordinances, codes, rules, and regulations that affect the Bid or the work under this Contract. Lack of knowledge on the part of the Bidder will not provide relief from responsibility of compliance with the above, whether or not specifically called for or shown in the Contract Documents.

PART 5 - PREPARATION AND SUBMISSION OF BIDS

5.1 PREPARATION

- A. Each Bidder shall use the Proposal Form included or one provided by the Owner, indicating base bid amount and alternate bid amount(s). Erasures or other corrections in the Proposal shall be explained or noted over the signature of the Bidder. Proposals containing conditions, omissions, unexplained erasures, alterations, items not called for, or irregularities may be rejected by the Owner.
- B. Each Proposal shall give the full business address of the Bidder and state whether it is an individual, corporation or partnership. Proposals by a corporation, shall be signed with the legal name and seal of the corporation, followed by the name of the State of its incorporation, and by the manual signature and designation of an officer, agent, or other person authorized to bind the corporation, and if the person signing is not the President, be accompanied by a duly authenticated document evidencing the authority to the officer or agent. Proposals by partnerships shall show the names of all partners and must be signed in the partnership name by one of the partners. The partnership signature shall be followed by the manual signature of the partner signing. The name of the person signing and his designation shall be typed or printed below his signature. Proposals by a person who affixes to his signature the word "President", "Secretary", "Agent", or other designation without disclosing his principal may be held to the terms of the Proposal by the individual so signing. Satisfactory evidence of the authority of an officer, agent, attorney, or other person signing for a corporation, and agent, attorney, etc., signing for a partnership or an individual shall be furnished.

5.2 SUBMISSION

- A. Proposals shall be enclosed in a sealed envelope and delivered or mailed to the proper address provided by the Owner. Failure to comply with these requirements may be cause for rejection of the Proposal.
- B. Each bidder shall submit per requirements of Section 00 4300 the following:
 - 1. A list of names of the Subcontractors or other persons or organizations, including those who are to furnish materials for equipment fabricated to a special design, proposed for such portions of the work as may be designated in the Contract Documents, or if no portions are so designated, the names of the Subcontractors proposed for the principal portions of the work. If the Contractor uses his own work force for any of the above, insert the names of his firm in the appropriate blank and be properly licensed as applicable for the specific type work listed.

PART 6 - DISQUALIFICATION OF BIDDERS

6.1 DISQUALIFICATION

- A. More than one Proposal from an individual, firm, partnership, corporation, or association under the same or different names shall not be considered. Reasonable grounds for believing that a Bidder is interested in more than one Proposal for the same work shall cause rejection of all Proposals in which such Bidders are believed to be interested. Proposals may be rejected if there is reason to believe that collusion exists among the Bidders. Proposals in which the prices obviously are unbalanced may be rejected.

PART 7 - RECEIPT AND OPENING OF BIDS

7.1 RECEIPT AND OPENING

- A. Bids will be opened at the time and place provided by the Owner. The Owner or Owner's Agent whose duty it is to open the Proposals will decide when the specified time has arrived, and Proposals received after will be considered. No responsibility will be attached to the Owner or any Owner's Agent for the premature opening of a Proposal not properly addressed and identified.

PART 8 - BID MODIFICATIONS

8.1 MODIFICATIONS

- A. Bid modifications will be accepted from Bidders provided the modification(s) is (are) clearly written, and signed and dated by an authorized agent of the Bidder, at the place where Proposals are to be received, and if received prior to the Bid Opening.

PART 9 - WITHDRAWAL OF BIDS

9.1 WITHDRAWAL

- A. Bids may be withdrawn on request received from Bidders prior to the time fixed for Bid opening. Negligence on the part of the Bidder in preparing his Proposal confers no right for the withdrawal of his Proposal after it has been opened.

PART 10 - AWARD OF CONTRACT

10.1 AWARD OF CONTRACT

- A. The Construction Contract will be awarded as soon as possible to the lowest responsible Bidder, provided his Proposal is reasonable and it is to the best interest of the Owner to accept it.

10.2 RIGHT TO WAIVER

- A. The Owner reserves the right to waive any informality in bids received when such waiver is in the best interest of the Owner.

10.3 FURTHER REQUESTS

- A. Each Bidder shall, if so requested by the Owner, present evidence of his experience, qualifications and ability to carry out the terms of the Contract, including a financial statement.

- 10.4 The Contractor shall purchase at his expense sets of Drawings and Project Manual and related Addenda as required for his use and furnish for the use of all the Subcontractors on the project upon award of the Contract.

PART 11 - REJECTION OF BIDS

11.1 REJECTION

- A. The Owner reserves the right to reject any and all Proposals when rejection is in the best interest of the Owner and to reject the Proposal of a Bidder who, in the opinion of the Owner, is not in a position to perform the Contract.

PART 12 - COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK

12.1 TIME OF COMPLETION

- A. Contractor shall execute the Owner/Contractor Contract within seven calendar days from date of receipt and return to the Owner for his execution. Submit required insurance certificates within five calendar days from date of receipt of the executed Owner / Contractor Contract. Contractor shall begin work within three calendar days from date of receipt of a Building Permit and Notice to Proceed issued by the appropriate authority.

- B. All work shall be Substantially Complete within 60 calendar days from date of Notice to Proceed and Finally Completed within 14 calendar days from the date the Project is declared Substantially Complete.
- C. Contractor shall maintain sufficient labor and supervision on the project site until items have been completed, including Architect's Substantial Completion Review Punch List. A Final Review with the Owner's Representative, Architect and Contractor will be scheduled upon completion of items on Architect's Punch List.

12.2 COMMENCEMENT

- A. At the Preconstruction Conference, the Owner and Architect shall make arrangements with the Contractor for the assignment of staging area to be used at the site for storage of materials, parking, etc. During the construction, the Contractor shall maintain the areas. The storage of materials for use in construction of this Contract shall not interfere with existing walkways, driveways, etc. Existing trees and landscaping shall be protected from injury.

PART 13 - SUBSTANTIAL COMPLETION

13.1 DEFINITION

- A. The term Substantial Completion shall mean that materials required by the Contract Documents are incorporated in the project, that labor has been performed and that the work is ready for review.

PART 14 - FINAL COMPLETION

14.1 FINAL REVIEW

- A. If, upon Final Review, more than ten items on the original Substantial Completion Review Punch Lists are found to be uncorrected, the Architect reserves the right to terminate the Final Review, until such time as items on the Punch Lists are completed.

PART 15 - LIQUIDATED DAMAGES

15.1 LIQUIDATED DAMAGES

- A. If project is not Substantially Completed, the Contractor shall pay to the Owner, as liquidated damages, two hundred dollars for each calendar day elapsing between the date for Substantial Completion and the date such Substantial Completion shall have been accomplished. If the project is not Finally Completed, the Contractor shall pay to the Owner, as liquidated damages, two hundred dollars per calendar day.
- B. Liquidated Damages shall be payable in addition to other excess expenses or costs payable by the Contractor to the Owner or Architect under the provisions of the General Conditions and Supplementary Conditions and shall not exclude the recovery of damages by the Owner under other provisions of the Contract Documents.
- C. The provision for Liquidated Damages for delay shall not affect the Owner's right to terminate the Contract and the Owner's exercise of the right to terminate shall not release the Contractor from his obligation to pay Liquidated Damages. Said Liquidated Damages shall be payable in addition to other expenses or costs payable by the Contractor and shall not exclude the recovery of damages by the Owner under other provisions of the Contract.

PART 16 - REQUIREMENTS FOR CERTIFICATES OF INSURANCE

16.1 RELATED REQUIREMENTS

- A. Refer to Supplementary Conditions for specific requirements.

PART 17 - BASIS FOR BIDDING

17.1 BASIS FOR BIDDING PRODUCTS (SHALL BE AS FOLLOWS:

- A. Products Specified by Reference Standards or by Description Only: Products meeting those standards or descriptions.
- B. Products Specified by Naming One or More Manufacturers with a Provision for Pre-Bid or Post-Bid Substitutions. See individual Sections for specific requirements.
- C. Products Specified by Naming Only One Manufacturer: No options, no substitutions allowed.

17.2 SUBSTITUTIONS

- A. Pre-Bid and Post-Bid Substitutions: Refer to Section 01 6000.

PART 18 - EXECUTION OF CONTRACT

18.1 SIGNATURES

- A. If the Contractor be an individual, the Contract shall be signed with his manual signature.
- B. If the Contractor be a firm or company owned by an individual, the Contract shall be executed in the name of the firm or company by the manual signature of the Owner.
- C. If the Contractor be a partnership, the Contract shall be executed in the name of the partnership by the manual signature of a partner or partners.
- D. If the Contractor be a corporation, the Contract shall be executed in the name of the corporation and shall bear the corporate seal. It may be signed for the corporation by the President and attested by the Secretary; if signed for the corporation by any officer other than the President, the signature of each officer signing shall be attested by the Secretary, and the executed Contract shall be accompanied by a duly authenticated document, bearing the seal of the corporation, quoting the section of the By-Laws of the corporation authorizing the Board of Directors to designate such officer, and a copy of the Resolution designating and authorizing him to execute on behalf of the corporation. That document must contain a statement that the authority is in effect on the date of execution of the Contract, and may not be dated earlier than the date of the execution of the Contract. The same officer may not execute the Contract and authenticate the document of authority.

PART 19 - INTENT

19.1 INTENT

- A. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the work. The Contract Documents are complementary, and what is required by any one element of the Contract Documents shall be binding as if required by all. The Contractor shall be responsible for the construction and coordination of the parts, and all systems shall be completely compatible and fully functional without additional cost to the Owner.

PART 20 - PRECEDENCE

20.1 PRECEDENCE

- A. Supplementary General Conditions shall govern over the General Conditions; but neither the Supplementary General Conditions nor the General Conditions shall govern over the basic Owner/Contractor Contract. Addenda and Change Orders supersede only affected portions of the Construction Documents.
- B. Should any provision of the Florida Statutes or other State Regulations conflict with any of the General Conditions, the provisions of the State requirements shall govern; where there are no State requirements involved, the General Conditions shall govern.
- C. Should the Construction Documents (Drawings and Specifications) conflict on any point, the work shall be performed according to the Specifications, in-so-far as the quality of materials and workmanship is concerned; but the Drawings shall govern in-so-far as the form or extent of the work is concerned. Should an item be shown on the Drawings, but not specified, or specified but not shown on the Drawings, Contractor shall provide the item as "standard of the industry", or as specified insofar as quality is concerned.
- D. Should details and schedules shown on the Drawings conflict on any point, the schedules shall prevail. Large scale details shall prevail over small-scale details, plans or elevations. Figure dimensions shall prevail over scaled dimensions.

END OF SECTION

SECTION 00 4113

BID FORM

TO: COLUMBIA COUNTY, FLORIDA
POST OFFICE BOX 1529
LAKE CITY, FLORIDA 32056-1529

PROJECT: COLUMBIA COUNTY LIBRARY
ROOF REPLACEMENT AND REPAIRS
LAKE CITY, FLORIDA

The undersigned Contractor, "Bidder", proposes to furnish all labor and materials for the construction of the above project, in accordance with the Contract Documents, as prepared by Kail Partners Architecture & Interiors for the following bid amounts:

BASE BID: _____ DOLLARS (\$ _____)

The undersigned agrees that if this Proposal is accepted, construction of this project will begin within time specified after award of Contract, and shall be Finally Completed within the specified time as evidenced by my willingness to sign and execute a Contract so stating.

The Bidder agrees, that this Proposal shall remain valid for a period of thirty calendar days after the time of the opening of this Proposal, and that the Bidder will not revoke nor cancel this Proposal or withdraw from the competition within said thirty calendar day period; that in the event the Contract is awarded to this Bidder, they will enter into a written Contract with the Owner in accordance with the accepted bid.

Acknowledgment is hereby made of receipt of the following Addenda issued during the bidding period:

ADDENDUM NO. _____ DATED: _____

ADDENDUM NO. _____ DATED: _____

In witness, the Bidder has set his signature and affixed his seal

this _____ day of _____, 20__.

(FIRM NAME) (SEAL)

BY: _____
(Authorized Signature) (Typed Name and Title)

Certificate Number and Type _____ as issued to

_____ by the
(Name of Holder Representing Firm)

State of Florida Construction Industry Licensing Board.

BID MODIFICATION FORM

(To be submitted in a sealed envelope marked "BID MODIFICATION" along with the proposal prior to Bid Opening. Use only if Bid Modification needed.)

ADD TO BASE BID: _____ DOLLARS (\$ _____)

DEDUCT FROM BASE BID: _____ DOLLARS (\$ _____)

END OF SECTION

SECTION 00 4300

PROCUREMENT FORM SUPPLEMENTS

Submit with the Bid, in a separate sealed envelope a list of "SUBCONTRACTORS, MANUFACTURERS OR SUPPLIERS" indicated below:

FIRM NAME: _____

ADDRESS: _____

The undersigned, "Bidder" lists below the names of the Subcontractors who will perform the portions of the work included in the project. Once approved by the Owner and Architect, Subcontractors listed cannot be changed without the express written approval of the Owner and Architect. The Contractor can only change a Subcontractor upon submittal of a signed and notarized statement from the Subcontractor who is withdrawing from the project, stating the reasons for withdrawing.

Subcontractors not meeting the requirements listed below may be cause for rejection of that Subcontractor. The undersigned declares that they have reviewed each Subcontractor listed and has in his files evidence that each Subcontractor listed is currently and appropriately licensed in the State of Florida and engaged that he maintains an organization capable, technically and financially, of performing the pertinent work.

If Contractor lists himself as a Subcontractor they shall meet all the above requirements, including licenses, occupational licenses and/or certifications for each trade for which they are listed.

Subsequent to execution of Contract, Contractor will be required to submit copies of all Subcontractors' occupational licenses and evidence of compliance with the above requirements.

- 1. Roofing _____
- 2. Roofing System Manufacturer _____

IN WITNESS, the Bidder has set his signature and affixed his seal
this ____ day of _____, 20__.

(FIRM NAME) (SEAL)

(Type Name and Title)

By: _____
(Authorized Signature)

END OF SECTION

SECTION 00 5214
AGREEMENT FORM

GENERAL CONDITIONS

ARTICLE 1.00

CONTRACT DOCUMENTS

1.1 DEFINITIONS

1.1.1 THE CONTRACT DOCUMENTS

The Contract Documents consist of the following:

- (a) The executed Agreement between Owner and Contractor
- (b) Conditions of the Contract (General, Supplementary, and Special Conditions) and Attachments
- (c) Drawings
- (d) Project Manual
- (e) Addenda issued prior to execution of the Contract
- (f) Modifications issued after execution of the Contract

1.1.2 THE CONTRACT

The contract shall be executed on Attachment One to these General Conditions, titled Agreement between Owner and Contractor. The Contract Documents form the Contract. The Contract represents the integrated agreement between the parties and supersedes prior negotiations, representations, or agreements, either written or oral, and including the bidding documents. The Contract may be amended or modified only by a Modification.

1.1.3 THE PROJECT

The Project is the construction to be built or renovated as designed by the Architect.

1.1.4 THE WORK

The work is defined as all labor, materials and equipment to be incorporated into the project under the terms of this contract.

1.1.5 MODIFICATION TO THE CONTRACT

A Modification may be made only after execution of the Contract, and is one of the following:

- (a) A written Amendment to the Contract signed by both parties;
- (b) An executed Change Order;
- (c) A written interpretation issued by the Architect pursuant to the General Conditions;
- (d) A written Field Order for a minor change in the work and issued by the Architect pursuant to the General Conditions.

1.2 EXECUTION, CORRELATION, INTENT AND INTERPRETATIONS

1.2.1 The Contract Agreement shall be signed in triplicate by the Owner and Contractor for distribution to the Owner, Contractor and Architect.

1.2.2 By executing the Contract, the Contractor agrees that he has examined the Contract Documents together with the site of the proposed work as well as its surrounding territory, that he is informed regarding the conditions affecting the work to be done and the labor and materials to be furnished for the completion of the work.

1.2.3 The Contract Documents are complementary, and what is required by one shall be as binding as if required by all. The intention is to include all labor, materials, supplies, equipment and tools necessary for the proper execution and completion of the work. It is not intended that work not covered under any heading, section, or division of the Specifications shall be supplied unless it is required elsewhere in the Contract Documents or is reasonably inferable therefrom as being necessary to produce the intended results. Words which have well-known technical or trade meanings are used in accordance with such recognized meanings.

1.2.4 Drawings and Specifications are intended to be complementary and to provide for a complete work.

The Contractor acknowledges that the Contract consideration includes sufficient monetary allowances to make the work complete and operational and in compliance with good practice and agrees that inadvertent minor discrepancies or the failure to show details or to repeat on any part of the Contract Documents, the figures or notes given on another, shall not be the cause of additional charges or claims.

Where contradictions occur within the Specifications or the Drawings, with regard to the quantity, quality or method of installation of a particular item, the Contractor shall include in his bid the cost for furnishing the more expensive item or installation of the greater quantity.

The following shall be given preference in the order set forth to determine what work the Contractor is to perform: 1) Addenda (later dates to take precedence over earlier dates), 2) Modifications, 3) Agreement, 4) Specifications, 5) Schedules, 6) Large Scale Detail Drawings, 7) Small Scale Plan and Section Drawings.

Dimensioned Drawings shall govern over scaled drawings.

Existing conditions, including dimensions, shall be verified by the Contractor before laying out the work.

1.2.5 Much of these specifications are written in an abbreviated form and may include sentence fragments. Omissions of words or phrases as "the Contractor shall", "in conformity with", "shall be", "as noted on the Drawings", "according to the plans", "a", "an", "the", and "all" are intentional. Omitted words and phrases shall be supplied by inference in the same manner as they are when a "note" occurs on the Drawings.

1.2.6 Where such words as "as shown", "as indicated", "as noted", or words of similar import are used, they shall refer to the Drawings. Where references are made to "sections" and "divisions" it shall mean sections and divisions of the Specifications unless otherwise stated. Where such words as "as selected", "as approved", "acceptable" or "approved" occur, they shall have reference to the selection and approval of the Architect unless otherwise stated. Where sentences contain verbs such as "provide", "install", and "furnish", they shall mean that the Contractor shall "furnish and install or cause to be furnished and installed" complete, the material or item specified, excepting those materials indicated to be Owner furnished and Contractor installed.

- 1.2.7 The organization of the Specifications into divisions, sections and articles, and the arrangement of Drawings shall not control the Contractor in dividing the work among the Subcontractors or in establishing the extent of work to be performed by any trade.
- 1.2.8 Written interpretations necessary for the proper execution of progress of the work, in the form of Drawings or other format, shall be issued with reasonable promptness by the Architect for such interpretations. Such interpretations shall be consistent with and reasonably inferable from the Contract Documents and shall be rendered by the Architect.

1.3 COPIES FURNISHED AND OWNERSHIP

- 1.3.1 The Contractor shall furnish copies of Drawings and Specifications to Subcontractors as provided in the Supplementary Conditions.
- 1.3.2 Drawings, Specifications and copies of are, and shall remain, the Owner's property. They are not to be used on any other project, and, with the exception of one contract set for each party to the Contract, are to be returned to the Owner on request at the completion of the work.

ARTICLE 2.00

ARCHITECT

2.1 DEFINITIONS

2.1.1 The Architect shall be the firm of Kail Partners Architecture & Interiors, and shall act as defined below either directly or through duly authorized personnel.

2.2 ADMINISTRATION OF THE CONTRACT

2.2.1 The Architect will provide general Administration of the Construction Contract.

2.2.2 The Architect will be the Owner's representative during construction and until final payment. The Architect will have authority to act on behalf of the Owner as Owner's representative to the extent provided in the Contract Documents. The Architect will advise and consult with the Owner and Owner's instructions to the Contractor shall be issued through the Architect.

2.2.3 The Architect and the Owner shall at all times have access to the work wherever it is in preparation and progress.

2.2.4 The Architect shall provide on-site reviews to check the quality and progress of the work and to determine in general if the work is being installed in accordance with the Contract Documents.

On the basis of on-site reviews, the Architect shall keep the Owner informed on the progress of the work and will endeavor to protect him against defects and deficiencies in the work of the Contractor.

The Architect will not be responsible for construction means, methods, techniques, sequences or procedures of construction, or safety precautions and programs in connection with the work, and will not be responsible for the Contractor's failure to carry out the work in accordance with the Contract Documents.

2.2.5 Based on on-site reviews and the Contractor's Application for Payment, the Architect will review the amounts owing to the Contractor and will sign Certificates for Payment in amounts consistent with the approved Schedule of Values.

The Architect shall review that the work installed is in conformance with the construction documents.

The Architect shall certify on each application for payment that such payment is due before payment is made.

Such certification by the Architect does not in any way relieve the Contractor of his final responsibility for conformity with the Contract Documents.

2.2.6 The Architect will be the interpreter of the requirements of the Contract Documents and review the performance of the Contractor. The Architect will provide such interpretations as necessary for the proper execution and progress of the work.

2.2.7 Claims, disputes and other matters in question relating to the execution or progress of the work or the interpretation of the Contract Documents shall be referred initially to the Architect and the Owner for a decision.

2.2.8 Interpretations and decisions of the Architect shall be consistent with the intent of the Contract Documents.

- 2.2.9 Claims, disputes or other matters that has been referred to the Architect, except those waived by the making or acceptance of final payment, shall be subject to arbitration upon the written demand of any party. However, no demand for arbitration of any such claim, dispute or other matter may be made until the earlier of:
- (a) the date on which a written decision has been rendered, or,
 - (b) the tenth day after the parties have presented their evidence to the Architect or have been given a reasonable opportunity to do so, if no written decision has been rendered by that date.
- 2.2.10 If a decision is made in writing and states that it is final but subject to appeal, no demand for arbitration of a claim, dispute or other matter covered by such decision may be made later than thirty days after the date on which the party making the demand received the decision. The failure to demand arbitration within said thirty days period will result in the Architect's decision becoming final and binding upon the Contractor. If a decision is rendered after arbitration proceedings have been initiated, such decision may be entered as evidence but will not supersede any arbitration proceedings unless the decision is acceptable to the parties concerned.
- 2.2.11 The Architect will have authority to reject work which does not conform to the Contract Documents or has been damaged prior to approval of final payment. Whenever, in reasonable opinion, Architect considers it necessary or advisable to insure the proper implementation of the intent of the Contract Documents, Architect will have authority to require special inspection or testing of the work, whether or not such work then be fabricated, installed or completed. However, neither authority to act under this Subparagraph, nor any decision made in good faith either to exercise or not to exercise such authority, shall give rise to any duty or responsibility of the Architect to the Contractor, any Subcontractor, any of their agents or employees, or any other person performing any of the work.
- 2.2.13 The Architect will review shop drawings and samples as provided.
- 2.2.14 The Architect will prepare change orders with Contractors back-up paperwork.
- 2.2.15 The Architect will conduct reviews to determine the dates of Substantial Completion and Final Completion and will receive and review written guarantees and related documents required by the Contract and assembled by the Contractor and will recommend a Final Certificate of Payment to the Owner.
- 2.2.16 The duties, responsibilities and limitation of authority of the Architect as the Owner's representative during construction will not be modified or extended without written consent of the Owner, Contractor and Architect.
- 2.2.17 The Architect will not be responsible for the acts or omissions of the Contractor, any Subcontractors or any of their agents or employees or any other persons at the site or otherwise performing of the work.

ARTICLE 3.00

OWNER

3.1 DEFINITION

3.1.1 The Owner is Columbia County, Florida and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Owner means the Owner or his authorized representative.

3.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

3.2.1 The Owner, through the Architect, shall furnish surveys describing the physical characteristics, subsurface conditions, legal limits and utility locations for the site of the project including investigative reports, all of which have been relied upon by the Architect in preparing Drawings and Specifications, where applicable.

3.2.2 Should conditions encountered below the surface of the ground vary to an unreasonable extent from the conditions indicated by the Drawings and Specifications, the Architect shall be notified by the Contractor and instructions shall have been received from the Architect prior to the Contractor's proceeding with the work involved. Core boring data, including ground-water elevations or conditions, if shown on the Drawings or attached to these Specifications, are presented only as information that is available indicating certain conditions found and limited to the exact locations shown. Neither the Owner nor the Architect shall be responsible for variations found to exist between the data referred to and actual field conditions that develop through the period of construction. The Contractor shall be responsible for making his own determination of water table variations prior to bidding and shall not assume that any water levels shown by the core boring data will necessarily be maintained at the level indicated.

3.2.3 The Owner shall secure and pay for easements for permanent structures or permanent changes in existing facilities.

3.2.4 Information or services under the Owner's control shall be furnished by the Owner to avoid delay in the orderly progress of the work.

3.2.5 The Owner shall issue all instructions to the Contractor through the Architect.

3.2.6 The foregoing are in addition to other duties and responsibilities of the Owner enumerated herein and especially those in respect to Payment and Insurance.

3.3 OWNER'S RIGHT TO STOP THE WORK

3.3.1 If the Contractor fails to correct defective work, or has significant safety violations, or persistently fails to supply materials or equipment in accordance with the Contract Documents, the Owner may order the Contractor to stop the work, or any portion thereof, until the cause for such order has been eliminated. The Contractor will not be entitled to a time extension of the contract completion time in the event the Owner exercises his rights under this paragraph.

3.4 OWNER'S RIGHT TO CARRY OUT THE WORK

- 3.4.1 If the Contractor defaults or neglects to carry out the work in accordance with the Contract Documents or fails to perform any provision of the Contract, the Owner may, after seven days written notice to the Contractor and without prejudice to any other remedy he may have, make good such deficiencies. In such case an appropriate Change Order shall be issued deducting from the payments due the Contractor the cost of correcting such deficiencies, including the cost of the Architect's additional services made necessary by such default, neglect or failure. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

ARTICLE 4.00

CONTRACTOR

4.1 DEFINITION

4.1.1 The Contractor is the person or organization identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Contractor means the Contractor or his authorized representative who is licensed to do business by the State of Florida.

4.2 REVIEW OF CONTRACT DOCUMENTS

4.2.1 The Contractor shall review and compare the Contract Documents and shall at once report to the Architect errors, inconsistencies or omissions he may discover. The Contractor shall not be liable to the Owner or the Architect for any damage resulting from any such errors, inconsistencies or omissions in the Contract Documents provided they are reported as outlined above. The Contractor shall not work without Contract Documents.

4.3 SUPERVISION AND CONSTRUCTION PROCEDURES

4.3.1 The Contractor shall supervise and direct his work. He shall be responsible for construction means, methods, techniques, sequences and procedures and for coordinating portions of the work under the Contract.

4.4 LABOR AND MATERIALS

4.4.1 Unless otherwise specifically noted, the Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, transportation, and other facilities and services necessary for the proper execution and completion of the work.

4.5 WARRANTY

4.5.1 The Contractor warrants to the Owner and the Architect that all materials and equipment furnished under this contract will be new unless otherwise specified, and that all work will be of good quality, free from faults and defects and in conformity with the Contract Documents. All work not so conforming to these standards at the time of acceptance or at the time of inspections, tests or approvals, shall be considered defective. If requested by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of material and equipment.

4.6 TAXES

4.6.1 The Contractor shall pay sales, consumer, use and other similar taxes required by law.

4.7 PERMITS, FEES AND NOTICES

4.7.1 The Contractor shall secure and pay for permits, governmental fees and licenses necessary for the proper execution and completion of the work, which are applicable at the time the bids are received. Contractor shall submit a current copy of Professional License(s) with executed contract.

4.7.2 The Contractor shall give notices and comply with laws, ordinances, rules, regulations and order of public authority bearing on the performance of the work. If the Contractor observes that the Contract Documents are at variance, he shall promptly notify the Architect in writing, and any necessary changes shall be adjusted by appropriate Modification. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Architect he shall assume full responsibility and shall bear costs attributed to.

4.7.3 Contractor shall hold harmless the Owner and Architect against any claim or liability arising from or based upon the violation of law, ordinance or regulation, whether by himself, his employees, or any subcontractor.

4.8 ALLOWANCES

4.8.1 No allowances are specified in the project.

4.9 SUPERINTENDENT

4.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the project site during the progress of the work. The Superintendent shall be satisfactory to the Architect and shall not be changed except with the consent of the Owner, unless the Superintendent proves to be unsatisfactory to the Contractor and ceases to be in his employ. The Superintendent shall represent the Contractor and communications given to the Superintendent shall be as binding as if given to the Contractor. Important communications will be confirmed in writing.

4.10 RESPONSIBILITY FOR THOSE PERFORMING THE WORK

4.10.1 The Contractor shall be responsible to the Owner for the acts and omissions of his employees and Subcontractors, their agents and employees, and Sub-subcontractors, their agents and employees, and other persons performing any of the work under a contract with the Contractor.

4.10.2 The Contractor shall not employ on the work any unfit person or anyone not skilled in the task assigned to him. The Owner may require the removal of disorderly employees.

4.10.3 There shall be no alcohol, firearms or drugs allowed on the job site. No unprofessional interaction with public or staff will be allowed.

4.11 PROGRESS SCHEDULE

4.11.1 The Contractor, after being awarded the Contract, shall prepare and submit for the Architect's approval an estimated progress schedule for the work. The progress schedule shall be related to the entire project to the extent required by the Contract Documents. This schedule shall indicate the dates for the starting and completion of the various stages of construction and shall be revised as required by the conditions of the work, subject to the Architect's approval.

4.11.2 Within five working days after the commencement of any condition which is causing or may cause delay in completion, the Contractor must notify the Architect and the Owner in writing of the effect, if any, of such conditions on the time progress schedule, and must state why and in what respects, if any, the condition is causing or may cause such delay.

4.12 DRAWINGS AND SPECIFICATIONS AT THE SITE

4.12.1 One set of Drawings, marked to record all changes made during construction, shall be delivered to the Architect for the Owner upon completion of the work.

4.13 SHOP DRAWINGS AND SAMPLES

4.13.1 Shop Drawings are drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are prepared by the Contractor or Subcontractor, manufacturer, supplier or distributor, and which illustrate some portion of the work.

4.13.2 Samples are physical examples furnished by the Contractor to illustrate materials, equipment or workmanship, and to establish standards by which the work will be reviewed.

4.13.3 The Contractor shall furnish to the Architect a schedule of shop drawings and samples to be submitted for review. This schedule shall indicate an estimated total number of drawings and samples and a timed sequence for their submission and approval. When approved by the Architect this shop drawing schedule shall be incorporated into the overall schedule.

4.13.4 The Contractor shall review, stamp with his approval and submit in accordance with the above schedules, Shop Drawings and Samples required by the Contract Documents. Shop Drawings and Samples shall be identified in a manner acceptable to the Architect. At the time of submission the Contractor shall inform the Architect in writing of any deviation in the Shop Drawings or Samples from the requirement of the Contract Documents.

4.13.5 The Contractor shall submit to the Architect electronic copies (PDF format) of all Shop Drawings required for the work of the various trades.

Shop Drawings will be annotated as appropriate by the Architect and returned to the Contractor with appropriate review indicated.

4.13.6 By approving and submitting Shop Drawings and Samples, the Contractor thereby agrees that he has determined and verified field measurements, field construction criteria, materials, catalog numbers and similar data, and that he has checked and coordinated each Shop Drawing and Sample with the requirements of the work and of the Contract Documents.

In checking his Shop Drawings prior to submittal, the Contractor is requested to note his corrections or comments on the Drawings.

4.13.7 The Architect will review and approve Shop Drawings and Samples with reasonable promptness, but only for conformity with the design concept of the project and with the information given in the Contract Documents. The Architect's approval of a separate item shall not indicate approval of an assembly in which the item functions.

4.13.8 Drawings returned to the Contractor will be stamped either: "NO EXCEPTIONS TAKEN", "EXCEPTIONS AS NOTED", "REVISE AND RESUBMIT", OR "REJECTED". Those drawings stamped "EXCEPTIONS AS NOTED" need not be returned for further approval if the notations are acceptable to the Contractor and Subcontractors. Drawings stamped "REVISE AND RESUBMIT" or "REJECTED" shall require new submission.

4.13.9 The Contractor shall make corrections provided by the Architect and shall resubmit the corrected copies of Shop Drawings or submit new samples until approved. The Contractor shall direct attention in writing to revisions other than the corrections requested by the Architect on previous submissions.

4.13.10 Appropriate and specific catalogue cuts may be submitted for approval by the Contractor where applicable.

4.13.11 The Architect's approval of Shop Drawings or Samples shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents unless the Contractor has informed the Architect in writing of such deviation at the submission and the Architect has given written approval to the specific deviation, nor shall the Architect's approval relieve the Contractor from responsibility for errors or omissions in the Shop Drawings or Samples.

4.13.12 No portion of the work requiring a Shop Drawing or sample submission shall commence until the submission has been approved.

4.14 USE OF SITE

4.14.1 The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents and shall not unreasonably encumber the site with any materials or equipment.

4.14.2 The Contractor shall be responsible for any encroachments on rights or property of the public or adjoining property owners and shall hold the Owner and Architect harmless because of any encroachments which may be a result of his lack of proper layout. In this regard he shall, without extra cost to the Owner, remove any work or that portion of any work that encroaches on the property of others, or that is built beyond legal building or setback limits, and he shall rebuild the affected work or portion of work at the proper location and in full compliance with the Contract Documents.

4.14.3 Contractor will coordinate at least 48 hours in advance any utility or access interruption that will impact other buildings or portions of that building in use.

4.15 CUTTING AND PATCHING OF WORK

4.15.1 The Contractor shall be responsible for any cutting, fitting and patching that may be required to complete his work except as otherwise specifically provided in the Contract Documents. The Contractor shall not endanger any work of any other contractors by cutting, excavating or otherwise altering any work and shall not cut or alter the work of any other contractor.

4.16 COMMUNICATIONS

4.16.1 The Contractor shall forward communications to the Owner through the Architect.

4.17 INDEMNIFICATION

4.17.1 To the full extent permitted by law, the Contractor shall indemnify and hold harmless the Owner and the Architect and their agents and employees from and against all claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from the performance of the work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of personal property including the loss of use resulting therefrom, and (2) is caused in whole or in part by a negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by the negligence of a party indemnified hereunder. Such obligations shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person.

- 4.17.2 In any and all claims against the Owners or the Architect or any of their agents or employees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.
- 4.17.3 The obligations of the Contractor shall not extend to the liability of the Architect, his Agent 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 directions or instructions by the Architect, his Agents or employees provided such giving or failure to give is the primary cause of the injury or damage.
- 4.18 CLEANING UP**
- 4.18.1 The Contractor shall keep the premises free from accumulation of waste materials or rubbish caused by work. At the completion of the work, Contractor shall remove waste materials and rubbish from and about the project as well as tools, construction equipment, machinery and surplus materials, and shall clean all glass surfaces and leave the work clean.
- 4.18.2 If the Contractor fails to clean up, the Owner may do so and the cost of shall be charged to the Contractor.
- 4.18.3 If a dispute arises between the separate contractors as to their responsibility for cleaning up, the Owner may clean up and charge the cost of to the several contractors as the Owner may determine to be just.

ARTICLE 5.00
SUBCONTRACTORS

5.1 DEFINITION

- 5.1.1 A Subcontractor is a person or organization who has a direct contract with the Contractor to perform work at the site. The term Subcontractor is referred to throughout the Contract Documents as if singular in number and masculine in gender and means a Subcontractor or his authorized representative who is licensed to do business by the laws of the State of Florida. It shall be the Contractor's responsibility to provide the current license number of each Subcontractor and to confirm their license is still valid.
- 5.1.2 A Sub-subcontractor is a person or organization who has a direct or indirect contract with a Subcontractor to perform work at the site. The term Sub-subcontractor is referred to throughout the Contract Documents as if singular in number and masculine in gender and means a Sub-subcontractor or an authorized representative thereof who is licensed to do business by the law of the place where the project is located.
- 5.1.3 Nothing contained in the Contract Documents shall create any contractual relation between the Owner or the Architect and any Subcontractor or Sub-subcontractor.
- 5.1.4 The Owner retains the right and privilege to reject any Subcontractor or Sub-subcontractor and further retains the right and privilege to approve any and all Subcontractors or Sub-subcontractors.

5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

- 5.2.1 The Supplementary Conditions include a requirement for the identification of specified Subcontractors.
- 5.2.2 The Contractor shall not make a substitution for Subcontractor or person or organization that has been accepted by the Owner and the Architect, unless the substitution is acceptable to the Owner and the Architect.

5.3 SUBCONTRACTUAL RELATIONS

- 5.3.1 Work performed for the Contractor by a Subcontractor shall be pursuant to an appropriate agreement between the Contractor and the Subcontractor (and where appropriate between Subcontractor and Sub-subcontractors) which shall contain provisions that
- 5.3.1.1 Preserve and protect the rights of the Owner and the Architect under the Contract with respect to the work to be performed under the subcontract so that the subcontracting thereof will not prejudice such rights;
- 5.3.1.2 Require that such work be performed in accordance with the requirements of the Contract Documents;
- 5.3.1.3 Required submission to the Contractor of applications for payment under each subcontract to which the Contractor is a party, in reasonable time to enable the Contractor to apply for payment.

- 5.3.1.4 Required that all claims for additional costs, extensions of time, damages for delays or otherwise with respect to subcontracted portions of the work shall be submitted to the Contractor in sufficient time so that the Contractor may comply in the manner provided in the Contract Documents for like claims by the Contractor upon the Owner;
- 5.3.1.5 Waive all rights the contracting parties may have against one another for damages caused by fire or other perils covered by the property insurance, except such rights as they may have to the proceeds of such insurance held by the Contractor as trustee and
- 5.3.1.6 Obligate each Subcontractor specifically to consent to the provisions.
- 5.3.1.7 When the Contractor receives payment from the Owner for labor, services, or materials furnished by subcontractors and suppliers hired by the Contractor for the project, the Contractor shall remit payment due to those subcontractors and suppliers, less the value of any item contested in accordance with the Contract, within ten days after the Contractor's receipt of payment from the Owner. When the payment due the subcontractor is for final payment, including retainage, the subcontractor must include with the invoice for final payment a conditional release of lien and all appropriate warranties and closeout documentation. When the subcontractor receives payment from the Contractor for labor, services, or materials furnished by subcontractors and suppliers hired by the subcontractor, the subcontractor shall remit payment due to those subcontractors and suppliers, less the value of any item contested in accordance with the Contract, within ten days after the subcontractor's receipt of payment. This provision shall not be construed to create a contractual relationship of any kind between the Architect and Contractor, between the Owner and a Subcontractor or Sub-subcontractor, between the Owner and Architect or between any persons or entities other than the Owner and Contractor.

5.4 PAYMENT TO SUBCONTRACTORS

- 5.4.1 The Contractor shall pay each Subcontractor, upon receipt of payment from the Owner, an amount equal to the percentage of completion allowed to the Contractor on account of such Subcontractor's work, less the percentage retained from payment to the Contractor. The Contractor shall also require each Subcontractor to make similar payment to his Sub-subcontractors.
- 5.4.2 If the Architect fails to issue a Certificate for Payment for cause which is the fault of the Contractor and not the fault of a particular Subcontractor, the Contractor shall pay the Subcontractor, after the Certificate for Payment should otherwise have been issued, for his work to the extent completed, less the retained percentage.
- 5.4.3 The Contractor shall pay each Subcontractor a just share of any insurance monies received by the Contractor, and he shall require each Subcontractor to make similar payment to his Sub-subcontractors.
- 5.4.4 The Architect may, on request and at his discretion, furnish to Subcontractor information regarding percentage of completion certified to the Contractor on account of work done by such Subcontractors.
- 5.4.5 Neither the Owner nor the Architect shall have any obligation to pay or to see to the payment of any monies to any Subcontractor except as may otherwise be required by law.

ARTICLE 6.00

SEPARATE CONTRACTS

6.1 OWNER'S RIGHT TO AWARD SEPARATE CONTRACTS

- 6.1.1 Prior to and during the progress of the work, the Owner reserves the right to award other contracts relating to the project or in connection with other work within the boundaries of the project.
- 6.1.2 When separate contracts are awarded for different portions of the project, "the Contractor" in the Contract Documents in each case shall be the contractor who signs each separate contract.

6.2 MUTUAL RESPONSIBILITY OF CONTRACTORS

- 6.2.1 The Owner shall coordinate the work of the Contractor with that of other Contractors on the site. The Contractor shall cooperate with the Owner in this activity and shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall properly connect and coordinate his work with theirs.
- 6.2.2 If the project will be constructed using phased design and construction methods, the work of the Contractor will depend upon proper execution and results of the work of another Contractor.

The Contractor shall inspect and promptly report apparent discrepancies or defects in such work that render it unsuitable for such proper execution and results. Failure of the Contractor to inspect and report shall constitute an acceptance of the other Contractor's work as fit and proper to receive his work, except as to defects which may develop in the other separate Contractor's work after the execution of the Contractor's work.

- 6.2.3 Should the Contractor cause damage to the work or property of any separate Contractor on the project, the Contractor shall settle with such other Contractor by agreement or mediation, if he will so settle. If such separate Contractor sues the Owner or initiates an mediation proceeding on account of damage alleged to have been so sustained, the Owner shall notify the Contractor who shall defend such proceedings, and if judgment or award against the Owner arises, the Contractor shall pay or satisfy it and shall reimburse the Owner for attorney's fees and court or mediation costs which the Owner has incurred.

ARTICLE 7.00

MISCELLANEOUS PROVISIONS

7.1 GOVERNING LAW

7.1.1 The Contract shall be governed by the law of the State of Florida and all local ordinances and codes, and exclusive venue shall be Columbia County, Florida.

7.2 SUCCESSORS AND ASSIGNS

7.2.1 The Owner and the Contractor each binds himself, his partners, successors, assigns and legal representatives to the other party and to the partners, successors, assigns and legal representatives of such other party in respect to covenants, agreements and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract or sublet it as a whole without the written consent of the other, nor shall the Contractor assign any monies due or to become due to him without the previous written consent of the Owner.

7.3 WRITTEN NOTICE

7.3.1 Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the firm or to an officer of the corporation for whom it was intended, or if delivered at or sent by registered or certified mail to the last business address known to him who gives the notice.

7.4 CLAIMS FOR DAMAGES

7.4.1 Should either party to the Contract suffer injury or damage to person or property because of an act or omission of the other party or of his employees, agents or others for whose acts he is legally liable, claim shall be made in writing to such other party within a reasonable time after the first observance of such injury or damage.

7.5 RIGHTS AND REMEDIES

7.5.1 The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

7.6 ROYALTIES AND PATENTS

7.6.1 The Contractor shall pay royalties and license fees. He shall defend suits or claims for infringement of patent rights and shall hold the Owner harmless from loss on account of, except that the Owner shall be responsible for such loss when a particular design, process or the product of a particular manufacturer or manufacturers is specified, but if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the Owner.

7.7 TESTS

7.7.1 If the Contract Documents, laws, ordinances, rules, regulations or orders of public authority having jurisdiction require work to be inspected, tested or approved, the Contractor shall give the Architect timely notice of its readiness and of the date arranged so the Architect may observe such inspection, testing or approval. The Contractor shall bear costs of such inspections, tests, and approvals unless otherwise provided.

7.7.2 If after the commencement of the work, the Architect determines that work requires special inspection, testing or approval, he will, upon written authorization from the Owner, instruct the Contractor to order such special inspection, testing or approval. If such special inspection or testing reveals a failure of the work to comply with the requirements of the Contract Documents or with respect to the performance of the work, with laws, ordinances, rules, regulations or orders of public authority having jurisdiction, the Contractor shall bear costs of, including the Architect's additional services made necessary by such failure; otherwise the Owner shall bear such costs.

7.7.3 Required certificates of inspection, testing or approval shall be secured by the Contractor and submitted.

7.7.4 Neither the observations of the Architect in his administration of the Construction Contract, nor inspections, tests or approvals by persons other than the Contractor shall relieve the Contractor from his obligations to perform the work in accordance with the Contract Documents.

7.8 ARBITRATION

7.8.1 The parties agree that controversies between the Owner and the Contractor arising out of or relating to this agreement or breach of shall not be subject to arbitration, but may be submitted to mediation or a court of competent jurisdiction in Columbia County, Florida.

7.9 EQUALITY AND SUBSTITUTIONS

7.9.1 In general, the preparation of the Drawings and Specifications has been based upon sizes, loads, and requirements of specific items of materials or equipment and, as such, it is the basis of bidding. Therefore, all substitutions must be in accordance with the following provision:

7.9.2 The Contractor may make substitutions only with the consent of the Owner, after evaluation by the Architect and recommendation for approval, and in accordance with a Change Order, if required.

7.10 PRECONSTRUCTION CONFERENCE

7.10.1 Before starting construction work on the project, a conference may be held at a place as designated for the purpose of verifying general procedures, expediting and handling of Shop Drawings and Schedules and to establish a working understanding between the parties concerned with this project. Present at the conference shall be a responsible representative of the Contractor and representatives of the Architect and Owner. If Contractor so desires, he may have present with him representatives of major subcontractors. The date and time of the conference shall be agreed upon by the Owner, Contractor and Architect.

7.11 REFERENCED SPECIFICATIONS AND DOCUMENTS

7.11.1 Documents, materials, systems or operations specified by reference shall be provided in compliance with the requirements of the specified reference, except as modified by the requirements of the Contract Documents. Unless a particular edition is called for, the reference used shall be the latest published edition on the date of the project Specifications.

7.11.2 In case of conflict between references and the project Specifications, the project Specifications shall govern. In case of conflict between references, the references having the more stringent requirement shall govern.

ARTICLE 8.00

TIME

8.1 DEFINITIONS

- 8.1.1 The Contract Time is the period of time allotted in the Contract Documents, Refer to Section 00 2113 for completion of the work.
- 8.1.2 The date of commencement of work is the date established in the Notice to Proceed.
- 8.1.2.1 If there is no Notice to Proceed, commencement of the work shall be the date of the Agreement.
- 8.1.3 The date of Substantial Completion of the work is the date certified by the Architect when construction is sufficiently complete, in accordance with the Contract Documents, so the Owner may occupy the work for the use for which it is intended.
- 8.1.4 The term day as used in the Contract Documents shall mean calendar day.

8.2 PROGRESS AND COMPLETION

- 8.2.1 Time is of the essence.
- 8.2.2 The Contractor shall begin the work on the date of commencement. He shall carry the work forward expeditiously with adequate forces and shall complete it within the Contract Time.

8.3 DAMAGES FOR DELAY

- 8.3.1 Where the Architect and the Contractor cannot agree that the delay in the prosecution of the work is justified, liquidated damages will be assessed.
- 8.3.2 If the project is not Substantially Completed in accordance with the provisions of the Contract Documents, the Contractor shall pay to the Owner as liquidated damages, TWO HUNDRED DOLLARS FOR EACH CALENDAR DAY ELAPSING BETWEEN THE DATE FIXED FOR SUBSTANTIAL COMPLETION AND THE DATE SUCH SUBSTANTIAL COMPLETION SHALL HAVE BEEN FULLY ACCOMPLISHED.
- It is also hereby agreed that if the project is not Finally Completed, in accordance with the requirements of the Contract Documents, the Contractor shall pay to the Owner as liquidated damages, TWO HUNDRED DOLLARS FOR EACH CALENDAR DAY ELAPSING BETWEEN THE DATE FIXED FINAL COMPLETION AND THE DATE SUCH FINAL COMPLETION SHALL HAVE BEEN FULLY ACCOMPLISHED.
- 8.3.3 Said Liquidated Damages shall be payable in addition to any excess expenses or costs payable by the Contractor to the Owner under the provisions of the General Conditions, and shall not exclude the recovery of damages by the Owner under other provisions of the Contract Documents.
- 8.3.4 The provision for Liquidated Damages for delay shall not affect the Owner's right to terminate the Contract as provided in the General Conditions, and the Owner's exercise of the right to terminate shall not release the Contractor from his obligation to pay Liquidated Damages in the amounts stipulated. Liquidated Damages shall be payable in addition to any excess expenses or costs payable by the Contractor as set fourth in the General Conditions, and shall not exclude the recovery of damages by the Owner under other provisions of the Contract, except for Contractor's delays.

ARTICLE 9.00

PAYMENTS AND COMPLETION

9.1 CONTRACT SUM

9.1.1 The Contract Sum is stated in the Agreement and is the total amount payable by the Owner to the Contractor for the performance of the work under the Contract Documents.

9.2 SCHEDULE OF VALUES

9.2.1 The Contractor shall submit to the Architect a schedule of values of the various portions of the work, including quantities aggregating the total Contract Sum, divided so as to facilitate payments to Subcontractors in accordance with Schedule of Values and work in place, as the Architect and the Contractor may agree upon, and supported by such data to substantiate its correctness as the Architect may require. Each item in the schedule of values shall include its proper share of overhead and profit. This schedule, when approved by the Architect, shall be used only as a basis for the Contractor's Applications for Payment.

9.3 PROGRESS PAYMENTS

9.3.1 Not less than thirty days after the previous application, the Contractor shall submit to the Architect an itemized Application for Payment, supported by such data substantiating the Contractor's right to payment in the General Conditions, and three originals shall be forwarded to the Architect for distribution.

9.3.2 At the discretion of the Owner, payment will be made on account of materials and equipment not incorporated in the work but delivered and suitably stored at the site or at some other location agreed upon. Such payments shall be conditioned upon submission by the Contractor of bills of sale or such other procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest including applicable insurance and transportation to the site.

9.3.3 The Contractor warrants and guarantees that title to all work, materials and equipment covered by an Application for Payment, will pass to the Owner upon receipt of such payment by the Contractor, free and clear of all liens, claims, security interest or encumbrances, "Liens"; and that no work, materials or equipment covered by an Application for Payment will have been acquired by the Contractor or by any other person performing the work at the site or furnishing materials and equipment for the project, subject to an agreement under which an interest in or an encumbrance on is retained by the seller or otherwise imposed by the Contractor or such other person.

9.4 CERTIFICATES FOR PAYMENT

9.4.1 If the Contractor has made Application for Payment, the Architect will issue the Certificates for Payment to the Owner, , for such amount as he determines to be properly due, or state reasons for withholding a Certificate.

- 9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the data comprising the Application for Payment, that the work has progressed to the point indicated; that, to the best of his knowledge, information and belief, the quality of the work is in accordance with the Contract Documents and that the Contractor is entitled to payment in the amount certified. In addition, the final Certificate for Payment will constitute a further representation the conditions precedent to the Contractor's being entitled to final payment have been fulfilled. However, by issuing a Certificate for Payment, the Architect shall not thereby be deemed to represent that he has made any examination to ascertain how or for what purpose the Contractor has used the monies previously paid on account of the Contract Sum.
- 9.4.3 After the Architect has issued a Certificate for Payment, the Owner shall make payment in the manner provided in the Agreement.
- 9.4.4 No certificate for a progress payment, nor any progress payment, nor any partial or entire use or occupancy of the project by the Owner, shall constitute an acceptance of work not in accordance with the Contract Documents.

9.5 PAYMENTS WITHHELD

- 9.5.1 The Architect may decline to approve an Application for Payment and may hold his Certificate in whole or in part, to the extent necessary to reasonably protect the Owner. The Architect may also decline to approve Applications for Payment, because of subsequently discovered evidence or subsequent reviews, he may nullify the whole or part of a Certificate for Payment previously issued, to such extent as may be necessary in his opinion to protect the Owner from loss because of:
- 9.5.1.1 Defective work not remedied or completed work that has been damaged requiring correction or replacement,
- 9.5.1.2 Third party claims have been filed or there is reasonable cause to believe such will be filed,
- 9.5.1.3 Reasonable evidence of the failure of the Contractor to make payments properly to Subcontractors for labor, materials or equipment,
- 9.5.1.4 Reasonable doubt that the work can be completed for the unpaid balance of the Contract Sum,
- 9.5.1.5 Damage to another contractor,
- 9.5.1.6 Reasonable indication that the work will not be completed within the Contract Time, or
- 9.5.1.7 Unsatisfactory prosecution of the work including failure to furnish acceptable submittals and adhere to the provision of the Special Conditions appended to.
- 9.5.2 When the above grounds are removed, payment shall be made for amounts withheld because of them.

9.6 SUBSTANTIAL COMPLETION

- 9.6.1 When the Contractor determines that the work is substantially complete, the Contractor shall give notice of such to the Architect. When the Architect determines that the work is substantially complete, he will then prepare a Certificate of Substantial Completion. The Certificate of Substantial Completion shall be submitted to the Owner and the Contractor for their acceptance of the responsibilities assigned to them in such certificate.

9.6.2 The Contractor shall cooperate with the Owner if it is the Owner's desire to occupy a substantially completed structure or portion of a structure. When such occupancy takes place the applicable warranty periods for the occupied portion shall be as provided in the Certificate of Substantial Completion.

9.6.3 The assessment of liquidated damages shall terminate on the date of Substantial Completion, or Final Completion, as applicable.

9.7 FINAL PAYMENT

9.7.1 Upon receipt of notice from the Contractor that the work is complete and ready for final inspection, the Architect will make a final review and will notify the Contractor of particulars in which this review reveals the work to be incomplete or defective. The Contractor shall take such measures as are necessary to remedy such deficiencies.

9.7.2 After the Contractor has corrected deficiencies and delivered Maintenance and Operating Instructions, Record Drawings, Guarantees, Bonds, Certificates of Inspection and other documents as required by the Contract Documents, he may make Application for Final Payment following the procedure for progress payments. The Application for Final Payment shall be accompanied, in addition to the supporting data and schedules submitted with progress payments, by submittals as follows: (a) Certificate of Completion of the Punch List, signed by the Owner's Representative; (b) An Affidavit, sufficient to establish compliance with the provisions that lienors have been paid in full; (c) If required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases, and waivers of liens arising out of the Contract to the extent and in such form as designated by the Owner.

If Subcontractors, fabricators or suppliers fail to furnish a release or waiver in full, the Contractor shall furnish a Bond or other collateral satisfactory to the Owner to indemnify him against lien. If lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner monies that the latter may be compelled to pay in discharging such lien, including costs and reasonable attorneys' fees.

9.7.3 If the Architect is satisfied that the Work has been completed and the Contractor has fulfilled his obligations under the Contract Documents, he will issue a final Certificate of Payment to the Owner. Otherwise he will return the application to the Contractor, indicating reasons for not approving final payment, in which case the Contractor will make the necessary corrections and resubmit the application. The Owner will within thirty days after receipt by him of an approved final Certificate of Payment from the Architect pay the Contractor the full amount of the Contract Sum, less the aggregate of all previous payments and any assessment of liquidated damages.

9.7.4 The making of final payment shall constitute a waiver of claims by the Owner except those arising from:

9.7.4.1 Unsettled claims,

9.7.4.2 Faulty or defective work,

9.7.4.3 Failure of the work to comply with the requirements of the Contract Documents, or

9.7.4.4 Terms of any special guarantees required by the Contract Documents.

9.7.5 The acceptance of final payment shall constitute a waiver of claims by the Contractor except those previously made and still unsettled.

9.8 MISCELLANEOUS PROVISIONS

- 9.8.1 Unless otherwise provided or agreed upon, the amount certified for payment on each certificate, except the final payment certificate, shall be ninety percent (90%) of the amount approved less previous amounts certified for payment.
- 9.8.2 Certificate for Payment shall be on the prescribed form as provided in Attachment Two.
- 9.8.3 The Contractor shall execute and submit the Contractor's Affidavit to Owner on Attachment Three to these General Conditions.

ARTICLE 10.00

PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

10.1.1 The Contractor shall be responsible for initiating, maintaining and supervising safety precautions and programs in connection with the work. Owner shall have the right to stop work on the project until Contractor corrects noted safety issues. Contractor shall absorb cost associated with this work stoppage.

10.2 SAFETY OF PERSONS AND PROPERTY

10.2.1 The Contractor shall take precautions for the safety of, and shall provide protection to prevent damage, injury or loss to:

10.2.1.1 Employees on the work and other persons who may be affected thereby;

10.2.1.2 The work and materials and equipment to be incorporated, whether in storage on or off the site, under the care, custody or control of the Contractor or of his Subcontractors or Sub-subcontractors and;

10.2.1.3 Other property at the site or adjacent to including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

10.2.2 The Contractor shall comply with applicable laws, ordinances, rules, regulations and lawful orders of public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. He shall erect and maintain as required by existing conditions and progress of the work, safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying Owners and users of adjacent utilities.

10.2.3 When the use or storage of hazardous materials or equipment is necessary for the execution of the work, the Contractor shall exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel.

10.2.4 Damage or loss to property caused in whole or in part by the Contractor, Subcontractor, Sub-subcontractor, or anyone directly or indirectly employed by them, or by anyone for whose acts they may be liable, shall be remedied by the Contractor.

10.2.5 The Contractor shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor to the Owner and Architect.

10.2.6 The Contractor shall not load or permit parts of the work to be loaded so as to endanger its safety.

10.2.7 Contractors and Subcontractors will comply with Owner's Security program(s) and ensure enforcement of same or similar program.

10.2.8 Trench Safety Act.

10.3**EMERGENCIES**

10.3.1

In an emergency affecting the safety of persons or property, the Contractor or Owner shall act, at his discretion, to prevent threatened damage, injury or loss. Additional compensation or extension of time claimed by the Contractor on account of emergency work shall be determined.

ARTICLE 11.00

INSURANCE

11.1 CONTRACTOR'S LIABILITY INSURANCE (See Supplementary Conditions.)

11.2 PROPERTY INSURANCE (See Supplementary Conditions.)

ARTICLE 12.00

CHANGES IN THE WORK

12.1 CHANGE ORDERS

- 12.1.1 The Owner may order changes in the work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and the Contract Time being adjusted accordingly. Such changes in the work shall be authorized by Change Order, and shall be executed under the applicable conditions of the Contract Documents.
- 12.1.2 A Change Order is a written order to the Contractor signed by the Owner and the Architect, issued after the execution of the Contract, authorizing a change in the work or an adjustment in the Contract Sum or the Contract Time. A Change Order will also be signed by the Contractor if he agrees to the adjustment on the Contract Sum or the Contract Time. The Contract Sum and the Contract Time may be changed only by Change Order.
- 12.1.3 The cost or credit to the Owner resulting from a change in the work shall be determined in one or more of the following ways:
- 12.1.3.1 By mutual acceptance of a lump sum properly itemized;
- 12.1.3.2 By unit prices stated in the Contract Documents or subsequently agreed upon; or
- 12.1.3.3 By cost and a mutually acceptable fixed or percentage fee.
- 12.1.4 If none of the methods set forth are agreed upon and the Owner and Architect deem it necessary that the added work in question be performed without delay, the Contractor shall promptly proceed with the added work in question. The cost of such work shall then be determined by the Architect on the basis of the Contractor's reasonable expenditures and savings, including, in the case of an increase in the Contract Sum, a reasonable allowance for overhead and profit. In such case, the Contractor shall keep and present in such form as the Architect may request, an itemized accounting together with appropriate supporting data. Pending final determination of cost to the Owner, payments on account shall be made on Certificate for Payment approved by the Architect. The amount of credit to be allowed by the Contractor to the Owner for any deletion or change which results in a net decrease in cost will be the amount of the actual net decrease as confirmed by the Architect. When both additions and credits are involved in any one change, the allowance for overhead and profit shall be figured on the basis of net amount, if any. Change Orders extending Contract Time for completion will not automatically entitle the Contractor to increased costs for overhead during the extended period unless specifically allowed in the Change Order.
- 12.1.5 If the Architect, the Owner and the Contractor agree that the unit costs set forth in the Contract Documents are not applicable to the quantities of added work in question, they shall not be utilized.
- 12.1.6 If the Contractor claims that additional cost is involved because of interpretation issued, order by the Owner to stop the work where the Contractor was not at fault, or order for a minor change in the work, the Contractor shall make such claim.

- 12.1.7 When the amount of cost or credit is to be based on mutual acceptance of a lump sum, whether such an amount is an extra, a credit, or no-change-in-contract price, the Contractor shall submit a change order estimate on forms furnished by the Owner which shall be substantiated by a complete itemized breakdown (including breakdowns from each Subcontractor on the same form) showing direct costs for the change or changes in the work. The breakdown shall list quantities and unit prices for materials, labor, equipment and other items of cost when the amount of cost is to be based on actual direct cost plus overhead and profit. The Contractor shall submit receipts or other evidence as the Architect may direct, showing actual direct costs and his right to the payment claimed.
- 12.1.8 The following factors shall be applicable to methods of arriving at extra or credit for Change Orders except where unit prices are stated in the Contract Documents:
- 12.1.8.1 For work done by his own organization, the Contractor may add ten percent of his net increase in direct costs for combined overhead and profit;
- 12.1.8.2 For work done by Subcontract, the respective Subcontractors may add ten percent of their net increase in direct costs for combined overhead and profit and the Contractor may then add five percent of the above Subcontractor's total for his overhead and profit;
- 12.1.8.3 Where changes involve the Contractor and one or more Subcontractors, the breakdown shall itemize the above percentages separately, by use of individual change order estimate forms;
- 12.1.8.4 Overhead and profit percentages will be deducted on items which have a net decrease;
- 12.1.8.5 When both additions and deductions are involved, the overhead and profit shall apply to the net amount, if any;
- 12.1.8.6 Direct costs shall include labor, materials, worker's compensation, taxes on labor and sales, and other direct taxes, health and retirement benefits, social security, and the expense of work performed after regular working hours to the extent authorized by the Owner;
- 12.1.8.7 Proportionate necessary transportation, traveling and subsistence expenses of Contractor's employees incurred for the project; materials, supplies and temporary facilities, including project office expenses; equipment rental by agreement approved by Owner, including transportation and unloading; telephone service at the site and other normal overhead expenses as approved by Owner shall be included in the Contractor's compensation for overhead and profit.
- 12.1.9 The above added percentages are defined to include overhead and additional costs resulting from the change in scope of work including time extensions.
- 12.1.10 It is mutually understood that the time extensions for changes in the work will depend upon the extent by which the changes cause delay in the completion of the various elements of construction. The change order granting the time extension may provide that the contract completion date will be extended only for those specific elements so delayed and that the remaining contract completion dates for other portions of the work will not be altered and may further provide for an equitable readjustment of liquidated damages pursuant to the new completion schedule.

12.2 CLAIMS FOR ADDITIONAL COSTS

12.2.1 If the Contractor wishes to make a claim for an increase in the Contract Sum, he shall give the Architect notice of such claim. This notice shall be given by the Contractor before proceeding to execute the work, except in an emergency endangering life or property, in which case the Contractor shall proceed. No such claim shall be valid unless so made. If the Owner and the Contractor cannot agree on the amount of the adjustment in the Contract Sum it shall be determined by Arbitration. Any change in the Contract Sum resulting from such claim shall be authorized by Change Order.

12.3 FIELD ORDERS

12.3.1 The Architect may issue written Field Orders which interpret the Contract Documents in accordance without change in Contract Sum or Contract Time. The Contractor shall carry out such Field Orders.

ARTICLE 13.00

UNCOVERING AND CORRECTION OF WORK

13.1 UNCOVERING OF WORK

- 13.1.1 If work should be covered contrary to the request of the Architect, it must, if required by the Architect, be uncovered for observation and replaced, at the Contractor's expense.
- 13.1.2 If work has been covered which the Architect has not specifically requested to observe prior to being covered, the Architect may request to see such work and it shall be uncovered by the Contractor. If such work is found in accordance with the Contract Documents, the cost of uncovering and replacement shall be charged to the Owner. If such work is found not in accordance with the Contract Documents, the Contractor shall pay such costs.

13.2 CORRECTION OF WORK

- 13.2.1 The Contractor shall correct work rejected by the Architect as defective or as failing to conform to the Contract Documents. The Contractor shall bear costs of correcting such rejected work, including the possible cost of the Architect's additional services.
- 13.2.2 If, within one year after the date of the submittal of the Certificate of Final Inspection or by the terms of any applicable special guarantee required by the Contract Documents, any of the work is found to be defective or not in accordance with the Contract Documents, the Contractor shall correct it after receipt of notice from the Owner to do so.
- 13.2.3 Such defective or non-conforming work shall be removed from the site if necessary, and the work shall be corrected to comply with the Contract Documents without cost to the Owner.
- 13.2.5 The Contractor shall bear the cost of making good work of separate contractors destroyed or damaged by such removal or correction.
- 13.2.6 If the Contractor does not remove such defective or non-conforming work within a reasonable time fixed by notice from the Owner, the Owner may remove it and may store the materials or equipment at the expense of the Contractor. If the Contractor does not pay the cost of such removal and storage, the Owner may upon notice sell such work and shall account for the net proceeds of, after deducting the costs that should have been borne by the Contractor including compensation for possible additional architectural services. If such proceeds of sale do not cover costs which the Contractor should have borne, the difference shall be charged to the Contractor and an appropriate Change Order shall be issued. If the payments then due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.
- 13.2.7 If the Contractor fails to correct such defective or non-conforming work, the Owner may correct it.

13.3 ACCEPTANCE OF DEFECTIVE OR NON-CONFORMING WORK

- 13.3.1 If the Owner prefers to accept defective or non-conforming work, he may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect an appropriate reduction in the Contract Sum, or, if the amount is determined after final payment, it shall be paid by the Contractor.

ARTICLE 14.00

TERMINATION OF THE CONTRACT

14.1 TERMINATION BY THE CONTRACTOR

14.1.1 If the work is stopped for a period of thirty days under order of court or other public authority having jurisdiction, or as a result of an act of government, through no act or fault of the Contractor or a Subcontractor or their agents or employees or other persons performing work under a contract with the Contractor, or if the work should be stopped for a period of thirty days by the Contractor for the Owner's failure to make payment, then the Contractor may, upon notice to the Owner, terminate the Contract and recover from the Owner payment for work executed and for proven loss sustained upon materials, equipment, construction equipment, tools, and machinery, including reasonable profit and damages accruing to the date work has been stopped for thirty days.

14.2 TERMINATION FOR DEFAULT-DAMAGES FOR DELAY-TIME EXTENSIONS

14.2.1 If the Contractor fails, except in cases for which extension of time is provided, to prosecute the work, with such diligence as will insure its completion within the time specified in this Contract, or fails to complete work within such time, the Owner may, upon notice to the Contractor, terminate his right to proceed with the work. In such event the Owner may take over the work and prosecute the same to completion, by contract or otherwise, and may take possession of and utilize in completing the work such materials, as may be on the site of the work and necessary for. Whether or not the Contractor's right to proceed with the work is terminated, he shall be liable for damage to the Owner resulting from his failure to complete the work within the specified time.

14.2.2 If fixed and agreed liquidated damages are provided in the Contract and if the Owner so terminates the Contractor's right to proceed, the resulting damage will consist of such liquidated damages until such reasonable time as may be required for final completion of the work together with any increased costs occasioned the Owner in completing the work.

14.2.3 If fixed and agreed liquidated damages are provided in the Contract and if the Owner does not so terminate the Contractor's right to proceed, the resulting damage will consist of such liquidated damages until the work is completed or accepted.

14.2.4 The Contractor's right to proceed shall not be so terminated nor the Contractor charged with resulting damage if:

14.2.4.1 The delay in the completion of the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including but not restricted to, acts of God, acts of a public enemy, acts of the Owner in its contractual capacity, acts of other Contractor in the performance of a contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, unusually severe weather conditions not reasonably anticipated for the contract period, or delays of subcontractors or suppliers arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and such subcontractors or suppliers; and if:

The Contractor notifies the Owner in writing of the causes of delay. The Architect shall ascertain the facts and extent of the delay and, with agreement of the Owner, extend the time for completing the work when, in his judgment, the findings of facts justify such an extension. A Change Order will be executed to reflect the change in Contract Time.

14.2.5 If, after notice of termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the Contract shall be equitably adjusted to compensate for such termination and the Contract modified accordingly.

14.2.6 The rights and remedies of the Owner are in addition to other rights and remedies provided by law or under this Contract.

14.3 TERMINATION FOR OTHER REASONS

14.3.1 If the Contractor is adjudged bankrupt, or if he makes a general assignment for the benefit of his creditors, or if a receiver is appointed on account of his insolvency, or if he fails to supply properly skilled workmen or proper materials, or if he fails to make payment to Subcontractors for materials or labor, or disregards laws, ordinances, rules, regulations or orders of public authority having jurisdiction, or otherwise is guilty of a substantial violation of a provision of the Contract Documents, then the Owner, may, without prejudice to right or remedy and after giving the Contractor written notice, terminate the employment of the Contractor and take possession of the site and of materials and equipment and may finish the work by methods he may deem expedient.

14.4 FURTHER PAYMENTS

14.4.1 In the event of termination the Contractor shall not be entitled to receive further payment until the work is finished. If the unpaid balance of the Contract Sum exceeds the costs of finishing the work, including possible compensation for the Architect's additional services, such excess shall be paid to the Contractor. If such costs exceed such unpaid balance, the Contractor shall pay the difference to the Owner.

14.5 ABANDONMENT OF THE PROJECT

14.5.1 Upon written notice to the Contractor and the Architect, the Owner may, without cause and without prejudice to right or remedy, elect to abandon the project and terminate the Agreement. In such case, the Contractor shall be paid for work executed and expense sustained, plus a reasonable profit.

ARTICLE 15.00

EQUAL OPPORTUNITY

15.1 EQUAL OPPORTUNITY

- 15.1.1 All jobs let based on bids received or contracts negotiated will be guaranteed by the individual Contractor or Subcontractor or Sub-subcontractor as to compliance with applicable laws, rules and regulations relating to equal employment opportunity, and Federal, State and Local Laws, rules and regulations pertaining to. The Contractor shall execute the certificate as provided in Attachment Number 4 as evidence of such compliance and file it with the Owner simultaneously with the Contractor's execution of the agreement.

ARTICLE 16.00

PROTEST

16.1 BID PROTEST

- 16.1.1 A respondent who wishes to file a protest pertaining to a bid shall file such notice in accordance with procedures prescribed by Florida Statutes. Protests shall be filed with the Columbia County, Florida, Director of Purchasing. A protest is officially filed when it is received by the Director.
- 16.1.2 Person who is adversely affected by the decision or intended decision shall file with the Director of Purchasing a notice of protest in writing within 72 hours after the bid opening. Failure to file a protest within the time prescribed in Florida Statutes shall constitute a waiver of proceedings under Florida Statutes. The formal written protest shall state with particularity the facts and law upon which the protest is based. Saturdays, Sundays and state holidays shall be excluded in the computation of the 72 hour time period.
- 16.1.3 As prescribed by Florida Statutes, any protestor who files an action protesting a decision or intended decision pertaining to a bid pursuant to Florida Statutes shall post at the time of filing the formal written protest, a bond payable to the Columbia County, Florida in an amount equal to twenty-five thousand dollars or two percent of the lowest accepted bid, whichever is greater, for projects valued over five hundred thousand dollars or five percent of the lowest accepted bid for other projects. The bond shall be conditioned upon payment of costs and fees which may be adjudged against the protester in the administrative hearing in which the action is brought and in subsequent appellate court proceedings. In lieu of a bond, a cashier's check, certified bank check, bank certified company check, money order or U.S. currency would be acceptable form of security. If, after completion of the administrative hearing process and appellate court proceedings, the district prevails, it shall recover costs and charges, which shall be included in the final order or judgment, but excluding attorney's fees. Upon payment of such costs and charges by the protester, the protest security shall be returned. If the protester prevails, he shall recover from the Columbia County, Florida costs and charges which shall be included in the final order of judgment, excluding attorney's fees.
- 16.1.4 Disposition of the protest shall follow Florida Statutes. In the event that the protest cannot be resolved as specified, the standard of proof for further proceedings shall be whether the proposed Columbia County, Florida action was clearly erroneous, contrary to competition, arbitrary or capricious. In bid protest proceeding contesting an intended Columbia County, Florida action to reject bids, the standard of review by administrative law judge shall be whether Columbia County, Florida intended action is illegal, arbitrary, dishonest or fraudulent.

ATTACHMENTS TO THESE GENERAL CONDITIONS

The following forms and informational sheets are attached as acceptable guides for various submittals called for:

Agreement between Owner and Contractor	Attachment No. 1
Application and Certificate for Payment	Attachment No. 2
Equal Opportunity Certificate of Compliance	Attachment No. 3
Supplementary Conditions	Attachment No. 4

ATTACHMENT NO. 1
COLUMBIA COUNTY, FLORIDA
LAKE CITY, FLORIDA

AGREEMENT BETWEEN OWNER AND CONTRACTOR

THIS AGREEMENT, made this ____ day of _____ in the year Two Thousand and _____ between the Owner: **COLUMBIA COUNTY, FLORIDA**, a political subdivision of the State of Florida, whose mailing address is Post Office Box 1529, Lake City, Florida 32056-1529; and the Contractor:

_____, whose mailing address is _____

ARTICLE 1

THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract for Construction (General, Supplementary and other Conditions), the Project Manual and Drawings for Columbia County Public Library – Roof Replacement and Repairs, Lake City, Florida, Architect's Project No. 1623, Addenda issued prior to execution of this Agreement and Modifications issued subsequent to. These form the Contract and are as fully a part of the Contract as if attached to this Agreement or repeated in.

ARTICLE 2

THE WORK

The Contractor shall perform the work required by the Contract Documents in accordance with the Drawings, Project Manual and Addenda for Columbia County Public Library – Roof Replacement and Repairs, Lake City, Florida, Architect's Project No. 1623, and shall execute the work described in the documents, working whatever schedule is required to complete the work in the time allotted, including overtime work and weekend work as required.

ARTICLE 3

TIME OF COMMENCEMENT AND COMPLETION

Contractor shall execute the Owner/Contractor Contract within five calendar days from date of receipt and return to the Owner for his execution, along with required insurance certificates. Contractor shall begin work within seven calendar days from date of receipt of a Letter of Intent, Building Permit and/or Notice to Proceed issued by the appropriate authority.

All work shall be Substantially Complete within 60 calendar days from date of Notice to Proceed and Finally Completed within 14 calendar days from the date the project is declared Substantially Complete.

Where delays are not justified under the General Conditions of the Contract for Construction or otherwise, the Contractor shall be liable for and shall pay to the Owner liquidated damages as follows:

If the Project is not Substantially Completed, the Contractor shall pay to the Owner as liquidated damages, Two Hundred Dollars for each calendar day elapsing between the date fixed for Substantial Completion and the date such Substantial Completion shall have been accomplished. It is also hereby agreed that if the project is not Finally Completed, the Contractor shall pay to the Owner as liquidated damages, Two Hundred Dollars per calendar day past Final Completion date.

ARTICLE 4

CONTRACT SUM

The Owner shall pay the Contractor for the performance of the work, subject to additions and deductions by Change Orders as provided in the conditions of the Contract, in current funds, the Contract Sum of

_____ DOLLARS (\$ _____)

ARTICLE 5

PROGRESS, FINAL PAYMENTS AND CONTRACTOR PAYMENT TO SUBCONTRACTORS

Upon Application for Payment submitted by the Contractor to the Architect and Certificates of Payments, the Owner shall make progress payments on account of the Contract Sum and a final payment to the Contractor as provided in the conditions of the Contract and as follows:

- 5.1 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month.
- a. Contractor shall present to the Architect an Application for Payment. Owner shall remit payment, less any contested amount, not later than the 25th business day after the date on which the payment request or invoice is stamped as received.
 - b. The Owner may reject the payment request or invoice within 20 business days after the date on which the payment request or invoice is stamped as received. The rejection shall specify the deficiency in the payment request and the action necessary to make the payment request proper.
 - c. If a payment request or an invoice is rejected and the Contractor submits a corrected payment request or invoice which corrects the deficiency specified, the corrected payment request or invoice shall be paid or rejected not later than the 10th business day after the date the corrected payment request or invoice is stamped as received.
 - d. If a dispute between the Owner and the Contractor cannot be resolved, the dispute shall be resolved in accordance with the dispute resolution procedure prescribed in the construction contract.
 - e. If the Owner disputes a portion of a payment request or an invoice, the undisputed portion shall be paid timely.
 - f. Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the work. The schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Application for Payment.
 - g. Applications for Payment shall indicate the percentage of completion of each portion of the work as of the end of the period covered by the Application for Payment.

- 5.2 Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:
- a. Until such time as the contract work reaches 50% completion, the Owner shall, within the time period set forth above, make a progress payment to the Contractor in the amount provided in such certificate; provided such payment in addition to previous payments does not exceed ninety percent (90%) of the portion of the Contract Sum properly allocable to labor, materials and equipment incorporated in the work plus ninety percent (90%) of the Contract Sum properly allocable to materials and equipment not incorporated in the work but delivered and suitably stored at the site or at a location suitable to Owner when agreed upon by the parties.
 - b. After such time as the Contract work reaches or exceeds 50% completion, the Owner shall, within the time period set forth above, make a progress payment to the Contractor in the amount provided in such certificate; provided such payment in addition to all previous payments does not exceed ninety-five percent (95%) of the portion of the Contract Sum properly allocable to labor, materials and equipment incorporated in the work plus ninety-five percent (95%) of the Contract Sum properly allocable to materials and equipment not incorporated in the work but delivered and suitably stored at the site or at a location suitable to Owner when agreed upon by the parties.
 - c. Any progress payments of this Agreement shall be reduced by any amounts that are the subject of a good faith dispute, the subject of a claim brought or otherwise the subject of a claim or demand by the Owner or Contractor.
 - d. The Contractor has fourteen days from the date the Owner accepts the work as Substantially Complete to complete punch list items for the project. If punch list items are not completed and Finally Accepted by the Architect and the Owner, liquidated damages for each calendar day of such delay will be assessed. The Contractor will be liable for and shall pay the Owner such amount. Waiver of this provision shall be approved by the Owner. When final punch list items have been completed to the satisfaction of Owner and Architect, and Final Closeout Documents have been reviewed and approved, Final Payment of the remaining 5% will be made upon Final Acceptance by Columbia County, Florida.
- 5.3 The Application for Payment for the final payment under the contract shall include the following forms:
- a. Contractor's Affidavit to Owner stating that liens have been paid in full. If Subcontractor, fabricator or supplier fails to furnish a release or waiver in full, the prime Contractor will furnish an Indemnity Bond for release of lien to the Owner, or other collateral satisfactory to the Owner, to indemnify the Owner against lien.
 - b. Consent of Surety to Final Payment on appropriate A.I.A. Document or other form acceptable to the Owner.
 - c. Contractor's Affidavit of Release of Liens on A.I.A. Documents G706 and G706A, or other forms acceptable to the Owner, certifying that the prime Contractor, Subcontractors, suppliers of materials and equipment, and performers of work, labor or services on the project release or waive lien against the Owner arising in the construction project.
- 5.4 Subcontractors, forty-five days after satisfactory completion of their work on the Contractor's project, can invoice the Contractor for the remainder of unpaid work, including the full value of the retainage related to their work, less the value of any item contested in accordance with the terms and conditions of the construction Contract.
- a. The Contractor shall require the Subcontractor to include a conditional release of lien and appropriate warranties and closeout documentation with this final payment invoice to the Contractor.

- b. The Contractor shall include this subcontractor payment request in the next Application for Payment in the pay application cycle to the Architect following the receipt of the subcontractor payment request, if deemed to be complete and in compliance with this section.
 - c. When a Contractor receives payment from the Owner for labor, services or materials furnished by subcontractors and suppliers hired by the Contractor, the Contractor shall remit payment due to those subcontractors and suppliers, less the value of any item contested in accordance with the terms and conditions of the construction Contract, within ten days after the Contractor's receipt of payment.
- 5.5 Paragraph 5.4 shall not be construed to create a contractual relationship (1) between the Architect and Contractor, (2) between the Owner and a Subcontractor or Sub-subcontractor, (3) between the Owner and Architect or (4) between persons or entities other than the Owner and Contractor.
- 5.6 Columbia County, Florida may occupy the facilities prior to the completion of punch list items; however, retainages specified will remain in force.

ARTICLE 6

MISCELLANEOUS PROVISIONS

- 6.1 Terms used in the Agreement which are defined in the Conditions of the Contract shall have the meanings designated in those Conditions.
- 6.2 The Contract Documents shall constitute the Agreement between the Owner and the Contractor, except for Modifications issued after execution of this Agreement, and shall include Alternates set forth in. In the event of a conflict between the Project Manual, then specific provisions of the Project Manual shall control.
- 6.3 The Owner's representative is:
- Tommy Matthews, Columbia County Building & Zoning
Columbia County, Florida
Lake City, Florida
(386) 758-1039 - Telephone
- 6.4 The Contractor's representative is:
- Name and Title:
Name of Company:
Address:
Telephone:
- 6.5 The Contractor's representative shall not be changed without notice to, and approval of, the Owner.

ARTICLE 7

ENUMERATION OF CONTRACT DOCUMENTS

- 7.1 The Specifications are those contained in the Project Manual; see Exhibit A (Table of Contents to be provided after bid opening) and incorporated by reference.
- 7.2 The Drawings are as follows and are dated June 27, 2016. See Exhibit B (Sheet Index to be provided after bid opening) and incorporated by reference.
- 7.3 The Addenda, if any, (to be provided after bid opening) are as follows:

<u>Number</u>	<u>Date</u>	<u>Pages</u>
---------------	-------------	--------------

THIS AGREEMENT executed as of the day and year first above written, and is executed in at least three original copies of which one is to be delivered to the Contractor, one to the Architect for use in the administration of the Contract, and the remainder to the Owner.

Signed, sealed and delivered
in the presence of:

COLUMBIA COUNTY, FLORIDA

ATTEST:

By:

Signature

Print or type name

**STATE OF FLORIDA
COUNTY OF COLUMBIA**

The foregoing instrument was acknowledged before me this ___ day of _____
20___, by _____, as **COLUMBIA COUNTY**, who is personally known to me.

**(NOTARIAL
SEAL)**

Notary Public, State of Florida

(Print or Type Name)

My Commission Expires:

Signed, sealed and delivered
in the presence of:

GENERAL CONTRACTOR

Witness

By: _____
Name and Title

Print or type name

Witness

Print or type name

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me this ____day of _____, 20_____,
by _____, as _____
of _____, a Florida corporation, on behalf of
the corporation, who is personally known to me or who has produced _____
as identification.

Notary Public, State of Florida

**(NOTARIAL
SEAL)**

(Print or Type Name)
My Commission Expires:

ATTACHMENT NO. 2

APPLICATION AND CERTIFICATE FOR PAYMENT

Date _____ For Period Ending _____ Payment No. _____

CONTRACTOR: _____

CONTRACT FOR: COLUMBIA COUNTY PUBLIC LIBRARY
ROOF REPLACEMENT AND REPAIRS
LAKE CITY, FLORIDA
ARCHITECT'S PROJECT NUMBER: 1623

Original Contract Sum	\$ _____	Contract Time	_____	Calendar Days	_____
Adds to Date	\$ _____	Authorized Ext	_____	Calendar Days	_____
Total	\$ _____	Pending Requests	_____	Calendar Days	_____
Deducts to Date	\$ _____	Time Lapsed To Date	_____	Calendar Days	_____
Adj. Contr. Sum	\$ _____		_____	Calendar Days	_____

WORK PERFORMED TO DATE	\$ _____
MATERIAL SUITABLY STORED (Itemized list of materials attached)	\$ _____
TOTAL TO DATE	\$ _____
Less Retainage	\$ _____
Less Previous Payments	\$ _____
 TOTAL	 \$ _____
 DUE THIS PAYMENT	 \$ _____

CERTIFICATION OF THE CONTRACTOR: I certify that items and amounts shown on the face of this Certificate are correct and that work has been performed and material supplied in full accordance with the terms and conditions of the Contract. I further certify that just and lawful bills against the undersigned and his subcontractors have been paid in full accordance with their terms and conditions and that Subcontractors listed on the previous month's Application and Certificate for Payment have been paid the full amount listed on that Application as evidenced by Partial Releases of Liens attached.

Date: _____ Contractor: _____ (Printed Name)
(Notarized Signature Required)

Date: _____ Notary: _____

CERTIFICATE OF THE ARCHITECT: I certify that I have checked and verified this Certificate and the accompanying Partial Releases of Liens; that to the best of my knowledge and belief it is a true statement of the value of the work performed and material suitably stored on the site or other approved location by the Contractor; that work and material included in this Certificate have been reviewed; and that work has been performed and material supplied in accordance with the terms of the Contract.

Date: _____

Architect: _____

APPROVED FOR PAYMENT:

Date: _____

Owner: _____

(Authorized Signature)

ATTACHMENT NO. 3

EQUAL OPPORTUNITY

CERTIFICATE OF COMPLIANCE

PROJECT TITLE:

COLUMBIA COUNTY PUBLIC LIBRARY
ROOF REPLACEMENT AND REPAIRS
COLUMBIA COUNTY, FLORIDA
LAKE CITY, FLORIDA
ARCHITECT'S PROJECT NO. 1623

This is to certify that the undersigned Contractor on subject project does now and will during the length of this project comply with applicable laws, rules and regulations relating to equal employment opportunity, and Federal, State, or Local laws, rules or regulations pertaining to; and further certifies compliance specifically with Executive Order 11246 originally issued by the President of the United States on September 24, 1965, as amended from time to time thereafter, including:

1. The Contractor does not discriminate in its employment policies as to race, color, religion, sex or national origin; and,
2. The Contractor does maintain an affirmative action plan to recruit, employ and promote qualified members of groups that may have been formerly excluded because of race, color, religion, sex or national origin.

CONTRACTOR

By: _____
Name / Title

Date: _____

ATTACHMENT NO. 4

SUPPLEMENTARY CONDITIONS

1. **Conditions of the Contract** General Conditions, these Supplementary Conditions and Divisions 00 and 01 are applicable to divisions and sections of the specifications and it is the Contractor's responsibility to so inform parties who should be influenced by.

2. **Applicable Drawings** The Drawings applicable to this work are titled:

Columbia County Public Library
Roof Replacement and Repairs

Dated: June 27, 2016

Prepared by: Kail Partners Architecture & Interiors
PO Box 359055
Gainesville, Florida 32635-9055

The Drawings accompany these Specifications and become a part of. The applicable Drawings consist of the sheets listed on Sheet G-1, Sheet Index.

The Contractor shall purchase sets of Drawings and Project Manual as required of his use and the use of the Subcontractors on the project.

3. **Contract Time** The work shall be commenced within seven calendar days after receipt of the Notice to Proceed and shall be Substantially Complete within 60 calendar days, and shall be Finally Completed within 14 calendar days after the date of Substantial Completion.

4. **Liquidated Damages** Since actual damages for delay are impossible of agreed determination, the fixed, agreed and liquidated damages described in the General Conditions shall be for each calendar day beyond the specified Contract Time as described in the Project Manual, shall be Two Hundred Dollars per calendar day past the date of Substantial Completion and Two Hundred Dollars per calendar day past Final Completion.

5. **Notice to Owner** - If a Subcontractor or supplier files a Notice to Owner under the Florida Lien Law, the Owner will notify the Contractor of its receipt. Payment request delivered subsequent to receipt of that Notice to Owner that contains payment in full or in part for that Subcontractor or supplier shall require a Final or Partial Release of Lien from each Subcontractor or supplier so affected.

6. **Contractor's Liability Insurance**

a) The Contractor shall purchase and maintain in a company or companies licensed to do business in the State of Florida, possess an AM Best rating of A-, and acceptable to the Owner and his Insurance Counselor such insurance as will protect him from claims, which may rise out of or result from the Contractor's operations under the Contract, whether such operations be by himself or by Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone else for whose acts any of them may be liable. The specific delineation of coverage in this paragraph is a minimum guide only, it being the specific intent of the Owner that it shall be fully and completely protected and indemnified from any and all claims which may arise out of Contractor's operation under the Contract; including among others those checked below:

a)i claims under workers' compensation, disability benefit and other similar employee benefit acts;

a)ii claims for damages because of bodily injury, occupational sickness or disease, or death of his employees;

- a)iii claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees;
- a)iv claims for damages by usual personal injury coverage including but not limited to libel, slander, and false arrest which are sustained (1) by any person including, but not limited to, a Contractor, Subcontractor or Sub-subcontractor or their employees as a result of an occurrence directly or indirectly related to the employment of such person by the Contractor, or (2) by any other person;
- a)v claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom;
- a)vi claims resulting from explosion, collapse, or underground accident, (X-C-U coverage required) and other on-premises operations.
- a)vii claims resulting from owned, hired and non-owned motor vehicles and equipment;
- a)viii claims for damage resulting from the actions or inactions of independent Contractors;
- a)ix claims arising under products and completed operations insurance.
- b) The insurance required shall be written for not less than the limits of liability specified below, or that required by law, whichever is greater, and shall include contractual liability insurance as applicable to the Contractor's obligations in the General Conditions. Contractor shall provide Owner with Certificate of Insurance evidencing that Owner shall receive a thirty day (30) notice of cancellation, nonrenewal or material change in coverage with a ten (10) day notice if cancellation is for nonpayment of premium. Contractor shall provide Owner with Certificate of Insurance prior to beginning any work.

b)j Workers' Compensation:

State, Florida Statutes	Statutory
Applicable Federal	Statutory
Employer's Liability	\$200,000

b)ii Comprehensive General Liability:
Including Premises-Operations; Products Completed Operations; Contractor's Liability
Broad Form Property Damage; Contractual Liability.

General Liability	\$1,000,000 per Claimant
Property Damage	\$1,000,000 per Occurrence
Personal Injury	\$1,000,000 per Claimant
Liability	\$1,000,000 per Occurrence
	\$2,000,000 per Annual Aggregate

Property Damage Liability Insurance will provide X, C, or U coverage as applicable.

The Owner shall be named as additional insured on the Contractor's Comprehensive General Liability Policy.

Personal Injury Liability shall be separate coverage from Bodily Injury.

b)iii Owner's Protective Liability:

The Owner shall be named as the insured; ORIGINAL policy shall be submitted to the Owner.

Bodily/Personal Injury	\$1,000,000 per Claimant
Injury	\$1,000,000 per Occurrence
Property Damage	\$1,000,000 Single Limit per Occurrence

b)iv Contractor's Protective Liability:

The Owner shall be named as additional insured on the Contractor's Protective Liability Policy.

Bodily/Personal Injury	\$1,000,000 per Claimant
	\$1,000,000 per Occurrence
Property Damage	\$1,000,000 Single Limit per Occurrence

b)v Comprehensive Automobile Liability:

The Owner shall be named as additional insured on the Contractor's Comprehensive Automobile Liability Policy. Policy shall cover owned, hired and all classes of non-owned vehicles.

Bodily Personal Injury:	\$1,000,000 per Claimant
	\$1,000,000 per Occurrence
Property Damage:	\$1,000,000 Single Limit per Occurrence

b)vi Coverage to be certified by the Contractor (and Subcontractors) shall include, but not be limited to the following:

- x Workers' Compensation
- x Automobile owned, hired and non-owned
- x Premises
- x Operations
- x Contractual
- x Personal injury - Hazards, A, B and C with employee exclusion removed
- x Broad Form Property Damage
- x Removal of X, C and U exclusions
- x Products and Completed Operations
- x Independent Contractors

- c) A Certificate of Insurance, executed on a standard ACORD form, shall be filed with the Owner simultaneously with the Contractor's execution of the Agreement. The certificate shall contain a provision that coverages afforded under the policies will not be cancelled until at least thirty days prior written notice has been given to the Owner. The Certificate of Insurance will include the following statement: "Interest of the Certificate Holder is included as an Additional Insured."

7. **Property Insurance**

- a) Until the work is completed and accepted by the Owner, the Contractor shall purchase and maintain property insurance upon the entire work at the site to the full insurable value of. This insurance shall include the interest of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the work and shall insure against the perils of fire, extended coverage, vandalism and malicious mischief. Coverage shall include damages, losses, and expenses arising out of or resulting from any insured property including fees and charges of Architects, Engineers and Attorneys.
 - b) The Contractor shall purchase and maintain such machinery insurance as may be required by the Contract Documents or by law. The insurance shall include the interest of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the work.
 - c) The Contractor shall file a copy of policies with the Owner and the Architect.
 - d) The Owner and Contractor waive rights against each other or damages caused by fire or other perils to the extent covered by insurance provided, except such rights as they may have to the proceeds of such insurance held by the Owner as trustee. The Contractor shall require similar waivers by Subcontractors and Sub-subcontractors. In waiving rights of recovery under terms, the term "Owner" shall be deemed to include his employees and the Architect, and its employees as the Owner's representative.
 - e) Such insurance shall be no less than that required by the Project Manual.
8. General Contractor contract / subcontract shall use State of Florida licensed contractors / subcontractors.

SECTION 01 0145
CUTTING AND PATCHING

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Requirements and limitations for cutting and patching of work.
- B. "Cutting and Patching" is hereby defined to include, but is not limited to, the cutting and patching of nominally completed or previously existing work in order to accommodate the coordination of work, or the installation of other work, or to uncover other work for access or inspection, or to obtain samples for testing or for similar purposes; and is defined to exclude integral cutting and patching during the manufacturing, fabricating, erecting and installing process for individual units of work.

1.2 RELATED REQUIREMENTS

- A. Refer to Division 00 and 01 sections of these specifications.

1.3 SUBMITTALS: Submittals shall be made in accordance with Section 01 3300. In addition, the following specific information shall be provided:

- A. Submit request in advance of cutting or alteration which affects: Structural integrity of any element, integrity of weather-exposed or moisture-resistant element, efficiency, maintenance or safety of any operational element, visual qualities of sight-exposed elements and/or work of Owner or other separate Contractors performing work at the same time.
- B. Include in Request: Identification of project, location and description of affected work, necessity for cutting or alteration, description of proposed work and products to be used, alternatives to cutting and patching, effect on work of Owner or other Contractors on site, permission of affected Contractor and date and time work propose to be executed.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Provide materials for cutting and patching which will result in equal-or-better work than the work being cut and patched in terms of performance characteristics, including visual effect where applicable. Use materials identical with the original materials where feasible and where recognized that satisfactory results can be produced.

PART 3 - EXECUTION

3.1 GENERAL

- A. Execute cutting, fitting and patching to complete work, and to: Fit the parts together and to integrate with other work, uncover work to install ill-timed work, remove and replace defective and non-conforming work, remove samples of installed work for testing and provide openings in elements of work for penetrations of mechanical and electrical work.

3.2 INSPECTION

- A. Inspect existing conditions, including elements subject to damage or movement during cutting and patching.
- B. After uncovering, inspect conditions affecting performance of work.

C. Beginning of cutting or patching means acceptance of existing conditions.

3.3 PREPARATION

- A. Provide supports to assure structural integrity of surroundings and devices and methods to protect other portions of project from damage.
- B. Provide protection from elements for areas which may be exposed by uncovering work and maintain excavations free of water.

3.4 PERFORMANCE

- A. Execute work by methods to avoid damage to other work and which will provide proper surfaces to receive patching and finishing.
- B. Employ original installer to perform cutting and patching for weather-exposed, moisture-resistant elements and sight-exposed surfaces.
- C. Cut rigid materials using masonry saw or core drill within a 1/4 inch tolerance of size of opening needed. Pneumatic tools not allowed without prior approval.
- D. Fit work to pipes, sleeves, ducts, conduit and other penetrations through surfaces. All voids around penetrations shall be grouted.
- E. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for an assembly, refinish entire unit; for patches in walls, refinish wall-to-wall and floor-to-ceiling; for patches in masonry walls, cut out face shell of block and replace or cut out individual units as required and replace.
- F. All penetrations through fire rated construction shall be fire stopped using a through penetration fire stop system listed in the "Underwriters Laboratory Fire Resistance Directory".

3.5 CLEANUP AND DEBRIS DISPOSAL

- A. Contractor shall clean up and remove debris resulting from these operations from the site on a regular basis and not exceeding one week intervals. More frequent cleanup in specific areas of extensive demolition may be required by the Owner.
- B. It is envisioned that a construction dumpster will be placed on the site and emptied at an approved off-site as required.
- C. The primary concern is that safety of the students, staff and workers not be compromised in any way as a result of the demolition work required under this contract. Debris will not be allowed to collect and remain in the areas of demolition.

END OF SECTION

SECTION 01 0390
COORDINATION AND MEETINGS

PART 1 - PART 1 GENERAL

1.1 REQUIREMENTS INCLUDED

A. Preconstruction Conference.

1.2 RELATED REQUIREMENTS

A. Refer to Division 00 and 01 sections of these specifications.

1.3 PRECONSTRUCTION CONFERENCE / PROGRESS MEETINGS

A. Contractor will administer the preconstruction conference for review of the contract requirements, clarification of responsibilities and use of project site and for review of administrative procedures. Date, time and place for Preconstruction Conference will be announced after award of the contract.

B. At the Preconstruction Conference, the Owner shall make arrangements with the Contractor for the assignment of staging areas to be used for storage of materials, parking, etc.

C. Contractor shall prepare agenda with copies for participants, attend progress meetings, record minutes and distribute copies to participants and those affected by decisions made.

D. Attendance: Owner, Contractor and Architect.

E. The dates and times of the progress meetings will be discussed at the Preconstruction Conference.

1.4 SUBCONTRACTOR PRECONSTRUCTION CONFERENCES

A. Review conditions of installation, preparation and installation procedures and coordination with related work.

END OF SECTION

SECTION 01 0811
RELEASE OF LIEN FORMS

THIS FORM TO BE USED FOR ATTACHMENT TO EACH APPLICATION AND CERTIFICATE FOR PAYMENT.

PARTIAL WAIVER AND RELEASE OF LIEN UPON PROGRESS PAYMENT

The undersigned lienor, in consideration of the sum of \$ _____, hereby waives and releases its lien and right to claim a lien for labor, services or materials furnished through _____ to _____ on the site of the following property: _____
(insert name of your Contractor) (insert date)

**COLUMBIA COUNTY PUBLIC LIBRARY
ROOF REPLACEMENT AND REPAIRS
LAKE CITY, FLORIDA**

This waiver and release does not cover any retention, labor, services or materials furnished after the date specified above.

DATED on _____, 20__.

BY: _____
(Lienor)

DATE: _____ NOTARY: _____

THIS FORM TO BE USED FOR ATTACHMENT TO REQUEST FOR FINAL APPLICATION AND CERTIFICATE FOR PAYMENT.

FINAL WAIVER AND RELEASE OF LIEN UPON FINAL PAYMENT

The undersigned lienor, in consideration of the final payment in the amount of \$ _____, hereby waives and releases its lien and right to claim a lien for labor, services or materials furnished to _____ on the site of the following property:

(insert name of Contractor)

**COLUMBIA COUNTY PUBLIC LIBRARY
ROOF REPLACEMENT AND REPAIRS
LAKE CITY, FLORIDA**

DATED on _____, 20__.

BY: _____
(Lienor)

DATE: _____

NOTARY: _____

END OF SECTION

SECTION 01 2000

PRICE AND PAYMENT PROCEDURES

Date _____ For Period Ending _____ Payment No. _____

CONTRACTOR: _____

CONTRACT FOR: COLUMBIA COUNTY PUBLIC LIBRARY
ROOF REPLACEMENT AND REPAIRS
LAKE CITY, FLORIDA

Original Contract Sum	\$ _____	Contract Time	_____	Calendar Days	_____
Adds to Date	\$ _____	Authorized Ext	_____	Calendar Days	_____
Total	\$ _____	Pending Requests	_____	Calendar Days	_____
Deducts to Date	\$ _____	Time Lapsed To Date	_____	Calendar Days	_____
Adj. Contr. Sum	\$ _____		_____	Calendar Days	_____

WORK PERFORMED TO DATE	\$ _____
MATERIAL SUITABLY STORED (Itemized list of materials attached)	\$ _____
TOTAL TO DATE	\$ _____
Less Retainage	\$ _____
Less Previous Payments	\$ _____
 TOTAL	 \$ _____
 DUE THIS PAYMENT	 \$ _____

CERTIFICATION OF THE CONTRACTOR: I certify that all items and amounts shown on the face of this Certificate are correct and that all work has been performed and material supplied in full accordance with the terms and conditions of the Contract. I further certify that all just and lawful bills against the undersigned and his subcontractors have been paid in full accordance with their terms and conditions and that all Subcontractors listed on the previous month's Application and Certificate for Payment have been paid the full amount listed on that Application as evidenced by Partial Releases of Liens attached.

Date: _____ Contractor: _____ (Printed Name)
(Notarized Signature Required)

Date: _____ Notary: _____

CERTIFICATE OF THE ARCHITECT: I certify that I have checked and verified this Certificate and the accompanying Partial Releases of Liens; that to the best of my knowledge and belief it is a true statement of the value of the work performed and material suitably stored on the site or other approved location by the Contractor; that all work and material included in this Certificate have been reviewed; and that all work has been performed and material supplied in full accordance with the terms of the Contract.

Date: _____

Architect: _____

APPROVED FOR PAYMENT:

Date: _____

Owner: _____

(Authorized Signature)

END OF SECTION

SECTION 01 3000
ADMINISTRATIVE REQUIREMENTS

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Scope of work covered by Contract Documents.
- B. Coordination of all trades.
- C. Codes and reference standards.
- D. Ordinances and regulations.

1.2 RELATED REQUIREMENTS

- A. Refer to Division 00 and 01 sections of these specifications.

1.3 SCOPE OF WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Description: Demolition and Roof Replacement and Repairs of the Columbia County Public Library roof as outlined in the documents. The work includes, but is not limited to, selective demolition, miscellaneous rough carpentry, sbs modified bituminous roofing, sheet metal flashing and trim, roof specialties, joint protection, general mechanical and electrical requirements. Drawings include General Project Cover Sheet, Roof Plan and Details.

1.4 COORDINATION

- A. Coordinate work of the various specifications sections to assure efficient and orderly sequence of installation of construction elements with provisions for accommodating items installed later.
- B. Verify that characteristics of elements of interrelated operating equipment are compatible. Coordinate work of various sections having interdependent responsibilities for installing, connecting to and placing in service such equipment.
- C. Coordinate requirements and reinstallation of limited Mechanical and Electrical work. Utilize space efficiently to maximize accessibility for other installations, maintenance and repairs.
- D. Execute cutting and patching to integrate elements of work, uncover ill-timed, defective and non-conforming work, provide proper openings for penetrations of existing surfaces and provide samples for testing. Seal all penetrations through roofs, parapet caps, walls and soffits with appropriate materials.

1.5 REGULATIONS, CODES AND STANDARDS

- A. Design and construction shall conform to the Florida Building Code 5th Edition 2014 and the Florida Fire Prevention Code 5th Edition.
- B. For products specified in the individual specifications sections by association or trade standards, comply with requirements of the applicable standard, except when more rigid requirements are specified or are required by applicable codes.
- C. All work shall conform to all applicable Florida Building Code, ordinances and regulations governing the construction. Applicable codes are as follows:
 - 1. ACI 318. American Concrete Institute.
 - 2. AHERA. Asbestos Hazard Emergency Response Act, 40 CFR, Part 763.

3. AISC. American Institute of Steel Construction, Allowable Stress Design - Manual of Steel Construction.
4. AISI. American Iron and Steel Institute, Specifications for the Design of Cold-Formed Steel Structure Members.
5. ANSI. American National Standards Institute.
6. ASCE. American Society of Civil Engineers. References to ASCE 7-10 shall be the edition listed in these State requirements.
7. ASHRAE. American Society of Heating, Refrigeration, and Air Conditioning Engineers.
8. ASTM. American Society for Testing Materials.
9. DCA. Department of Community Affairs. Florida Americans with Disability Implementation Act and the Florida Accessibility Code for Building Construction as adopted by the State Board of Building Codes and Standards, which has become the Florida Building Commission. Florida Energy Efficiency Code for Building Construction (FEEC), as outlined in Chapter 13 of F.B.C.
10. DOT - AASHTO. American Association of State Highway and Transportation Officials "Standard Specifications for Highway Bridges", as modified by Florida DOT "Structures Design Guidelines for Load and Resistance Factor Design."
11. FDOT. Florida Department of Transportation. "Standard Specifications for Road and Bridge Construction."
12. FEMA. Federal Emergency Management Agency.
13. Florida Building Code. Florida Building Code (FBC) 5th Edition 2014.
14. NEC. National Electrical Code (NFPA 70). Adopted by reference in the FBC.
15. OSHA. Occupational Safety and Health Administration, U.S. Department of Labor.
16. SJI. Steel Joist Institute.
17. TMS. The Masonry Society Standards.
18. Such other codes and standards as enumerated in the technical specifications sections and included by reference. Such codes and standards shall be "current accepted edition" in effect as of the bid date, except when a specified date is specified in the individual specification sections.

1.6 TOXIC SUBSTANCES

- A. The Contractor shall meet all the requirements of the State of Florida Toxic Substance Law, Chapter 87-202, Laws of Florida. The law states in part, that all toxic substances enumerated in the Florida substance list that are to be used in the construction, repair or maintenance of educational facilities are subject to certain provisions.
- B. Before any such substance may be used, the Contractor shall notify the Owner at least three working days prior to using the substance. The notification shall contain the following: The name of the substance to be used, where the substance is to be used and when the substance is to be used.

END OF SECTION

SECTION 01 3300

SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Procedures for submittals during construction, including shop drawings and product data and samples.
- B. Construction progress schedules.

1.2 RELATED REQUIREMENTS

- A. Refer to Division 00 and 01 sections of these specifications.

1.3 SHOP DRAWINGS

- A. Present in a clear and thorough manner. Title each drawing with project name and number, identify each element of shop drawings by reference to sheet number, detail or schedule of contract documents.
- B. Identify field dimensions and show relation to adjacent or critical features of work or products.
- C. Minimum sheet size shall be 8-1/2 x 11 inches.

1.4 PRODUCT DATA

- A. Submit only pages which are pertinent and mark each copy of standard printed data to identify products, referenced to specifications section number. Show reference standards, performance characteristic and capacities; diagram, component parts, finish, dimensions and required clearances.
- B. Modify manufacturer's standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the work. Delete information not applicable. Indiscriminate submittal of unmarked product data will not be accepted.
- C. As required by Florida Statute 553.842 and Florida Administrative Code 9N-3 State Product Approval, provide the information and approval numbers on all building components that will be utilized on this construction project. Statewide approved products are listed online at www.floridabuilding.org
- D. Manufacturers' Certificates: When required by individual specifications section, submit applicable manufacturer's certificates that products meet or exceed specified requirements.
- E. Manufacturers' Printed Instructions: Submit applicable manufacturer's instructions for delivery, storage, assembly, installation, adjusting and finishing.

1.5 SAMPLES

- A. Submit full range of manufacturer's standard finishes, except when more restrictive requirements are specified, indicating colors, textures or patterns for selection. Early in the construction period, the contractor shall submit the names of all manufacturers and trade names of all materials involving color, texture or pattern selection which are proposed for actual use in the project. Color items, even in the same range, vary among different manufacturer's products, and it is therefore important that samples be submitted and selections be made from items actually intended for use in the work.

- B. Submit samples to illustrate functional characteristics of products, including parts and attachments.
- C. Label each sample with identification required for transmittal letter.
- D. Provide field samples of finishes at project, at location acceptable to Owner, as required by individual specifications section. Install each sample complete and finished. Acceptable finishes in place may be retained in the completed work, except where otherwise noted or specified.

1.6 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit network analysis system using the critical path method, generally as outlined in Associated General Contractors of America (AGC) publication "The Use of CPM in Construction - A Manual for General Contractors". Other progress schedule methods may be submitted subject to the Owner's review and approval.
- B. Show complete sequence of construction by activity, identifying work of separate stages and other logically grouped activities. Show projected percentages of completion for each item of work as of time of each application for payment.
- C. Show submittal dates required for shop drawings, product data and samples and product delivery dates.

1.7 CONTRACTOR'S REVIEW

- A. Review all submittals prior to transmittal, determine and verify field measurements, field construction criteria, manufacturers' catalog numbers and conformance of submittal with requirements of contract documents. Submittals without Contractor's review stamp indicating approval will not be processed.
- B. Coordinate submittals with requirements of work and of contract documents.
- C. Sign or initial shop drawings and product data and each sample label to certify compliance with requirements of contract documents. Provide notification, at time of submittal, of any deviations from requirements of contract documents.
- D. Do not fabricate products or begin work which requires submittals until return of submittal with Architect's acceptance.

1.8 SUBMITTAL REQUIREMENTS

- A. Transmit submittals in accordance with approved progress schedule and in such sequence to avoid delay in the work.
- B. Apply Contractor's stamp, signed or initialed, certifying to review and approval, verification of products, field dimensions and field construction criteria and coordination of information with requirements of work and contract documents. Do not send submittals until item is approved by Contractor.
- C. Coordinate submittals into logical groupings to facilitate interrelation of the several items.
- D. Submit electronic copies of all shop drawings and product data for each item as specified in individual specifications sections.
- E. Submit under Contractor's standard transmittal letter, each transmittal letter shall be numbered for ease of reference during construction. Identify project by title and number and identify work and product by specifications section number.

1.9 RESUBMITTALS

- A. Make resubmittals under procedures specified for initial submittals and identify changes made since previous submittal. Transmittal letter shall be numbered the same as initial submittal, except with suffix "A", "B", etc. for each time resubmittal occurs until accepted.
- B. Delays caused by the need for resubmittals shall not constitute reason for an extension of contract time.

1.10 REVIEW

- A. Review of shop drawings, product data and samples shall be as promptly as possible and submittals shall be returned to Contractor for distribution within fourteen calendar days from date received.
- B. The review of submittals will be limited to general design requirements only, and shall in no way relieve the Contractor from responsibility for errors or omissions contained therein or from supplying materials specified.
- C. Submittals reviewed will be marked in one of the following ways: NO EXCEPTIONS TAKEN, EXCEPTIONS AS NOTED, REVISE AND RESUBMIT or REJECTED.

1.11 DISTRIBUTION

- A. Contractor shall distribute copies of shop drawings and product data and samples, which bear stamp of approval to project site file, Subcontractors, Suppliers, other affected Contractors and other entities requiring information.
- B. Shop drawings that do not bear the Architect's shop drawing stamp shall not be allowed on the job site.

END OF SECTION

SECTION 01 4000
QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. General quality control.
- B. Workmanship.
- C. Manufacturers' instructions.
- D. Testing laboratory services.

1.2 RELATED REQUIREMENTS

- A. Refer to Division 00 and 01 sections of these specifications.

1.3 QUALITY CONTROL

- A. Maintain quality control over suppliers, manufacturers, products, services, site conditions and workmanship to produce work of specified quality.

1.4 WORKMANSHIP

- A. Comply with industry standards except when more restrictive tolerances or specified requirements indicate more rigid standards or more precise workmanship.
- B. Perform work by persons qualified to produce workmanship of specified quality.
- C. Secure products in place with positive anchorage devices designed and sized to withstand code stresses, vibration and racking.

1.5 MANUFACTURERS' INSTRUCTIONS

- A. Comply with manufacturers' instructions including each step in sequence. If instructions conflict with contract documents request clarification prior to starting work.

1.6 TESTING LABORATORY SERVICES

- A. Contractor shall employ at his sole expense the services of an approved independent testing laboratory to perform tests and other services required by individual specification sections.
- B. Services will be performed in accordance with requirements of governing authorities and with specified standards.
- C. Reports will be submitted giving observations and results of tests, indicating compliance or non-compliance with specified standards and with contract documents.
- D. Contractor shall cooperate with testing laboratory personnel; furnish tools, samples of materials, design mix, equipment, storage and assistance as requested. Notify testing laboratory 24 hours prior to expected time for operations requiring testing services. Make arrangements with testing laboratory and pay for additional samples and tests for Contractor's convenience.

END OF SECTION

SECTION 01 5000

TEMPORARY FACILITIES AND CONTROL

PART 1 - GENERAL

- 1.1 REQUIREMENTS INCLUDED: The Contractor shall provide the following at his sole expense, except as specified otherwise herein, including all related costs for operation, maintenance and utilities, during the entire construction period until final completion of the project.
- A. Temporary electricity power. Charges relative to the cost of power consumption will be paid by the Owner. However, costs associated with facilities and connections to provide for power are to be paid by the Contractor.
 - B. Heat and ventilation.
 - C. Phone service.
 - D. Water provided by Owner.
 - E. Sanitary facilities.
 - F. Barriers.
 - G. Enclosures.
 - H. Protection of installed work.
 - I. Security. Coordinate with Owner.
 - J. Construction use fire extinguishers.
 - K. Water control.
 - L. Cleaning during construction.
 - M. Offices and sheds at Contractor's option.
- 1.2 RELATED REQUIREMENTS
- A. Refer to Division 00 and 01 sections of these specifications.
- 1.3 ELECTRICITY AND CONSTRUCTION LIGHTING
- A. Provide service required for construction operations, with branch wiring and distribution boxes located to allow service and lighting by means of construction-type power cords.
 - B. Provide temporary lighting as required for construction operations. Maintain lighting and make routine repairs.
- 1.4 HEAT AND VENTILATION
- A. Provide as required to maintain specified conditions for construction operations and to protect materials and finishes from damage due to temperature or humidity.
 - B. Prior to operation of permanent facilities for temporary purposes, verify that installation is approved for operation.

- C. Provide ventilation of enclosed areas to cure materials, to disperse humidity and to prevent accumulations of dust, fumes, vapors or gases.

1.5 TELEPHONE SERVICE

- A. Provide phone service.

1.6 WATER

- A. Contractor may connect to nearest available existing water service for construction operations as well as potable water.

1.7 SANITARY FACILITIES

- A. Provide and maintain required temporary toilet facilities and enclosures in accordance with requirements of governing State and local health authorities. Contractor will not be allowed to use existing toilet facilities.

1.8 BARRIERS

- A. Construction site as designated by the Owner. Protect against vehicular traffic, stored materials, dumping, chemically injurious materials or water.
- B. Upon issuance of the building permit and notice to proceed, a safety plan shall be provided by the Contractor which clearly delineates areas for construction, safety barriers, exits and construction traffic during the various phases of the project and when conditions change.

1.9 ENCLOSURES

- A. Provide temporary weather-tight closures of any openings in exterior roofs, walls or soffits to provide acceptable working conditions and protection for materials, to allow for temporary heating or ventilation and to prevent entry of unauthorized persons.

1.10 PROTECTION OF INSTALLED WORK

- A. Provide temporary protection for installed products. Control traffic in immediate area to minimize damage.
- B. Provide protective coverings at walls, projections, jambs, sills and soffits of openings. Protect surfaces from traffic and movement of heavy objects and storage.
- C. Prohibit traffic and storage on landscaped areas.

1.11 SECURITY

- A. Provide security program and facilities to protect work, and Owner's operations from unauthorized entry, vandalism and theft. Coordinate with Owner's security program. Owner will not be responsible for the Contractors' losses due to theft or vandalism to property during the construction period.
- B. Owner will assist and cooperate with Contractor's security program.

1.12 CONSTRUCTION USE FIRE EXTINGUISHERS

- A. Provide types, sizes, numbers and locations as would be reasonably effective in extinguishing fires by personnel at project site. Provide Type A extinguishers at locations of low-potential for either electrical or grease-oil-flammable liquids fires; provide Type ABC dry chemical extinguishers at other locations; comply with recommendations of NFPA . Post warning and quick-instructions at each extinguisher location and instruct personnel at project site at time of their first arrival on proper use of extinguishers.

1.13 CLEANING DURING CONSTRUCTION

- A. Control accumulation of waste materials and rubbish and periodically dispose of off-site at approved dump.
- B. Clean areas prior to start of finish work and maintain areas free of dust and other contaminants during finishing operations.

1.14 OFFICES AND SHEDS

- A. Contractor's Field Office: At Contractor's option, provide mobile structure or other structure approved by Owner, weather-tight, with lighting, electrical outlets, heating, cooling and ventilating equipment.
- B. Storage sheds for tools, materials and equipment: At Contractor's option, provide weather-tight, with heat and ventilation for products requiring controlled conditions, with adequate space for organized storage and access and lighting for inspection of stored materials. Coordinate location with Owner.

1.15 REMOVAL

- A. Remove temporary materials, equipment, services and construction prior to substantial completion review.
- B. Clean and repair damage caused by installation or use of temporary facilities.

END OF SECTION

SECTION 01 6000
PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Products.
- B. Transportation and handling.
- C. Storage and protection.
- D. Product options.
- E. Substitutions.
- F. Systems demonstration.

1.2 RELATED REQUIREMENTS

- A. Refer to Division 00 and 01 sections of these specifications.

1.3 PRODUCTS

- A. Products include material, equipment and systems.
- B. Comply with specifications and referenced standards as minimum requirements.
- C. As required by Florida Statute 553.842 and Florida Administrative Code 9N-3 State Product Approval, provide the information and approval numbers on all building components that will be utilized on this construction project. Statewide approved products are listed online at www.floridabuilding.org
- D. Components required to be supplied in quantity within a specification section and like items shall be the end products of one manufacturer in order to achieve standardization for appearance, operation, maintenance, spare parts and manufacturers' service.
- E. Do not use materials and equipment removed from existing structures, except as specifically required or allowed by contract documents.

1.4 TRANSPORTATION AND HANDLING

- A. Transport products by approved methods to avoid product damage, deliver in undamaged condition in manufacturers' unopened containers or packaging, dry.
- B. Provide equipment and personnel to handle products by methods to prevent soiling or damage.
- C. Promptly inspect shipments to assure that products comply with requirements, quantities are correct and products are undamaged.

1.5 STORAGE AND PROTECTION

- A. Store products in accordance with manufacturers' instructions with seals and labels intact and legible. Store sensitive products in weather-tight enclosures and maintain within temperature and humidity ranges required by manufacturers' instructions.

- B. For exterior storage of fabricated products, place on sloped supports above ground. Cover products subject to deterioration with impervious sheet covering and provide ventilation to avoid condensation.
- C. Store loose granular materials on solid surfaces in a well-drained area and prevent mixing with foreign matter.
- D. Arrange storage to provide access for inspection. Periodically inspect to assure products are undamaged and are maintained under required conditions.

1.6 PRODUCT OPTIONS

- A. Products specified by reference standards or by description only. Any product meeting those standards or descriptions.
- B. Products specified by naming one or more manufacturers with a provision for either pre-bid or post-bid substitutions. Submit a request for substitution for any manufacturer not specifically named.
- C. Products specified by naming several manufacturers: products of named manufacturers meeting specifications: no options, no substitutions allowed.
- D. Products specified by naming only one manufacturer: no options, no substitutions allowed.

1.7 SUBSTITUTIONS

A. Pre-Bid Substitutions:

1. Bidders may submit bids on approved substitute products only. Acceptance and approval of all products submitted as substitutes remains the sole prerogative of the Architect and will be determined by quality and other overall assimilation of the products into the design of the project. It is requested that each prospective bidder immediately peruse the drawings and project manual upon receipt to determine which, if any, pre-bid substitutions they plan to submit for approval.
2. Bidders having substitute products to be evaluated must submit prior to bid date, the following information, in addition to specific information required in the individual specifications sections for pre-bid substitutions: Complete specifications, full size samples, photographs, available colors and finishes, a clear statement on each substitute product stating exactly where and how the products varies, if any, from the specified products in dimensions, structure, material and design.
3. Upon receipt and thorough evaluation of the requested information, the Architect will do one of the following: Approve by Addendum the substitute products per the submitted materials; approve by Addendum the substitute products with revisions requiring the vendor to modify his substitute products accordingly; or reject the substitute products. Approval of a manufacturer other than the manufacturer specified does not indicate the approved manufacturer's standard products are acceptable. The approved manufacturers must comply with products as specified. Samples: should samples of substitute products be required for evaluation, said sample must be submitted prior to bid date. Samples submitted by successful bidders will be impounded by the Owner to insure that products delivered to site conform in every respect to the sample. The Owner will not buy samples and will not assume any costs incidental thereto. Return of samples: Samples not destroyed in testing may be claimed by the unsuccessful bidders up to thirty calendar days after bid date, and by successful bidder up to fourteen calendar days after final payment. The Owner will assume no responsibility for samples not claimed within the time specified and will not pay for samples damaged in testing.

B. Post-Bid Substitutions (after award and execution of contract):

1. Document each request with complete data substantiating compliance of proposed substitution with contract documents.

2. Request constitutes a representation that Contractor: Has investigated proposed product and determined that it meets or exceeds, in all respects, specified product and will provide the same warranty for substitution as for specified product. Will coordinate installation and make other changes which may be required for work to be complete in all respects. Waives claims for additional costs which may subsequently become apparent; however, deductions from contract sum will be considered and must be so noted on request.
3. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals without separate request per provisions specified hereinbefore.
4. Architect will determine acceptability of proposed substitution and will notify Contractor of acceptance or rejection in writing within a reasonable time.

1.8 SYSTEMS DEMONSTRATION

- A. Prior to final review, instruct Owner's personnel in operation, adjustment and maintenance of equipment and systems, using the operation and maintenance manual as the basis of instruction.
- B. See Section 01 7000 - Execution and Closeout Requirements.

END OF SECTION

SECTION 01 7000
EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Closeout procedures.
- B. Final cleaning.
- C. Prerequisites to final payment.
- D. Record drawings.
- E. Operation and maintenance manuals.
- F. Warranties, guarantees and bonds.
- G. Spare parts and maintenance materials.
- H. Correction during contractor's one year guarantee period.

1.2 RELATED REQUIREMENTS

- A. Refer to Division 00 and 01 sections of these specifications.

1.3 CLOSEOUT PROCEDURES

- A. Comply with procedures stated in general conditions of the contract. When the work is substantially complete, in accordance with the definition and requirements for the project to be reviewed for substantial completion, the contractor shall notify the Architect who shall make a substantial completion review and after said review is made, the Contractor shall remedy any defects or make any corrections on the Architect's punch lists to prepare the project for a final completion review.
- B. Prerequisites to Substantial Completion Review: Before the project will be consider the project ready for substantial completion review, all of the following, as a minimum, shall be performed:
 - 1. All general construction completed and all materials and equipment installed and operating as intended.
 - 2. All mechanical, controls, data and all electrical work complete, fixtures in place, connected and ready for test.
 - 3. All painting and joint sealants completed, checked by the Contractor for number of coats and ready for inspection.
 - 4. All equipment cleaned, connected and in full working order.
 - 5. Grounds clear of all temporary materials, equipment, services and construction, field offices and storage sheds, surplus materials and equipment and raked clean of all debris with all debris removed from the site.
 - 6. Sections of all walks, drives and other permanent features which have been damaged during construction shall be removed and replaced; patches not acceptable.

1.4 FINAL CLEANING

- A. Execute prior to final review.
- B. Clean exterior surfaces exposed to view, remove temporary labels, stains and foreign substances and polish transparent and glossy surfaces. Clean equipment and fixtures to a sanitary condition.
- C. Clean project site, sweep paved areas and rake clean other surfaces.

1.5 PREREQUISITES TO FINAL REVIEW: When the Contractor considers the work has reached final completion, and all items on the punch lists have been corrected and final cleaning has been completed, submit notice to Architect that work is complete in accordance with the contract documents and ready for final review.

- A. If all items are found in order, the Architect will recommend final acceptance of the project by the Owner, upon receipt of all final closeout documents including, but not limited to, the following: final releases of liens from all Subcontractors and Suppliers. Guarantees and warranties as outlined in each section of the specifications. Note length of guarantees and warranties may vary from section to section. All O&M manuals, Final reports and all other closeout requirements outlined in the specifications.

1.6 PREREQUISITES TO FINAL PAYMENT (ALL APPLICABLE ITEMS LISTED BELOW SHALL BE SUBMITTED IN DUPLICATE IN ONE COMPLETE PACKAGE):

- A. Contractor's affidavit that responsible representatives of the Owner have been properly instructed and informed as to all working characteristics of mechanical and electrical systems and equipment as required under the individual specifications sections and in accordance with the provisions of Section 01 6000 - Product Requirements, as applicable to:
 - 1. Heating and ventilating and air conditioning - operation and control.
 - 2. Electrical control switches, panels, fans, motors, etc.
 - 3. Miscellaneous equipment operation.
 - 4. Other systems as required - sound, energy management system, data, etc.
- B. Record drawings, operation and maintenance manuals, warranties, guarantees and bonds.
- C. Contractor's affidavit that spare parts and maintenance materials have been delivered to the facilities department of the Owner.
- D. Submit satisfactory evidence using the latest editions of the following forms, unless otherwise stipulated by the Owner, showing that all labor employed on the project has been paid in full and that all materials and/or equipment and incidentals used directly or indirectly in connection with the project have been paid for in full and that no claims are outstanding against the work.
 - 1. Contractor's Affidavit of Payment of Debts and Claims (A.I.A. Document G706), Conditional Final Releases of Lien.
 - 2. Contractor's Affidavit of Release of Liens (A.I.A. Document G706A).
 - 3. Consent of Surety Company to Final Payment (A.I.A. Document G707).
- E. The Contractor shall submit on his letterhead a type written list of all Subcontractors used for this project and include their address, telephone number and email for use by the Owner during the warranty period.
- F. Provide all submittals, approvals and certificates required by governing authorities for this project and submit a final statement of accounting giving total adjusted contract sum, previous payments, and sum remaining due.

1.7 RECORD DRAWINGS

- A. Keep record drawings current and do not permanently conceal any work until required information has been recorded.
- B. Procedure:
 - 1. During the progress of the work, the Contractor's Superintendent will be responsible for recording any changes in the drawings.
 - 2. Upon completion of the work, this data shall be transferred to a clean copy of the original drawings and submitted to the Owner.

1.8 OPERATION AND MAINTENANCE MANUALS

- A. Provide Operation and Maintenance Manuals for: Mechanical equipment and controls, electrical equipment and controls and as specified in individual specification sections.
- B. Submit two sets bound in 8-1/2 x 11 inch three-ring side binders with durable plastic covers, unless otherwise specified in individual specifications sections.
- C. Provide a separate volume for each system with a table of contents and index tabs for each volume.
 - 1. Part 1: Directory, listing names, addresses and telephone numbers of: Architect, Contractor and Subcontractor.
 - 2. Part 2: Operation and maintenance instructions arranged by system. For each system give names, addresses and telephone numbers of Subcontractors and Suppliers. List: appropriate design criteria, list of equipment, parts list, operating instructions, maintenance instructions, equipment, maintenance instructions, finishes, shop drawings and product data and warranties.

1.9 WARRANTIES, GUARANTEES AND BONDS

- A. Execute Contractor's applicable documents and assemble documents executed by Subcontractors, Suppliers and Manufacturers. Provide table of contents and assemble all documents in binder with durable plastic cover.

1.10 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide products, spare parts and maintenance materials in quantities specified in individual specifications sections, in addition to that used for construction of work. Coordinate with Owner and deliver to project site.

1.11 CORRECTION DURING CONTRACTOR'S ONE YEAR GUARANTEE PERIOD

- A. Contractor shall report to the proper officials regarding corrections to be made after job completion.
 - 1. Owner will notify Contractor of deficiency.
 - 2. Contractor shall accomplish agreed upon corrective measures and notify the Owner and secure a release on the item.
 - 3. Should the Contractor fail to perform corrective work within fourteen calendar days, Owner shall notify Architect. Architect will contact the Contractor for corrective work. If work is not begun within three working days from Architect's notification the surety company may be notified of Contractor's non-performance.

END OF SECTION

SECTION 02 4119

SELECTIVE STRUCTURE DEMOLITION

PART 1 - GENERAL

- 1.1 WORK INCLUDED: This section covers the furnishing of all labor, equipment, materials and resources to accomplish the following:
- A. The Contractor shall carefully coordinate with the Owner during all the work and shall adjust his schedule for this work in accordance with the Owner's requirements to minimize disruption of work in the adjacent spaces and building.
 - B. Complete removal and disposal of existing items as noted on the Documents and as required to accomplish the work.
 - C. It is the responsibility of the Contractor to carefully review the Contract Documents and remove any items identified on the Contract Documents or required to accomplish the new construction. Any such interference with new construction encountered after the completion of demolition work shall be remedied by the Contractor at no expense to the Owner.
- 1.2 GENERAL
- A. Refer to Division 00 and 01 sections of these specifications.
 - B. All work of this section shall be carried out in strict accordance with OSHA Regulations and other governing Codes.
- 1.3 SUBMITTALS: Submittals during construction shall be made in accordance with section 01 3300. In addition, the following specific information shall be provided.
- A. Demolition Schedule: Submit proposed methods and operations of temporary shoring and demolition for review prior to the start of work. Include in the schedule the coordination for shut-off, capping and continuation of utility services as required.
- 1.4 JOB CONDITIONS
- A. Condition of Structures: The Owner assumes no responsibility for the actual condition of structures to be demolished. The Contractor shall field verify these areas and remove as required.
 - B. Partial Removal: Salvaged items must be transported from the site as they are removed.
 - C. Protections: Ensure the safe passage of persons around and in the area of demolition. Conduct operations to prevent injury to persons, adjacent buildings, structures and other facilities.
 - D. Damages: Promptly repair damages caused to adjacent facilities by demolition operations at no cost to the Owner.

PART 2 - PRODUCTS

- 2.1 GENERAL
- A. Provide all materials, suitable and in adequate quantity, required to accomplish the work as specified herein.

PART 3 - EXECUTION

3.1 DEMOLITION

- A. **Pollution Controls:** Comply with governing regulations pertaining to environmental protection. Clean adjacent areas of the spaces and improvements of dust, dirt and debris caused by demolition operations, as directed by the Owner.
- B. All roof mounted equipment to remain shall be surveyed in the presence of the Owner to determine existing condition, operational status, etc. prior to beginning work.

3.2 DISPOSAL OF DEMOLISHED MATERIALS

- A. **General:** Remove from the site debris, rubbish and other materials resulting from demolition operations and dispose of in an approved dump.
- B. **Title to Materials:** Title to all materials and equipment to be removed, except as specified and/or noted otherwise, is vested in the Contractor upon receipt of the Notice to Proceed. The Owner will not be responsible for the condition or loss of, or damage to, such property after Notice to Proceed. Materials and equipment shall not be viewed by perspective purchasers or sold on the site. Salvage items shall be transported from the site as they are removed.
- C. **Salvaged Materials and Equipment:** Carefully remove materials and equipment that are listed and indicated, as applicable, to be removed by the Contractor and that are to remain the property of the Owner and deliver to a storage site on campus as directed by Owner. Remove items in a manner that will prevent damage.

3.3 CLEANUP

- A. **Debris and Rubbish:** Remove and transport debris and rubbish in a manner that will prevent spillage on streets or adjacent areas. Clean up spillage from streets and adjacent areas.
- B. **Regulations:** Comply with applicable Federal, State and local hauling and disposal regulations.

END OF SECTION

SECTION 06 1053

MISCELLANEOUS ROUGH CARPENTRY

PART 1 - GENERAL

- 1.1 WORK INCLUDED: This section covers the work necessary to furnish and install, complete, the following:
- A. General framing, plates, blocking, braces, furring and nailers.
 - B. Rough carpentry hardware, including, but not limited to, nails, screws, toggle bolts and other anchorage devices.
 - C. Treated wood products shall be used where in contact with concrete or CMU.
 - D. All pressure treated wood shall be arsenic-free.
- 1.2 RELATED REQUIREMENTS
- A. Refer to Division 00 and 01 sections of these specifications.
- 1.3 SUBMITTALS: Submittals during construction shall be made in accordance with section 01 3300.
- 1.4 RELATED WORK
- A. Section 07 5200 – Modified Bituminous Membrane Roofing
- 1.5 FIELD MEASUREMENTS
- A. The Contractor shall verify all dimensions, shall make any field measurements necessary and shall be fully responsible for accuracy and layout of work. The Contractor shall review the Drawings and any discrepancies shall be reported for clarification prior to starting fabrication.
- 1.6 DELIVERY, STORAGE AND HANDLING
- A. Immediately upon delivery to site, place materials in an area protected from weather.
 - B. Store materials a minimum of 6 inches above ground on wood blocking and cover with protective waterproof covering providing for adequate air circulation or ventilation.
 - C. Do not store materials in wet or damp portions of building.

PART 2 - PRODUCTS

- 2.1 QUALITY ASSURANCE
- A. Lumber grading rules and wood species shall be in conformance with U.S. Product Standard PS 20 and the National Forest Products Association. The wood members shall conform to the requirements above and provide design values equal to those published in the "Design Values for Wood Construction" of National Design Specification for Wood Construction, published by the National Forests Products Association.
- 2.2 GRADE MARKS
- A. Each piece of lumber shall be stamped with the grade as determined by an approved grading association indicating conformance with U.S. Product Standard PS 20.

- B. Moisture content shall not exceed 19 percent, unless otherwise specified.
- C. Preservative and pressure treated material shall conform to American Wood Preservers Association Standards (AWPA) and bear the appropriate American Wood Preservers Bureau (AWPB) quality mark designation.

2.3 LUMBER

- A. Dimensions given are nominal. Surface four sides (S4S); unless indicated otherwise, lumber shall be No. 2 Southern Yellow Pine for general framing, plates, blocking, braces, studs, furring and nailers.

2.4 PRESSURE TREATED WOOD

- A. Provide arsenic free pressure treated wood in accordance with AWPA C2 and the quality control standards. AWPB LP-2: above ground application in contact with masonry or concrete. AWPB LP-22: round contact application.

2.5 ROUGH CARPENTRY HARDWARE

- A. Nails: Steel common nails in accordance with the fastening schedule of the Florida Building Code, sizes as indicated on Drawings or as required. Use hot-dipped zinc-coated nails wherever exposed to exterior, high humidity and treated wood locations.
- B. Bolts and Screws: Conforming to ASTM A 307, sizes as indicated on Drawings, or as required. Use galvanized where exposed to exterior, high humidity and treated wood locations.
- C. Anchors: Toggle bolt type for anchorage to hollow masonry. Expansion shield and lag bolt type for anchorage to solid masonry or concrete. Bolts or ballistic fasteners for anchorages to steel. No plastic anchors of any type allowed.

PART 3 - EXECUTION

3.1 GENERAL

- A. Use only skilled workers and the highest standards of the craft. Plan work in advance and perform in proper sequence to facilitate prompt and continuous progress of the work. Lay out, cut, fit and install all rough carpentry items. Anchor sufficiently to ensure rigidity and permanence.
- B. Install items accurate to dimension, true to line, level and square unless indicated otherwise on Drawings. Provide for installation and support of other work.
- C. Provide pressure treated wood for all wood blocking, furring and nailing strips in contact with concrete and concrete masonry units.

END OF SECTION

SECTION 07 5200

MODIFIED BITUMINOUS MEMBRANE ROOFING - RECOVER

PART 1 - GENERAL

1.1 SECTION INCLUDES:

- A. Preparation of Substrate to Receive Roofing Materials
- B. Roof Insulation Application to Prepared Substrate
- C. Roof Membrane Application
- D. Roof Flashing Application
- E. Incorporation of Sheet Metal Flashing Components and Roofing Accessories into the Roof System

1.2 RELATED REQUIREMENTS

- A. Refer to Division 00 and 01 sections of these specifications.

1.3 RELATED SECTIONS

- A. Section 06 1053 – Miscellaneous Rough Carpentry
- B. Section 07 6200 - Sheet Metal Flashing and Trim
- C. Section 07 7100 - Roof Specialties

1.4 REFERENCE STANDARDS

- A. References in these specifications to standards, test methods and codes, are implied to mean the latest edition of each such standard adopted. The following is an abbreviated list of associations, institutions, and societies which may be used as references throughout this specification section.

ASTM	American Society for Testing and Materials Philadelphia, PA
FM	Factory Mutual Engineering and Research Norwood, MA
NRCA	National Roofing Contractors Association Rosemont, IL
OSHA	Occupational Safety and Health Administration Washington, DC
SMACNA	Sheet Metal and Air Conditioning Contractors National Association Chantilly, VA
UL	Underwriters Laboratories Northbrook, IL

1.5 DESCRIPTION OF WORK

A. The basic work descriptions required in this specification are referenced below.

Project Type:	Recover
Deck:	Metal
Slope:	1/4 inch
Existing Assembly:	Paradiene 20/30 roof system, applied over rigid insulation.
Gypsum Sheathing Panel:	DensDeck Prime, having a thickness of 1/4 inch, applied in Para Stik insulation adhesive.
Roof System:	Paradiene 20, applied in PA-311 M Adhesive; Paradiene 30 FR, applied in PA-311 M Adhesive.
Flashing System:	Veral Aluminum, torch applied.

1.6 SUBMITTALS

A. All submittals which do not conform to the following requirements will be rejected.

B. Submittals Prior to Contract Award:

1. Letter from the proposed primary roofing manufacturer confirming that the bidder is an acceptable Contractor authorized to install the proposed system.
2. Letter from the primary roofing manufacturer stating that the proposed application will comply with the manufacturer's requirements in order to qualify the project for the specified guarantee.

C. Submittals Prior to Project Close-out:

1. Certificate Of Analysis from the testing laboratory of the primary roofing materials manufacturer, confirming the physical and mechanical properties of the roofing membrane components. Testing shall be in accordance with the parameters published in ASTM D 5147 and ASTM D 7051 and indicate Quality Assurance/Quality Control data as required to meet the specified properties. A separate Certificate Of Analysis for each production run of material shall indicate the following information:
 - a. Material type
 - b. Lot number
 - c. Production date
 - d. Dimensions and Mass
 - 1) Roll length
 - 2) Roll width
 - 3) Selvage width
 - 4) Total thickness
 - 5) Thickness at selvage (coating thickness)
 - 6) Weight
 - e. Physical and Mechanical Properties;
 - 1) Low temperature flexibility
 - 2) Peak load
 - 3) Ultimate Elongation
 - 4) Dimensional stability

- 5) Compound Stability
 - 6) Granule embedment
 - 7) Resistance to thermal shock (foil faced products)
2. Manufacturer's printed recommendations for proper maintenance of the specified roof system including inspection frequencies, penetration addition policies, temporary repairs, and leak call procedures.

1.7 QUALITY ASSURANCE

- A. Acceptable Products: Primary roofing products, including each type of sheet shall be supplied by a single manufacturer which has been successfully producing the specified types of primary products for not less than 10 years.
- B. Product Quality Assurance Program: Primary roofing materials shall be manufactured under a quality management system that is monitored regularly by a third party auditor under the ISO 9001 audit process. A certificate of analysis for reporting/confirming the tested values of the actual material being supplied for the project will be required prior to project close-out.
- C. Agency Approvals: The proposed roof system shall conform to the following requirements.
 1. Underwriters Laboratories Class A acceptance of the proposed roofing system (including mopping asphalt or cold adhesive) without additional requirements for gravel or coatings.
- D. Acceptable Contractor: Contractor shall have a minimum of 2 years experience in successfully installing the same or similar roofing materials and be certified in writing by the roofing materials manufacturer to install the primary roofing products.
- E. Scope of Work: The work to be performed under this specification shall include but is not limited to the following: Attend necessary job meetings and furnish competent and full time supervision, experienced roof mechanics, all materials, tools, and equipment necessary to complete, in an acceptable manner, the roof installation in accordance with this specification. Comply with the latest written application instructions of the manufacturer of the primary roofing products. In addition, application practice shall comply with requirements and recommendations contained in the latest edition of the Handbook of Accepted Roofing Knowledge (HARK) as published by the National Roofing Contractor's Association, amended to include the acceptance of a phased roof system installation.
- F. Local Regulations: Conform to regulations of public agencies, including any specific requirements of the city and/or state of jurisdiction.
- G. Manufacturer Requirements: Ensure that the primary roofing materials manufacturer provides direct trained company personnel to attend necessary job meetings, perform periodic inspections as necessary, and conducts a final inspection upon successful completion of the project.

1.8 PRODUCT DELIVERY STORAGE AND HANDLING

- A. Delivery: Deliver materials in the manufacturer's original sealed and labeled containers and in quantities required to allow continuity of application.
- B. Storage: Store materials out of direct exposure to the elements on pallets placed over clean, flat and dry surfaces. Storage of pallets over dirt, grass-covered ground or newly placed concrete may result in upward moisture transpiration and contamination of product. Store rolls of roofing on end. For roof-top storage, avoid overloading of deck and building structure. Factory packaging is not intended for job site protection. Slit factory packaging immediately upon arrival at the job site to prevent build-up of condensation and cover materials using a breathable cover such as a canvas. Polyethylene or other non-breathable plastic coverings shall not be used. Store flammable or temperature sensitive materials away from open flame, ignition sources or excessive heat.

- C. Handling: Handle all materials in such a manner as to preclude damage and contamination with moisture or foreign matter. Handle rolled goods to prevent damage to edges or ends.
- D. Damaged Material: Any materials that are found to be damaged or stored in any manner other than stated above will be automatically rejected, removed and replaced at the Contractor's expense.

1.9 PROJECT/SITE CONDITIONS

A. Requirements Prior To Start

1. Notification: Give a minimum of 5 days notice to the Owner and manufacturer prior to commencing any work and notify both parties on a daily basis of any change in work schedule.
2. Permits: Obtain all permits required by local agencies and pay all fees which may be required for the performance of the work.
3. Safety: Familiarize every member of the application crew with all fire and safety regulations recommended by OSHA, NRCA and other industry or local governmental groups.

B. Environmental Requirements

1. Precipitation: Do not apply roofing materials during precipitation or in the event there is a probability of precipitation during application. Take adequate precautions to ensure that materials, applied roofing, and building interiors are protected from possible moisture damage or contamination.
2. Temperature Restrictions - self-adhesive sheets: The minimum required substrate temperature at point of application is 40°F. Maintain a minimum roof membrane material temperature above 60° F. In low temperature conditions, materials should be kept warm prior to application. In temperatures below 60° F the specified tacky primer, required for vertical applications, should be considered to facilitate proper bonding of self-adhered membrane for horizontal applications. The minimum ambient temperature range at the time of tacky primer application is 45°F to 105°F. Suspend application in situations where the self-adhered base ply cannot be kept at temperatures allowing for proper adhesion.

C. Protection Requirements

1. Membrane Protection: Provide protection against staining and mechanical damage for newly applied roofing and adjacent surfaces throughout this project.
2. Torch Safety: Crew members handling torches shall be trained by an Authorized Certified Roofing Torch Applicator (CERTA) Trainer, be certified according to CERTA torch safety guidelines as published by the National Roofing Contractor's Association (NRCA), and follow torch safety practices as required by the contractor's insurance carrier. Designate one person on each crew to perform a daily fire watch. The designated crew member shall watch for fires or smoldering materials on all areas during roof construction activity, and for the minimum period required by CERTA guidelines after roofing material application has been suspended for the day.
3. Limited Access: Prevent access by the public to materials, tools and equipment during the course of the project.
4. Debris Removal: Remove all debris daily from the project site and take to a legal dumping area authorized to receive such materials.
5. Site Condition: Complete, to the Owner's satisfaction, all job site clean-up including building interior, exterior and landscaping where affected by the construction.

1.10 GUARANTEE/WARRANTY

- A. Roof Membrane Guarantee: Upon successful completion of the project, and after all post installation procedures have been completed, furnish the Owner with the manufacturer's twenty year labor and materials membrane guarantee. The guarantee shall be a term type, without deductibles or limitations on coverage amount, and shall be issued at no additional cost to the Owner. This guarantee shall not exclude random areas of ponding from coverage.
1. Siplast twenty year Roof Membrane Guarantee

PART 2 - PRODUCTS

2.1 ROOFING SYSTEM ASSEMBLY/PRODUCTS

- A. Rigid Roof Insulation: Roof insulation shall be UL and FM approved. Insulation shall be approved in writing by the insulation manufacturer for intended use and for use with the specified roof assembly.
1. Gypsum Sheathing Panel: A panel composed of a gypsum based, non-structural water resistant core material integrally bonded with fiberglass mats on both sides having a nominal thickness of 1/4 inch. The panel surface shall be factory primed with a non-asphaltic primer. Acceptable types are as follows:
 - a. DensDeck Prime Gypsum Roof Board, by Georgia Pacific Corporation; Atlanta, GA

2.2 DESCRIPTION OF SYSTEMS

- A. Roofing Membrane Assembly: A roof membrane assembly consisting of two plies of a prefabricated, reinforced, homogeneous Styrene-Butadiene-Styrene (SBS) block copolymer modified asphalt membrane, applied over a prepared substrate. Reinforcement mats shall be impregnated/saturated and coated each side with SBS modified bitumen blend. The cross sectional area of the sheet material shall contain no oxidized or non-SBS modified bitumen. The roof system shall pass 500 cycles of ASTM D 5849 Resistance to Cyclic Joint Displacement (fatigue) at 14°F. Passing results shall show no signs of membrane cracking or interply delamination after 500 cycles. The roof system shall pass 200 cycles of ASTM D 5849 after heat conditioning performed in accordance with ASTM D 5147. The assembly shall possess waterproofing capability, such that a phased roof application, with only the modified bitumen base ply in place, can be achieved for prolonged periods of time without detriment to the watertight integrity of the entire roof system.
1. Siplast Paradiene 20/30 FR roof system
 - a. Modified Bitumen Base and Stripping Ply
 - 1) Thickness (avg): 91 mils (ASTM D 5147)
 - 2) Thickness (min): 87 mils (ASTM D 5147)
 - 3) Weight (min per 100 ft² of coverage): 62 lb
 - 4) Peak filler content in elastomeric blend - 35% by weight
 - 5) Low temperature flexibility @ -15°F: PASS (ASTM D 5147)
 - 6) Peak Load (avg) @ 73°F: 30 lbf/inch (ASTM D 5147)
 - 7) Peak Load (avg) @ 0°F: 70 lbf/inch (ASTM D 5147)
 - 8) Ultimate Elongation (avg.) @ 73°F: 50% (ASTM D 5147)
 - 9) Compound Stability (max): 0.1% (ASTM D 5147)
 - 10) High Temperature Stability (min): 250°F (ASTM D 5147)
 - 11) Approvals: UL Class listed, FM Approved (products shall bear seals of approval)
 - 12) Reinforcement: fiberglass mat or other meeting the performance and Compound stability criteria
 - a) Siplast Paradiene 20

- b. Modified Bitumen Finish Ply
 - 1) Thickness (avg): 130 mils (ASTM D 5147)
 - 2) Thickness at selvage (coating thickness) (avg): 98 mils (ASTM D 5147)
 - 3) Thickness at selvage (coating thickness) (min): 94 mils (ASTM D 5147)
 - 4) Weight (min per 100 ft² of coverage): 90 lb
 - 5) Peak filler content in elastomeric blend: 35% by weight
 - 6) Low temperature flexibility @ -15° F: PASS (ASTM D 5147)
 - 7) Peak Load (avg) @ 73°F: 30 lbf/inch (ASTM D 5147)
 - 8) Peak Load (avg) @ 0°F: 75 lbf/inch (ASTM D 5147)
 - 9) Ultimate Elongation (avg.) @ 73°F: 55% (ASTM D 5147)
 - 10) Compound Stability (max): 0.1% (ASTM D 5147)
 - 11) High Temperature Stability (min): 250°F (ASTM D 5147)
 - 12) Granule Embedment (max loss): 2.0 grams per sample (ASTM D 5147)
 - 13) Approvals: UL Class listed, FM Approved (products shall bear seals of approval)
 - 14) Reinforcement: fiberglass mat or other meeting the performance and Compound stability criteria
 - 15) Surfacing: ceramic granules
 - a) Siplast Paradiene 30 FR

- B. Flashing Membrane Assembly: A flashing membrane assembly consisting of a prefabricated, reinforced, Styrene-Butadiene-Styrene (SBS) block copolymer modified asphalt membrane with a continuous, channel-embossed metal-foil surfacing. The finish ply shall conform to ASTM D 6298 and the following physical and mechanical property requirements.
 - 1. Siplast Veral flashing system, aluminum finish
 - a. Cant Backing Sheet and Flashing Reinforcing Ply
 - 1) Thickness (avg): 102 mils (ASTM D 5147)
 - 2) Thickness (min): 98 mils (ASTM D 5147)
 - 3) Weight (min per 100 ft² of coverage): 72 lb
 - 4) Maximum filler content in elastomeric blend: 35% by weight
 - 5) Low temperature flexibility @ -15° F - PASS (ASTM D 5147)
 - 6) Peak Load (avg) @ 73°F: 30 lbf/inch (ASTM D 5147)
 - 7) Peak Load (avg) @ 0°F: 75 lbf/inch (ASTM D 5147)
 - 8) Ultimate Elongation (avg.) @ 73°F: 50% (ASTM D 5147)
 - 9) Dimensional Stability (max): 0.1% (ASTM D 5147)
 - 10) Compound Stability (min - sheet): 250°F (ASTM D 5147)
 - 11) Compound Stability (min – adhesive coating): 212°F (ASTM D 5147)
 - 12) Approvals: UL Class listed, FM Approved (products shall bear seals of approval)
 - 13) Reinforcement: fiberglass mat or other meeting the performance and dimensional stability criteria
 - 14) Back Surfacing: polyolefin film
 - a) Siplast Paradiene 20 SA
 - b. Metal-Clad Modified Bitumen Flashing Sheet
 - 1) Thickness (avg): 150 mils (ASTM D 5147)
 - 2) Thickness (min): 146 mils (ASTM D 5147)
 - 3) Weight (min per 100 ft² of coverage): 96 lb
 - 4) Coating Thickness – back surface (min): 40 mils (ASTM D 5147)
 - 5) Low temperature flexibility @ 0° F: PASS (ASTM D 5147)

- 6) Peak Load (avg) @ 73°F: 85 lbf/inch (ASTM D 5147)
 - 7) Peak Load (avg) @ 0°F: 180 lbf/inch (ASTM D 5147)
 - 8) Ultimate Elongation (avg) @ 73°F: 45% (ASTM D 5147)
 - 9) Tear-Strength (avg): 120 lbf (ASTM D 5147)
 - 10) Dimensional Stability (max): 0.2% (ASTM D 5147)
 - 11) Compound Stability (min): 225°F (ASTM D 5147)
 - 12) Cyclic Thermal Shock Stability (maximum): 0.2% (ASTM D 7051)
 - 13) Approvals: UL Approved, FM Approved (products shall bear seals of approval)
 - 14) Reinforcement: fiberglass scrim mat or other meeting the performance and dimensional stability criteria
 - 15) Surfacing: aluminum metal foil
 - a) Siplast Veral Aluminum
- C. Catalyzed Acrylic Resin Flashing System: A specialty flashing system consisting of a PMMA-based, fully reinforced membrane installed over a prepared or primed substrate. The flashing system consists of a catalyzed acrylic resin primer, basecoat and topcoat, combined with a non-woven polyester fleece. The use of the specialty flashing system shall be specifically approved in advance by the membrane manufacturer for each application.
1. Parapro 123 Flashing System by Siplast; Irving, TX
- D. Substitute Roof Systems: The following substitute roof systems are approved for use in lieu of the specified roof system.

Manufacturer
Soprema

Roofing Membrane Assembly – Base Ply Elastophene Sanded - Finish Ply – Elastophene FR GR
 Flashing Assembly – Sopralast System – Flashing Base Ply – Elastophene Sanded – Flashing Cap Ply – Sopralast 50 TV ALU
 Coverboard Insulation – Sopraboard 1/8” thickness
 Insulation Foam Adhesive – DuoTack Foam Adhesive
 Membrane Cold Adhesive – ColPly Adhesive
 PMMA Resin Flashing System – Alsan Flashing System
 Asphalt Primer – Elastocol 500

Manufacturer
Johns-Manville

Base Plies – DynaBase
 Finish Ply – DynaGlas FR
 Flashing Sheet – DynaClad
 Coverboard – ½” DuraBoard
 Stripping Ply and Flashing Reinforcing Sheet – DynaGrip SD/SA
 Adhesive – JM Premium Cold Application Adhesive

2.3 ROOFING ACCESSORIES

- A. Bituminous Cutback Materials
1. Primer: An asphalt, solvent blend conforming to ASTM D 41 requirements.
 - a. Siplast PA-1125 Asphalt Primer by Siplast; Irving, TX
 2. Primer for Self-Adhesive Sheets: A quick drying, low-VOC, water-based, high-tack primer specifically designed to promote adhesion of roofing and waterproofing sheets to approved substrates. Primer shall meet South Coast Air Quality District and Ozone Transport Commission requirements.

- a. Siplast TA-119 Primer by Siplast; Irving, TX
- 3. Mastics: An asphalt cutback mastic, reinforced with non-asbestos fibers, used as a base for setting metal flanges conforming to ASTM D 4586 Type II requirements.
 - a. Siplast PA-1021 Plastic Cement by Siplast; Irving, TX
- B. Sealant: A moisture-curing, elastomeric sealant designed for roofing applications. The sealant shall be approved by the roof membrane manufacturer for use in conjunction with the roof membrane materials. Acceptable types are as follows:
 - 1. Siplast PS-209 Elastomeric Sealant by Siplast; Irving, TX
- C. Ceramic Granules: No. 11 grade specification ceramic granules of color scheme matching the granule surfacing of the finish ply.
- D. Perlite Cant Strips: A cant strip composed of expanded volcanic minerals combined with waterproofing binders. The top surface shall be pre-treated with an asphalt based coating. The face of the cant shall have a nominal 4 inch dimension.
- E. Fasteners
 - 1. Flashing Reinforcing Sheet Fasteners for Wood/Plywood Substrates to Receive Flashing Coverage: Fasteners shall be approved by the manufacturer of the primary roofing products. Acceptable fasteners for specific substrate types are listed below.
 - a. Wood/Plywood Substrates
 - 1) A 12 gauge, spiral or annular threaded shank, zinc coated steel roofing fastener having a minimum 1 inch head.
 - a) Simplex Cap Nail by Simplex Nails, Inc., Americus, GA
- F. Walktread: A prefabricated, puncture resistant polyester core reinforced, polymer modified bitumen sheet material topped with a ceramic-coated granule wearing surface.
 - 1. Thickness: 0.217 in
 - 2. Weight: 1.8 lb/ft²
 - 3. Width: 30 in
 - a. Paratread Roof Protection Material by Siplast; Irving, TX

PART 3 - EXECUTION

3.1 PREPARATION

- A. General: Sweep or vacuum all surfaces, removing all loose aggregate and foreign substances prior to commencement of roofing.
- B. Remove All Existing:
 - 1. Roof membrane
 - 2. Base flashings
 - 3. Edge metal
 - 4. Flanged metal flashings
 - 5. Cants
 - 6. Walkways
 - 7. Non functional penetrations/curbs
 - 8. Drain assemblies
 - 9. Vapor retarder
 - 10. Metal trim, counter flashing

- C. Wet Areas. Remove any areas of the existing assembly where moisture is present and replace with compatible materials, bringing the area back to level with surrounding surfaces.
- D. Primer for Self-Adhesive Bituminous Membrane: Apply the specified tacky primer by roller or spray in an even film. Refer to the manufacturer's literature for the approved rate of application over various substrate types. Allow the primer to dry until it leaves a slightly sticky surface without transfer when touched.
- E. Asphaltic Primer: Prime metal and concrete and masonry surfaces with a uniform coating of the specified asphalt primer.

3.2 SUBSTRATE PREPARATION

- A. Insulation: Install insulation panels with end joints offset; edges of the panels shall be in moderate contact without forcing applied in strict accordance with the insulation manufacturer's requirements and the following instructions. Where insulation is installed in two or more layers, stagger joints between layers.
 - 1. Insulation - single layer: Adhere the insulation panels, using the specified bead spacing pattern per manufacturer recommendations. Increase the frequency by 50% at the perimeter of the roof and 100% in the corners.

3.3 ROOF MEMBRANE INSTALLATION

- A. Membrane Application: Apply roofing in accordance with roofing system manufacturer's instructions and the following requirements. Application of roofing membrane components shall immediately follow application of base sheet and/or insulation as a continuous operation.
- B. Aesthetic Considerations: Construction of an aesthetically pleasing overall appearance of the finished roof application is a standard requirement for this project. Make necessary preparations, utilize recommended application techniques, apply the specified materials including granules, and exercise care in ensuring that the finished application is acceptable to the Owner.
- C. Bitumen Consistency: Cutting or alterations of bitumen, primer, and sealants will not be permitted.
- D. Roofing Application: Apply all layers of roofing free of wrinkles, creases or fishmouths. Exert sufficient pressure on the roll during application to ensure prevention of air pockets.
 - 1. Apply all layers of roofing perpendicular to the slope of the deck.
 - 2. Fully bond the base ply to the prepared substrate, utilizing minimum 3 inch side and end laps. Apply each sheet directly behind the torch or cold adhesive applicator. Cut a dog ear angle at the end laps on overlapping selvage edges. Using a clean trowel, apply top pressure to top seal T-laps immediately following sheet application. Stagger end laps a minimum of 3 feet.
 - 3. Fully bond the finish ply to the base ply, utilizing minimum 3 inch side and end laps. Apply each sheet directly behind the torch or cold adhesive applicator. Stagger end laps of the finish ply a minimum 3 feet. Cut a dog ear angle at the end laps on overlapping selvage edges. Using a clean trowel, apply top pressure to top seal T-laps immediately following sheet application. Stagger side laps of the finish ply a minimum 12 inches from side laps in the underlying base ply. Stagger end laps of the finish ply a minimum 3 feet from end laps in the underlying base ply.
 - 4. (Cold adhesive applications) Heat weld all side and end laps of the modified bitumen plies during each day's application in areas where standing water accumulates.
 - 5. Maximum sheet lengths and special fastening of the specified roof membrane system may be required at various slope increments where the roof deck slope exceeds 1/2 inch per foot. The manufacturer shall provide acceptable sheet lengths and the required fastening schedule for all roofing sheet applications to applicable roof slopes.

- E. Granule Embedment: Broadcast mineral granules over all bitumen overruns on the finish ply surface, while the bitumen is still hot or the adhesive is soft, to ensure a monolithic surface color.
- F. Flashing Application: Cut the cant backing sheet into 12 inch widths and peel the release film from the back of the sheet. Set the sheet into place over the primed substrate extending 6 inches onto the field of the roof area and 6 inches up the vertical surface utilizing minimum 3 inch laps. Set the non-combustible cant into place dry prior to installation of the roof membrane base ply. Flash walls and curbs using the reinforcing sheet and the metal foil flashing membrane. After the base ply has been applied to the top of the cant, prime the base ply surfaces to receive the reinforcing sheet. Fully adhere the reinforcing sheet, utilizing minimum 3 inch side laps onto the primed base ply surface and up the primed wall or curb to the desired flashing height. After the final roofing ply has been applied to the top of the cant, prepare the surface area that is to receive flashing coverage by torch heating granular surfaces or by application of asphalt primer; allowing primer to dry thoroughly. Torch apply the metal foil-faced flashing into place using three foot widths (cut off the end of roll) always lapping the factory selvage edge. Stagger the laps of the metal foil flashing layer from lap seams in the reinforcing layer. Extend the flashing sheet a minimum of 4 inches beyond the toe of the cant onto the prepared surface of the finished roof and up the wall or curb to the desired flashing height. Exert pressure on the flashing sheet during application to ensure complete contact with the vertical/horizontal surfaces, preventing air pockets; this can be accomplished by using a damp sponge or shop rag. Check and seal all loose laps and edges. Nail the top edge of the flashing on 9 inch centers. (See manufacturer's schematic for visual interpretation).
- G. Catalyzed Acrylic Resin Flashing System: Install the liquid-applied primer and flashing system in accordance with the membrane system manufacturer's printed installer's guidelines and other applicable written recommendations as provided by the manufacturer.
- H. Water Cut-Off: At end of day's work, or when precipitation is imminent, construct a water cut-off at all open edges. Cut-offs can be built using asphalt or plastic cement and roofing felts, constructed to withstand protracted periods of service. Cut-offs must be completely removed prior to the resumption of roofing.

3.4 ROOF SYSTEM INTERFACE WITH RELATED COMPONENTS

- A. Walktread: Cut the walktread into maximum 5 foot lengths and allow to relax until flat. Adhere the sheet using the specified plastic cement. Apply the specified cement in a 3/8 inch thickness to the back of the product in 5 inch by 5 inch spots in accordance with the pattern as supplied by the walktread manufacturer. Walk-in each sheet after application to ensure proper adhesion. Use a minimum spacing of 2 inches between sheets to allow for proper drainage.
- B. Sealant: Apply a smooth continuous bead of the specified sealant at the exposed finish ply edge transition to metal flashings incorporated into the roof system.

3.5 FIELD QUALITY CONTROL AND INSPECTIONS

- A. Site Condition: Leave all areas around job site free of debris, roofing materials, equipment and related items after completion of job.
- B. Notification Of Completion: Notify the manufacturer by means of manufacturer's printed Notification of Completion form of job completion in order to schedule a final inspection date.

C. Final Inspection

1. Post-Installation Meeting: Hold a meeting at the completion of the project, attended by all parties that were present at the pre-job conference. A punch list of items required for completion shall be compiled by the Contractor and the manufacturer's representative. Complete, sign, and mail the punch list form to the manufacturer's headquarters.

- D. Issuance Of The Guarantee: Complete all post installation procedures and meet the manufacturer's final endorsement for issuance of the specified guarantee.

END OF SECTION



Kail Partners, Architecture & Interiors
PO Box 359055
Gainesville, Florida 32635-9055

May 18, 2016

Mr. Daniel Kail

Re: Roof Moisture Test
Lake City Public Library
308 NW Columbia Avenue, Lake City, Florida 32055

Dear Sir,

A roof moisture survey was performed at the Columbia County Public Library roof on Friday, May 6, 2016. Weather conditions were ideal. Temperature ranged from 70 to 84 degrees with clear sky and low humidity. Roof surface was visibly dry in all areas.

Testing apparatus used was a Tramex Leak Seeker capacitance meter, serial #ES11973513. Calibration was field set at sensitivity level of 8. Calibration was verified with roof core samples and moisture confirmed with visual observation and hand held Delmhorst Instruments moisture meter. Meter probes were placed on the surface of the roof insulation, interior and directly on the deck substrate.

Access & Temporary Repairs

Roof access was coordinated by Columbia County Facilities Maintenance Director Mr. Donny DuPree. We met on site and accessed the building interior to inspect and photo document underside roof deck conditions. Mr. DuPree accessed and walked the roof with me. We reviewed preliminary moisture test results and inspected test cut areas. Roof core samples on the North & South roof sections were dry. Wet roof core samples on the entrance vestibule and center roof section were shown to be saturated wet. Local roofing contractor O'Neal Roofing repaired test cuts on the roof. Photographs of observations are included in the report.

Roof Summary

North Roof Section

The existing roof system is a granular surfaced, modified membrane installed over an original metal building roof.

Insulation substrate is a combination of approximately 2.0" isocyanurate with a surface layer of 0.5" gypsum board similar to DensDeck or USG Securock. A synthetic vapor barrier with a scrim reinforcement is installed between the iso and gypsum board. The

base layer of isocyanurate insulation appears to be mechanically attached to the original metal building roof.

The roof and insulation substrate on the North section was determined to be substantially dry during our testing and core sampling. The results are considered consistent with existing type materials, installation method and appearance of the roof.

Widespread blistering or ridging of the membrane is occurring on the North roof section. Blistering appears to occur between the plies of the modified bitumen system. The blistering is causing localized separation of ply laps.

Blisters and ridges can be cut out to create a sound, level surface for recover roof attachment.

Center, HVAC Well & Front Entrance Canopy

The center roof section is where the HVAC units are installed. Roof width is approximately 15'. Drainage from adjacent library roofs collects in this area for discharge via internal drains. Overflow scupper is located on the west parapet. The roof deck appears to be structural concrete installed over metal pan decking. Attached photographs provide an indication of deck thickness where duck work passes through the deck. Perlite insulation is adhered to what appears to be one ply mopped to the concrete deck.

Wet conditions at core restricted observation of vapor barrier. Wet perlite insulation substrate conditions on the center roof are considered too widespread for salvage.

Complete removal of all existing roofing, insulation and tapered crickets down to the deck and vapor barrier is recommended for the center roof section.

South Roof Section

The South roof section appears to be constructed with conventional ribbed metal decking set on steel joists with a base layer of isocyanurate insulation, perlite and a multiply modified bitumen membrane.

The roof and insulation substrate was dry. Substrate appears to be in sound condition for salvage and incorporation into a new roof system.

Moisture Testing Procedure

The roof surface was marked in an approximate 10' by 10' grid. Tramex meter readings were taken at each available grid point.

Roof core sampling was performed at readings above 40. Moisture content at elevated readings on the Center portion of the roof was observed to be saturated with fluid quantities of water on both the top layer of perlite insulation and on the surface of the concrete deck. After evaluation of the existing structure roof, underside deck conditions,



and site observation of the special purpose Public Library building, we limited destructive core sampling. Gravimetric analysis of roof core samples to determine the percent of moisture content was omitted due to the clearly apparent and visible, dripping wet moisture content. Core samples were probed with a Delmhorst moisture meter to confirm conditions. Observations are documented in attached photographs.

Conclusion

The existing roof and insulation on the North and South sections of the library can be incorporated into a new roof installation. The existing insulation substrate was determined to be substantially dry. Targeted removal of blistered or delaminated ply areas is required.

The Center HVAC roof section is relatively small and congested with AC units. Roof width is 15'. Previous leakage has migrated on the structural concrete deck and locally saturated the absorbent perlite insulation board.

Tapered crickets are installed between roof drains. The taper is formed with perlite which has become wet and is not suitable for reuse.

Complete tear off and disposal of the center roof section is recommended.

Salvage of the North Roof Section roof and insulation is considered to be particularly important because of the construction of the original metal building roof deck and the mechanical attachment of the current modified roof. Complete demolition of the existing roof would cause damage to the original metal building roof deck and lose the value of the existing insulation. Recover is a more practical and cost efficient option for reroofing at this time.

Underside deck conditions include suspended metal building insulation, electrical conduits and data lines. Deck underside conditions are not visible in all areas.

Conditions reported are based upon visual observations and instrument readings available at the time of inspection. Contractors and roof system manufacturers should review the site specific conditions prior to bidding.

We will make ourselves available to meet with the roof manufacturer's technical representatives at the site and review observations.

Thank you.

JSG 5/22/16

Joe Glasheen

Cell 954 258 1821

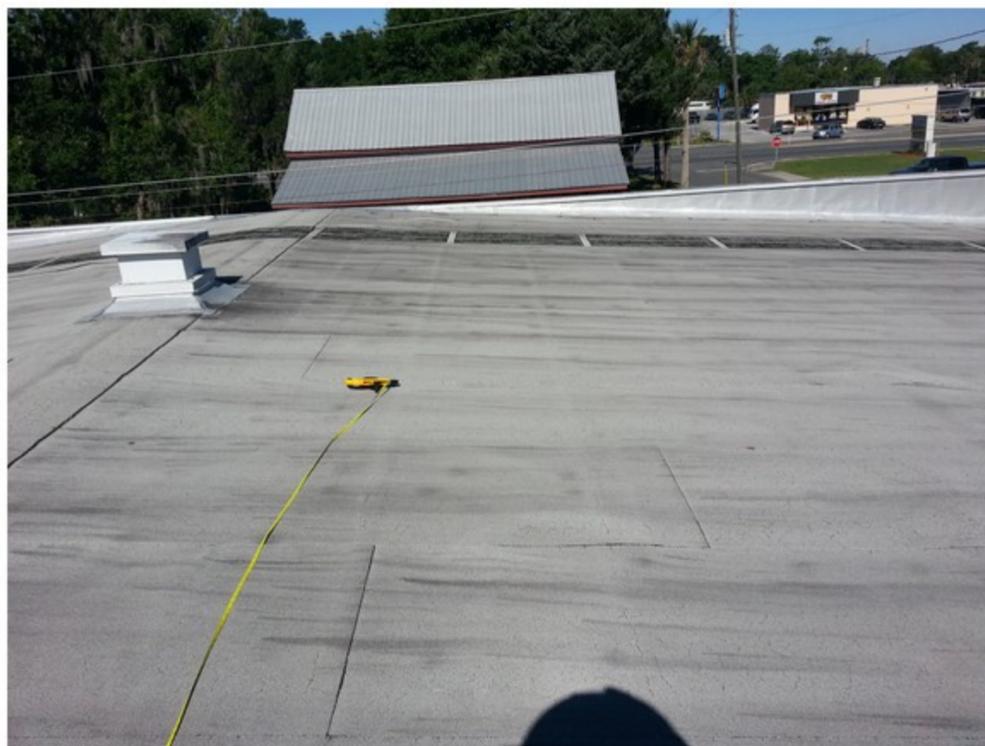
Photos & Survey attached.

**Lake City Library
Roof Moisture Survey 050516**





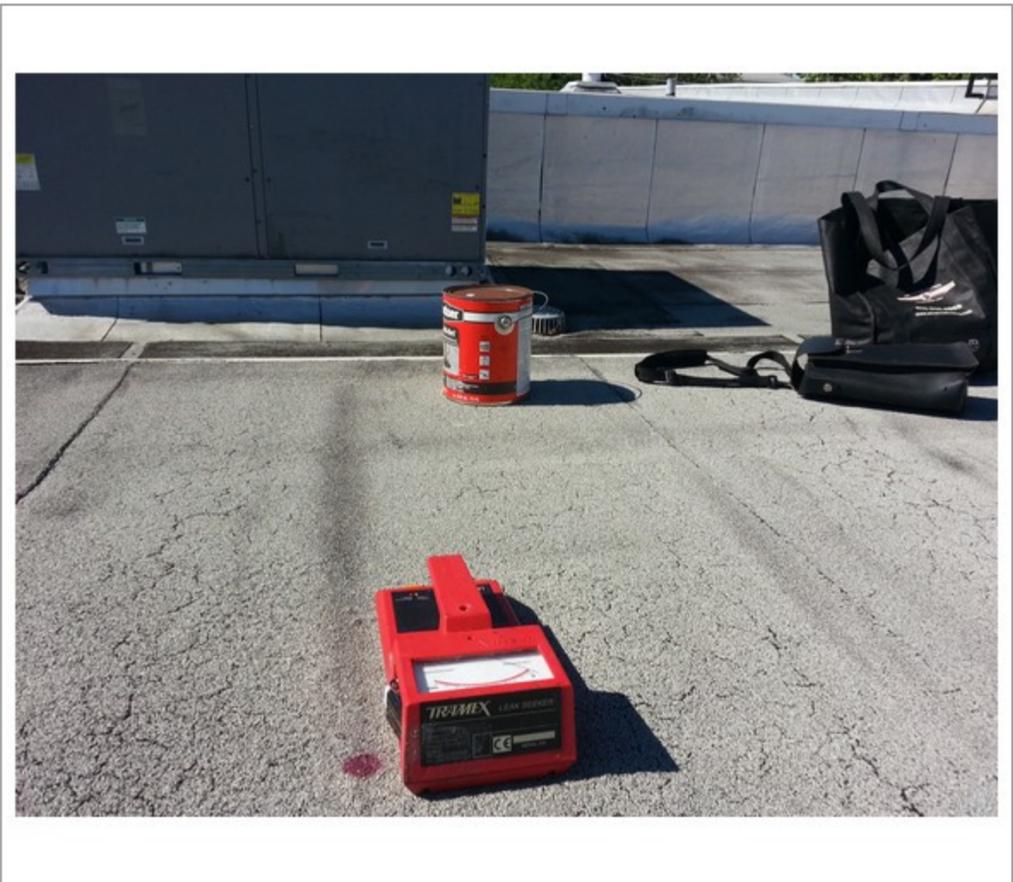
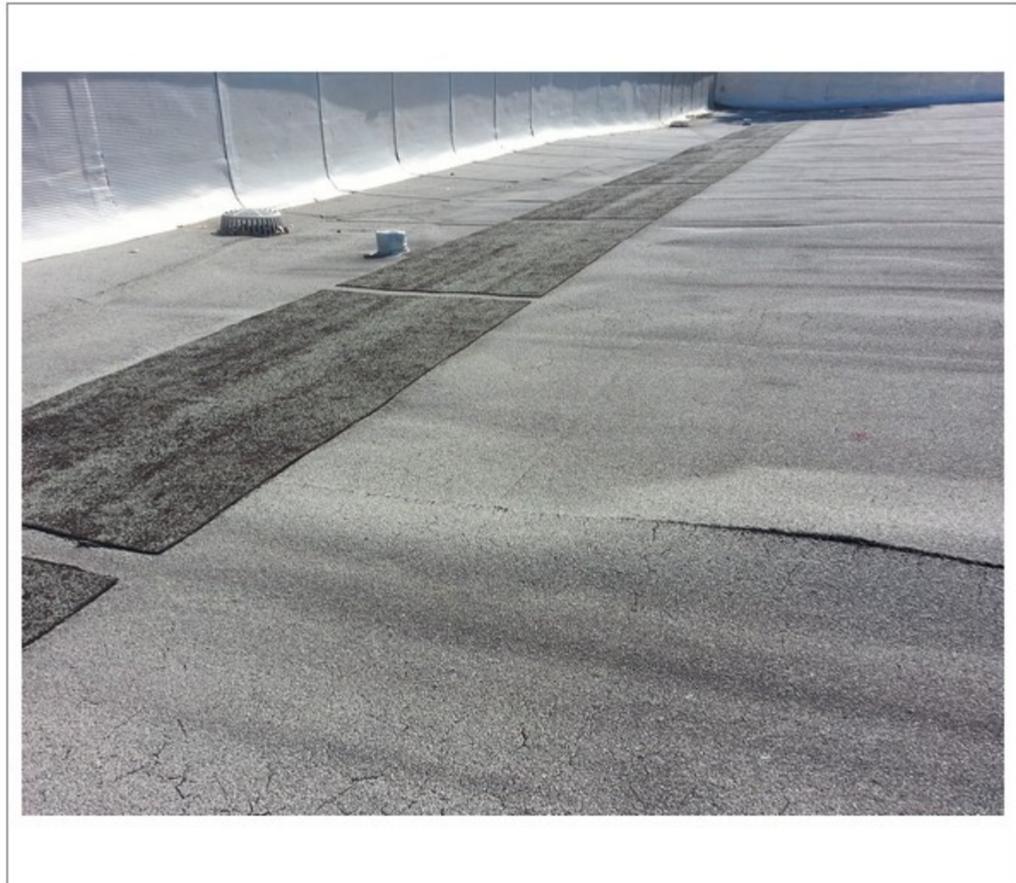
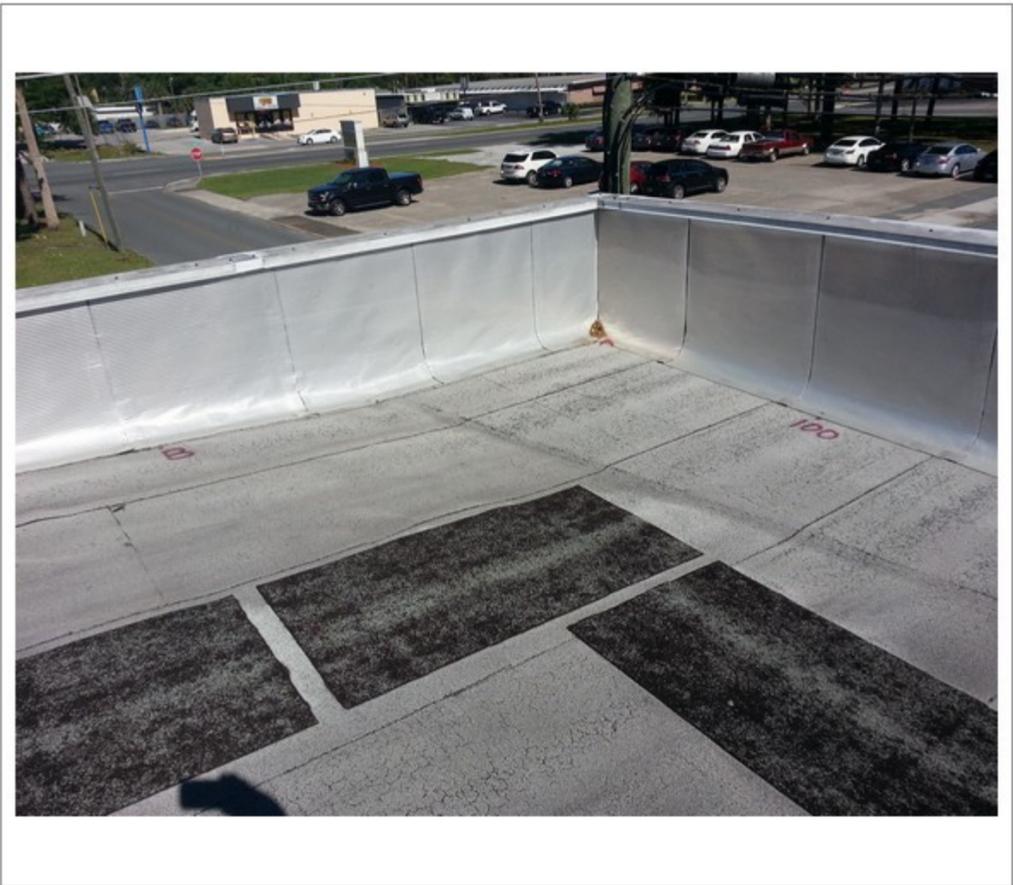
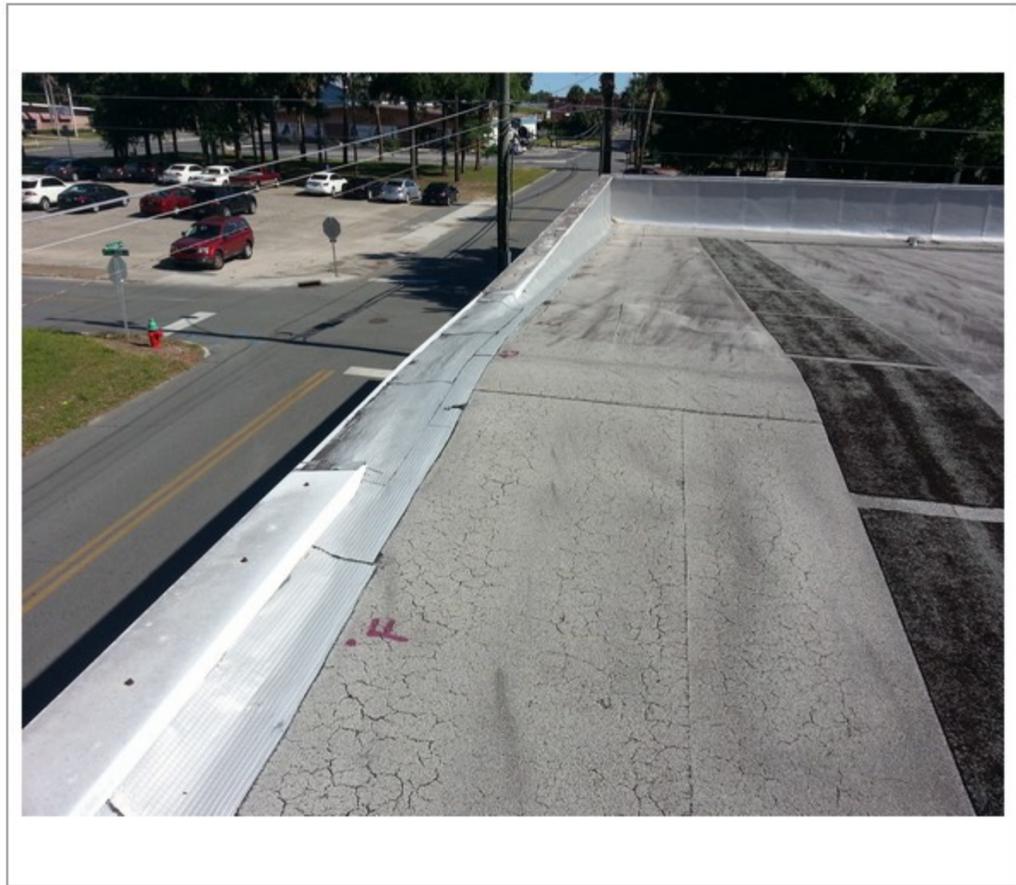
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Lake City Library



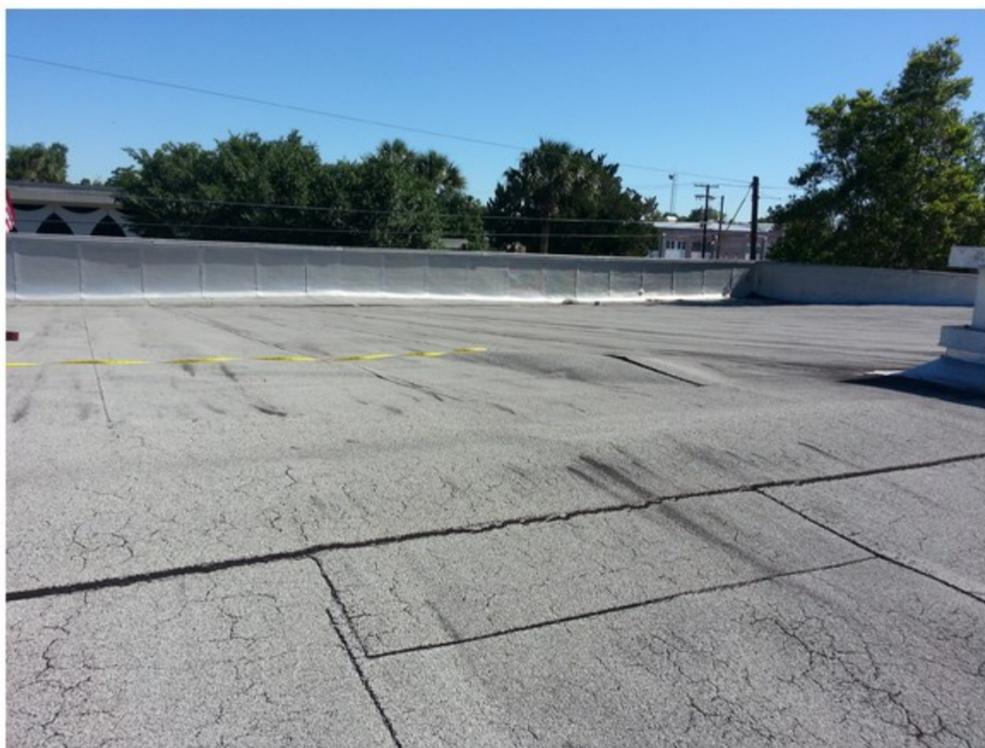
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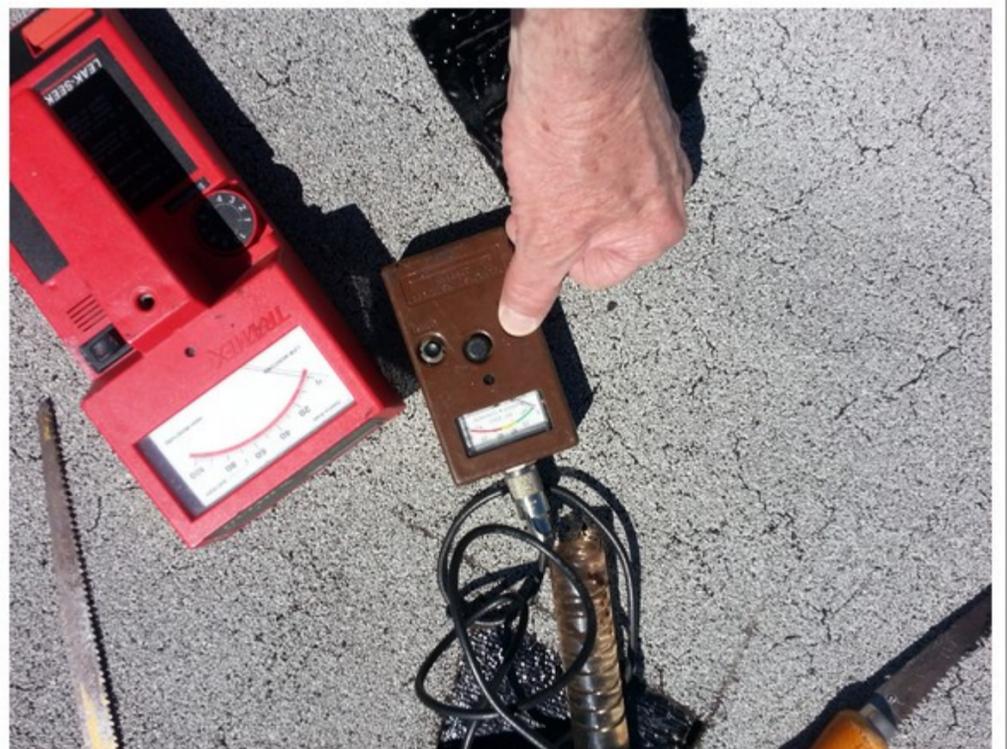
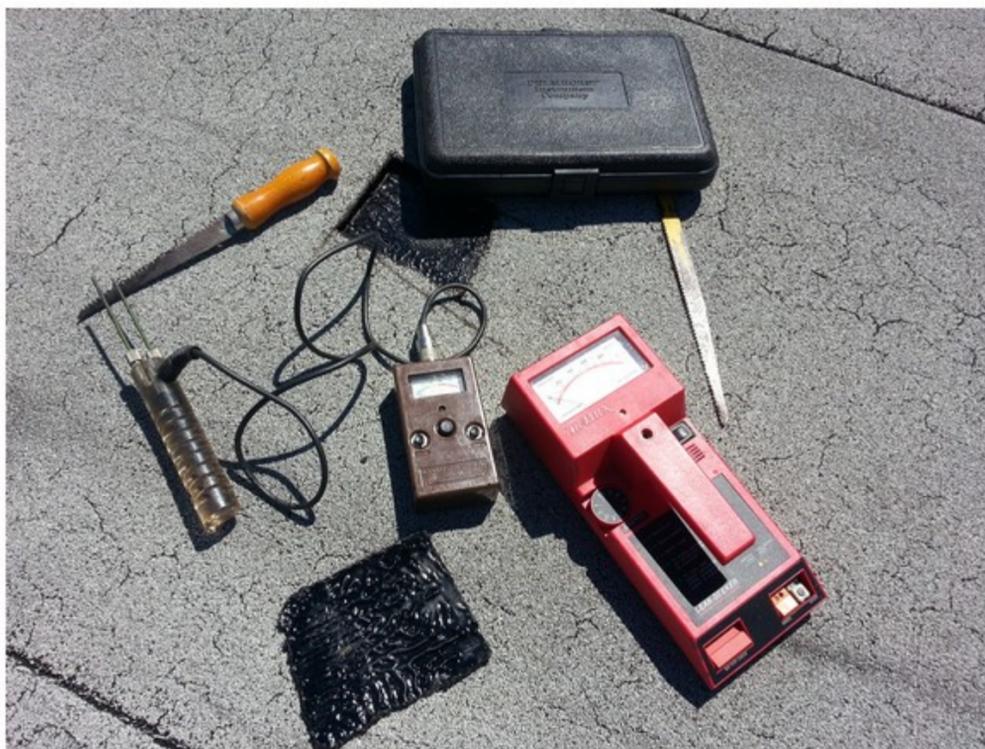


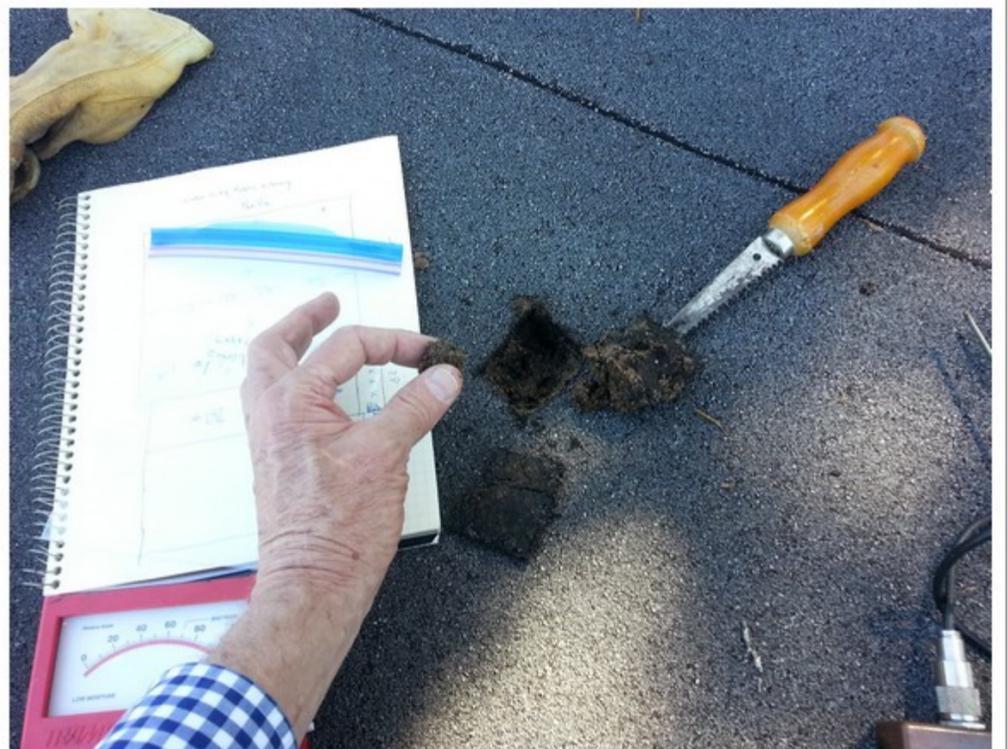


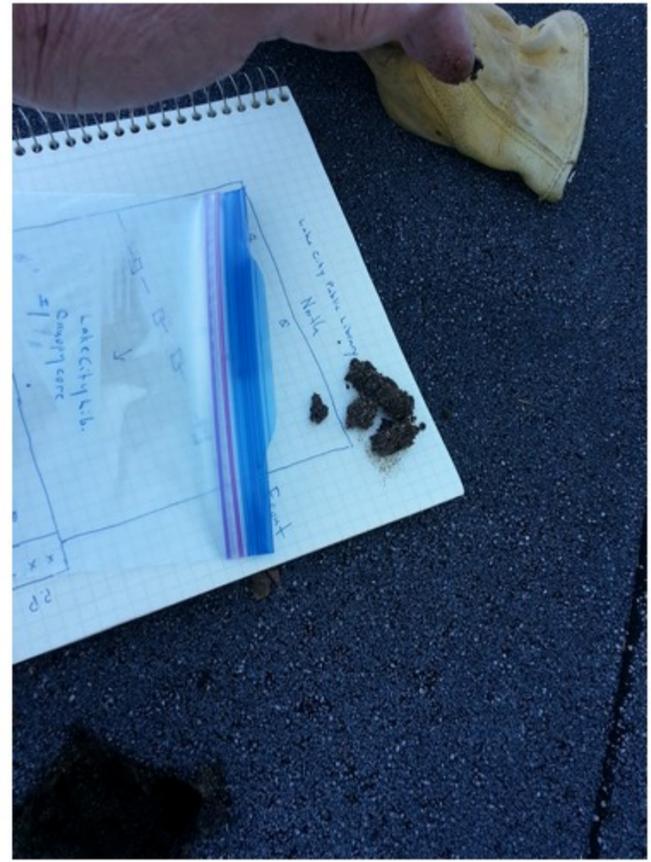


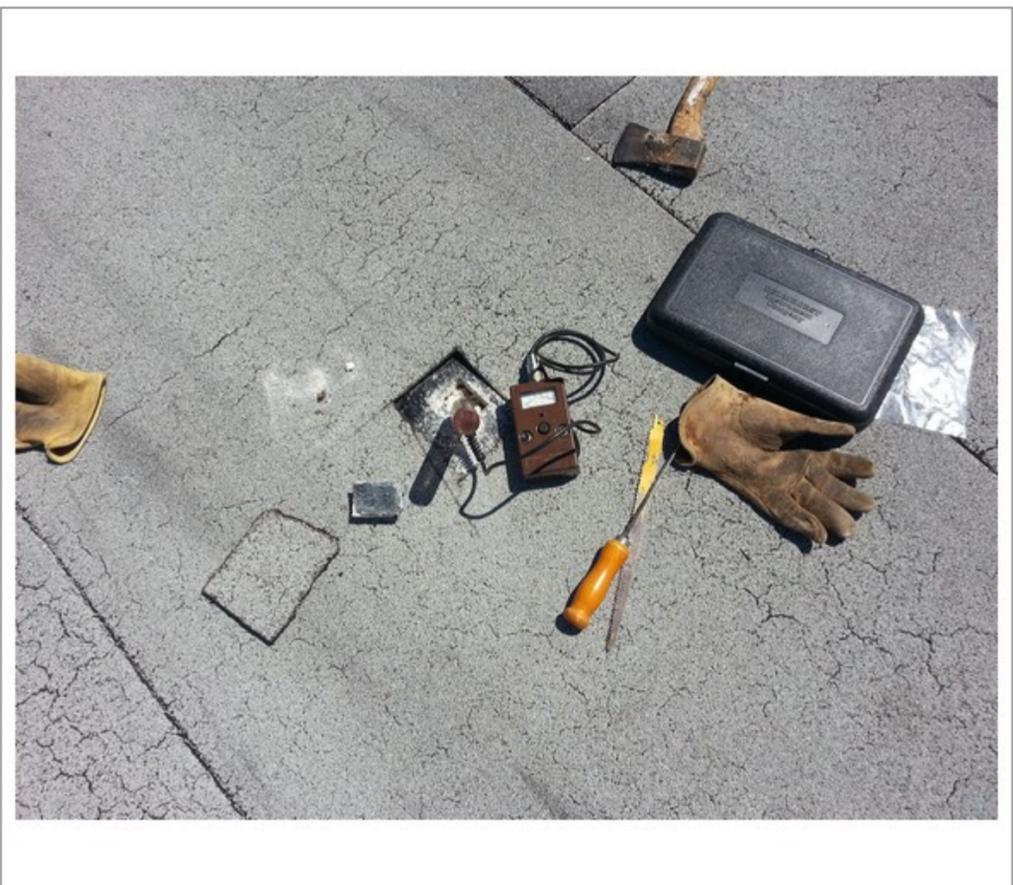
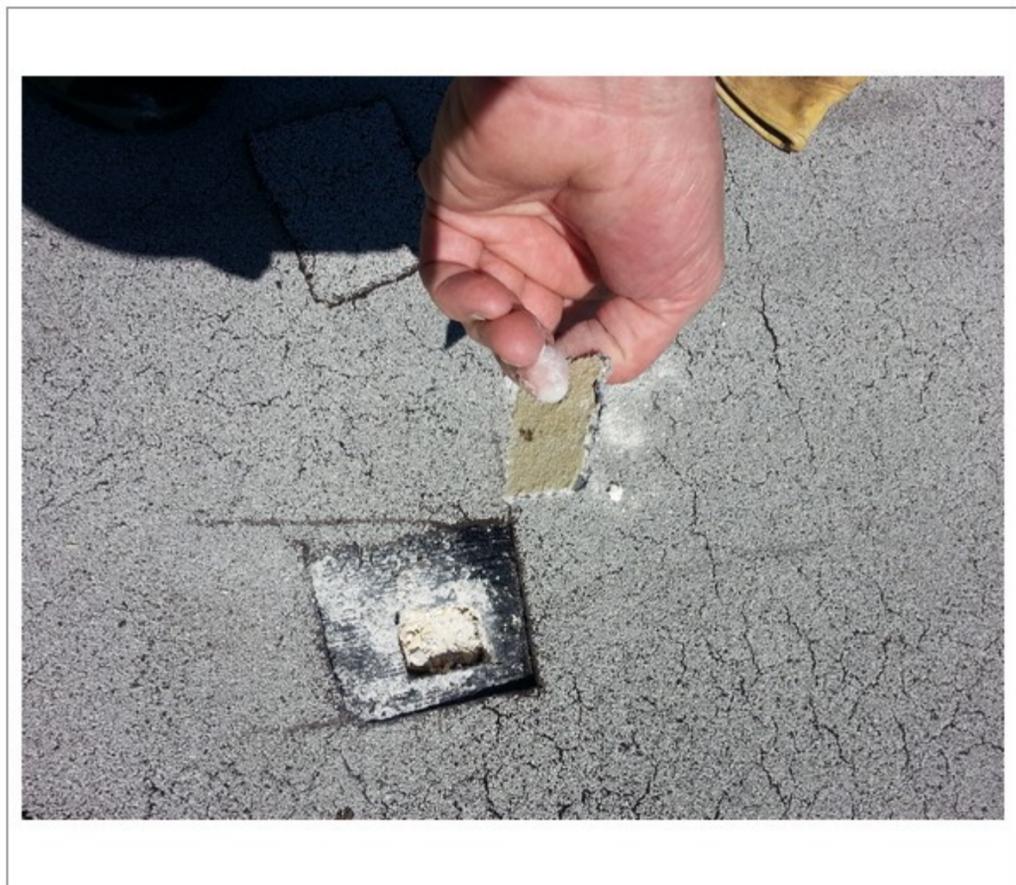
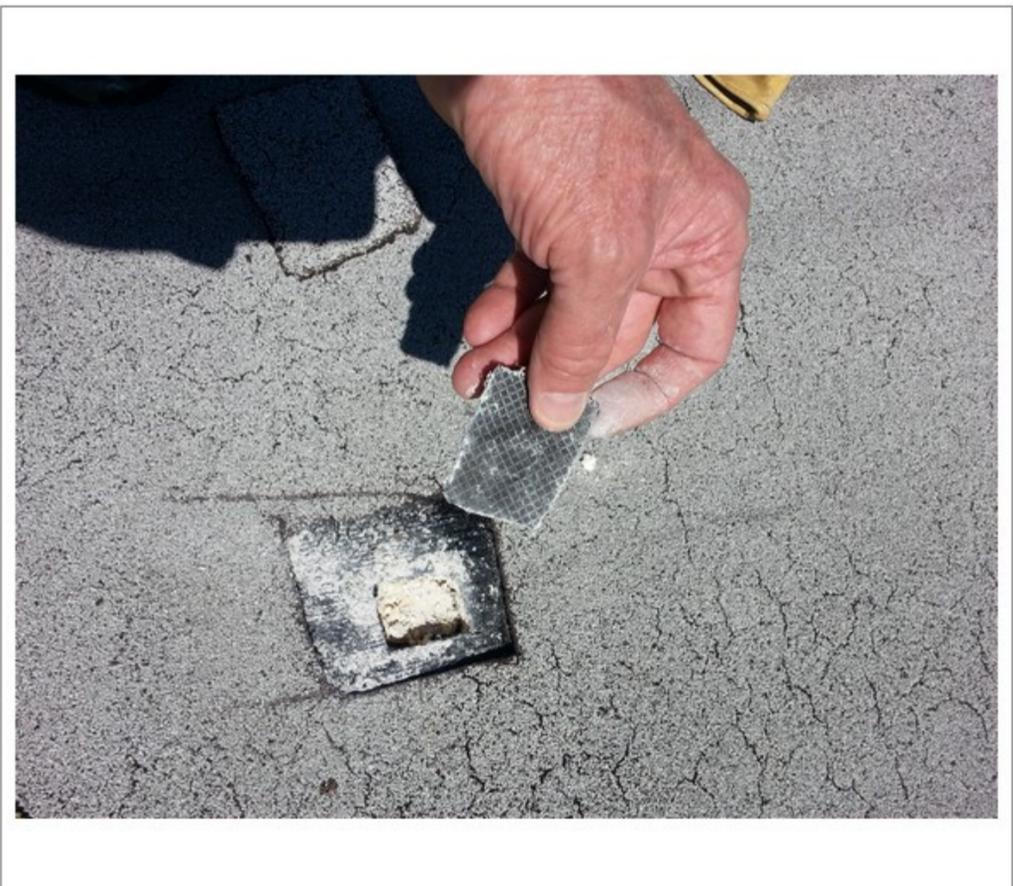


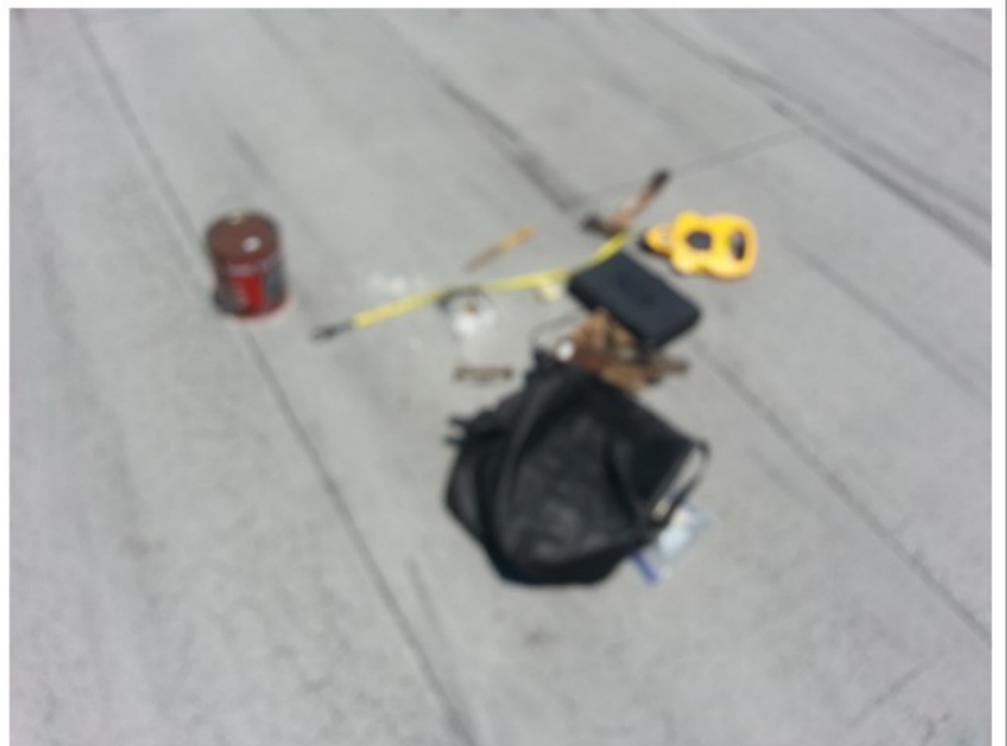


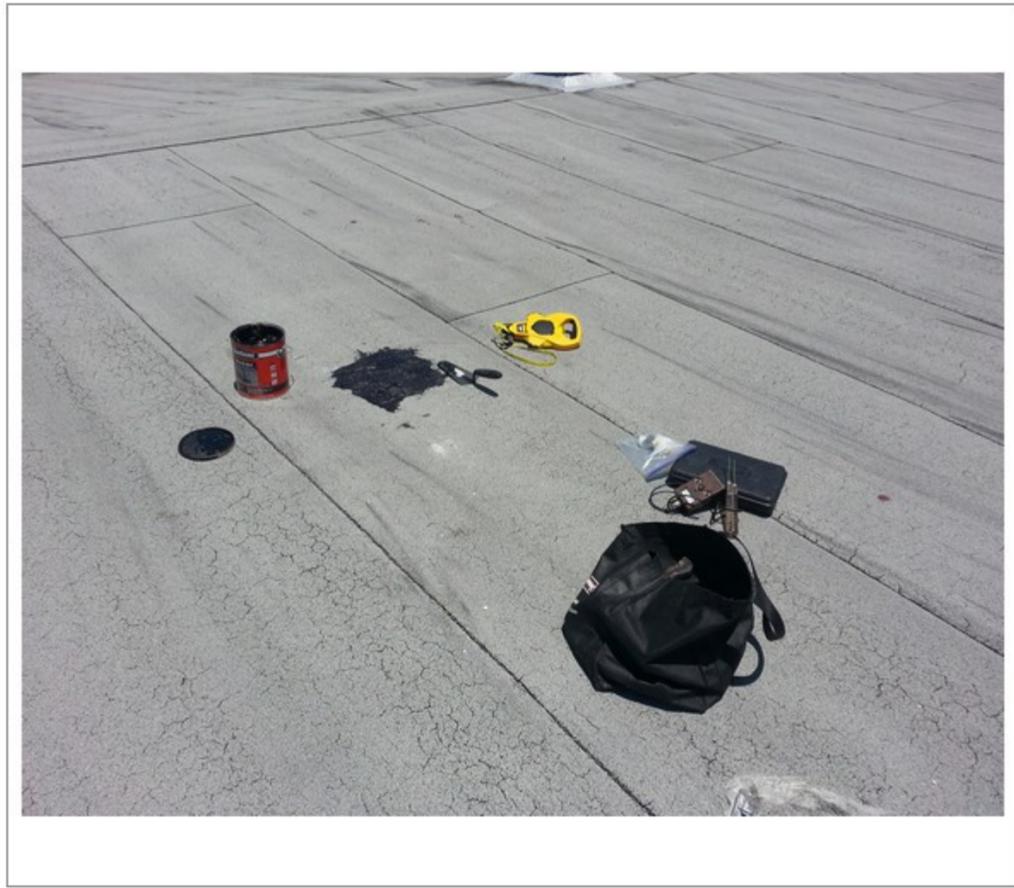












SECTION 07 5200

MODIFIED BITUMINOUS MEMBRANE ROOFING – TEAR OFF

PART 1 - GENERAL

1.1 SECTION INCLUDES:

- A. Preparation of Substrate to Receive Roofing Materials
- B. Roof Insulation Application to Prepared Substrate
- C. Modified Bitumen Ply Sheet Application to Prepared Substrate
- D. Poly(methyl methacrylate) (PMMA)-based Roof Membrane Application
- E. PMMA-based Roof Flashing Application

1.2 RELATED REQUIREMENTS

- A. Refer to Division 00 and 01 sections of these specifications.

1.3 RELATED SECTIONS

- A. Section 06 1053 – Miscellaneous Rough Carpentry
- B. Section 07 6200 – Sheet Metal Flashing and Trim
- C. Section 07 7100 – Roof Specialties

1.4 REFERENCE STANDARDS

- A. Agencies which may be used as references throughout this specification section include:

ASTM	American Society for Testing and Materials Philadelphia, PA
FM	Factory Mutual Engineering and Research Norwood, MA
NRCA	National Roofing Contractors Association Rosemont, IL
CERTA	Certified Roofing Torch Applicator Program National Roofing Contractors Association Rosemont, IL Midwest Roofing Contractors Association Lawrence, KS
OSHA	Occupational Safety and Health Administration Washington, DC
UL	Underwriters Laboratories Northbrook, IL
ACI	American Concrete Institute Hills, MI
ICRI	International Concrete Repair Institute Des Plaines, IL

1.5 DESCRIPTION OF WORK

A. The basic work descriptions required in this specification are referenced below.

Project Type:	Tear Off
Deck:	Structural concrete
Slope:	Less than 1/8 inch
Substrate Preparation:	Prime using PA-1125 Asphalt Primer at the rate of 1 gallon per 100 – 400 square feet.
Temporary Roof:	Paradiene 20 TG, torch applied.
Tapered Insulation:	Tapered Paratherm system, having a minimum thickness of 1.5 inches and providing for a roof slope of 1/4 inch, applied in Para-Stik Insulation Adhesive.
Insulation - top layer:	DensDeck Prime, having a thickness of ¼ inch, applied in Para-Stik Insulation Adhesive.
Roof System:	Paradiene 20, applied in PA-311 M Paradiene 30 FR, applied in PA-311 M
Flashing System:	Veral Aluminum, torch applied.

1.6 SUBMITTALS

A. Submittals Prior to Contract Award:

1. Letter from the proposed primary roofing manufacturer confirming that the bidder is an acceptable Contractor authorized to install the proposed system.
2. Letter from the primary roofing manufacturer stating that the proposed application will comply with the Manufacturer's requirements in order to qualify the project for the specified guarantee.

1.7 QUALITY ASSURANCE

- A. Acceptable Contractor: Contractor shall be certified in writing by the roofing materials manufacturer to install the primary roofing products.
- B. Product Quality Assurance Program: Primary roofing materials shall be manufactured under a quality management system that is monitored regularly by a third party auditor under the ISO 9001 audit process.
- C. Agency Approvals: The proposed roof system shall conform to the following requirements. No other testing agency approvals will be accepted.
1. Underwriters Laboratories Class A acceptance of the proposed roofing system based upon testing performed in accordance with ASTM E 108 protocol.
 2. The roof configuration shall have been successfully tested by an accredited testing laboratory to meet a minimum design windload pressure as noted on the Drawings.
- D. Project Acceptance: Submit a completed manufacturer's application for roof guarantee form along with shop drawings of the roofs showing all dimensions, penetrations, and details. The project must receive approval by the membrane manufacturer, through this process, prior to shipment of materials to the project site.

- E. Scope of Work: The work to be performed under this specification shall include but is not limited to the following: Attend necessary job meetings and furnish competent and full time supervision, experienced roof mechanics, all materials, tools, and equipment necessary to complete, in an acceptable manner, the roof membrane/flashing system installation in accordance with this specification. Comply with the latest written application instructions of the manufacturer of the primary roofing products.
- F. Local Regulations: Conform to regulations of public agencies, including any specific requirements of the city and/or state of jurisdiction.
- G. Manufacturer Requirements: The membrane/flashing system manufacturer shall provide direct trained company personnel to attend necessary job meetings, perform periodic inspections as necessary, and conduct a final inspection upon successful completion of the project.

1.8 GUARANTEE/WARRANTY

- A. Roof Membrane/System Guarantee: Upon successful completion of the project, and after all post installation procedures have been completed, furnish the Owner with the manufacturer's 20 year labor and materials guarantee covering the rigid insulation, insulation adhesive, and roof membrane/flashing system. The guarantee shall be a term type, without deductibles or limitations on coverage amount, and shall be issued at no additional cost to the Owner.
 - 1. Siplast 20 year Roof Membrane/System Guarantee

1.9 PRODUCT DELIVERY STORAGE AND HANDLING

- A. Delivery: Deliver materials in the manufacturer's original sealed and labeled containers and in quantities required to allow continuity of application.
- B. Storage: Store closed containers in a cool, dry area away from heat, direct sunlight, oxidizing agents, strong acids, and strong alkalis. Do not store resins or catalyst at temperatures below 32°F or above 85°F. Keep away from open fire, flame or any ignition source. Store in a well ventilated area.
- C. Handling: Handle all materials in such a manner as to preclude damage and contamination with moisture or foreign matter. Keep away from open fire, flame, or any ignition source. Vapors may form explosive mixtures with air. Avoid skin and eye contact with this material. Avoid breathing fumes when above the Threshold Limit Value (TLV). Do not eat, drink, or smoke in areas where roofing materials are stored or applied.
- D. Damaged Material: Any materials that are found to be damaged or stored in any manner other than stated above shall be automatically rejected, removed and replaced at the Contractor's expense.

1.10 PROJECT/SITE CONDITIONS

- A. Requirements Prior to Job Start
 - 1. Notification: Give a minimum of 5 days notice to the Owner and manufacturer prior to commencing any work and notify both parties on a daily basis of any change in work schedule.
 - 2. Permits: Obtain all permits required by local agencies and pay all fees which may be required for the performance of the work.

3. **Safety:** Familiarize every member of the application crew with all fire and safety regulations recommended by OSHA, NIOSH, NRCA and other industry or local governmental groups. Workers shall wear a long sleeve shirt with long pants and work boots. Workers shall use only butyl rubber or nitrile gloves when mixing or applying PMMA products. Safety glasses with side shields are required for eye protection. Use local exhaust ventilation to maintain worker exposure below the published Threshold Limit Value (TLV). If the airborne concentration poses a health hazard, becomes irritating or exceeds recommended limits, use a NIOSH approved respirator in accordance with OSHA Respirator Protection requirements published under 29 CFR 1910.134. The specific type of respirator will depend on the airborne concentration. A filtering face piece or dust mask is not appropriate for use with this product if TLV filtering levels have been exceeded.
- B. Environmental Requirements**
1. **Precipitation:** Do not apply roofing materials during precipitation or in the event there is a probability of precipitation during application. Take adequate precautions to ensure that materials, applied roofing, and building interiors are protected from possible moisture damage or contamination.
 2. **Temperature Restrictions – self-adhesive sheets:** The minimum required substrate temperature at point of application is 40°F. Maintain a minimum roof membrane material temperature above 50°F. In low temperature conditions, materials keep materials warm prior to application. Suspend application in situations where the self-adhered base ply cannot be kept at temperatures allowing for proper adhesion or the substrate temperature will not allow for proper adhesion.
 3. **Temperature Restrictions – PMMA-based Materials:** Do not apply catalyzed resin materials if there is a threat of inclement weather. Follow the resin manufacturer's specifications for minimum and maximum ambient, material and substrate temperatures. Do not apply catalyzed resin materials unless ambient and substrate temperatures fall within the resin manufacturer's published range.
- C. Protection Requirements**
1. **Membrane Protection:** Provide protection against staining and mechanical damage for newly applied roofing and adjacent surfaces.

PART 2 - PRODUCTS

2.1 ROOFING SYSTEM ACCESSORIES

A. Temporary Roof Ply Sheet

1. **Torchable Modified Bitumen Ply Sheet:** A fiberglass mat reinforced modified bitumen sheet, coated on one side with a high quality torch grade SBS modified bitumen blend, having a minimum weight of 76 lb/sq.
 - a. Siplast Paradiene 20 TG

B. Rigid Roof Insulation: Roof insulation shall be UL and FM approved. Insulation shall be approved in writing by the insulation manufacturer for intended use and for use with the specified roof assembly. Maintain a maximum panel size of 4 feet by 4 feet where polyisocyanurate insulation is specified to be installed in insulation adhesive.

1. **Polyisocyanurate Tapered Roof Insulation:** Tapered panels and standard fill panels composed of a closed cell, rigid polyisocyanurate foam core material, integrally laminated between glass fiber facers, in full compliance with ASTM C 1289, Type II, Class 1, Grade 2. The tapered system shall have a minimum thickness of 1.5 inches and provide for a roof slope of 1/4 inch per foot. Acceptable types are as follows.
 - a. Tapered Paratherm by Siplast; Irving, TX

2. Gypsum Sheathing Panel: A panel composed of a gypsum based, non-structural water resistant core material integrally bonded with fiberglass mats on both sides having a nominal thickness of 1/4 inch. The panel surface shall be factory primed with a non-asphaltic primer. Acceptable types are as follows:
 - a. DensDeck Prime Gypsum Roof Board, by Georgia Pacific Corporation; Atlanta, GA
- C. Primers, Sealants and Adhesives for Bitumen Products
1. Insulation Adhesive: A single component, moisture cured, polyurethane foam adhesive, dispensed from a portable, pre-pressurized container used to adhere insulation panels to the substrate as well to other insulation panels.
 - a. Para-Stik Insulation Adhesive by Siplast; Irving, TX
 2. Primer: An asphalt, solvent blend conforming to ASTM D 41 requirements.
 - a. Siplast PA-1125 Asphalt Primer by Siplast; Irving, TX
 3. Primer for Self-Adhesive Sheets: A quick drying, low-VOC, water-based, high-tack primer specifically designed to promote adhesion of roofing and waterproofing sheets to approved substrates. Primer shall meet South Coast Air Quality District and Ozone Transport Commission requirements.
 - a. TA-119 Primer by Siplast; Irving, TX
 4. Elastomeric Sealant: A moisture-curing, elastomeric sealant designed for roofing applications. The sealant shall be approved by the roof membrane manufacturer for use in conjunction with the roof membrane materials. Acceptable types are as follows:
 - a. PS-209 Elastomeric Sealant by Siplast; Irving, TX
- D. Fasteners
1. Flashing Reinforcing Sheet Fasteners for Wood/Plywood Substrates to Receive Flashing Coverage: Fasteners shall be approved by the manufacturer of the primary roofing products. Acceptable fasteners for specific substrate types are listed below.
 - a. Wood/Plywood Substrates
 - 1) A 12 gauge, spiral or annular threaded shank, zinc coated steel roofing fastener having a minimum 1 inch head.
 - a) Gauge Simplex Nail by the Simplex Nail and Manufacturing Co., Americus, GA
- E. Resin Accessories
1. Cleaning Solution/Solvent: A clear solvent used to clean and prepare transition areas of in-place catalyzed resin to receive subsequent coats of resin and to clean substrate materials to receive resin.
 - a. Pro Prep by Siplast; Irving, TX
 2. Preparation Paste: A PMMA-based paste used for remediation of depressions in substrate surfaces or other irregularities.
 - a. Pro Paste Resin by Siplast; Irving, TX
- F. PMMA Primers
1. Primer for Wood, Plywood and Rigid Insulation, Masonry and Vertical Concrete Substrates: A fast-curing PMMA-based primer for use in over wood, plywood and rigid insulation substrates.
 - a. Pro Primer W by Siplast; Irving, TX
- G. Accessories
1. Ceramic Granule Anti-Skid Surfacing: No. 11 grade specification ceramic granules suitable for broadcast into a PMMA-based resin wearing layer.
 - a. No. 11 Granules by Siplast; Irving, TX

2.2 DESCRIPTION OF SYSTEMS

A. Roofing Membrane Assembly: A roof membrane assembly consisting of two plies of a prefabricated, reinforced, homogeneous Styrene-Butadiene-Styrene (SBS) block copolymer modified asphalt membrane, applied over a prepared substrate. Reinforcement mats shall be impregnated/saturated and coated each side with SBS modified bitumen blend. The cross sectional area of the sheet material shall contain no oxidized or non-SBS modified bitumen. The roof system shall pass 500 cycles of ASTM D 5849 Resistance to Cyclic Joint Displacement (fatigue) at 14°F. Passing results shall show no signs of membrane cracking or interply delamination after 500 cycles. The roof system shall pass 200 cycles of ASTM D 5849 after heat conditioning performed in accordance with ASTM D 5147. The assembly shall possess waterproofing capability, such that a phased roof application, with only the modified bitumen base ply in place, can be achieved for prolonged periods of time without detriment to the watertight integrity of the entire roof system.

1. Siplast Paradiene 20/30 FR roof system

a. Modified Bitumen Base and Stripping Ply

- 1) Thickness (avg): 91 mils (ASTM D 5147)
- 2) Thickness (min): 87 mils (ASTM D 5147)
- 3) Weight (min per 100 ft² of coverage): 62 lb
- 4) Peak filler content in elastomeric blend - 35% by weight
- 5) Low temperature flexibility @ -15°F: PASS (ASTM D 5147)
- 6) Peak Load (avg) @ 73°F: 30 lbf/inch (ASTM D 5147)
- 7) Peak Load (avg) @ 0°F: 70 lbf/inch (ASTM D 5147)
- 8) Ultimate Elongation (avg.) @ 73°F: 50% (ASTM D 5147)
- 9) Compound Stability (max): 0.1% (ASTM D 5147)
- 10) High Temperature Stability (min): 250°F (ASTM D 5147)
- 11) Approvals: UL Class listed, FM Approved (products shall bear seals of approval)
- 12) Reinforcement: fiberglass mat or other meeting the performance and Compound stability criteria
 - a) Siplast Paradiene 20

b. Modified Bitumen Finish Ply

- 1) Thickness (avg): 130 mils (ASTM D 5147)
- 2) Thickness at selvage (coating thickness) (avg): 98 mils (ASTM D 5147)
- 3) Thickness at selvage (coating thickness) (min): 94 mils (ASTM D 5147)
- 4) Weight (min per 100 ft² of coverage): 90 lb
- 5) Peak filler content in elastomeric blend: 35% by weight
- 6) Low temperature flexibility @ -15°F: PASS (ASTM D 5147)
- 7) Peak Load (avg) @ 73°F : 30 lbf/inch (ASTM D 5147)
- 8) Peak Load (avg) @ 0°F: 75 lbf/inch (ASTM D 5147)
- 9) Ultimate Elongation (avg.) @ 73°F: 55% (ASTM D 5147)
- 10) Compound Stability (max): 0.1% (ASTM D 5147)
- 11) High Temperature Stability (min): 250°F (ASTM D 5147)
- 12) Granule Embedment (max loss): 2.0 grams per sample (ASTM D 5147)
- 13) Approvals: UL Class listed, FM Approved (products shall bear seals of approval)
- 14) Reinforcement: fiberglass mat or other meeting the performance and Compound stability criteria
- 15) Surfacing: ceramic granules
 - a) Siplast Paradiene 30 FR

- B. Flashing Membrane Assembly: A flashing membrane assembly consisting of a prefabricated, reinforced, Styrene-Butadiene-Styrene (SBS) block copolymer modified asphalt membrane with a continuous, channel-embossed metal-foil surfacing. The finish ply shall conform to ASTM D 6298 and the following physical and mechanical property requirements.
1. Siplast Veral flashing system, aluminum finish
 - a. Cant Backing Sheet and Flashing Reinforcing Ply
 - 1) Thickness (avg): 102 mils (ASTM D 5147)
 - 2) Thickness (min): 98 mils (ASTM D 5147)
 - 3) Weight (min per 100 ft² of coverage): 72 lb
 - 4) Maximum filler content in elastomeric blend: 35% by weight
 - 5) Low temperature flexibility @ -15° F - PASS (ASTM D 5147)
 - 6) Peak Load (avg) @ 73°F: 30 lbf/inch (ASTM D 5147)
 - 7) Peak Load (avg) @ 0°F: 75 lbf/inch (ASTM D 5147)
 - 8) Ultimate Elongation (avg.) @ 73°F: 50% (ASTM D 5147)
 - 9) Dimensional Stability (max): 0.1% (ASTM D 5147)
 - 10) Compound Stability (min - sheet): 250°F (ASTM D 5147)
 - 11) Compound Stability (min – adhesive coating): 212°F (ASTM D 5147)
 - 12) Approvals: UL Class listed, FM Approved (products shall bear seals of approval)
 - 13) Reinforcement: fiberglass mat or other meeting the performance and dimensional stability criteria
 - 14) Back Surfacing: polyolefin film
 - a) Siplast Paradiene 20 SA
 2. Metal-Clad Modified Bitumen Flashing Sheet
 - 1) Thickness (avg): 142 mils (ASTM D 5147)
 - 2) Thickness (min): 138 mils (ASTM D 5147)
 - 3) Weight (min per 100 ft² of coverage): 92 lb
 - 4) Coating Thickness – back surface (min): 40 mils (ASTM D 5147)
 - 5) Low temperature flexibility @ 0° F: PASS (ASTM D 5147)
 - 6) Peak Load (avg) @ 73°F: 85 lbf/inch (ASTM D 5147)
 - 7) Peak Load (avg) @ 0°F: 180 lbf/inch (ASTM D 5147)
 - 8) Ultimate Elongation (avg) @ 73°F: 45% (ASTM D 5147)
 - 9) Tear-Strength (avg): 120 lbf (ASTM D 5147)
 - 10) Dimensional Stability (max): 0.2% (ASTM D 5147)
 - 11) Compound Stability (min): 225°F (ASTM D 5147)
 - 12) Cyclic Thermal Shock Stability (maximum): 0.2% (ASTM D 7051)
 - 13) Approvals: UL Approved, FM Approved (products shall bear seals of approval)
 - 14) Reinforcement: fiberglass scrim mat or other meeting the performance and dimensional stability criteria
 - 15) Surfacing: aluminum metal foil
 - a) Siplast Veral Aluminum
 - C. Catalyzed Acrylic Resin Flashing System: A specialty flashing system consisting of a liquid-applied, fully reinforced, multi-component acrylic membrane installed over a prepared or primed substrate. The flashing system consists of a catalyzed acrylic resin primer, basecoat and topcoat, combined with a non-woven polyester fleece. The resin and catalyst are pre-mixed immediately prior to installation. The use of the specialty flashing system shall be specifically approved in advance by the membrane manufacturer for each application.
 1. Parapro 123 Flashing System by Siplast; Irving, TX

- D. Substitute Roof Systems: The following substitute roof systems are approved for use in lieu of the specified roof system.

Manufacturer

Soprema

Temporary Roofing – Torch Grade – Elastophene SP 3.0

Roofing Membrane Assembly – Base Ply Elastophene Sanded - Finish Ply – Elastophene FR GR

Flashing Assembly – Sopralast System – Flashing Base Ply – Elastophene Sanded – Flashing Cap Ply – Sopralast 50 TV ALU

Insulation and Coverboard – Sopra ISO and SopraBoard – Tapered ISO Insulation – Sopra ISO ¼” per foot slope – Coverboard – Sopraboard 1/8” thickness

Insulation Foam Adhesive – DuoTack Foam Adhesive

Membrane Cold Adhesive – ColPly Adhesive

PMMA Resin Flashing System – Alsan Flashing System

Asphalt Primer – Elastocol 500

Manufacturer

Johns Manville

Temporary Roof – DynaWeld Base

Base Plies – DynaBase

Finish Ply – DynaGlas FR

Flashing Sheet – DynaClad

Coverboard – ½” DuraBoard

Stripping Ply and Flashing Reinforcing Sheet – DynaGrip SD/SA

Adhesive – JM Premium Cold Application Adhesive

PART 3 - EXECUTION

3.1 SUBSTRATE EXAMINATION/PREPARATION

- A. General: Ensure that substrates are free from gross irregularities, loose, unsound or foreign material such as dirt, ice, snow, water, grease, oil, bituminous products, release agents, laitance, paint, loose particles/friable matter, rust or any other material that would be detrimental to adhesion of the catalyzed primer and/or resin to the substrate. Some surfaces may require scarification, shotblasting, or grinding to achieve a suitable substrate.
- B. Preparation of Existing Concrete/Masonry Substrates to Receive Resin Materials: Existing concrete substrates shall have a minimum compressive strength of 3,500 psi. Following evaluation for moisture content and confirmation that the moisture content is at an acceptable level, shot blast or scarify/shot-blast concrete or masonry surfaces to provide a sound substrate free from laitance and residue from bitumen, coal tar, primer, coatings, adhesives, sealer or any material that may inhibit adhesion of the specified primer. Generate a concrete surface profile of CSP-2 to CSP-4 as defined by the ICRI. Grinding may be used as a preparation method for localized areas that cannot be reached by a shot blasting equipment provided that a surface can be prepared to a CSP-2 to CSP 4. Repair spalls and voids on vertical or horizontal surfaces using the specified primer and preparation paste.
- C. Preparation of Concrete Substrates to Receive a Modified Bitumen Base Ply: Prime the deck surface with asphalt primer at the rate of 1 gallon per 100 to 400 square feet.
- D. Temporary Roof Application: Torch apply the ply sheets directly to the prepared substrate, lapping sides and ends a minimum of 3 inches. Apply the sheets free of wrinkles, creases or fishmouths and exert sufficient pressure on the roll during application to ensure the prevention of air pockets. Seal each penetration and termination using fiberglass tape and the specified plastic cement to ensure that the temporary roof configuration is completely water-tight.

- E. Insulation: Install insulation panels with end joints offset; edges of the panels shall be in moderate contact without forcing applied in strict accordance with the insulation manufacturer's requirements and the following instructions. Where insulation is installed in two or more layers, stagger joints between layers. Maintain a maximum panel size of 4 feet by 4 feet for polyisocyanurate insulation applied in insulation adhesive.
 - 1. 1. Insulation - multiple layer: Install all layers in an application of the specified insulation adhesive in strict accordance with the requirements of the insulation adhesive supplier. Stagger the panel joints between insulation layers.
- F. Ply Sheet Application: Bond the modified bitumen ply sheet to the prepared substrate, utilizing minimum 3 inch side and end laps. Apply each sheet directly behind the torch applicator. Cut a dog ear angle at the end laps on overlapping selvage edges. Using a clean trowel, apply pressure to top seal T-laps immediately following sheet application. Stagger end laps a minimum of 3 feet. Follow manufacturer's specifications regarding maximum exposure periods prior to application of the liquid-applied finish membrane.
- G. Preparation of Steel/Aluminum Substrates: Grind to generate a "white-metal" surface and remove loose particles. Extend preparation area a minimum of 1/2-inch (13 mm) beyond the termination of the roofing/flashing system. Notch steel surfaces to provide a rust-stop where detailed.
- H. Rigid Plastic Flashing Substrates: Evaluate the plastic for compatibility with the resin materials. Lightly abrade the surface to receive the flashing system, clean plastic substrates using the specified cleaner/solvent and allow to dry. Extend the preparation area a minimum of 1/2 inch beyond the termination of the flashing system.
- I. Preparation of Wood/Plywood Flashing Substrates to receive Resin: Prime wood/plywood surfaces to receive the specified flashing system with the specified PMMA-based primer at the rate specified by the resin manufacturer and allow primer to cure. Tape the joints between plywood or wood panels using the specified tape and prior to application of the lashing system.

3.2 MIXING OF RESIN PRODUCTS

- A. Preparation/Mixing/Catalyzing Resin Products: Pour the desired quantity of resin into a clean container and using a spiral mixer or mixing paddle, stir the liquid for the time period specified by the resin manufacturer. Calculate the amount of catalyst powder needed using the manufacturer's guidelines and add the pre-measured catalyst to the resin component. Mix again for the time period specified by the resin manufacturer, ensuring that the product is free from swirls and bubbles. To avoid aeration, do not use a spiral mixer unless the spiral section of the mixer can be fully contained in the liquid during the mixing process. Mix only enough product to ensure that it can be applied before pot life expires.

3.3 PREPARATION PASTE AND PRIMER MIXING/APPLICATION

- A. Primer Application: Apply primer resin using a roller or brush at the rate specified by the primer manufacturer over qualified and prepared substrates. Apply primer resin at the increased rate specified by the primer manufacturer over DensDeck Prime or other porous substrates. Do not let resin pool or pond. Do not under-apply or over-apply primers as this may interfere with proper primer catalyzation. Make allowances for waste, including saturation of roller covers and application equipment.
- B. Paste Application: Apply catalyzed preparation paste using a trowel over prepared and primed substrates. Before application of any resin product over cured paste, wipe the surface of the paste using the specified cleaner/solvent and allow to dry. Treat the surface again if not followed up by resin application within 60 minutes.

3.4 FLASHING AND FIELD MEMBRANE APPLICATION

A. Base Flashing Application

1. Using masking tape, mask the perimeter of the area to receive the flashing system. Apply resin primer to substrates requiring additional preparation and allow primer to cure.
2. Pre-cut fleece to ensure a proper fit at transitions and corners prior to membrane application.
3. Apply an even, generous base coat of flashing resin to prepared surfaces using a roller at the rate specified by the resin manufacturer. Work the fleece into the wet, catalyzed resin using a brush or roller to fully embed the fleece in the resin and remove trapped air. Lap fleece layers a minimum of 2 inch and apply an additional coat of catalyzed resin between layers of overlapping fleece. Again using a roller, apply an even top coat of catalyzed resin immediately following embedment of the fleece at the rate specified by the resin manufacturer, ensuring that the fleece is fully saturated. Ensure that the flashing resin is applied to extend beyond the fleece (maximum ¼-inch). Remove the tape before the catalyzed resin cures. Make allowances for waste, including saturation of roller covers and application equipment.
4. Should work be interrupted for more than 12 hours or the surface of the cured resin becomes dirty or contaminated by the elements, wipe the surface to be lapped with new flashing resin using the specified cleaner/solvent. Allow the surface to dry for a minimum 20 minutes and a maximum 60 minutes before continuing work.

B. Field Membrane Application

1. Using the specified cleaner/solvent, wipe flashing membrane surfaces to be lapped with field membrane. Allow the surface to dry for a minimum 20 minutes before continuing work.
2. Apply an even, generous base coat of field membrane resin to prepared surfaces using a roller at the rate specified by the resin manufacturer. Work the fleece into the wet, catalyzed resin using a brush or roller to fully embed the fleece in the resin and remove trapped air. Lap fleece layers a minimum of 2 inch and apply an additional coat of catalyzed resin between layers of overlapping fleece. Again using a roller, apply an even top coat of catalyzed resin immediately following embedment of the fleece at the rate specified by the resin manufacturer, ensuring that the fleece is fully saturated. Ensure that the flashing resin is applied to extend beyond the fleece (maximum ¼-inch). Make allowances for waste, including saturation of roller covers and application equipment. Allow 2 hours cure time prior to exposing the membrane to foot traffic.

3.5 WALKTREAD/SKID RESISTANT SURFACING

- A. Granule Anti-Skid Application: Mask the areas to receive the anti-skid system using masking tape. Apply an additional top coat of catalyzed roof resin at the rate specified by the resin manufacturer, immediately broadcast granules to refusal, and allow to cure. Remove tape before the resin cures. Apply a layer of catalyzed roof resin over granule surfaces. Allow 2 hours cure time prior to exposing the membrane to foot traffic.

3.6 FIELD QUALITY CONTROL AND INSPECTIONS

- A. Site Condition: Leave all areas around job site free of debris, roofing materials, equipment and related items after completion of job.
- B. Notification Of Completion: Notify the manufacturer by means of manufacturer's printed Notification of Completion form of job completion in order to schedule a final inspection date.
- C. Final Inspection
 1. Post-Installation Meeting: Hold a meeting at the completion of the project, attended by all parties that were present at the pre-job conference. A punch list of items required for

completion shall be compiled by the Contractor and the manufacturer's representative. Complete, sign, and mail the punch list form to the manufacturer's headquarters.

- D. Issuance Of The Guarantee: Complete all post installation procedures and meet the manufacturer's final endorsement for issuance of the specified guarantee.

END OF SECTION

SECTION 07 6200
SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

- 1.1 **WORK INCLUDED:** This section covers the work necessary to furnish and install, complete, the following:
- A. Field fabricated metalwork.
 - B. Lead Flashings.
 - C. Fascia roof edge metal, gutters and downspout.
 - D. Ancillary items related to field fabricated flashings.
- 1.2 **RELATED REQUIREMENTS**
- A. Refer to Division 00 and 01 sections of these specifications.
- 1.3 **RELATED WORK**
- A. Section 07 5200 – Modified Bituminous Membrane Roofing
 - B. Section 07 9000 – Joint Protection
- 1.4 **SUBMITTALS:** Submittals during construction shall be made in accordance with section 01 3300. In addition, the following specific information shall be provided:
- A. Shop Drawings: Shop drawings of field fabricated work indicating joints, types and location of fasteners and special shapes.
 - B. Manufacturer's Literature: Catalog data for stock prefabricated items.
 - C. Samples: Manufacturers' standard Kynar finish color ranges for color selection.
 - D. Profile and gauge of roof edge, gutters and downspouts and related components, location and type of fasteners, details, profiles and sealants.
- 1.5 **REFERENCES**
- A. Manufacturers' recommendations and specifications.
 - B. Sheet Metal and Air Conditioning Contractors National Association (SMACNA): "Architectural Sheet Metal Manual."
 - C. Federal Specifications as referenced herein.
 - D. ASTM Standards and Test Procedures as referenced herein.
- 1.6 **FIELD MEASUREMENTS**
- A. The Contractor shall verify all dimensions, shall make any field measurements necessary and shall be fully responsible for accuracy and layout of work. The Contractor shall review the drawings and any discrepancies shall be reported for clarification prior to starting fabrication, application or installation.

1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store and handle materials or equipment under provisions of Section 01 6000.
- B. Stack prefabricated materials to prevent twisting, bending, or abrasion and to provide ventilation.
- C. Prevent contact with materials during storage which may cause discoloration, straining or damage.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. The use of a manufacturer's name and specification number is for the purpose of establishing the standard of quality and general configuration desired. Products of other manufacturers, meeting the requirements specified herein, will be considered in accordance with Section 01 6000.
- B. Like items of material or equipment specified herein shall be the end products of one manufacturer in order to achieve standardization for appearance, operation, maintenance, spare parts and manufacturer's service.

2.2 GENERAL

- A. The tabulation of items herein is not intended to be all inclusive, and it shall be the Contractor's responsibility to provide all sheet metal flashings and related work shown on the drawings, specified or which can be reasonably inferred as necessary to complete this project.

2.3 LEAD FLASHINGS

- A. Vents Through Roof: Solid lead conforming to Federal Specification QQ-L-201, Grade B, minimum weight 3 pounds per square foot, soft temper, except hard temper for flanges.

2.4 METAL FINISH

- A. .040 aluminum with all exposed surfaces given factory applied oven cured fluorpon coating with a minimum of full strength 70 percent solids content of "Kynar 500" resin over a primer in accordance with the manufacturer's written procedures.

2.5 GUTTERS AND DOWNSPOUTS

- A. Shall be formed in accordance with SMACNA standard. 0040 aluminum with painted Kynar finish. Securely anchor gutters with hangers of the same material. Provide straps at downspouts spaced at 4'-0" on center maximum.

2.6 ANCILLARY ITEMS

- A. Fastening Devices: Shall be in accordance with manufacturers' recommendations and in general, shall be large headed nails, rivets or screws of the same metal which is being fastened.
- B. Solder and Flux: Best commercial quality of type most suited for metal to be soldered.
- C. Sealer Tape: Polyisobutylene sealer tape.
- D. Isolation Paint for Aluminum and Dissimilar Metals: Single-components, coal-tar pitch based bituminous paint, 68% minimum solids by volume, brush applied at minimum 10 mils dry film thickness.

PART 3 - EXECUTION

3.1 COORDINATION

- A. Schedule and coordinate the work of this section and other related sections.
- B. Carefully review the drawings for areas or items requiring flashings and provide as required.

3.2 INSPECTION

- A. Installation of work specified in this section shall not start until the wood nailers and other items that will be concealed have been inspected. Notify inspector a minimum of 48 hours in advance of the time this Contractor plans to install this work.

3.3 INSTALLATION

- A. All workmanship shall be equal to the best standards of practice in modern sheet metal. Work shall be accurately formed to sizes, shapes and dimensions indicated and detailed. Sheet metal work shall be neat, straight, true and without imperfections.
- B. Run of sheet metal work shall have provision for expansion control at eight to ten foot centers in accordance with SMACNA standards.
- C. Joints in reglet counterflashing shall be lapped minimum 6 inches. Installation of reglets shall be in strict accordance with the manufacturer's latest printed instructions.
- D. All other joints in sheet metal work shall be riveted and sealed. Sealant shall be of proper type for use with the particular metal.
- E. At any point where two different types of metal join, they shall be separated with bitumastic isolation paint specified.
- F. Installation of prefabricated metal systems and flexible flashings shall be in strict accordance with the system manufacturer's latest instructions.
- G. Field fabricated metalwork shall be formed of metal specified hereinbefore in configurations indicated on drawings, and shall be installed in accordance with applicable NRCA and SMACNA standards.

END OF SECTION

SECTION 07 7100
ROOF SPECIALTIES

PART 1 - GENERAL

- 1.1 WORK INCLUDED: This section covers the work necessary to furnish and install, complete, the following:
- A. Rooftop pipe supports
- 1.2 RELATED REQUIREMENTS
- A. Refer to Division 00 and 01 sections of these specifications.
- 1.3 RELATED WORK
- A. Section 06 1053 – Miscellaneous Rough Carpentry
 - B. Section 07 5200 – Modified Bituminous Membrane Roofing
- 1.4 SUBMITTALS: Submittals during construction shall be made in accordance with section 01 3300. In addition, the following specific information shall be provided:
- A. Shop Drawings: Showing materials, details, flashing, anchorage and relation to adjacent structure.
 - B. Manufacturer's Literature: Catalog cuts of all items specified herein.
- 1.5 FIELD MEASUREMENTS
- A. The Contractor shall verify all dimensions, shall make any field measurements necessary and shall be fully responsible for accuracy and layout of work. The Contractor shall review the drawings and specifications and any discrepancies shall be reported for clarification prior to starting fabrication.

PART 2 - PRODUCTS

- 2.1 MANUFACTURERS
- A. The use of a manufacturer's name and specification number is for the purpose of establishing the standard of quality and general configuration desired. Products of other manufacturers, meeting the requirements specified herein, will be considered.
 - B. Like items of material or equipment specified herein shall be the end products of one manufacturer in order to achieve standardization for appearance, operation, maintenance, spare parts and manufacturer's service.
- 2.2 ROOFTOP PIPE SUPPORTS
- A. Supports shall be equal to Pipe Pier 50H – 4"x4"x10-1/2", closed-cell, medium density, black polyethylene foam Ethanfoam HS 45 with 14 gauge strut channel. Provide at pvc condensate lines as noted on the Drawings. Space at 4'-0" on center maximum and at each side of any pipe change of direction. Field verify piping and install supports per manufacturer's recommendations.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces and structures to receive the work of this section. Do not proceed until unsuitable conditions have been corrected. Starting work constitutes acceptance of conditions as suitable to the proper execution of the work.

3.2 COORDINATION

- A. Schedule and coordinate the work of this section with the work of all other sections involved.

3.3 INSTALLATION

- A. Install all items specified herein as detailed and in accordance with manufacturers' instructions.
- B. Work shall be weathertight and free of expansion and contraction noise.
- C. Work shall be designed, fabricated and installed to compliment the design and installation of the work of other related sections including wind loading and thermal expansion/contraction.
- D. Notify Architect of conditions that would adversely affect installation or subsequent use.
- E. Apply manufacturer's recommended adhesion method to adhere rooftop pipe supports to membrane roofing.
- F. Protect installed rooftop pipe supports to ensure that supports will be without damage or deterioration.

END OF SECTION

SECTION 07 9000
JOINT PROTECTION

PART 1 - GENERAL

- 1.1 WORK INCLUDED: This section covers the work necessary to furnish and install, complete, the following:
- A. Preparing substrate surfaces, sealants and joint backing for all joints related to roofing, flashings, buildings, structures and equipment.
- 1.2 RELATED REQUIREMENTS
- A. Refer to Division 00 and 01 sections of these specifications.
- 1.3 RELATED WORK
- A. Section 07 5200 – Modified Bituminous Membrane Roofing
 - B. Section 07 6200 – Sheet Metal Flashing and Trim
- 1.4 REFERENCES
- A. ASTM C 920 – Elastomeric Joint Sealants.
 - B. ASTM C 1083 – Water Absorption of Cellular Elastomeric Gaskets and Sealants.
 - C. ASTM E 96 – Standard Test for Water Vapor Permeance.
 - D. SWRI (Sealant, Waterproofing and Restoration Institute) – Sealant and Caulking Guide Specification.
- 1.5 ENVIRONMENTAL CONDITIONS
- A. The ambient temperature shall be between 40 and 90 degrees F when sealant is applied, unless recommended otherwise by sealant manufacturer.
- 1.6 QUALITY ASSURANCE
- A. Applicator shall have a minimum of two years of experience installing sealants in projects of similar scope.
 - B. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
 - C. Color(s) of sealants selected shall be utilized throughout the project. The use of multiple colors on a given bead run shall not be accepted.
- 1.7 SUBMITTALS
- A. Samples and Certificates: Submit small samples of each sealant type specified herein showing full color range, per section 01 3300. Samples shall be accompanied by a Certificate of Compliance with requirements specified herein for each sealant type.
 - B. Applicator's Affidavit: Submit applicator's affidavit of qualification compliance.

1.8 GUARANTEE

- A. Installed sealants and accessories shall be guaranteed for a period of five years from date of Substantial Completion. Written guarantee shall include coverage of installed sealants and accessories which fail to achieve air tight and watertight seal, exhibit loss of adhesion or cohesion or do not cure.

1.9 DELIVERY, STORAGE AND HANDLING

- A. Deliver all sealants to the site in sealed containers, each bearing manufacturer's name and product designation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. The use of a manufacturer's name and specification number is for the purpose of establishing the standard of quality and general configuration desired. Products of other manufacturers, meeting all of the requirements specified herein, will only be considered upon submission of complete data in the form of a shop drawing with detailed information on proposed products.

2.2 SEALANTS

- A. Sealants shall be self-leveling for horizontal and sloping joints with a maximum slope of 1 percent. Non-sag sealants shall be used for steeper sloped joints, vertical joints and overhead joints.
- B. Silicone Sealant Type S, ASTM C920, Grade NS, Class 25, single component, chemical curing, non-sagging with color selected. Equal to Dow Corning 795.
- C. Polyurethane Sealant Type S, ASTM C920, Grade NS, Class 25, single component, chemical curing, non-sagging with color as selected. Equal to Sika 1A.

2.3 BACKUP MATERIAL

- A. Use closed-cell polyethylene foam rod conforming to ASTM D 1751 and compatible with sealant used. Size as shown or as recommended by manufacturers for all joints greater than 3/16 inch.

2.4 BOND BREAKER

- A. As recommended by sealant manufacturer.

2.5 PRIMER

- A. As recommended by sealant manufacturer.

PART 3 - EXECUTION

3.1 PREPARATION

- A. All surfaces to be sealed shall be clean, dry, sound and free of dust, loose mortar and other foreign materials. Mask adjacent surfaces where necessary to maintain neat edge. Starting of work will be construed as acceptance of all subsurfaces.

3.2 INSTALLATION

- A. Apply all materials following manufacturer's recommendation and instructions.
- B. Fill sealant joint completely from back to top, without voids.

- C. Tool sealant joints slightly concave after sealant is installed on vertical and horizontal joints that are flush with adjacent surfaces. On flashing reglets, sealant shall be installed with convex surface to shed water.

3.3 CLEANING

- A. The surfaces next to the sealed joints shall be cleaned of smears or other soiling resulting from sealant applications. At no additional cost to Owner, replace or repair to Owner's satisfaction any damaged surfaces resulting from sealant application or cleaning.

END OF SECTION

SECTION 20 0000

GENERAL MECHANICAL REQUIREMENTS

PART 1 - GENERAL

- 1.1 WORK INCLUDED: This section covers the work associated with the existing roof-mounted mechanical equipment, which is a part of this project.
- A. Contractor shall verify the operation and condition of all existing roof-mounted equipment in the scope of work in the company of the Owner prior to beginning work and notify in writing of any existing malfunctions.
 - B. Contractor shall disconnect and reconnect all existing roof mounted equipment as required for the roof replacement, and restore to original operating condition.
- 1.2 RELATED REQUIREMENTS
- A. Refer to Division 00 and 01 sections of these specifications.
- 1.3 CONNECTING TO WORK OF OTHERS
- A. Prior to starting and during progress of work, Contractor shall examine the work and materials installed by other. If conditions exist which prevent satisfactory results, notify the Owner.
 - B. Start of work will be construed as acceptance of all claims or questions as to suitability of the work. Contractor shall remove and replace, at his expense, all work which may be required to be removed on account of such defects.
- 1.4 SINGULAR REFERENCES
- A. Singular references in the text of these specifications shall not be construed as requiring only one device if multiple devices are shown on the Documents.
- 1.5 ORDINANCES AND REGULATIONS
- A. All work shall conform with ASHRAE, SMACNA, NEC and all other applicable Codes, State ordinances and regulations governing the disconnection and reinstallation of such equipment. If work is laid out, indicated or specified as contrary to, or conflicts with, Codes, ordinances or regulations, Contractor shall report prior to bid date for resolution.
- 1.6 CODES, PERMITS AND INSPECTIONS
- A. Work, materials and equipment shall comply with the latest acceptable editions of the following codes and regulations:
 1. Florida Building Code (FBC) 5th Edition 2014.
 2. National Electrical Code (NFPA 70), latest application edition.
 3. National Fire Protection Association, NFPA 90A.
 4. ANSI A117.1 1980.
 5. National Fire Protection Association 12, 13 and 14.
- 1.7 GUARANTEE AND SERVICE
- A. Contractor shall issue a guarantee covering labor and materials used for the installation and reinstallation of items installed under this section for one year from date of substantial completion.

- B. Contractor shall replace defective materials, parts, equipment and/or workmanship provided in this contract.

1.8 MATERIALS AND EQUIPMENT

- A. GENERAL: Materials listed herein or on the drawings are general mechanical materials to be used unless specifically noted otherwise. Use new materials manufactured in the U.S.A., free from all defects.

1.9 INSTALLATION

- A. Changes to the work shown on the Documents necessary to make the work fit work of other trades or to rules of others having jurisdiction, or to meet current Code requirements shall be made by Contractor at his own expense.
- B. Install new and reinstalled existing material, equipment and fixtures in neat, workmanlike manner.
- C. Cutting of steel, wood or other main structural parts shall be approved by Architect prior to commencing cutting. Cutting will be held to a minimum size larger than required for any projection and shall not extend beyond cover plates.

1.10 JOINTS AND CONNECTIONS

- A. General: Make joints and connections permanently air and water tight.
- B. Screw Joints: American Standard.

1.11 UTILITY INTERRUPTIONS

- A. All service interruptions shall be held to minimum time and shall be scheduled with the Owner a minimum of 48-hours in advance.
- B. Utility outages may be required to be on weekends or after hours for work on roof-mounted mechanical or electrical equipment. Coordinate with the Owner.

1.12 ELECTRICAL WORK ASSOCIATED WITH THIS SECTION

- A. The Electrical Contractor shall furnish and install all electrical wiring, external to mechanical equipment and make disconnections and connections thereto as required to accomplish the roof replacement work.
- B. Contractor shall furnish the Electrical Subcontractor with all components, and will instruct him in their function. The Mechanical Subcontractor will maintain the responsibility for this system performance.

END OF SECTION

SECTION 26 0000

GENERAL ELECTRICAL REQUIREMENTS

PART 1 - GENERAL

1.1 WORK INCLUDED

- A. The work covered by this section consists of the furnishing of all labor, equipment and materials and performing all operations required to accomplish the electrical work as herein called for and shown on the drawings in coordination with the roof replacement work to include removal and reinstallation of all electrical equipment required.
- B. All work under this section shall include all electrical work which is a part of this project.
- C. Complete installation shall meet the latest edition of the National Electrical Code requirements.

1.2 RELATED REQUIREMENTS

- A. Refer to Division 00 and 01 sections of these specifications.

1.3 ORDINANCES AND REGULATIONS

- A. All work shall conform to the latest state ordinances, Codes and regulations governing the installation of such equipment.

1.4 CODES AND STANDARDS

- A. Florida Building Code 5th Edition 2014
- B. National Electrical Code (NFPA 70), latest applicable edition.
- C. American National Standards Institute (ANSI).
- D. National Electrical Manufacturer's Association (NEMA).
- E. National Fire Protection Association (NFPA 72A).

1.5 DOCUMENTS

- A. The intent of the drawings and specifications is to obtain a complete and satisfactory installation or reinstallation of equipment as required.
- B. Contractor shall furnish, install and connect with appropriate services all electrical items shown on the drawings and existing in the scope of work described in the Documents. If discrepancies, conflicts or interferences occur between drawings, or between drawings and specifications, notify Architect.
- C. Any necessary interruptions to the services shall be scheduled a minimum of 48 hours in advance with and approved by the Owner.
- D. Utility outages may be required to be on weekends or after hours for work on electrical equipment. Coordinate all outages with the Owner.

1.6 EQUIPMENT

- A. All equipment required to be furnished in this project, shall be new, Code compliant and the most suitable grade for the purpose intended. Equipment shall be the product of a U.S.A. manufacturer regularly engaged in the manufacture of such items for a period of three years.

1.7 MATERIALS

- A. All materials used in this project shall be new and most suitable grade for the purpose intended.
- B. Materials and equipment specified indicate quality, material and type of construction desired. It shall be this Contractor's responsibility to ascertain that alternate manufacturer's products meet detailed specifications and that size and arrangement of equipment is suitable for installation.

1.8 SUBMITTALS

- A. Before ordering any material or equipment, Contractor shall submit a complete schedule showing the make, type, manufacturer's name and trade designation of all new equipment proposed to be used on this project.

1.9 SUPERVISION OF WORK

- A. Electrical Subcontractor's Superintendent shall be experienced, qualified and on site when work of this section is in progress. Said Superintendent shall, as a minimum, be a licensed journeyman electrician. Provide a copy of the Superintendent's license to the Contractor for further transmittal to the Owner.

1.10 WORKMANSHIP

- A. Install materials and equipment in a neat and first class workmanlike manner.

1.11 CLEANING

- A. Clean all equipment before testing and before putting the equipment into service.

1.12 TESTING

- A. Correct any circuits that do not test satisfactorily.
- B. Grounding of all new and existing equipment being installed or reinstalled shall be tested per NEC and shall not exceed 25 ohms resistance.

1.13 TESTS

- A. Perform all tests required by each section of the specifications in the presence of the Architect and Owner.

1.14 GUARANTEE

- A. In addition to the manufacturer's guarantee of each item of any new equipment, Contractor will guarantee for one year from substantial completion and will make good any defects of materials or workmanship involved in the removal, reinstallation and reconnection and all items in this project that occur during this period without expense to the Owner.

PART 2 - PRODUCTS

2.1 Raceways: The general wiring method is to be metallic raceways. All new exterior mounted conduit shall be rigid galvanized or weathertight flex, approved for exterior use.

A. Connectors, Couplings and Fittings: Conduit connectors and couplings shall be exterior grade compression type units. Set Screw type connectors and couplings of malleable steel shall not be used. No cast metal fittings or indenture type fittings will be permitted.

2.2 CONDUCTORS

A. General: All conductors shall be copper #12 minimum: Sizes are AWG; 600 volt insulation, type rated for exterior use. Provide size of new conductors required per NEC.

2.3 BOXES AND FITTINGS

A. All new boxes, fittings, clamps, hangers, etc. required for this project shall be galvanized Code gauge steel. Covers shall be attached with stainless steel screws at the exterior. All new exterior units shall be cast, weatherproof type and gasketed.

2.4 DISCONNECT SWITCHES

A. If new disconnect switches are required, the following are acceptable producers: Square D or Siemens ITE. All new products shall be furnished by one provider.

B. Provide NEMA Heavy Duty type H.D., Underwriters Laboratories listed safety switches of voltage and ampere rating required by equipment.

C. Switch operating mechanism of new equipment shall be quick make, quick break. Switches shall have a dual interlock to prevent opening of door when switch is in "ON" position, or closing of switch when in the "OFF" position and the door is in "OPEN" position.

D. Enclosure shall be NEMA 3R enclosure and shall be code gauge (UL 98) galvanized steel with rust inhibiting phosphate and baked enamel finish.

2.5 SLEEVES FOR RACEWAYS AND CABLES

A. Steel Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, galvanized steel, plain ends.

B. Cast-Iron Pipe Sleeves: Cast or fabricated "wall pipe," equivalent to ductile iron pressure pipe, with plain ends and integral water stop.

C. Description: Modular sealing device, designed for field assembly, to fill annular space between sleeve and raceway or cable.

D. Sealing Elements: EPDM interlocking links shaped to fit surface of cable or conduit. Include type and number required for material and size of raceway or cable.

E. Pressure Plates: Plastic. Include two for each sealing element.

F. Connecting Bolts and Nuts: Carbon steel with corrosion-resistant coating of length required to secure pressure plates to sealing elements. Include one for each sealing element.

PART 3 - EXECUTION

3.1 COMMON REQUIREMENTS FOR ELECTRICAL INSTALLATION

A. Comply with NECA 1.

- B. Remove and reinstall electrical equipment back in original locations, unless there is a Code conflict requiring modification of the installation.
- C. Equipment: Connect in such a way as to facilitate future disconnecting with minimum interference with other items in the vicinity.

3.2 SLEEVE INSTALLATION FOR ELECTRICAL PENETRATIONS

- A. Electrical penetrations occur when raceways, cables, wireways, cable trays, or bussways penetrate roof deck or walls.
- B. Install sleeves for new penetrations using core-drilled holes.
- C. Cut sleeves to length for mounting flush with both surfaces.
- D. Size pipe sleeves to provide 1/4-inch annular clear space between sleeve and raceway or cable unless sleeve seal is to be installed.
- E. Seal space outside of sleeves with grout for penetrations of concrete.
- F. Roof-Penetration Sleeves: Seal penetration of individual raceways and cables with flashings in coordination with the roof replacement work.

END OF SECTION

COLUMBIA COUNTY PUBLIC LIBRARY ROOF REPLACEMENT AND REPAIRS LAKE CITY, FLORIDA




SITE DIAGRAM
 NTS

SHEET INDEX

- G-1 GENERAL PROJECT COVER SHEET**
- A-1 ROOF PLAN**
- A-2 DETAILS**

DESIGN CRITERIA

1. FLORIDA BUILDING CODE 5TH EDITION 2014
2. FLORIDA FIRE PREVENTION CODE 5TH EDITION
3. ASCE 7-10
4. RISK CATEGORY = III
5. ULTIMATE DESIGN WIND SPEED (3-SECOND GUST) = 130 MPH
6. NOMINAL DESIGN WIND SPEED = 101 MPH
7. APPLICABLE ENCLOSURE CLASSIFICATION = FULLY ENCLOSED
8. WIND EXPOSURE CATEGORY = B
9. INTERNAL PRESSURE COEFFICIENT = +0.18 / -0.18
10. EDGE CORNER ZONE WIDTH = 6.2'

ULTIMATE ROOF DESIGN WIND PRESSURES

ZONE 1 - FIELD	-19.2 PSF
ZONE 2 - EDGE	-30.6 PSF
ZONE 3 - CORNER	-46.0 PSF

NOMINAL ROOF DESIGN WIND PRESSURES

ZONE 1 - FIELD	-14.2 PSF
ZONE 2 - EDGE	-23.9 PSF
ZONE 3 - CORNER	-35.9 PSF

GENERAL NOTES

1. THE CONTRACTOR SHALL COORDINATE PROJECT ACCESS AND SCHEDULING WITH THE OWNER.
2. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL INSPECT AREAS WHERE WORK WILL BE PERFORMED AND PHOTOGRAPH ROOF AREAS, ROOF EQUIPMENT AND ADJACENT AREAS AND EQUIPMENT WHICH COULD BE MISCONSTRUED AS DAMAGE RESULTING FROM WORK - SUBMIT PHOTOS TO OWNER AND ARCHITECT PRIOR TO COMMENCING.
3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PROTECTION OF COLUMBIA COUNTY PERSONNEL AND PROPERTY IN AND AROUND THE PROJECT SITE.
4. THE CONTRACTOR SHALL RESTORE ALL LANDSCAPING DAMAGED DURING CONSTRUCTION TO ORIGINAL CONDITION. DISTURBED AREAS SHALL BE SODDED, NOT SEEDED. DAMAGED SIDEWALKS AND EXISTING BUILDING FINISHES SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST.
5. CONSTRUCTION DEBRIS SHALL NOT BE THROWN OR DROPPED FROM THE ROOF. THE CONTRACTOR SHALL UTILIZE CHUTES OR HIGH LIFT VEHICLES TO REMOVE DEBRIS FROM THE ROOF. DEBRIS SHALL BE REMOVED FROM THE ROOF IMMEDIATELY AND NOT STACKED ON THE ROOF.
6. SHOULD ROOFING EFFORTS REQUIRE THE TEMPORARY DISCONNECTION OF UTILITIES THE CONTRACTOR SHALL CONTACT THE OWNER PRIOR TO DISCONNECTION.
7. PROVIDE SOLID BARRIER AT ROOF EDGES ABOVE ALL PEDESTRIAN WALK AREAS BELOW PER OSHA STANDARDS. SUBMIT PROPOSED BARRIER SYSTEM PLAN FOR REVIEW AND APPROVAL.

**COLUMBIA COUNTY PUBLIC LIBRARY
ROOF REPLACEMENT AND REPAIRS
LAKE CITY, FLORIDA**

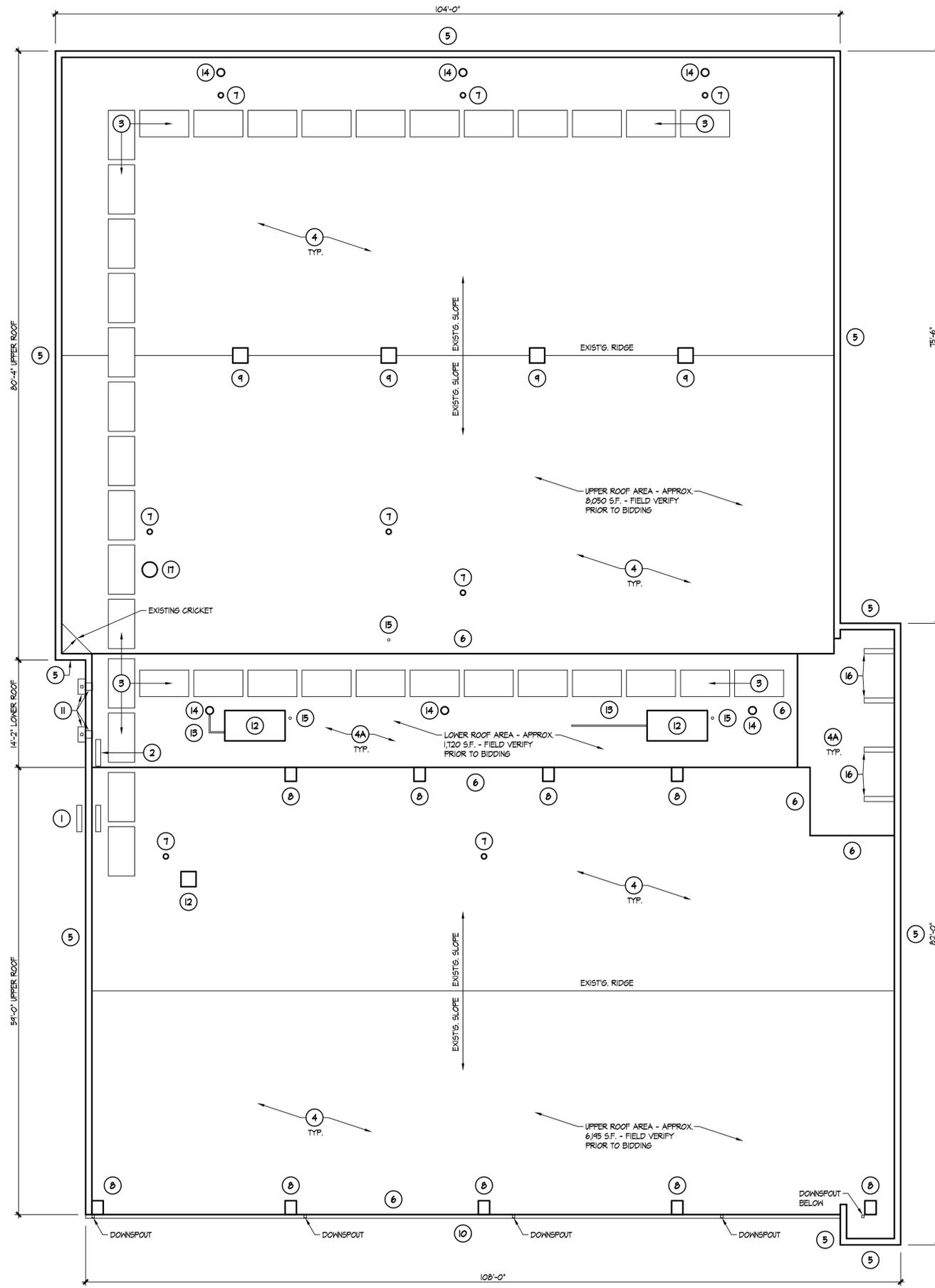


ROY DANIEL KAIL, JR.
 ARCHITECT
 KAIL PARTNERS
 AA36002508

DATE
6/27/16

1623

G-1

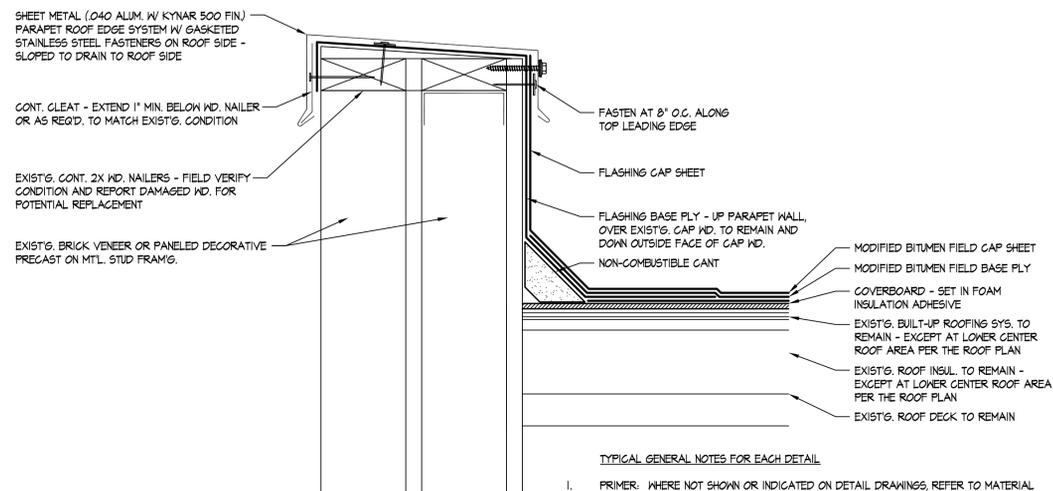


ROOF REPLACEMENT NOTES

- ① EXISTING STEEL ACCESS LADDER TO REMAIN - PROVIDES ACCESS FROM GRADE TO UPPER ROOF AREA
- ② EXISTING STEEL LADDER TO REMAIN - PROVIDES ACCESS FROM UPPER ROOF AREA TO LOWER ROOF AREA
- ③ REMOVE EXISTING ROOF WALK TREADS - PROVIDE AND INSTALL NEW ROOF WALK TREADS OVER NEW ROOF SYSTEM - PATH AND PATTERN TO MATCH EXISTING
- ④ CUT EXISTING ROOFING AT BLISTERS FOR RELIEF - REMOVE EXISTING CANT STRIPS AND VERTICAL FLASHING UP PARAPET WALLS - PROVIDE AND INSTALL NEW CANT STRIPS, VERTICAL FLASHING UP PARAPET WALLS AND ROOF BOARD AND TWO-PLY SBS MODIFIED BITUMEN ROOFING SYSTEM OVER EXISTING ROOFING
- ④A REMOVE EXISTING BUILT-UP ROOFING, CANT STRIPS, VERTICAL FLASHING, UNDERLAYMENT AND PERLITE INSULATION DOWN TO EXISTING CONCRETE DECK TO REMAIN - PROVIDE AND INSTALL NEW TEMPORARY ROOF, TAPERED RIGID INSULATION (LAYOUT TO MATCH EXISTING), ROOF BOARD, TWO-PLY SBS MODIFIED BITUMEN ROOFING SYSTEM, CANT STRIPS AND VERTICAL FLASHING
- ⑤ REMOVE EXISTING SHEET METAL AT PARAPET CAPS - PROVIDE AND INSTALL NEW SHEET METAL PARAPET CAPS
- ⑥ REMOVE EXISTING SHEET METAL EDGE METAL AND PROVIDE AND INSTALL NEW SHEET METAL EDGE METAL
- ⑦ REMOVE EXISTING FLASHING AT EXISTING VTR'S AND REPLACE WITH NEW FLASHING - EXTEND VTR'S AS REQ'D. TO BE 12" MIN. ABOVE NEW ROOF SURFACE
- ⑧ REMOVE EXISTING VERTICAL SHEET METAL FLASHING AND SHEET METAL CAPS - PROVIDE AND INSTALL NEW VERTICAL SHEET METAL FLASHING AND NEW SHEET METAL CAPS - PROVIDE AND INSTALL SHEET METAL VERTICAL COVER AT ALL EXPOSED ENDS - NEW SHEET METAL TO MATCH EXISTING
- ⑨ REMOVE EXISTING VERTICAL SHEET METAL FLASHING AND SHEET METAL CAPS - PROVIDE AND INSTALL NEW VERTICAL SHEET METAL FLASHING AND NEW SHEET METAL CAPS - NEW SHEET METAL TO MATCH EXISTING
- ⑩ REMOVE EXISTING GUTTER AND DOWNSPOUTS - PROVIDE AND INSTALL NEW SHEET METAL GUTTERS AND DOWNSPOUTS - NEW DOWNSPOUTS SHALL BE 4" SQUARE AND INSTALLED IN EXISTING DOWNSPOUT LOCATIONS - TRANSITIONS DOWNSPOUTS TO TIE INTO EXISTING PVC RECEIVER LOCATED AT GRADE LEVEL - ATTACH DOWNSPOUTS TO EXISTING BRICK WALL WITH 1/8" X 1" SHEET METAL BRACKETS AT TOP AND BOTTOM AND AT 4'-0" O.C.
- ⑪ REMOVE EXISTING SHEET METAL SCUPPER FLASHING AND PROVIDE AND INSTALL NEW SHEET METAL SCUPPER FLASHING - REMOVE EXISTING SHEET METAL LEADER BOX ON EXTERIOR WALL TO INSTALL NEW SCUPPER AND REINSTALL EXISTING LEADER BOX
- ⑫ RAISE / LIFT EXISTING ROOF TOP UNIT OR EXHAUST FAN OFF OF EXISTING CURB TO INSTALL NEW FLASHING - REINSTALL ROOF TOP UNIT
- ⑬ RAISE EXISTING PVC CONDENSATE DRAIN LINE ON NEW PIPE SUPPORTS - ROUTE TO AIM TOWARD ROOF DRAIN
- ⑭ REMOVE EXISTING ROOF DRAIN STRAINER TO INSTALL NEW ROOFING SYSTEM - REINSTALL EXISTING STRAINER - VERIFY ROOF DRAINS ARE WORKING PROPERLY PRIOR TO RENOVATION WORK
- ⑮ REMOVE EXISTING PITCH PAN - PROVIDE AND INSTALL NEW LIQUID MEMBRANE FLASHING AT EXISTING PIPE PENETRATIONS
- ⑯ REMOVE EXISTING PITCH PAN - PROVIDE AND INSTALL NEW LIQUID MEMBRANE FLASHING AT EXISTING TUBULAR STEEL MEMBERS
- ⑰ PROVIDE AND INSTALL NEW LIQUID MEMBRANE FLASHING AT EXISTING FLUE
- ⑱ REFER TO THE ROOF MOISTURE SCAN REPORT IN SECTION 01 5200 OF THE PROJECT MANUAL FOR PHOTOGRAPHS OF THE EXISTING CONDITIONS - TYPICAL NOTE THROUGHOUT

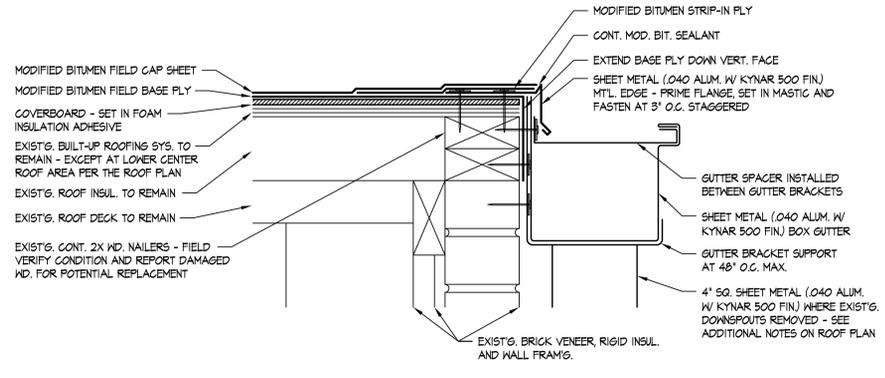
ROOF PLAN
1/8" = 1'-0"

NOTE:
ALL DIMENSIONS AND AREAS ARE +/-
AND SHALL BE FIELD VERIFIED BY
BIDDERS DURING THE BIDDING PHASE

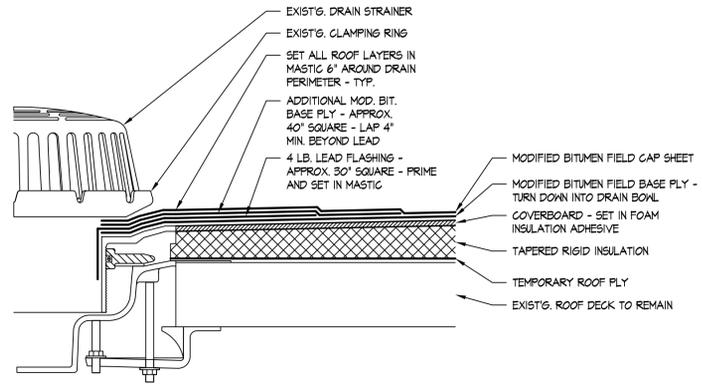


- TYPICAL GENERAL NOTES FOR EACH DETAIL
1. PRIMER: WHERE NOT SHOWN OR INDICATED ON DETAIL DRAWINGS, REFER TO MATERIAL PRODUCT DATA SHEETS FOR PRIMER APPLICATION REQUIREMENTS.
 2. REFER TO PROJECT MANUAL SECTION 07 5200 AND THE ROOF MOISTURE REPORT FOR PHOTOGRAPHS OF THE EXISTING CONDITIONS.
 3. PARAPET HEIGHTS VARY THROUGHOUT THE SCOPE OF WORK - FIELD VERIFY DURING THE BIDDING PHASE AND BID ACCORDINGLY.

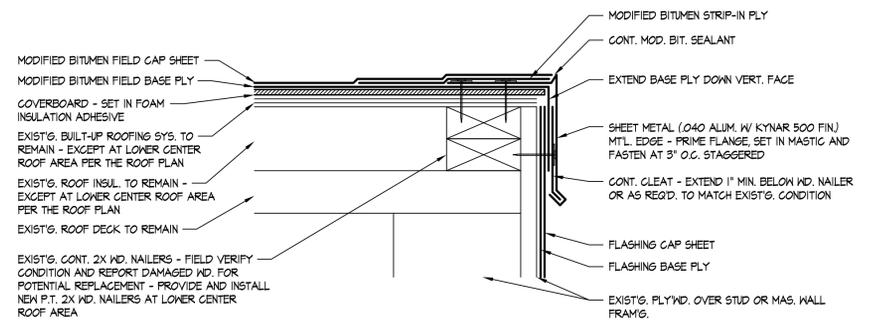
PARAPET CAP DETAIL (A) A-2
3" = 1'-0"



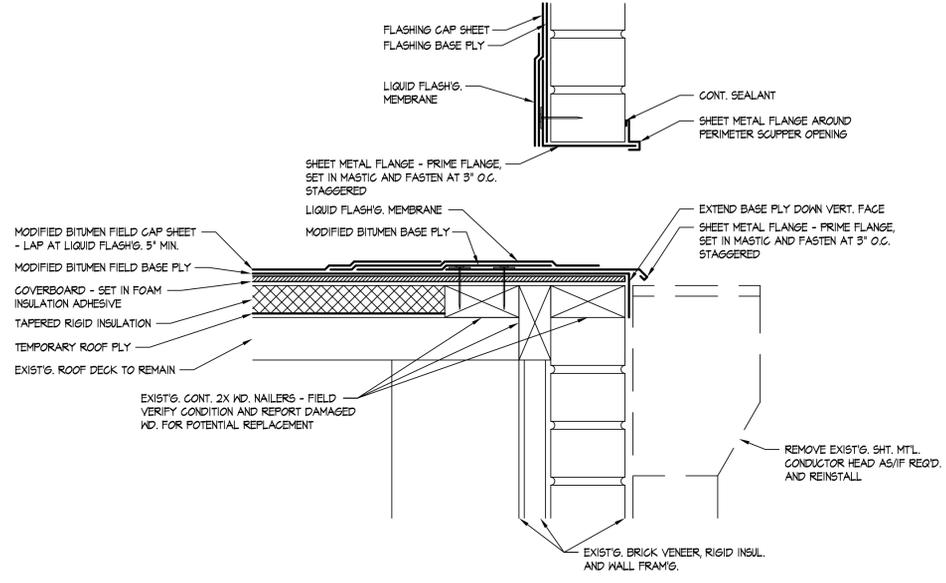
GUTTER DETAIL (D) A-2
3" = 1'-0"



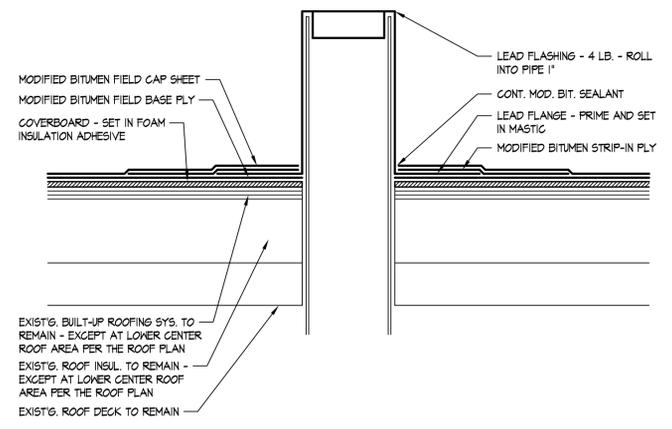
DRAIN DETAIL (G) A-2
3" = 1'-0"



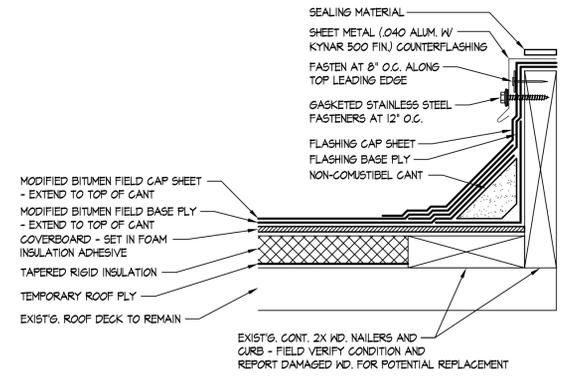
ROOF EDGE DETAIL (B) A-2
3" = 1'-0"



SCUPPER DETAIL (E) A-2
3" = 1'-0"



WASTE STACK DETAIL (C) A-2
3" = 1'-0"



CURB DETAIL (F) A-2
3" = 1'-0"