

INVITATION FOR BID IFB #14-0364CD ROOF REPLACEMENT FOR MANATEE COUNTY PUBLIC SAFETY/TRAFFIC MANAGEMENT CENTER

Manatee County, a political subdivision of the State of Florida, (hereinafter "County") will receive sealed Bids from individuals, corporations, partnerships, and other legal entities organized under the laws of the State of Florida or authorized to conduct business in the State of Florida.

NON-MANDATORY INFORMATION CONFERENCE

In order to ensure that all prospective Bidders have sufficient information and understanding of County's needs, an <u>Information Conference</u> will be held at: <u>9:00 AM on Friday, December 20, 2013</u> at the Manatee County Public Safety/Traffic Management Center, 2101 47th Terrace East, Bradenton, FL 34203.. <u>Attendance is not mandatory, but is highly encouraged.</u>

DEADLINE FOR CLARIFICATION REQUESTS:

3:00 PM on December 31, 2013

(Reference Bid Article A.05)

TIME AND DATE DUE: 3:00 PM on January 14, 2014

FOR INFORMATION CONTACT:

AUTHORIZED FOR RELEASE

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SECTION A **INFORMATION TO BIDDERS**

A.01 OPENING LOCATION

Sealed Bids will be <u>publicly opened</u> at the <u>Manatee County Purchasing Division</u>, <u>1112 Manatee Avenue West</u>, <u>Suite 803</u>, <u>Bradenton</u>, <u>Florida 34205</u> in the presence of County officials at the time and date stated, or soon thereafter. All Bidders or their representatives are invited to be present.

Any Bids received after the stated time and date will not be considered. It shall be the sole responsibility of the Bidder to have their Bid <u>delivered to the Manatee County Purchasing Division</u> for receipt on or before the stated time and date. Bidder shall be solely and strictly responsible for its timely delivery to the Purchasing Division. Bids delayed by mail, courier, or Bids delayed for any other reason, shall not be considered, shall not be opened at the public opening, and arrangements shall be made for their return at the Bidder's request and expense.

A.02 SEALED & MARKED

Bids shall be submitted in triplicate, one original (marked Original) and two (2) copies (marked Copy) of your signed Bid shall be submitted in one sealed package, clearly marked on the outside "Sealed Bid ##14-0364CD, Roof Replacement for Manatee County Public Safety/Traffic Management Center" along with your company name. For your convenience, a mailing label is provided with this Invitation for Bid package. Or, you may address the package as follows:

Address package to:	Manatee County Purchasing Division
· · · · · ·	1112 Manatee Avenue West, Suite 803
	Bradenton, Florida 34205
	Sealed Bid #, Title

All blank spaces must be filled in as noted with amounts extended and totaled and no changes shall be made in the wording of the forms or in the items mentioned therein. In the event a change is made in your submittal, the Bidder shall write its initials by the change. Any Bid may be rejected which contains any omissions, alterations, irregularities of any kind, or which shall in any manner fail to conform to Bid requirements.

A Bid made by an individual, either in his/her own or proper person or under a trade or firm name, shall be executed under the individual's signature. If made by a partnership, the Bid shall be executed by two or more of the general partners. If made by a corporation, the Bid shall be executed by its President or other legally authorized corporate officer or agent.

A.03 SECURING OF DOCUMENTS

Invitation for Bids (IFB) and related documents are available on http://www.mymanatee.org/purchasing for download in a portable document format (.PDF) file by clicking on "Bids and Proposals" from the Purchasing Division's web page. You may view and print these files using Adobe Reader software. If necessary, you may download a free copy of Adobe Reader from the link provided on the "Bids and Proposals" page.

A.03 SECURING OF DOCUMENTS (Continued)

Additionally, Manatee County collaborates with the Manatee Chamber of Commerce by emailing solicitation opportunities to its members.

Manatee County may also use DemandStar to distribute Bids. On the DemandStar web site, http://www.DemandStar.com, click on the tab titled "My DemandStar" for more information regarding this service. Participation in the DemandStar system is not a requirement for doing business with Manatee County.

Complete copies of the IFB and all related documents are available for public inspection at the Manatee County Purchasing Division, 1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205, or by calling (941) 749-3014. Appointments are encouraged. Documents are available between the hours of 9:00 AM and 4:00 PM Monday through Friday, with the exception of holidays. A complete set of the IFB documents must be used in preparing Bids. County assumes no responsibility for errors and misinterpretations resulting from the use of incomplete sets of Bid Documents.

A.04 MODIFICATION OF IFB DOCUMENTS

If a Bidder wishes to recommend changes to the IFB documents, the Bidder shall furnish, in writing, data and information necessary to aid County in evaluating the request to modify the Specifications. County is not obligated to make any changes to the IFB documents. Unless an Addendum is issued, the IFB documents shall remain unaltered. Bidders must fully comply with the IFB documents in their entirety.

A.05 DEADLINE FOR CLARIFICATION REQUESTS

<u>3:00 PM on December 31, 2013</u> shall be the deadline to submit all inquiries, suggestions, or requests concerning interpretation, clarification or additional information pertaining to this Invitation for Bid to the Manatee County Purchasing Division.

This deadline has been established to maintain fair treatment of all potential Bidders, while maintaining progression of the Project to promote economic stimulus.

A.06 CLARIFICATION & ADDENDA

Each Bidder shall examine all Invitation for Bid Documents and shall judge all matters relating to the adequacy and accuracy of such documents. Any inquiries, suggestions or requests concerning interpretation, clarification or additional information pertaining to this Invitation for Bid shall be made through the Manatee County Purchasing Division. County shall not be responsible for oral interpretations given by any County employee, representative, or others.

The issuance of a written Addendum is the only official method whereby interpretation, clarification or additional information can be given.

A.06 CLARIFICATION & ADDENDA (Continued)

If any Addenda are issued to this Invitation for Bid, County will post the documents on the Purchasing Division's web page, which can be accessed at http://www.mymanatee.org/purchasing, and then by clicking on "Bids and Proposals". If the original solicitation was broadcast via DemandStar, the addenda will also be broadcast on the DemandStar distribution system to "Planholders" on this web service.

It shall be the <u>responsibility of each Bidder, prior to submitting their Bid</u>, to contact the Manatee County Purchasing Division (see contact information on the cover page) to <u>determine if any Addenda were issued</u> and to make such Addenda a part of their Bid.

A.07 LOBBYING

After the issuance of any Invitation for Bid prospective Bidders, or any agent, representative or person acting at the request of such Bidder shall not contact, communicate with or discuss any matter relating in any way to the Invitation for Bid with any officer, agent or employee of Manatee County other than the Purchasing Official or as directed in the Invitation for Bid, pursuant to the Manatee County Code. This prohibition includes the act of carbon copying officers, agents or employees of Manatee County on all correspondence, including email correspondence. This requirement begins with the issuance of an Invitation for Bid, and ends upon execution of Contract or when the invitation has been cancelled. Violators of this prohibition shall be subject to sanctions as provided in the Manatee County Code.

A.08 UNBALANCED BIDDING PROHIBITED

County recognizes that large and/or complex Projects will often result in a variety of methods, sources, and prices. However, where in the opinion of County such variation does not appear to be justified, given Bid requirements and industry and market conditions, the Bid will be presumed to be unbalanced. Examples of unbalanced Bids will include:

- a. Bids showing omissions, alterations of form, additions not specified, or required conditional or unauthorized alternate Bids.
- b. Bids quoting prices that substantially deviate, either higher or lower, from those included in the Bids of competitive Bidders for the same line item unit costs.
- c. Bids where the unit costs offered are in excess of or below reasonable cost analysis values.

A.08 UNBALANCED BIDDING PROHIBITED (Continued)

In the event County determines that a Bid is presumed unbalanced, it will request the opportunity to, and reserves the right to, review all source quotes, Bids, price lists, letters of intent, etc., which the Bidder obtained and upon which the Bidder relied upon to develop its Bid. County reserves the right to reject as non-responsive any presumptive unbalanced Bids where the Bidder is unable to demonstrate the validity and/or necessity of the unbalanced unit costs.

A.09 FRONT END LOADING OF BID PRICING PROHIBITED

Prices offered for performance and/or acquisition activities to occur early in the Project schedule, such as mobilization; clearing and grubbing; or maintenance of traffic; that are substantially higher than pricing of competitive Bidders within the same portion of the Project schedule, will be presumed to be front end loaded. Front end loaded Bids could reasonably appear to be an attempt to obtain unjustified early payments creating a risk of insufficient incentive for the Bidder to complete the Work or otherwise creating an appearance of an undercapitalized Bidder.

In the event County determines that a Bid is presumed to be front end loaded, it will request the opportunity to, and reserves the right to, review all source quotes, bids, price lists, letters of intent, etc., which the Bidder obtained and upon which the Bidder relied upon to develop the pricing or acquisition timing for these Bid items. County reserves the right to reject as non-responsive any presumptive front end loaded Bids where the Bidder is unable to demonstrate the validity and/or necessity of the front end loaded costs.

A.10 WITHDRAWAL OF OFFERS

Bidders may withdraw offers as follows:

- a. Mistakes discovered before the opening of a solicitation may be withdrawn by written notice from the Bidder submitting the Bid. This request must be received in the office designated for receipt of Bids in the solicitation document prior to the time set for delivery and opening of the Bids. A copy of the request shall be retained and the unopened Bid returned to that Bidder; or
- b. After the responses to a solicitation are opened or a selection has been determined, but before a Contract is signed, a Bidder alleging a material mistake of fact may be permitted to withdraw their Bid if:
 - 1. the mistake is clearly evident in the solicitation document; or
 - Bidder submits evidence which clearly and convincingly demonstrates that a mistake was made. Request to withdraw a Bid must be in writing and approved by the Purchasing Official.

A.11 IRREVOCABLE OFFER

Any Bid may be withdrawn up until the time and date set for opening of the Bid. Any Bid not so withdrawn shall, upon opening, constitute an <u>irrevocable offer for a period of ninety (90) days</u> to sell to Manatee County the goods or services set forth in the attached IFB until one or more of the Bids have been duly accepted by County.

A.12 BID EXPENSES

All expenses for making Bids to County are to be borne by the Bidder.

A.13 RESERVED RIGHTS

<u>County reserves the right to accept or reject</u> any and/or all Bids, to waive irregularities and technicalities, and to request resubmission. Also, County reserves the right to accept all or any part of the Bid and to increase or decrease quantities to meet additional or reduced requirements of County. Any sole response received by the first submission date may or may not be rejected by County depending on available competition and current needs of County. For all items combined, the Bid of the lowest, responsive, responsible Bidder will be accepted, unless all Bids are rejected.

The <u>lowest</u>, responsible Bidder shall mean that Bidder who makes the lowest Bid to sell goods and/or services of a quality which meets or exceeds the quality of goods and/or services set forth in the IFB documents or otherwise required by County, and who is fit and capable to perform the Bid as made.

To be <u>responsive</u>, a Bidder shall submit a Bid which conforms in all material respects to the requirements set forth in the Invitation for Bid.

To be a <u>responsible</u> Bidder, the Bidder shall have the capability in all respects to perform fully the Bid requirements, and the tenacity, perseverance, experience, integrity, reliability, capacity, facilities, equipment, and credit which will assure good faith performance.

Also, County reserves the right to make such investigation as it deems necessary to determine the ability of any Bidder to furnish the service requested. Information County deems necessary to make this determination shall be provided by the Bidder. Such information may include, but shall not be limited to current financial statements, verification of availability of equipment and personnel, and past performance records.

A.14 APPLICABLE LAWS

Bidder must be authorized to transact business in the State of Florida. All applicable laws and regulations of the State of Florida and ordinances and regulations of Manatee County will apply to any resulting Contract. Any involvement with the Manatee County Purchasing Division shall be in accordance with the Manatee County Purchasing Ordinance as amended.

A.15 COLLUSION

By submitting a Bid to this Invitation for Bid, the Bidder certifies that it has not divulged, discussed or compared its Bid with any other Bidder, and <u>has not colluded</u> with any other Bidder or parties to this Bid whatsoever. Also, Bidder certifies, and in the case of a joint Bid each party thereto certifies as to their own organization, that in connection with this Bid:

- a. any prices and/or cost data submitted have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices and/or cost data, with any other Bidder or with any competitor;
- any prices and/or cost data quoted for this Bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder, prior to the scheduled opening, directly or indirectly to any other Bidder or to any competitor;
- c. no attempt has been made or will be made by the Bidder to induce any other person or firm to submit or not to submit a Bid for the purpose of restricting competition;
- d. the only person or persons interested in this Bid, principal or principals is/are named therein and that no person other than therein mentioned has any interest in this Bid or in the resulting Contract to be entered into; and
- e. no person or agency has been employed or retained to solicit or secure the resulting Contract upon an agreement or understanding or a commission, percentage, brokerage, or contingent fee except bona fide employees or established commercial agencies maintained by Bidder for purpose of doing business.

A.16 CODE OF ETHICS

With respect to this Bid, if any Bidder violates, directly or indirectly, the ethics provisions of the Manatee County Purchasing Ordinance and/or Florida criminal or civil laws related to public procurement, including but not limited to Florida Statutes, Chapter 112, Part III, Code of Ethics for Public Officers and Employees, such Bidder will be disqualified from eligibility to perform the Work described in this Invitation for Bid, and may also be disqualified from furnishing future goods or services to, and from submitting any future Bids to supply goods or services to, Manatee County.

By submitting a Bid, the Bidder represents to County that all statements made and materials submitted are truthful, with no relevant facts withheld. If a Bidder is determined to have been untruthful in their Bid or any related presentation, such Bidder will be disqualified from eligibility to perform the Work described in this Invitation for Bid, and may also be disqualified from furnishing future goods or services to, and from submitting any future Bids to supply goods or services to, Manatee County.

A.17 PUBLIC CONTRACTING AND ENVIRONMENTAL CRIMES

A person or affiliate who has been placed on the State's convicted vendor list following a conviction for a public entity crime, as that term is defined in Florida Statute § 287.133, may not submit a Bid to provide any goods or services to a public entity; may not submit a Bid with a public entity for the construction or repair of a public building or public work; may not submit Bids on leases of real property to a public entity; may not be awarded or perform Work as a Contractor, Supplier, Subcontractor, or Consultant under a Contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in Florida Statutes § 287.017 for CATEGORY TWO for a period of thirty-six (36) months following the date of being placed on the convicted list.

In addition, the Manatee County Code prohibits the Award of any resulting Contract to any person or entity who/which has, within the past five (5) years, been convicted of, or admitted to in court or sworn to under oath, a public entity crime or of any environmental law that, in the reasonable opinion of the Purchasing Official, establishes reasonable grounds to believe the person or business entity will not conduct business in a responsible matter.

To ensure compliance with the foregoing, the Code requires all persons or entities desiring to contract with County to execute and file with the Purchasing Official an affidavit, executed under the pain and penalties of perjury, confirming that person, entity and any person(s) affiliated with the entity, does not have such a record and is therefore eligible to seek and be awarded business with County. In the case of a business entity other than a partnership or a corporation, such affidavit shall be executed by an authorized agent of the entity. In the case of a partnership, such affidavit shall be executed by the general partner(s). A Public Contracting and Environmental Crimes Certification form is included (reference Section 00491 of this document) for this purpose.

A.18 BID FORMS

Bids must be submitted on attached provided forms, although additional pages may be attached. Bidders must fully complete all pages of the Bid Forms. Bid Forms must be executed by an authorized signatory who has the legal authority to make the Bid and bind the company. Bidders must fully comply with all requirements of this IFB in its entirety. Failure to comply shall result in default of the resulting Contract, whereupon, the defaulting Contractor shall be required to pay for any and all re-procurement costs, damages, and attorney fees as incurred by County.

A.19 LEGAL NAME

Bids shall clearly indicate the <u>legal name</u>, <u>address</u> and <u>telephone number</u> of the Bidder on the Bid Form. Bid Forms shall be <u>signed</u> above the <u>typed or printed name</u> and <u>title</u> of the signer. The signer must have the authority to bind the Bidder to the submitted Bid.

A.19 LEGAL NAME (Continued)

When Bidder is a partnership, the Bid Form shall be signed in the name of the firm and by all partners required under the terms of the partnership agreement. When a corporation is a Bidder, the authorized corporate officers shall sign.

Bidders who are corporations or limited partnerships shall provide a certified copy of their permit to transact business in the State of Florida, preferably along with the Bid Form, or within forty-eight (48) hours after request by County.

When submitting a Bid as a joint venture, it must have filed paper documents with the Division of Profession's Construction Industry Licensing Board prior to submitting a Bid.

A.20 DISCOUNTS

Any and all discounts must be incorporated in the prices contained in the Bid and not shown separately. The prices as shown on the Bid Form shall be the prices used in determining Award.

A.21 TAXES

Manatee County is exempt from Federal Excise and State Sales Taxes. (F.E.T. Cert. No. 59-78-0089K; Florida Sales Tax Exempt Cert. No. 85-8012622206C-6); therefore, the Bidder is prohibited from delineating a separate line item in his Bid for any sales or service taxes. Nothing herein shall affect the Bidder's normal tax liability.

A.22 DESCRIPTIVE INFORMATION

Unless otherwise specifically provided in the IFB documents, all equipment, materials and articles provided shall be new and of the most suitable grade for the purpose intended. Unless otherwise specifically provided in the IFB documents, reference to any equipment, material, article or patented process, by trade name, brand name, make or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition.

A.23 AMERICANS WITH DISABILITIES ACT

County does not discriminate upon the basis of any individual's disability status. This non-discrimination policy involves every aspect of County's functions including one's access to, participation, employment, or treatment in its programs or activities. Anyone requiring **reasonable accommodation** for an Information Conference or Bid Opening should contact the person named on the cover page of this Bid document at least twenty-four (24) hours in advance of either activity.

A.24 EQUAL EMPLOYMENT OPPORTUNITY CLAUSE

In accordance with the provisions of Title VI of the Civil Rights Act of 1964 and Title 15, Part 8 of the Code of Federal Regulations, County hereby notifies all prospective Bidders that they will affirmatively ensure minority business enterprises will be afforded full opportunity to participate in response to this advertisement and will not be discriminated against on the grounds of race, color or national origin in consideration for Bid Award.

A.25 MBE/DBE

The State of Florida, Office of Supplier Diversity provides the certification process and the database for identifying certified MBE/DBE firms. This service may be directly accessed at: http://www.osd.dms.state.fl.us/iframe.htm

If you have any questions regarding this State service, please contact their office at (850) 487-0915.

A.26 MATHEMATICAL ERRORS

In the event of multiplication/extension error(s), the unit price shall prevail. In the event of addition error(s) the extension totals will prevail. All Bids shall be reviewed mathematically and corrected, if necessary, using these standards, prior to additional evaluation.

A.27 DISCLOSURE

Upon receipt, all inquiries and responses to inquiries related to this Invitation for Bid become "Public Records", and shall be subject to public disclosure consistent with Florida Statues, Chapter 119.

Bids become subject to disclosure thirty (30) days after the opening or if a Notice of Intent to Award decision is made earlier than this time as provided by Florida Statutes § 119.071(1)(b). No announcement or review of the Bid shall be conducted at the public opening.

Based on the above, County will receive Bids at the time and date stated, and will make public at the opening the names of the business entities of all that submitted a Bid and any amount presented as a total offer without any verification of the mathematics or the completeness of the Bid.

If County rejects all Bids and concurrently notices its intent to reissue the solicitation, the rejected Bids are exempt from public disclosure until such time as County provides notice of an intended decision concerning the reissued solicitation or until County withdraws the reissued solicitation. A Bid is not exempt for longer than twelve (12) months after the initial notice rejecting all Bids.

A.27 DISCLOSURE (Continued)

Pursuant to Florida Statutes 119.0701, to the extent Successful Bidder is performing services on behalf of County, Successful Bidder must:

- a. Keep and maintain public records that ordinarily and necessarily would be required by County in order to perform the service;
- Provide the public with access to public records on the same terms and conditions that County would provide and at a cost that does not exceed the cost provided in Florida Statutes, Chapter 119, or as otherwise provided by law;
- c. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law, and:
- d. Meet all requirements for retaining public records and transfer, at no cost, to County all public records in possession of Successful Bidder upon termination of the awarded Contract and/or PO and destroy any duplicate public records that are exempt or confidential from public records disclosure requirements. All records stored electronically must be provided to County in a format that is compatible with County's information technology systems.

A.28 LOCAL PREFERENCE

- a. Local business is defined as a business legally authorized to engage in the sale of the goods and/or services to be procured, and which certifies within its Bid that for at least six (6) months prior to the announcement of the solicitation of Bids it has maintained a physical place of business in Manatee, Desoto, Hardee, Hillsborough, Pinellas or Sarasota County with at least one full-time employee at that location.
- b. Local preference shall not apply to the following categories of Contracts:
 - 1. Purchases or Contracts which are funded, in whole or in part, by a governmental or other funding entity, where the terms and conditions of receipt of the funds prohibit the preference;
 - 2. Any Bid announcement which specifically provides that the general local preference policies set forth in this section are suspended due to the unique nature of the goods or services sought, the existence of an emergency as found by either the County Commission or County Administrator, or where such suspension is, in the opinion of the County Attorney, required by law.

A.28 LOCAL PREFERENCE (Continued)

- c. To qualify for local preference under this section, a local business must certify to County by completing an "Affidavit as to Local Business Form" (Form D), notarizing, and mailing the notarized original to the following address: Manatee County Purchasing Division, 1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205. It is the responsibility of the Bidder to ensure accuracy of the Affidavit as to Local Business (Form D) and notify County of any changes affecting same. Bidder attests that it:
 - 1. Has not within the five (5) years prior to the Bid announcement admitted guilt or been found guilty by any court or state or federal regulatory enforcement agency of violation of any criminal law, or a law or administrative regulation regarding fraud;
 - 2. Is not currently subject to an unresolved citation or notice of violation of any Manatee County Code provision, except citations or notices which are the subject of a current legal appeal, as of the date of the Bid announcement;
 - 3. Is not delinquent in the payment of any fines, liens, assessments, fees or taxes to any governmental unit or taxing authority within Manatee County, except any such sums which are the subject of a current legal appeal.

A.29 VENDOR REGISTRATION

All vendors are encouraged to register with Manatee County using the on-line "Vendor Registration" web page on www.mymanatee.org/purchasing.

Your cooperation in registering your business with Manatee County will enhance our opportunities to identify sources for goods and services, plus identify local businesses. This information is used for soliciting quotations up to \$250,000.00 and for competitive solicitations of larger purchases.

You will note that Manatee County collaborates with the Manatee Chamber of Commerce (www.manateechamber.com) by emailing solicitation opportunities to its members.

Our staff can assist you with your registration as needed. Our office hours are 8:00 A.M. to 5:00 P.M., Monday through Friday on regular business days. Please call (941) 749-3014 if you wish to have a Purchasing staff member assist you.

Quick steps to registration: www.mymanatee.org/purchasing

A link to Vendor Registration is listed on the Purchasing Division's web page under "Register as a Vendor".

Click on "Vendor Registration Form" for on-line input.

A.29 VENDOR REGISTRATION (Continued)

Thank you for reviewing this information and considering registering your business with Manatee County. Registration is not mandatory; however, by taking the time to register, you are helping County to provide timely notifications of Quotation, Bid and Proposal opportunities to your business.

A.30 ePAYABLES

Manatee County and Clerk of the Circuit Court have partnered to offer the ePayables program, which allows payments to be made to vendors via credit cards. County will issue a unique credit card number to each vendor; the card has a zero balance until payments have been authorized.

After goods are delivered or services rendered, vendors submit invoices to the remit to address on the purchase order according to the current process. When payments are authorized, an email notification is sent to the vendor. The email notification includes the invoice number(s), invoice date(s), and amount of payment. Once the vendor receives the email, the credit card has been authorized to be charged for the amount listed in the email. When the vendor charges the full amount authorized in the email, the card will return to a zero balance until the next payment is authorized.

There is no cost for vendors to participate in this program; however, there may be a charge by the company that processes your credit card transactions.

If you are interested in participating in this program, please complete Form E, ePayables application and return the completed form via email to lori.bryan@manateeclerk.com.

NOTE: ANY OR ALL STATEMENTS CONTAINED IN THE FOLLOWING SECTIONS: MIMIMUM QUALIFICATIONS & BASIS OF AWARD, GENERAL TERMS AND CONDITIONS, OR SPECIFICATIONS, WHICH VARY FROM THE INFORMATION TO BIDDERS, SHALL HAVE PRECEDENCE.

END OF SECTION A

SECTION B BID SUMMARY

B.01 BACKGROUND

The existing roof at the Public Safety/Traffic Management Center is an SBS-modified bitumen membrane over a fiber cover board and two layers of rigid insulation on a structural deck, based on fully adhered fastening. The existing roof has failed and is in need of replacement, and has the following known issues: moisture detected below the membrane in numerous locations; widespread membrane blistering; accelerated corrosion of lead flashings; ponding near scuppers; flashing joints with missing and unseated fasteners or missing sealant; failed sealants and parapet coping joints; scupper beds with unsealed penetrations and failed sealant; excessive bleed out and missing granules.

The County's project management team will be conducting investigative work during progress of the roof replacement to determine the cause of the existing roof's failure, which may include sampling and materials testing.

B.02 THE WORK

The Work included in this Bid consists of furnishing all labor, materials, equipment and incidentals required to completely remove and dispose of the existing roof membrane system and install a new insulated deck, SBS torch applied modified bitumen roofing system with new parapet and scupper copings and one-way roof vents at the Manatee County Public Safety/Traffic Management Center located at 2101 47th Terrace East, Bradenton, Florida per the Project Manual and Drawings.

The specifications listed in the Project Manual for the new roof system are for a system manufactured by Firestone Building Products Company. However, the County will accept offers for other manufacturers of SBS torch applied modified bitumen roofing systems that meet or exceed all aspects of the new roofing system listed in the Project Manual.

Bidders who wish to offer an SBS torch applied modified bitumen roof system from a different manufacturer for consideration as an approved equal by the County's project management team shall submit technical data sheets for each component of the roof system to the contact person listed on the front page of this Invitation for Bids no later than the deadline for clarification requests established in Article A.05 on page A-2 of this Invitation for Bids.

The Successful Bidder shall furnish all Shop Drawings, working drawings, labor, materials, equipment, tools, services and incidentals necessary to complete all Work required by these Specifications.

The successful Bidder shall perform the Work complete, in place and ready for continuous service and shall include any repairs, replacements, and/or restoration required as a result of damages caused prior to acceptance by County.

The Successful Bidder shall furnish and install all materials, equipment and labor which is reasonably and properly inferable and necessary for the proper completion of the Work, whether specifically indicated in the Bid Documents or not.

B.03 EXAMINATION OF BID DOCUMENTS AND SITE(S)

It is the responsibility of each Bidder before submitting a Bid, to (a) examine the Bid Documents thoroughly; (b) visit the site(s) to become familiar with local conditions that may affect cost, progress, performance, or furnishing of the Work; (c) consider federal, state, and local codes, laws, and regulations that may affect costs, progress, performance, or furnishing of the Work; (d) study and carefully correlate Bidder's observations with the Bid Documents; and (e) notify County of all conflicts, errors, or discrepancies in the Bid Documents.

Each Bidder may, at Bidder's own expense, make or obtain any additional examinations, investigations, explorations, tests and studies, and obtain any additional information and data which pertain to the physical conditions at or contiguous to the site(s) or otherwise which may affect cost, progress, performance or furnishing of the Work and which Bidder deems necessary to determine his Bid for performing and furnishing the Work in accordance with the time, price and other terms and conditions of the Bid Documents. County will provide each Bidder access to the site(s) to conduct such explorations and tests.

Bidder shall fill all holes, clean up and restore the site(s) to its former condition upon completion of such explorations. The lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and other lands designated for use by Contractor in performing the Work are identified in the Bid Documents.

All additional lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by Contractor. Easements for permanent structures or permanent changes in existing structures are to be obtained and paid for by County unless otherwise provided in the Bid Documents.

Inspection of the site(s) is **a requirement** to be considered for Award of this Bid. Prior to submitting a Bid, each Bidder shall examine the site(s) and all conditions thereon fully familiarizing themselves with the full scope of the Project. Failure to become familiar with site conditions will in no way relieve the Successful Bidder from the necessity of furnishing any materials or performing any Work that is required to complete the Project in accordance with the plans and Specifications. Bidder shall acknowledge inspection of the Project site(s) on his/her signed, submitted Bid Form.

END OF SECTION B

SECTION C BASIS OF AWARD & MINIMUM QUALIFICATIONS

C.01 BASIS OF AWARD

Award shall be to the lowest, responsive, responsible Bidder meeting Specifications and having the lowest total offer for the requirements listed on the Bid Form for the Work as set forth in this Invitation for Bid. Bid prices shall include costs for furnishing all labor, equipment and/or materials for the completion of the Work in accordance with and in the manner set forth and described in the Bid Documents to County's satisfaction within the prescribed time.

Only one schedule for Completion of the Work shall be considered. <u>Only one Award shall be made.</u>

NOTE: Inspection of the site is a pre-requisite to be considered for Award of this Bid.

In evaluating Bids, County shall consider the qualifications of the Bidders; and if required, may also consider the qualifications of the Subcontractors, Suppliers, and other persons and organizations proposed. County may also consider the operating costs, maintenance requirements, performance data and guarantees of major items of materials and equipment proposed for incorporation in the Work.

Whenever two or more Bids are equal with respect to price, the Bid received from a local business shall be given preference in Award. Whenever two or more Bids which are equal with respect to price are received, and neither of these Bids are from a local business, the Award shall be determined by a chance drawing, coin toss, or similar tie-breaking method conducted by the Purchasing Division and open to the public.

C.02 MINIMUM QUALIFICATIONS OF BIDDERS

No person who is not certified or registered as a Roofing Contractor pursuant to Florida Statutes, Chapter 489 on the day the Bid is submitted, and who has continuously held that certification or registration for a period of at least three (3) consecutive years immediately prior to the day the Bid is submitted, may be qualified to bid on this Project. In the event that a Bidder is a business organization, including a partnership, corporation, business trust or other legal entity as set forth in Florida Statutes § 489.119(2), then the Bidder shall only be qualified to bid on this Project if: 1) the Bidder (the business organization) is on the day the Bid is submitted, and for at least three (3) consecutive years immediately prior to the day the Bid is submitted has been, in continuous existence, properly licensed and registered as required by Florida law; and 2) the Bidder, on the day the Bid is submitted, has a certified or registered Qualifying Agent, as required by Florida Statutes § 489.119, and that Qualifying Agent has been the same Qualifying Agent of the Bidder for a period of at least three (3) consecutive years immediately prior to the day the Bid is submitted.

The Roofing Contractor shall meet the minimum qualifications listed in Section 07500 Article 1.06.A of the Project Manual for the new roofing system being installed and shall list the qualifications on the Contractor's Questionnaire to be included as part of their Bid submittal.

END OF SECTION C

SECTION D GENERAL TERMS & CONDITIONS

D.01 CONTRACT FORMS

The Contract resulting from the acceptance of a Bid shall be in the form of the Contract stated in this Bid (reference Section VI of this document).

A written notice confirming Award or recommendation thereof will be forwarded to the Successful Bidder accompanied by the required number of unsigned counterparts of the Contract. Within ten (10) days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Contract with any other required documents to County. (Note: Contract must be approved in accordance with Chapter 2-26 of the Manatee County Code, and the Administrative Standards and Procedures Manual approved by the County Administrator).

D.02 ASSIGNMENT OF CONTRACT

Contractor shall not assign, transfer, convey, sublet or otherwise dispose of the resulting Contract or of his right, title, or interest therein, or his power to execute such Contract, or to assign any monies due or to become due there under to any other person, firm or corporation unless first obtaining the written consent of County. The giving of such consent to a particular Subcontractor assignment shall not dispense with the necessity of such consent to any further or other assignment.

D.03 COMPLETION OF WORK

The Work will be completed and ready for final inspection within the specified calendar days from the date the Contract time commences to run. Only one Bid shall be considered based on **90 calendar days**. **Only one Award shall be made**.

D.04 LIQUIDATED DAMAGES

If the Contractor refuses or fails to prosecute the Work, or any separable part thereof, with such diligence as will hinder its completion within the time specified, County may seek damages. The actual damages for delay will be impossible to determine and in lieu thereof, the Contractor shall pay to County the sum of \$966 as fixed, agreed, and liquidated damages for each calendar day of the delay until the Work is finally accepted by County and the Contractor and his Surety shall be liable for the amount thereof.

D.05 PAYMENT

Contractor may apply for partial payment on monthly estimates, based on the amount of the Work done or completed in compliance with the provisions of the resulting Contract. Contractor shall submit an application, on a standard pay application form provided or approved by County, of an approximate estimate of the proportionate value of the Work done, items and locations of the Work performed up to and including the last day of the period then ending.

D.05 PAYMENT (Continued)

County will then review said estimate and make any necessary revisions so that the estimate can receive approval for payment. If the Contractor and County do not agree on the approximate estimate of the proportionate value of the Work done for any pay period, the determination of County will be binding. The amount of said estimate after deducting any required Retainage and all previous payments shall be due and payable to the Contractor, twenty (20) business days if County is its own Engineer of Record (EOR) or twenty-five (25) business days if outside agent approval is required after the pay estimate has been approved by the agent for County.

In accordance with the Prompt Payment Act, Florida Statutes § 218.735(7), a Punch List shall be formulated.

Time allowed for development of Punch List:

- a. Awarded Contracts with an estimated cost of less than \$10 million will be within thirty (30) calendar days after reaching Substantial Completion.
- b. Awarded Contracts with a cost of \$10 million dollars or more will be within thirty (30) calendar days OR if extended by Contract, up to sixty (60) calendar days after reaching Substantial Completion.

The Final Completion date of the resulting Contract must be at least thirty (30) days after delivery of the list of items. If the list is not provided to the awarded Contractor by the agreed upon date, the Contract completion time must be extended by the number of days County exceeds the delivery date.

It is the Contractor's responsibility for the care of the materials. Any damage to or loss of said materials is the full responsibility of the Contractor. Any periodical pay estimate signed by the Contractor shall be final as to the Contractor for any or all Work covered by the periodical pay estimate.

Any requests for payment of materials stored on site must be accompanied with a paid receipt. The Contractor warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to County at the time of payment free and clear of all liens, claims, security interests and encumbrances (hereafter referred to as "Liens").

The Contractor agrees to furnish an affidavit stating that all laborers, material men, and Subcontractors have been paid on the Project for Work covered by the Application for Payment and that a partial or complete release of lien, as may be necessary, be properly executed by the material men, laborers, Subcontractors on the Project for Work covered by the Application for Payment, sufficient to secure County from any claim whatsoever arising out of the aforesaid Work. When the Contractor has completed the Work in compliance with the terms of the Contract Documents, he shall notify County in writing that the Project is ready for final inspection.

D.05 PAYMENT (Continued)

County will then advise the Contractor as to the arrangements for final inspection and what Work, if any, is required to prepare the Project or a portion thereof for final inspection. When County determines the Project or portion thereof is ready for final inspection, County shall perform same. Upon completion of final inspection, County will notify Contractor of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies. When all such errors have been corrected, a final re-inspection will be made.

The process will be repeated until, in the opinion of County, the Project has been completed in compliance with the terms of the Contract Documents.

When final acceptance has been made by County, County will make final payment of the resulting Contract amount, plus all approved additions, less approved deductions and previous payments made. The resulting Contract will be considered complete when all Work has been finished, the final inspection made, approved as-builts received, and the Project finally accepted in writing by County. The Contractor's responsibility shall then terminate except as otherwise stated.

D.06 CONTRACT CONTINGENCY WORK

This Bid item entails a monetary allowance which is used at County's discretion to handle unexpected conditions as required to satisfactorily complete the Project in accordance with the plans and Specifications. A Field Directive must be issued by an authorized County Representative to authorize use of Contract Contingency funds.

The percentage for Contract Contingency is listed on the Bid Form. Vendor shall enter the amount for Contract Contingency based on the percentage of their Total Base Bid. The total Contract Award will include the Contract Contingency funds.

Appropriate uses of Contract Contingency funds include increases to existing Bid item quantities that do not change the initial Scope of Work, which may be directed by staff; modification items not originally bid which were unforeseen yet necessary during the construction to provide a safe, complete Project and that do not change the initial Scope of Work; and unanticipated conflicts and/or design changes required during construction which are necessary to provide a safe, complete Project and that do not change the initial Scope of Work.

Inappropriate uses of Contract Contingency funds include anything that changes the initial Scope of Work, including the Contract Price and Contract Time, and adding Bid items not previously contemplated that change the initial Scope of Work.

D.07 RETAINAGE

A Retainage of 10% of the total Work in place shall be withheld until 50% complete. After 50% completion, the Retainage shall be reduced to 5% of the total Work in place until Final Completion and acceptance of the Work by County. Upon final acceptance, the remaining Retainage shall be included in the final payment.

D.08 PROGRESS REQUIREMENTS

All Work done under the resulting Contract shall be done with a minimum of inconvenience to the private property owners in the area. The Contractor shall coordinate his Work with private property owners such that existing utility services are maintained and they have access to their property at all times.

D.09 WARRANTY AND GUARANTEE PROVISIONS

All Work, materials, and equipment furnished as defined herein shall be guaranteed and warranted by the Contractor for a minimum period of three (3) years, unless otherwise specified, from final acceptance by County to be free from defects due either to faulty materials or equipment or faulty workmanship.

All materials, equipment, and workmanship furnished and installed by the Contractor is warranted and guaranteed by the Contractor to meet the required standards and to accomplish the purposes and functions of the Project as defined, detailed, and specified herein.

County shall, following discovery thereof, promptly give written notice to the Contractor of faulty materials, equipment, or workmanship within the period of the guarantee and the Contractor shall promptly replace any part of the faulty equipment, material, or workmanship at his own cost. These warranty and guarantee provisions create no limitations on County as to any claims or actions for breach of guaranty or breach of warranty that County might have against parties other than the Contractor, and do not constitute exclusive remedies of County against the Contractor.

D.10 MATERIALS AND WORKMANSHIP

All materials and apparatus required for this Work, except as specified otherwise, shall be new, of first class quality, and shall be furnished, delivered, connected and finished in every detail. Construction shall be prescribed by good industry practice and in accordance with manufacturer's recommendations for the type being installed.

Use skilled workman trained and experienced in the necessary trades and who are completely familiar with the specified requirements and the methods needed for proper performance of the Work of this section.

D.11 PROJECT CLOSE-OUT

Clean construction site and remove any and all excess materials. Correct any damages to property that may have occurred as a result of installation and/or delivery. Repair and patch all surfaces cut for installation. The Contractor shall remedy any deficiencies promptly should County determine any Work is incomplete or defective.

D.11 PROJECT CLOSE-OUT (Continued)

When County determines the Work is acceptable in accordance with this Invitation for Bid, the Contractor shall provide the close out submittals, including but not necessarily limited to the following:

1 set Certificate of Warranties

1 set Manufacturer's Product Literature (when applicable)

1 set Project Record Drawings

1 set Subcontractor Information (when applicable)

D.12 ROYALTIES AND PATENTS

The Contractor shall pay all royalties and license fees for equipment or processes in conjunction with the equipment and/or services being furnished. Contractor shall defend all suits or claims for infringement of any patent, trademark or copyright, and shall save County harmless from loss on account thereof, including costs and attorney's fees.

D.13 AUTHORIZED PRODUCT REPRESENTATION

The Bidder, by virtue of submitting the name and Specifications of a manufacturer's product, will be required to furnish the named manufacturer's product. Failure to perform accordingly may, in County's sole discretion, be deemed a Material Breach of the resulting Contract, and shall constitute grounds for County's immediate termination of the resulting Contract.

D.14 REGULATIONS

It shall be the responsibility of the Contractor to assure compliance with any OSHA, EPA and/or other federal or State of Florida rules, regulations or other requirements, as each may apply.

D.15 CANCELLATION

Any failure of the Contractor to furnish or perform the Work (including, but not limited to, commencement of the Work, failure to supply sufficient skilled workers or suitable materials or equipment) in accordance with the resulting Contract, County may order the stop of the Work, or any portion thereof, until the cause for such order has been eliminated. If the Contractor persistently fails to perform the Work in accordance with the resulting Contract, County reserves the right to terminate the resulting Contract and select the next qualified Bidder or re-advertise this procurement in part or in whole. County reserves the right to cancel all or any undelivered or unexecuted portion of the resulting Contract with or without cause.

D.16 INDEMNIFICATION

The Contractor covenants and agrees to <u>indemnify and save harmless</u> County, its agents and employees, from and against all claims, suits, actions, damages, causes of action, or judgments arising out of the terms of the resulting Contract for any personal injury, loss of life, or damage to the property sustained as a result of the performance or non-performance of services or delivery of goods; from and against any orders, judgments, or decrees, which may be entered against County, its agents or employees; and from and against all costs, attorney's fees, expenses and other liabilities incurred in the defense of any such claim, suit or action, and the investigation thereof. Nothing in the resulting Award, Contract or Purchase Order shall be deemed to affect the rights, privileges and immunities of County as set forth in Florida Statutes § 768.28.

D.17 SUBCONTRACTORS, SUPPLIERS AND OTHERS

The identity of Subcontractors, Suppliers, and other persons and organizations (including those who are to furnish the principal items of material and equipment) may be requested by County for each Bid item from any of the Bidders; and the Bidder shall respond within five (5) days after the date of such request. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, persons or organization if requested by County. If County, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, other person or organization, County may, before the Notice of Intent to Award is given, request the apparent Successful Bidder to submit an acceptable substitute without an increase in Contract Price or Contract Time.

If apparent Successful Bidder declines to make any such substitution, County may Award the resulting Contract to the next lowest qualified Bidder that proposes to use acceptable Subcontractors, Suppliers, and other persons who County does not make written objection to. Contractor shall not be required to employ any Subcontractor, Supplier, other person or organization who Contractor has reasonable objection to.

Subcontractors shall be bound by the terms and conditions of the resulting Contract insofar as it applies to their work, but this shall not relieve the prime Contractor from the full responsibility to County for the proper completion of all Work to be executed under the resulting Contract.

The employment of unauthorized aliens by any Contractor is considered a violation of Section 274 (e) of the Immigration and Employment Act. If the Contractor knowingly employs unauthorized aliens, such violation shall be cause for unilateral cancellation of the resulting Contract.

A complete list of all Subcontractors proposed for any portion of the Work may be requested of any Bidder deemed necessary by County. Subcontracts shall be awarded only to those Subcontractors considered satisfactory by County.

D.18 MANUALS, SCHEMATICS, HANDBOOKS (IF APPLICABLE)

All manuals, schematics and handbooks shall be provided which are applicable to the equipment delivered. An operators manual, parts manual and technician manual must also be provided. Parts lists (manuals) must include OEM part numbers for items not manufactured by the Contractor. Contractor shall furnish two (2) copies of each.

D.19 INSURANCE

The Contractor will not commence Work under the resulting Contract until <u>all insurance</u> under this section and such insurance coverage as might be required by County has been obtained. The Contractor shall obtain, and submit to the Purchasing Division <u>within ten (10) calendar days</u> from the date of Notice of Intent to Award, at his expense, the following minimum amounts of insurance (inclusive of any amounts provided by an umbrella or excess policy):

a. Workers' Compensation/Employers' Liability

<u>Part One</u> - There shall be no maximum limit (other than as limited by the applicable statute) for liability imposed by Florida Workers' Compensation Act or any other coverage required by the resulting Contract Documents which are customarily insured under Part One of the standard Workers' Compensation Policy.

<u>Part Two</u> - The minimum amount of coverage required by the resulting Contract Documents which are customarily insured under Part Two of the standard Workers' Compensation Policy shall be:

(Each Accident)	<u>\$100,000</u>
(Disease-Policy Limit)	<u>\$500,000</u>
(Disease-Each Employee)	\$100,000

b. Commercial General Liability

The limits are to be applicable only to Work performed under the resulting Contract and shall be those that would be provided with the attachment of the Amendment of Limits of Insurance (Designated Project or Premises) endorsement (ISO Form CG 25 03) a Commercial General Liability Policy with the following minimum limits.

General Aggregate:

Products/Completed Operations Aggregate	\$2,000,000
Personal and Advertising Injury	\$1,000,000
Each Occurrence	\$1,000,000
Fire Damage (Any One Fire)	\$Nil
Medical Expense (Any One Person)	\$Nil

ADDITIONAL INSURED: Manatee County, a political subdivision of the State of Florida, shall be specifically named as additional insured on the Commercial General Liability Policy.

\$300,000 \$1,000.000

D.19 INSURANCE (Continued)

c. Business Auto Policy

Each Occurrence Bodily Injury and
Property Damage Liability Combined
Annual Aggregate (if applicable)

ADDITIONAL INSURED: Manatee County, a political subdivision of the State of Florida, shall be specifically named as additional insured on the Business Auto Policy.

d. Property Insurance

<u>If the resulting Contract includes</u> construction of or additions to above ground buildings or structures, Contractor shall provide "**Builder's Risk**" insurance with the minimum amount of insurance to be 100% of the value of such addition(s), building(s), or structure(s).

e. Installation Floater

If the resulting Contract does not include construction of or additions to above ground building or structures, but does involve the installation of machinery or equipment, Contractor shall provide an "Installation Floater" with the minimum amount of insurance to be 100% of the value of such addition(s), building(s), or structure(s).

f. Certificates of Insurance and Copies of Policies

Certificates of Insurance in triplicate evidencing the insurance coverage specified herein shall be filed with the Purchasing Official before operations are begun. The required certificates of insurance shall name the types of policy, policy number, date of expiration, amount of coverage, companies affording coverage, and also shall refer specifically to the Bid number and title of the Project. All insurance policies required herein shall be issued by companies that are authorized to do business under the laws of the State of Florida and hold an A.M. Best rating of A-or better. Insurance, as specified herein, shall remain in force and effect for the duration of the Project including any warranty periods.

g. <u>Complete Policies</u>: The entire and complete insurance policies required herein shall be provided to County on request.

Nothing herein shall in any manner create any liability of County in connection with any claim against the Contractor for labor, services, or materials, or of Subcontractors; and nothing herein shall limit the liability of the Contractor or Contractor's Sureties to County or to any Workers, Suppliers, material men or employees in relation to the resulting Contract.

D.19 INSURANCE (Continued)

- h. By way of its submission of a Bid hereto, Bidder:
 - 1. Represents that Bidder maintains, and will maintain during the term of any Contract arising from this solicitation, insurance coverage from responsible companies duly authorized to do business in the State of Florida and deemed acceptable to County, as set forth in this solicitation; and
 - Agrees that, insurance should not be cancelled without thirty (30) days notice to County and must be endorsed to provide same. Failure of Bidder to obtain and maintain proper amounts of insurance at all times as called for herein shall constitute a Material Breach of the resulting Contract, which may result in immediate termination.
- i. <u>Certification Requirements</u> In order for the certificate of insurance to be accepted it **must** comply with the following:
 - 1. The certificate holder shall be:

Manatee County Board of Commissioners,
A political subdivision of the State of Florida
P.O. Box 1000
Bradenton, FL 34206-1000
IFB# 14-0364CD, Roof Replacement at Manatee County Public Safety/Traffic Management Center

2. Certificate shall be mailed to:

Manatee County Purchasing Division 1112 Manatee Avenue West, Suite 803 Bradenton, FL 34205

Attn: Chris Daley-CPPB, Contract Specialist

D.20 BID BOND/CERTIFIED CHECK

By submitting a Bid to this Invitation for Bid, the Bidder agrees should the Bidder's Bid be accepted, to execute the form of Contract and present the same to Manatee County for approval within ten (10) calendar days after Notice of Intent to Award. The Bidder further agrees that failure to execute and deliver said form of Contract within ten (10) calendar days will result in damages to Manatee County and as guarantee of payment of same a Bid Bond/certified check shall be enclosed within the submitted sealed Bid in the amount of five (5%) percent of the total amount of the Bid. The Bidder further agrees that in case the Bidder fails to enter into a Contract, as prescribed by Manatee County, the Bid Bond/certified check accompanying the Bid shall be forfeited to Manatee County as agreed liquidated damages. If County enters into a Contract with a Bidder, or if County rejects any and/or all Bids, accompanying bond will be promptly returned.

D.21 PERFORMANCE AND PAYMENT BONDS

The Successful Bidder shall furnish Surety bonds using the Public Construction Bond form prescribed in Florida Statutes § 255.05, which is provided herein, as security for faithful performance of the Contract awarded as a result of this Bid and for the payment of all persons performing labor and/or furnishing material in connection therewith. Failure to provide the required bonds on the prescribed form may result in Successful Bidder being deemed nonresponsive. Bonds must be in the form prescribed in Florida Statutes § 255.05, and must not contain notice, demand or other terms and conditions, including informal pre-claim meetings, not provided for in Florida Statutes § 255.05.

Surety of such bonds shall be in an amount equal to 100% of the Contract Award issued by a duly authorized and nationally recognized Surety company, authorized to do business in the State of Florida, satisfactory to this County. Surety shall be rated as "A-" or better as to general policy holders rating and Class V or higher rating as to financial size category and the amount required shall not exceed 5% of the reported policy holders' surplus, all as reported in the most current Best Key Rating Guide, published by A.M. Best Company, Inc. of 75 Fulton Street, New York, New York, 10038. The attorney-in-fact who signs the bonds must file with the bonds, a certificate and effective dated copy of power-of-attorney. Performance and Payment Bonds shall be issued to Manatee County, a political subdivision of the State of Florida, within ten (10) calendar days after Notice of Intent to Award.

In addition, pursuant to Florida Statutes § 255.05(1)(b), prior to commencing Work, the Contractor shall be responsible and bear all costs associated to record the Performance and Payment Bond with the Manatee County Clerk of the Circuit Court. A certified copy of said recording shall be furnished to the Purchasing Division upon filing. Pursuant to Florida Statutes § 255.05(1)(b), County will make no payment to the Contractor until the Contractor has complied with this paragraph.

Furnishing Performance and Payment Bonds shall be requisite to execution of a Contract with County. Said Performance and Payment Bonds will remain in force for the duration of the Contract with the premiums paid by the Contractor. Failure of the Successful Bidder to execute such Contract and to supply the required bonds shall be just cause for cancellation of the Award. County may then contract with another acceptable Bidder or re-advertise this Invitation for Bid. If another Bidder is accepted, and notice given within ninety (90) days after the opening of the Bids, this acceptance shall bind the Bidder as though they were originally the Successful Bidder.

Failure of County at any time to require performance by the Contractor of any provisions set out in the resulting Contract will in no way affect the right of County, thereafter, to enforce those provisions.

When activity occurs within the resulting Contract that increases the amount of the Contract by either an approved Administrative Contract Adjustment (ACA) or an approved Change Order, a recorded Bond Rider shall be provided before the additional Work can proceed. All premiums shall be paid by the Contractor.

D.22 NO DAMAGES FOR DELAY

No claim for damages or any claim other than for an extension of time shall be made or asserted against County by reason of any delays. The Contractor shall not be entitled to an increase in the total Contract Price or payment or compensation of any kind from County or direct, indirect, consequential impact or other costs, expenses for damages, including but not limited to costs of acceleration or inefficiency arising because of delay, disruption, interference or hindrance from any cause whatsoever; provided, however, that this provision shall not preclude recovery or damages by the Contractor for hindrance or delays due solely to fraud, bad faith, or active interference on part of County or its agents. Otherwise, the Contractor shall only be entitled to extensions of the Contract Time as the sole and exclusive remedy for such resulting delay, in accordance with and to the extent specifically provided above.

D.23 NO INTEREST

Any monies not paid by County when claimed to be due to the Contractor under this Contract shall not be subject to interest including prejudgment interest. Any monies not paid by County when claimed to be due to the Contractor for damages awarded in the case of construction delays shall not be subject to prejudgment interest.

D.24 CONSTRUCTION OF CONTRACT

The resulting Contract and the rights and responsibilities hereunder shall not be construed more strongly against either party, regardless of the extent to which such party may have participated in the preparation hereof.

D.25 BE GREEN

All Contractors are encouraged to use as many **environmentally preferable** "green" products, materials, supplies, etc. as possible in order to promote a safe and healthy environment. **Environmentally preferable are products or services that have a reduced adverse effect on the environment**. Provide detail of your organization's initiative and its ability to meet the goal of environmental sustainability.

END OF SECTION D

SECTION E GENERAL CONDITIONS

ARTICLE 1. DEFINITIONS

Whenever used in the Contract Documents, the following terms have the meaning indicated which are applicable to both the singular and plural thereof:

<u>Addendum</u> - Written or graphic instruments issued prior to the opening of Bids which clarify or change the Bid Documents.

Administrative Contract Adjustment (ACA) – A minor change to a Contract, which is less than 10% of the Contract Price or less than 20% of the Contract Time, and does not require Board approval. (Reference Resolution R-07-189)

<u>Application for Payment</u> - The form accepted by the Project Representative which is to be used by Contractor in requesting progress or final payments and which is to include such supporting documentation as is required by the Contract Documents.

<u>Award</u> - Acceptance of the Bid from the person, firm, or corporation which in the County's sole and absolute judgment will under all circumstances best serve the public interest. Award shall be made in accordance with Chapter 2-26 of the Manatee County Code.

<u>Bid</u> - The Offer of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

<u>Bid Bond</u> – An insurance agreement, accompanied by a monetary commitment, by which a third party (the Surety) accepts liability and guarantees that the Bidder will not withdraw the Bid.

<u>Bidder</u> - One who submits a Bid directly to the County, as distinct from a Sub-bidder, who submits a Bid to a Bidder.

<u>Bid Documents</u> - Consists of the Invitation for Bid, which includes but is not limited to the Bid Form, drawings, technical Specifications, terms and conditions, and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids); and becomes a part of the resulting Contract.

<u>Bid Summary</u> – Specifications or scope of Work that specifically describes the Work to be done for this Project.

<u>Bond Rider</u> – A Bond Rider increases the Performance Bond coverage to ensure responsibility of the Contractor in executing the Work for the County in consideration of the increased value resulting from an approved change in the Contract amount.

<u>Change Order</u> - A document recommended by the Project Representative which is signed by Contractor and County and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Time, issued on or after the Effective Date of the Contract.

<u>Compensable Delay</u> - Any delay beyond the control and without the fault or negligence of the Contractor resulting from County-caused changes in the Work, differing site conditions, suspensions of the Work, or termination for convenience by County.

<u>Contract</u> - The written Contract between County and Contractor covering the Work to be performed; other Contract Documents are attached to the Contract and made a part thereof as provided therein.

<u>Contract Contingency</u> - A monetary allowance used at the County's discretion, which is part of the total sum of the Contract that allows for minor changes in the Contract that do not change the initial Scope of Work, including Contract Price and Contract Time.

<u>Contract Documents</u> - The Contract, Addenda (which pertain to the Bid Documents), Contractor's Bid (including documentation accompanying the Bid and any post-Bid documentation submitted prior to the Notice of Award), the bonds, the Specifications, Special Provisions and the drawings, together with all amendments, modifications and supplements issued on or after the Effective Date of the Contract.

<u>Contract Price</u> - The monies payable by County to Contractor under the Contract Documents as stated in the Contract.

<u>Contract Time</u> - The number of days or the date stated in the Notice to Proceed for the completion of the Work.

<u>Contractor</u> - The person, firm or corporation with whom County has entered into a Contract.

<u>Days</u> - All references to days are to be considered calendar days except as specified differently.

<u>Defective</u> - An adjective which when modifying the Work refers to work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents, or has been damaged prior to Project Representative's recommendation of final payment (unless responsibility for the protection thereof has been assumed by County).

<u>Drawings</u> - The drawings which show the character and Scope of Work to be performed and which have been prepared or approved by Engineer and are referred to in the Bid and Contract Documents.

<u>Effective Date of the Contract</u> - The date indicated in the Contract on which it becomes effective (date of execution).

<u>Engineer</u> – Licensed professional who is responsible for the preparation, signing, dating, sealing and issuing of any engineering document(s) for any engineering service or Work.

<u>Excusable Delay</u> - Any delay beyond the control and without the negligence of the Contractor, the County, or any other Contractor caused by events or circumstances such as, but not limited to, acts of God or of the public enemy, fires, floods, freight embargoes, acts of government other than County or epidemics. Labor disputes and above average rainfall shall give rise only to Excusable Delays.

<u>Field Directive</u> - A written order issued by an authorized County Representative which approves changes in the Work, but does not involve a change in the initial Scope of Work, including the Contract Price and the Contract Time. A Field Directive must be issued by an authorized County Representative to authorize use of Contract Contingency funds.

<u>Final Completion</u> – The Work (including items defined on the Punch List) has been completed, accepted in writing by the County, approved as-builts have been received, and is ready for final payment.

<u>Float or Slack Time</u> - The time available in the progress schedule during which an unexpected activity can be completed without delaying Substantial Completion of the Work.

<u>Inexcusable Delay</u> - Any delay caused by events or circumstances within the control of the Contractor, such as inadequate crewing, slow submittals, etc., which might have been avoided by the exercise of care, prudence, foresight, or diligence on the part of the Contractor.

<u>Information (Pre-Bid) Conference</u> – A meeting held by the Purchasing Division with potential Bidders, prior to the opening of the solicitation, for the purpose of answering questions, clarifying ambiguities, and responding to general issues in order to establish a common basis for understanding all of the requirements of the solicitation; may result in the issuance of an Addendum.

<u>Material Breach</u> – A substantial failure in the performance of the Contract, as to give the affected party the right to remedies available in the Contract.

Non-prejudicial Delay - Any delay impacting a portion of the Work within the available total Float or Slack Time and not necessarily preventing completion of the Work within the Contract Time.

<u>Notice of Award</u> - The written notice to the Successful Bidder stating Award has been approved by the Board of County Commissioners; or by the Purchasing Official in accordance with Chapter 2-26 of the Manatee County Code.

<u>Notice of Intent to Award</u> - The written notice to the apparent Successful Bidder stating Award has been recommended with final Award to be authorized by the Purchasing Official or Board of County Commissioners, as appropriate.

<u>Notice to Proceed</u> - Written notice by County (after execution of Contract) to Contractor fixing the date on which the Contract Time will commence to run and on which Contractor shall start to perform (ten (10) days from date of such notice) Contractor's obligations under the Contract Documents.

<u>Payment Bond</u> – An instrument, issued by a Surety that guarantees that Subcontractors will be paid for labor expended on the Contract.

<u>Performance Bond</u> – An instrument executed subsequent to Award by the successful Contractor that protects the County from loss due to Contractor's inability to complete the Contract as agreed.

<u>Preconstruction Conference</u> - Prior to starting the Work, a meeting scheduled by County with Contractor to review the Work schedules, to establish procedures for handling Shop Drawings and other submissions, for processing periodical pay estimates, and such other matters as may be pertinent to the project.

<u>Prejudicial Delay</u> - Any excusable or Compensable Delay impacting the Work and exceeding the total float time available in the progress schedule, thus preventing completion of the Work within the Contract Time unless the Work is accelerated.

<u>Pre-operation Testing</u> - All field inspections, installation checks, water tests, performance tests and necessary corrections required of Contractor to demonstrate that individual components of the Work have been properly constructed and do operate in accordance with the Contract Documents for their intended purposes.

<u>Project</u> - The total construction of which the Work to be provided under the Contract Documents (may be the whole or a part as indicated elsewhere in the Contract Documents).

<u>Project Representative</u> - The authorized representative of Manatee County who is assigned to the project or any part thereof.

<u>Punch List</u> – A list of minor deficiencies or additional Work that does not prohibit achieving Substantial Completion yet must be completed before Final Completion of the Contract can be achieved.

<u>Retainage</u> – A certain percentage, identified in the solicitation document, is withheld from payment due to the Contractor until the Work is fully completed and accepted by County.

<u>Schedule of Values</u> – In the case of a total, lump sum Bid, unit prices shall be established for this Contract by the submission of a Schedule of Values. In the case of an itemized Bid, unit prices are the prices bid. The Contractor shall submit a Schedule of Values within ten (10) days of Notice to Proceed date. The schedule shall include quantities and prices of items equaling the Total Offer and will subdivide the Work into components in sufficient detail to serve as the basis for progress payments during construction. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work. Upon request of the County, the Contractor shall support the values with data which will substantiate their correctness.

<u>Shop Drawings</u> - All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for Contractor to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a Supplier and submitted by Contractor to illustrate material or equipment for some portion of the Work.

<u>Special Provisions:</u> As required to define Work or procedures not covered in the standard Specifications, and as necessary to supplement or modify items in the standard Specifications.

<u>Subcontractor</u> - An individual or corporation having a direct contact with Contractor or with any other Subcontractor for the performance of a part of the Work at the site. Such person or firm has contractual relations with the Contractor, not with the County.

<u>Substantial Completion</u> - The stage in the progress of the Work (or a specified portion thereof) is sufficiently complete in accordance with the Contract Documents so the Work (or a specified portion thereof) can be utilized for the intended purpose.

<u>Successful Bidder</u> - The lowest, responsible and responsive Bidder to whom an Award is made.

<u>Supplier</u> - A manufacturer, fabricator, Supplier, distributor, material man or vendor.

<u>Surety</u> – A pledge or guarantee by an insurance company, bank, individual or corporation on behalf of the Bidder which protects against default or failure of the principal to satisfy the contractual obligations.

<u>Underground Facilities</u> - All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments and any encasement containing such facilities which have been installed underground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, telephone or

other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

<u>Unit Price Work</u> - Work to be paid for on the basis of unit prices.

<u>Work</u> - The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.

Work Directive Change - A written directive to Contractor, issued on or after the Effective Date of the Contract and signed by County and recommended by Project Representative ordering an addition, deletion or revision in the Work, or responding to differing or unforeseen physical conditions under which the Work is to be performed or to emergencies. A Work Directive Change itself may not change the Contract Price or Contract Time; but is evidence that the parties expect that the change directed or documented by a Work Directive Change will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Time.

<u>Written Amendment</u> - A Written Amendment of the Contract Documents, signed by County and Contractor on or after the Effective Date of the Contract and normally dealing with the non-engineering or non-technical rather than strictly Work related aspects of the Contract Documents.

ARTICLE 2. PRELIMINARY MATTERS

Computation of Time: When time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or legal holiday, such day will be omitted from the computation.

2.1 The Contractor must submit a proposed schedule of the Work at the Preconstruction Conference. The purpose of this schedule is to enable the County to govern the Work, to protect the functions of the local government and its citizens and to aid in providing appropriate surveillance. The County shall have the right to reschedule Work provided such rescheduling is in accordance with the remainder of the terms of the Contract. The schedule shall show, as a minimum, the approximate dates on which each segment of the Work is expected to be started and finished, the proposed traffic flows during each month, the anticipated earnings by the Contractor for each month and the approximate number of crews and equipment to be used. The County, after necessary rescheduling and obtaining additional information for specific purposes, shall review and approve the schedule. The Contractor shall also forward to the County, as soon as practicable after the first day of each month, a summary report of the progress of the various parts of the Work under the Contract, in fabrication and in the field, stating the existing status, estimated time

of completion and cause of delay, if any. Together with the summary report, the Contractor shall submit any necessary revisions to the original schedule for the County's review and approval. In addition, more detailed schedules may be required by the County for daily traffic control.

- 2.2 A Notice to Proceed may be given at any time within thirty (30) days after the Effective Date of the Contract. The Contract Time will commence at the time specified in such notice. Contractor shall start to perform the Work on the date specified in the Notice to Proceed, but no Work shall be done at the site prior to the date on which the Contract Time commences to run.
- 2.3 If at any time the materials and appliances to be used appear to the County as insufficient or improper for securing the quality of Work required or the required rate of progress, the County may order the Contractor to increase his efficiency or to improve the character of his Work and the Contractor shall conform to such an order. The failure of the County to demand any increase of such efficiency of any improvement shall not release the County from its obligation to secure the quality of Work or the rate of progress necessary to complete the Work within the limits imposed by the Contract. The County may require the Contractor to remove from the Work such employees as the County deems incompetent, careless, insubordinate or otherwise objectionable, or whose continued employment on the Work is deemed to be contrary to the County's interest.
- 2.4 The County reserves the right to let other Contracts in connection with this Work. The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and execution of their Work, and promptly connect and coordinate the Work with theirs.

ARTICLE 3. CONTRACT DOCUMENTS: INTENT, AMENDING, RE-USE

3.1 The Contract Documents comprise the entire Contract between County and Contractor concerning the Work. The Contract Documents are complementary; what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the laws and ordinances of the State of Florida and Manatee County.

Should a conflict exist within the Contract Documents, the precedence in ascending order of authority is as follows: 1) Bid Summary, 2) Special Conditions, 3) General Conditions, and 4) Drawings.

Note: Computed dimensions shall govern over scaled dimensions.

3.2 It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents. Any work, materials or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result will be supplied whether or not specifically called for in the Contract Documents.

When words which have a well-known technical or trade meaning are used to describe Work, materials, or equipment, such words shall be interpreted in accordance with that meaning. Reference to standard Specifications, manuals or codes of any technical society, organization or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or laws or regulations in effect at the time of opening of Bids, except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of County, Contractor or Engineer, or any of their agents or employees from those set forth in the Contract Documents.

- 3.3 The Contract Documents may be amended to provide for additions, deletions and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways:
 - 3.3.1 A Written Amendment
 - 3.3.2 A Change Order
 - 3.3.3 An Administrative Contract Adjustment (ACA)
 - 3.3.4 A Work Directive Change
- 3.4 In addition, the requirements of the Contract Documents may be supplemented and minor variations and deviations in the Work may be authorized in one or more of the following ways:
 - 3.4.1 Contract Contingency Work Field Directive
 - 3.4.2 Engineer's approval of a Shop Drawing or sample

ARTICLE 4. CONTRACTOR'S RESPONSIBILITIES

- 4.1 Contractor shall keep on the Work at all times during its progress a competent resident superintendent; who shall be the Contractor's representative at the site and shall have authority to act on behalf of Contractor. All communications given to the superintendent shall be as binding as if given to Contractor.
- 4.2 Contractor shall provide competent, suitable qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the Work or property at the site or adjacent thereto and except as otherwise indicated in the Contract Documents, all Work at the site shall be performed during regular working hours and Contractor will not permit overtime Work or the

performance of Work on Saturday, Sunday or legal holiday without County's written consent given after prior notice to Engineer (at least seventy-two (72) hours in advance).

- 4.2.1 Contractor shall pay for all additional engineering charges to the County for any overtime Work which may be authorized. Such additional engineering charges shall be a subsidiary obligation of Contractor and no extra payment shall be made by County on account of such overtime Work. At County's option, overtime costs may be deducted from Contractor's monthly payment request or Contractor's Retainage prior to release of final payment.
- 4.3 Unless otherwise specified, Contractor shall furnish and assume full responsibility for all bonds, insurance, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the Work.
- 4.4 All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instruction of the applicable Supplier except as otherwise provided in the Contract Documents.
- 4.5 Contractor shall be fully responsible to County for all acts and omissions of the Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect Contract with Contractor just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents shall create any contractual relationship between County or Engineer and any such Subcontractor, Supplier or other person or organization, nor shall it create any obligation on the part of County to pay or to see to the payment of any monies due any such Subcontractor, Supplier or other person or organization.
- 4.6 <u>Permits</u>: Unless otherwise provided, Contractor shall obtain and pay for all construction permits and licenses. County shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work.
- 4.7 During the progress of the Work, Contractor shall keep the premises free from accumulation of waste materials rubbish and other debris resulting from the Work. At the completion of the Work, Contractor shall remove all waste

materials, rubbish, and debris from and about the premises as well as all tools, appliances, construction equipment and machinery and surplus materials and shall leave the site clean and ready for occupancy by County. Contractor shall restore to original conditions all property not designated for alteration by the Contract Documents.

- 4.8 Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.
- 4.9 Safety and Protection: Contractor shall comply with the Florida Department of Commerce Safety Regulations and any local safety regulations. Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of and shall provide the necessary protection to prevent damage, injury or loss to:
 - 4.9.1 all employees on the Work and other persons and organizations who may be affected thereby;
 - 4.9.2 all the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and
 - 4.9.3 other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and Underground Facilities not designated for removal, relocation or replacement in the course of construction.
 - 4.9.4 Contractor shall comply with all applicable laws and regulations of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall provide and maintain all passageways, guard fences, lights and other facilities for the protection required by public authority or local conditions. Contractor shall provide reasonable maintenance of traffic way for the public and preservation of the County's business, taking into full consideration all local conditions. Contractor's duties and responsibilities for the safety and protection of the Work shall continue until such time as all the Work is completed.
- 4.10 <u>Emergencies</u>: In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, Contractor, without special instruction or authorization from Engineer or County, is obligated to act to prevent threatened damage, injury or loss. Contractor shall give County prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby. If County

- determines that a change in the Contract Documents is required because of the action taken in response to an emergency, a Work Directive Change or Change Order will be issued to document the consequences of the changes or variation.
- 4.11 For substitutes not included with the Bid, but submitted after the Effective Date of the Contract, Contractor shall make written application to Engineer for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified and be suited to the same use as that specified. The application will also contain an itemized estimate of all costs and delays or schedule impacts that will result directly or indirectly from review, acceptance and provisions of such substitute, including costs of redesign and claims of other Contractors affected by the resulting change, all of which will be considered by the Engineer in evaluating the proposed substitute. Engineer may require Contractor to furnish at Contractor's expense, additional data about the proposed substitute. In rendering a decision, County/Engineer and Contractor shall have access to any available Float or Slack Time in the construction schedule. In the event that substitute materials or equipment not included as part of the Bid, but proposed after the Effective Date of the Contract, are accepted and are less costly than the originally specified materials or equipment, then the net difference in cost shall be credited to the County and an appropriate Change Order executed.
 - 4.11.1 If a specific means, method, sequence, technique or procedure of construction is indicated in or required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to Engineer if Contractor submits sufficient information to allow Engineer to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents.
 - 4.11.2 Engineer will be allowed a reasonable time within which to evaluate each proposed substitute. Engineer will be the sole judge of acceptability and no substitute will be ordered, installed or utilized without Engineer's prior written acceptance which will be evidenced by either a Change Order or an approved shop drawing. County may require Contractor to furnish at Contractor's expense a special performance guarantee or other Surety with respect to any substitute.
 - 4.11.3 Contractor shall reimburse County for the charges of Engineer and Engineer's consultants for evaluating each proposed substitute submitted after the Effective Date of the Contract and all costs resulting from any delays in the Work while the substitute was undergoing review.

- 4.12 The Contractor shall furnish, free of charge, all labor, stakes, surveys, batter boards for structures, grade lines and other materials and supplies and shall set construction stakes and batter boards for establishing lines, position of structures, slopes and other controlling points necessary for the proper prosecution of the construction Work. Where rights-of-way, easements, property lines or any other conditions which make the lay-out of the project or parts of the project critical are involved, the Contractor will employ a competent surveyor who is registered in the State of Florida for lay-out and staking. These stakes and marks shall constitute the field control by and in accord with which the Contractor shall govern and execute the Work. The Contractor will be held responsible for the preservation of all stakes, marks and if for any reason any of the stakes or marks or batter boards become destroyed or disturbed, they will be immediately and accurately replaced by the Contractor.
- 4.13 The Contractor has, by careful examination, satisfied himself as to the nature and location of the Work and all other matters which can in any way affect the Work under this Contract, including, but not limited to details pertaining to boring, as shown on the drawings, are not guaranteed to be more than a general indication of the materials likely to be found adjacent to holes bored at the site of the Work, approximately at the locations indicated. The Contractor shall examine boring data, where available, and make his own interpretation of the subsoil investigations and other preliminary data, and shall base his Bid on his own opinion of the conditions likely to be encountered. In no event shall an extension of time be considered for any conditions that existed at the time of bidding, nor shall the Contractor receive extra compensation for completion of the project as intended by the drawings and in keeping with the Contact documents. No verbal agreement or conversation with any officer, agent or employee of the County, before or after the execution of this Contract, shall affect or modify any of the terms or obligations herein contained.
- 4.14 If the Contractor, in the course of the Work, finds that the drawings and/or Contract Documents cannot be followed, he shall immediately inform the County in writing, and the County shall promptly check the accuracy of the information. Any Work done after such discovery, until any necessary changes are authorized, will be done at the Contractor's risk.

ARTICLE 5. COUNTY'S RESPONSIBILITIES

- 5.1 County shall furnish the data required of County under the Contract Documents promptly and shall make payments to the Contractor within a reasonable time after the Work has been accepted by the County. Payment shall be made no more than twenty (20) business days if County is its own Engineer of Record or twenty-five (25) business days if outside agent approval is required after the pay estimate has been approved by the agent for the County. The form of all submittals, notices, Change Orders and other documents permitted or required to be used or transmitted under the Contract Documents shall be determined by the County/Engineer. Standard County forms shall be utilized.
- 5.2 The County shall provide the lands upon which the Work under this Contract is to be done, except that the Contractor shall provide all necessary additional land required for the erection of temporary construction facilities and storage of his materials, together with right of access to same.
- 5.3 The County shall have the right to take possession of and use any completed portions of the Work, although the time for completing the entire Work or such portions may not have expired, but such taking possession and use shall not be deemed an acceptance of any Work not completed in accordance with the Contract Documents.

ARTICLE 6. CHANGES IN THE WORK

- 6.1 Without invalidating the Contract and without notice to any Surety, County may, at any time, order additions, deletions or revisions in the Work. These will be authorized by a Written Amendment, a Change Order, or a Work Directive Change. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).
- 6.2 Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Time with respect to any Work performed that is not required by the Contract Documents as amended, modified and supplemented.
- 6.3 County and Contractor shall execute appropriate Change Orders, or Written Amendments, covering changes in the Work which are ordered by County, or which may be required because of acceptance of defective Work.
- 6.4 At any time Engineer may request a quotation from Contractor for a proposed change in the Work and within twenty-one (21) calendar days after receipt, Contractor shall submit a written and detailed proposal for an increase or decrease in the Contract Price or Contract Time for the proposed change. Engineer shall have twenty-one (21) calendar days after receipt of the detailed proposal to respond in writing. The proposal shall include an itemized estimate of all costs and time for performance that will result directly or indirectly from the proposed change. Unless otherwise directed, itemized estimates shall be in

sufficient detail to reasonably permit an analysis by Engineer of all material, labor, equipment, subcontracts, overhead costs and fees, and shall cover all Work involved in the change, whether such Work was deleted, added, changed or impacted. Notwithstanding the Request for Quotation, Contractor shall carry on the Work and maintain the progress schedule. Delays in the submittal of the written and detailed proposal will be considered non-prejudicial.

ARTICLE 7. CHANGE OF CONTRACT PRICE

- 7.1 The Contract Price constitutes the total compensation (subject to authorized adjustments) payable to Contractor for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by Contractor shall be at his expense without change in the Contract Price.
- 7.2 The Contract Price may only be changed by Change Order or by a Written Amendment. Any claim for an increase or decrease in the Contract Price shall be based on written notice delivered by the party making the claim to the other party. Notice of the amount of the claim with supporting data shall be delivered within ten (10) days from the beginning of such occurrence and shall be accompanied by claimant's written statement that the amount claimed covers all known amounts (direct, indirect and consequential) to which the claimant is entitled as a result of the occurrence of said event.
- 7.3 The value of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways, at the County's discretion:
 - 7.3.1 Where the Work involved is covered by unit prices contained in the Contract Documents, cost will be determined by application of such unit prices to the quantities of the items involved.
 - 7.3.2 By mutual acceptance of lump sum.
 - 7.3.3 On the basis of the cost of the Work, plus a 15% Contractor's fee for overhead and profit. (Contractor shall submit an itemized cost breakdown together with supporting data.)
- 7.4 Either County or Contractor may make a claim for an adjustment in the Contract Price. The unit price of an item of Unit Price Work shall be subject to reevaluation and adjustment under the following conditions:
 - 7.4.1 If the total cost of a particular item of Unit Price Work amounts to 5% or more of the Contract Price and the variation in the quantity of the particular item of Unit Price Work performed by Contractor differs by more than 15% from the estimated quantity of such item indicated in the Contract; and

- 7.4.2 If there is no corresponding adjustment with respect to any other item of Work; and
- 7.4.3 If a Contractor believes that it has incurred additional expense as a result thereof; or
- 7.4.4 If County believes that the quantity variation entitles it to an adjustment in the unit price; or
- 7.4.5 If the parties are unable to agree as to the effect of any such variations in the quantity of Unit Price Work performed.

ARTICLE 8. CHANGE OF CONTRACT TIME

- 8.1 Contract Time may only be changed by a Change Order or a Written Amendment. Any claim for an extension or shortening of the Contract Time shall be based on written notice delivered by the party making the claim to the other party. Notice of the extent of the claim with supporting data shall be delivered within fifteen (15) days from detection or beginning of such occurrence and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event.
- 8.2 The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of Contractor. Such delays shall include, but not be limited to, acts or neglect by County or others performing additional Work; or to fires, floods, epidemics, abnormal weather conditions or acts of God.
- 8.3 All time limits stated in the Contract Documents are of the essence.

ARTICLE 9. WARRANTY, TEST/INSPECTION, CORRECTION

- 9.1 Contractor warrants, for a minimum period of three (3) years or as otherwise stated herein, and guarantees to County that all Work will be in accordance with the Contract Documents and will not be defective; that County, representatives of County, and governmental agencies with jurisdictional interests will have access to the Work at reasonable time for their observation, inspecting and testing (Contractor shall give Engineer timely notice of readiness of the Work for all required approvals and shall assume full responsibility, including costs, in obtaining required tests, inspections, and approval certifications and/or acceptance, unless otherwise stated by County).
- 9.2 If any Work (including work of others) that is to be inspected, tested, or approved is covered without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation. Such uncovering shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice. Neither observations by

Engineer nor inspections, tests, or approvals by others shall relieve Contractor from Contractor's obligations to perform the Work in accordance with the Contract Documents.

- 9.3 If the Work is defective, or Contractor fails to supply sufficient skilled workers, or suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, County may order Contractor to stop the Work, or any portion thereof and terminate payments to the Contractor until the cause for such order has been eliminated. Contractor shall bear all direct, indirect and consequential costs for satisfactory reconstruction or removal and replacement with non-defective Work, including, but not limited to fees and charges of engineers, architects, attorneys and other professionals and any additional expenses experienced by County due to delays to other Contractors performing additional Work and an appropriate deductive Change Order shall be issued. Contractor shall further bear the responsibility for maintaining schedule and shall not be entitled to an extension of the Contract Time and the recovery of delay damages due to correcting or removing defective Work.
 - 9.3.1 If Contractor fails within seven (7) days after written notice to correct defective Work, or fails to perform the Work in accordance with the Contract Documents, or fails to comply with any other provision of the Contract Documents, County may correct and remedy any such deficiency to the extent necessary to complete corrective and remedial action. County may exclude Contractor from all or part of the site, take possession of all or part of the Work, Contractor's tools, construction equipment and machinery at the site or for which County has paid Contractor but which are stored elsewhere. All direct and indirect costs of County in exercising such rights and remedies will be charged against Contractor in an amount approved as to reasonableness by Engineer and a Change Order will be issued incorporating the necessary revisions.
 - 9.3.2 If within three (3) years after the date of completion or such longer period of time as may be prescribed by laws or regulations or by the terms of any applicable special guarantee required by the Contract Documents, any Work is found to be defective, Contractor shall promptly, without cost to County and in accordance with County's written instructions, either correct such defective Work or if it has been rejected by County, remove it from the site and replace it with non-defective Work. If Contractor does not promptly comply with the terms of such instruction, County may have the defective Work corrected or removed and all direct, indirect and consequential costs of such removal and replacement will be paid by Contractor.

ARTICLE 10. SUSPENSION OR TERMINATION OF WORK

- 10.1 County reserves the right to suspend the Work, or any portion thereof, at any time without cause for a period not to exceed ninety (90) days by written notice to Contractor, which will fix the date on which Work will be resumed. Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension if Contractor makes an approved claim therefore.
 - 10.1.1 If Work is suspended by County for a period that exceeds ninety (90) days; or if Work is suspended by an order of court or other public authority; or if County fails to pay Contractor, then Contractor may, upon seven (7) days written notice to County, terminate the Contract and recover payment for all Work executed.
 - 10.1.2 In lieu of terminating the Contract, if the Engineer has failed to act on any Application for Payment or County has failed to make any payment as aforesaid, Contractor may, upon seven (7) days written notice to County, stop the Work until payment of all amounts then due have been received.
- 10.2 County reserves the right, after giving seven (7) days written notice, to terminate this Contract if:
 - 10.2.1 Contractor persistently fails to perform the Work in accordance with the Contract Documents;
 - 10.2.2 Contractor disregards laws or regulations of any public body having jurisdiction;
 - 10.2.3 Contractor commences a voluntary case under any chapter of the Bankruptcy Code or any similar action by filing a petition under any other federal or state law relating to bankruptcy or insolvency;
 - 10.2.4 Contractor has a petition filed against them under any chapter of the Bankruptcy Code or similar relief under any other federal or state law;
- 10.3 County may exclude Contractor from the site and take possession of the Work and of all Contractor's tools, construction equipment and machinery at the site and use same to the full extent they could be used (without liability to Contractor for trespass or conversion); incorporate in the Work all materials and equipment stored at the site or for which County has paid Contractor but which are stored elsewhere, and finish the Work as County may deem expedient.
 - 10.3.1 Contractor shall not be entitled to receive any further payment beyond an amount equal to the value of material and equipment not incorporated in the Work, but delivered and suitably stored, less the aggregate of payments previously made.

- 10.3.2 If the direct, indirect and consequential costs of completing the Work exceed the unpaid balance of the Contract Price, Contractor shall pay the difference to County. Such costs incurred by County shall be verified by County and incorporated in a Change Order; but in finishing the Work, County shall not be required to obtain the lowest figure for the Work performed. Contractor's obligations to pay the difference between such costs and such unpaid balance shall survive termination of this Contract.
- 10.4 In the event sufficient budgeted funds are not available for a new fiscal year, County shall notify Contractor of such occurrence and Contract shall terminate on the last day of the current fiscal year without penalty or expense to County.
- 10.5 Failure of Contractor to comply with any of the provisions of this Contract shall be considered a Material Breach of Contract and shall be cause for immediate termination of Contract at the discretion of County.
- 10.6 In addition to all other legal remedies available to County, County reserves the right to terminate and obtain from another source, any commodities or services which have not been delivered within the Contract Time as stated in the Contract Documents.

ARTICLE 11. CONTRACT CLAIMS & DISPUTES

11.1 Except as otherwise provided herein, any dispute arising under this Contract shall be decided by the Purchasing Official in accordance with Section 2-26-63 of the Manatee County Code subject to an administrative hearing process provided in 2-26-64. The decision of the Board of County Commissioners in accordance with Section 2-26-64 of the Manatee County Code shall be the final and conclusive County decision subject to exclusive judicial review in the circuit court by a petition for certiorari.

ARTICLE 12. RESIDENT PROJECT REPRESENTATIVE - DUTIES, RESPONSIBILITIES

- 12.1 The Resident Project Representative is the Engineer's Agent, who will act as directed by and under the supervision of the Engineer, and who will confer with County regarding his actions. Resident Project Representative's dealing in matters pertaining to the on-site Work shall, in general, be only with the County and Contractor and dealings with Subcontractors shall only be through or with the full knowledge of Contractor.
- 12.2 Resident Project Representative will:
 - 12.2.1 Review the progress schedule, schedule of shop drawing submissions and Schedule of Values prepared by Contractor and consult with County concerning their acceptability.

- 12.2.2 Attend Preconstruction Conferences. Arrange a schedule of progress meetings and other job conferences as required in consultation with County and notify those expected to attend in advance. Attend meetings and maintain and circulate copies of minutes thereof.
- 12.2.3 Serve as County's liaison with Contractor, working principally through Contractor's superintendent and assist him in understanding the intent of the Contract Documents. As requested by Contractor, assist in obtaining additional details or information when required at the job site for proper execution of the Work.
- 12.2.4 Receive and record date of receipt of Shop Drawings and samples, receive samples which are furnished at the site by Contractor and notify Engineer of their availability for examination.
- 12.2.5 Advise Engineer and Contractor or his superintendent immediately of the commencement of any Work requiring a shop drawing or sample submission if the submission has not been approved by the County.
- 12.2.6 Conduct on-site observations of the Work in progress to assist Engineer in determining if the Work is proceeding in accordance with the Contract Documents and that completed Work will conform to the Contract Documents.
- 12.2.7 Report to County whenever he or she believes that any Work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or does not meet the requirements of any inspections, tests or approvals required or if Work has been damaged prior to final payment; and advise Contractor when he believes Work should be corrected or rejected or should be uncovered of observation or requires special testing, inspection or approval.
- 12.2.8 Verify that tests, equipment and system start-ups and operating and maintenance instructions are conducted as required by the Contract Documents and in the presence of the required personnel, and that Contractor maintains adequate records thereof; observe, record and report to Engineer appropriate details relative to the test procedures and start-ups.
- 12.2.9 Accompany visiting inspectors representing public or other agencies having jurisdiction over the project; record the outcome of these inspections and report to County.
- 12.2.10 Transmit to Contractor, Engineer's clarifications and interpretations of the Contract Documents.

- 12.2.11 Consider and evaluate Contractor's suggestions or modifications in drawings or Contract Documents and report them with recommendations to County.
- 12.2.12 Maintain at the job site orderly files for correspondence, reports of job conferences, Shop Drawings and sample submissions, reproductions of original Contract Documents including all Addenda, Change Orders, field orders, additional drawings issued subsequent to the execution of the Contract, Engineer's clarifications and interpretations of the Contract Documents, progress reports and other project related documents.
- 12.2.13 Keep a diary or log book, recording hours on the job site, weather conditions, data relative to questions of extras or deductions; list of visiting officials and representatives or manufacturers, fabricators, Suppliers and distributors; daily activities, decisions, observations in general and specific observations in more detail as in the case of observing test procedures. Send copies to County.
- 12.2.14 Record names, addresses and telephone numbers of all Contractors, Subcontractors and major Suppliers of materials and equipment.
- 12.2.15 Furnish Engineer periodic reports as required of progress of the Work and Contractor's compliance with the approved progress schedule and schedule of shop drawing submissions.
- 12.2.16 Consult with Engineer in advance of scheduling major tests, inspections or start of important phases of the Work.
- 12.2.17 Report immediately the occurrence of any accident.
- 12.2.18 Review applications for payment with Contractor for compliance with the established procedure for their submission and forward them with recommendations to Engineer, noting particularly their relation to the Schedule of Values, Work completed and materials and equipment delivered at the site but not incorporated in the Work.
- 12.2.19 During the course of the Work, verify that certificates, maintenance and operations manuals and other data required to be assembled and furnished by Contractor are applicable to the items actually installed, and deliver this material to County for his review prior to final acceptance of the Work.
- 12.2.20 Before Engineer issues a certificate of Substantial Completion, submit to Contractor a list of observed items requiring completion or correction.

- 12.2.21 Conduct final inspection in the company of County and/or Engineer and Contractor and prepare a Punch List of items to be completed or corrected. Reference Florida Statutes § 218.735(7).
- 12.2.22 Verify that all items on final list have been completed or corrected and make recommendations to County concerning acceptance.
- 12.3 Except upon written instructions of Engineer, Resident Project Representative:
 - 12.3.1 Shall not authorize any deviation from the Contract Documents or approve any substitute materials or equipment;
 - 12.3.2 Shall not exceed limitations on Engineer's authority as set forth in the Contract Documents;
 - 12.3.3 Shall not undertake any of the responsibilities of Contractor, Subcontractors or Contractor's superintendent, or expedite the Work;
 - 12.3.4 Shall not advise on or issue directions relative to any aspect of the means, methods, techniques, sequences or procedures of construction unless such is specifically called for in the Contract Documents;
 - 12.3.5 Shall not advise on or issue directions as to safety precautions and programs in connection with the Work;
 - 12.3.6 Shall not authorize County to occupy the project in whole or in part; and
 - 12.3.7 Shall not participate in specialized field or laboratory tests.

ARTICLE 13. APPRENTICES

- 13.1 If successful Contractor employs apprentices, he shall be governed and comply with the provisions of Fla.Stat. § 446.011.
 - NOTE: The form of all submittals, notices, Change Orders and other documents permitted or required to be used or transmitted under the Contract shall be determined by the County. Standard County forms shall be utilized.

END OF SECTION E

SECTION F

FORM OF CONTRACT BETWEEN THE

COUNTY OF MANATEE, FLORIDA AND CONTRACTOR AS IDENTIFIED BELOW ON THE BASIS OF A STIPULATED UNIT COST CONTRACT PRICE

ARTICLE 1. WORK

CONTRACTOR shall furnish all labor, materials, supplies, and other items required to complete the Work for IFB #14-0364CD- Roof Replacement for Manatee County Public Safety/Traffic Management Center in strict accordance with Contract Documents and any duly authorized subsequent Addenda thereto, all of which are made a part hereof.

ARTICLE 2. COMPENSATION

As compensation to CONTRACTOR, COUNTY shall pay and CONTRACTOR will accept as full consideration for the performance of all Work required by IFB #14-0364CD-Roof Replacement for Manatee County Public Safety/Traffic Management Center, subject to additions and deductions as provided therein, the sum of \$xxxxx.xx based on a completion time of 90 calendar days.

ARTICLE 3. LIQUIDATED DAMAGES

Time is of the essence in this CONTRACT. As of the date of this CONTRACT, the damages that will be suffered by COUNTY in the event of CONTRACTOR'S failure to timely complete the Work are impossible to determine. In lieu thereof, it is agreed that if CONTRACTOR fails to achieve Final Completion of the Work within 90 calendar days of issuance of the Notice to Proceed (accounting, however, for any extensions of time granted pursuant to approved Change Orders), CONTRACTOR shall pay to COUNTY,

as liquidated damages (and not as a penalty), the sum of \$966 per calendar day for each day beyond 90 days until CONTRACTOR achieves Final Completion. COUNTY shall have the option of withholding said liquidated damages from any pay application(s) thereafter submitted by CONTRACTOR. Alternatively, CONTRACTOR shall immediately pay said sums to COUNTY upon COUNTY'S demand for same.

ARTICLE 4. ENGINEER

The COUNTY of MANATEE, Property Management Department, is responsible as COUNTY and Karins Engineering Group, Inc. as "ENGINEER," designed this Project and is responsible for technical/engineering reviews and decisions. The ENGINEER is a member of COUNTY'S Project Management team which is collectively responsible for ensuring the Work is completed in accordance with the Contract Documents.

All communications involving this Project will be addressed to: <u>Tom Yarger</u>, <u>Construction Services Division Manager</u>, <u>Property Management Department</u> and to the Engineer of Record, <u>John Bonacci</u>, <u>P.E.</u>, <u>Karins Engineering Group</u>, <u>Inc.</u>. <u>All invoicing</u> will be addressed to the attention of: <u>Tom Yarger</u> (address noted below) with invoice copies sent to John Bonacci, P.E. (address noted below).

Manatee County Property Management Dept. IFB# 14-0364CD
Attention: Tom Yarger
Construction Services Division Manager
1112 Manatee Avenue West, Suite 862
Bradenton, Florida 34205
Phone (941) 745-4501 ext. 3003

Karins Engineering Group, Inc. IFB# 14-0364CD Attn: John Bonacci, P.E. Engineer 2017 Fiesta Drive Sarasota, Florida 34231 Phone (941) 927-8525

Where the terms ENGINEER and/or COUNTY are used in the Contract Documents, it shall mean COUNTY'S Project Management team.

ARTICLE 5. CONTRACTOR'S REPRESENTATIONS

In order to induce COUNTY to enter into this CONTRACT, CONTRACTOR makes the following representations:

- 5.1 CONTRACTOR has familiarized itself with the nature and extent of the Bid Documents, Work, site, locality and all local conditions and laws and regulations that in any manner may affect cost, progress, performance or furnishing of the Work.
- 5.2 CONTRACTOR has studied carefully all drawings of the physical conditions upon which CONTRACTOR is entitled to rely.
- 5.3 CONTRACTOR has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests, reports and studies which pertain to the physical conditions at or contiguous to the site or which otherwise may affect the cost, progress, performance or furnishing of the Work as CONTRACTOR considers necessary for the performance or furnishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Bid Documents; and no additional examinations, investigations, explorations, tests, reports, studies or similar information or data are or will be required by CONTRACTOR for such purposes.
- 5.4 CONTRACTOR has reviewed and checked all information and data shown or indicated on the Bid Documents with respect to existing Underground Facilities at or contiguous to the site and assumes responsibility for the accurate location of said Underground Facilities. Any additional examinations, investigations, explorations, tests, reports, studies or similar information or data in respect of said Underground Facilities conducted by CONTRACTOR will be done at CONTRACTOR'S expense.

- 5.5 CONTRACTOR has correlated the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Bid.
- 5.6 CONTRACTOR has given COUNTY written notice of all conflicts, errors or discrepancies that have been discovered in the Bid Documents and the written resolution thereof by COUNTY is acceptable to CONTRACTOR.
- 5.7 CONTRACTOR shall schedule and perform the Work subject to COUNTY'S approval and shall hold COUNTY harmless from all liabilities incurred due to CONTRACTOR'S failure to coordinate with COUNTY.

ARTICLE 6. CONTRACT DOCUMENTS

The Contract Documents which comprise the entire CONTRACT between COUNTY and CONTRACTOR concerning the Work consist of the following:

- 6.1 This CONTRACT and Bid Document **IFB #14-0364CD**
- 6.2 Invitation for Bid #14-0364CD, in its entirety
- 6.3 Public Construction Bond Form and Insurance Certificate(s)
- 6.4 Drawings/Plans (not attached)
- 6.5 Addendum number \underline{x} to \underline{x} inclusive
- 6.6 CONTRACTOR'S Bid Form
- 6.7 Reports
- 6.8 The following, which may be delivered or issued after the Effective Date of the CONTRACT and are not attached hereto: all written Change Orders and other documents amending, modifying, or supplementing the Contract Documents.

6.9 The documents listed in paragraphs above are attached to this CONTRACT (except as noted otherwise above). There are no Contract Documents other than those listed above in this Article 6.

ARTICLE 7. DISPUTE RESOLUTION

Disputes shall be resolved as follows: good faith negotiations by the designated agents of the parties and if not resolved by such designated agents, CONTRACTOR shall submit its claim, with the basis for the dispute, in writing to the Manatee County Purchasing Official for a determination and handling in accordance with the provisions of Chapter 2-26 of the Manatee County Code.

ARTICLE 8. NO WAIVER

- 8.1 The failure of CONTRACTOR or COUNTY to insist on the strict performance of the terms and conditions hereof shall not constitute or be construed as a waiver or relinquishment of either party's right to thereafter enforce the same in accordance with this CONTRACT in the event of a continuing or subsequent default on the part of CONTRACTOR or COUNTY.
- 8.2 Nothing herein shall be interpreted as a waiver of COUNTY of its rights, including the limitations of the limited waiver of sovereign immunity, as set forth in Florida Statute 768.28, or any other statute, and COUNTY expressly reserves these rights to the full extent allowed by law.

ARTICLE 9. NO THIRD-PARTY BENEFICIARIES

This CONTRACT is solely for the benefit of the parties hereto, and no right, privilege, or cause of action shall by reason hereof accrue upon, to, or for the benefit of any third party. Nothing in this CONTRACT is intended or shall be construed to confer upon or give any person, corporation, partnership, trust, private entity, agency, or any other governmental entity any right, privilege, remedy, or claim under or by reason of this CONTRACT or any provisions or conditions hereof.

ARTICLE 10. GOVERNING LAW, JURISDICTION AND VENUE

- 10.1 This CONTRACT and the construction and enforceability thereof shall be interpreted under the laws of the State of Florida.
- 10.2 CONTRACTOR consents and agrees that all legal proceedings related to the subject matter of this CONTRACT shall be governed by the laws of and maintained in courts sitting with the State of Florida.
- 10.3 CONTRACTOR consents and agrees that jurisdiction for such proceedings shall lie exclusively with such court and venue in Manatee County, Florida, or if in Federal Court, the Middle District of Florida, Tampa Division.
- 10.4 In the event of any litigation arising under the terms of this CONTRACT, each party shall be responsible for their own attorney's fees, including appellate fees, regardless of the outcome of the litigation.

ARTICLE 11. FORCE MAJEURE

Neither party shall be considered in default of performance of such obligations hereunder to the extent that performance of such obligations or any of them is delayed or prevented by Force Majeure. Force Majeure shall include, but not be limited to hostility, revolution, civil commotion, strike, epidemic, fire, flood, wind, earthquake, hurricane, or other disruptive event of nature, act of terrorism, explosion, lack of or failure of transportation or bridge/roadway facilities, any law, proclamation, regulation, ordinance or other act of government, or any act of God or any cause whether of the same or different nature, existing or future; provided that the cause, whether or not enumerated in this Article, is beyond the control and without the fault or negligence of the party seeking relief under this Article.

ARTICLE 12. MISCELLANEOUS

- 12.1 Terms used in this CONTRACT are defined in Article 1 of Section E, General Conditions.
- 12.2 No assignment by a party hereto of any rights under or interest in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, monies that may become due and monies that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law); and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignee from any duty or responsibility under the Contract Documents.
- 12.3 COUNTY and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect of all covenants, agreements, and obligations contained in the Contract Documents.
- 12.4 By accepting Award of this CONTRACT, CONTRACTOR, which shall include its directors, officers and employees, represents that it presently has no interest in and shall acquire no interest in any business or activity which would conflict in any manner with the performance of duties or services required hereunder.

CONTRACT IFB #14-0364CD

IN WITNESS WHEREOF, the parties hereto have caused this CONTRACT **14-0364CD** to be duly executed by their authorized representatives.

CONTRACTOR

		Ву:	
			Print Name & Title of Signer
		Date:	
COUN	TY OF MANATEE, FLORIDA		
Ву:	Melissa M. Wendel, CPPO Purchasing Official		
Date:			

BID FORM

(Submit in triplicate)

For: IFB #14-0364CD-ROOF REPLACEMENT FOR MANATEE COUNTY PUBLIC SAFETY/TRAFFIC MANAGEMENT CENTER

	PUBLIC	SAFETY/TR	AFFIC MANAGEMEN	NT CENTER	₹
Total Offer:					
Based on a con	npletion 1	ime of 90 c	alendar days		
Only one schedule f	for Comple	tion of the Wo	ork shall be considered.	Only one A	ward shall be made.
full knowledge and	understand	ding of the afo	we have carefully review prementioned herewith s tained in the Invitation for	submit this B	id, meeting each and
Specifications, term Manatee County a whereupon, the def	ns, and conditions of the Sulanting Co	onditions sha ccessful Bidd ntractor shall	package, in its entirety all be made a part of der. Failure to comply be required to pay for a County, and agrees to for	any resultin shall result any and all r	ng Contract betweer in Contract default e-procurement costs
Communications co	ncerning t	his Bid shall b	e addressed as follows:	(Complete	all fields)
Bidder's Name:					
Mailing Address:					
Telephone:			Fax: <u>(</u>)	
				,	
•			ference policy of Manate	e County.	attest that I have
L			on [date(s)]		attest that I have
visited the Project si	ite(s) to far	niliarize myse	If with the full Scope of V		
Acknowledge Addend	lum No.	Dated:	Acknowledge Adder	ndum No.	Dated:
			Acknowledge Adder		
			Acknowledge Adder		
Authorize	ed Signatu	re(s):			

Name and Title of Above Signer(s):

BID FORM

(Submit in Triplicate) Section 00300

ROOF REPLACEMENT FOR MANATEE COUNTY PUBLIC SAFETY/TRAFFIC MANAGEMENT CENTER

Bid Based on Completion Time of 90 Calendar Days

ITEN#	Bid Based on Completion			1.70	EVTENDED
ITEM		EST.			EXTENDED
NO.	DESCRIPTION	QTY.	U/M	UNIT PRICE	PRICE
1	MOBILIZATION	1	LS	\$	\$
2	REROOF USING SBS MODIFIED BITUMEN SYSTEM	1	LS	\$	\$
3	STRUCTURAL CONCRETE REPAIRS	11,500	SF	\$	\$
4	RELATIVE HUMIDITY TESTING	4	EA	\$	\$
5	PARAPET COPING REPLACEMENT	959	LF	\$	\$
6	SCUPPER COPING REPLACEMENT	25	EA	\$	\$
7	ONE-WAY ROOF VENT ADDITION	55	EA	\$	\$
8	LEAD BOOT REPLACEMENT	100	EA	\$	\$
9	PROTECTION OF ROOFING SYSTEM DURING DOWN TIME (SECTION 07500 ARTICLE 3.01.F)	10	DAY	\$	\$
	TOTAL BASE BID- Based on Completion Time of <u>90</u> Calendar Days				\$
10	CONTRACT CONTINGENCY WORK (USED ONLY WITH COUNTY APPROVAL)			OF TOTAL SASE BID	\$
	TOTAL OFFER with Contract Contingency- Based on Completion Time of <u>90</u> Calendar Days				\$

bidder marrie		
Authorized Sign	nature:	

FORM A **CONTRACTOR'S QUESTIONNAIRE**

(Submit in Triplicate)

The Bidder warrants the truth and accuracy of all statements and answers herein contained. (Attach additional pages if necessary.)

THIS QUESTIONNAIRE MUST BE COMPLETED AND SUBMITTED WITH YOUR BID

1.	Contact Information:
	License #:
	License Issued to:
	Date License Received (MM/DD/YR):
	Company Name:
	Physical Address:
	City: State of Incorporation: Zip Code:
	Phone Number: () Fax Number: () Email address:
2.	Bidding as: an individual; a partnership; a corporation; a joint venture
3.	If a partnership, list names and addresses of partners; if a corporation, list names of officers, directors, shareholders, and state of incorporation; if joint venture, list names and address of ventures' and the same if any venture are a corporation for each such corporation, partnership, or joint venture:
4.	Bidder is authorized to do business in the State of Florida: Yes No For how many years?
5.	Your organization has been in business (under this firm's name) as a
	Is this firm in bankruptcy?
	BIDDER:

6.	Bidder has been an approved applicator by the specified manufacturer for how many years: Attach a copy of your current license or authorization from the manufacturer and a list of projects where this specific type of work and roofing system was performed.
7.	Describe and give the date and County of the last three governmental or private projects of similar scope you've completed which are similar in cost, type, size, and nature as this Project. Include contact name and phone number. Provide the budget, actual cost, size and summary of work for each project. Attach additional pages as necessary. (Note: If listing a Manatee County reference, contact person should not be directly associated with this Project.
8.	Have you ever been assessed liquidated damages under a Contract during the past five (5) years? If so, state when, where (contact name, address and phone number) and why.
9.	Have you ever failed to complete projects awarded to you? Or failed to complete projects within Contract Time? If so, state when, where (contact name, address, phone number) and why.
10.	Have you ever been debarred or prohibited from providing a Bid to a governmental entity? If yes, name the entity and describe the circumstances:
	BIDDER:

11.	Will you subcontract any part of this Work? If so, describe which major portion(s) and percentage(%) of project being subcontracted:
12.	If any, list (with Contract amount) MBE/DBE to be utilized:
13.	What equipment do you own to accomplish this Work? (A listing may be attached)
14.	What equipment will you purchase/rent for the Work? (Specify which)
15.	List the following in connection with the Surety which is providing the bond(s): Surety's Name:
	Name, address, phone number and email of Surety's resident agent for service of process in Florida:
	Agent's Name: Address:
	Phone: Email:
	BIDDER:

FORM B

PUBLIC CONTRACTING AND ENVIRONMENTAL CRIMES CERTIFICATION

SWORN STATEMENT PURSUANT TO ARTICLE V, MANATEE COUNTY PURCHASING ORDINANCE

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.

This sworn statement is submitted to the Manatee County Board of County Commissioners by

s no ient:

procurement of goods or services (including professional services) or a County lease, franchise, concession or management Contract, or shall receive a grant of County monies unless such person or entity has submitted a written certification to County that it has not:

- (1) been convicted of bribery or attempting to bribe a public officer or employee of Manatee County, the State of Florida, or any other public entity, including, but not limited to the Government of the United States, any state, or any local government authority in the United States, in that officer's or employee's official capacity; or
- (2) been convicted of an agreement or collusion among Bidders or prospective Bidders in restraint of freedom of competition, by agreement to bid a fixed price, or otherwise; or
- (3) been convicted of a violation of an environmental law that, in the sole opinion of County's Purchasing Official, reflects negatively upon the ability of the person or entity to conduct business in a responsible manner: or
- (4) made an admission of guilt of such conduct described in items (1), (2) or (3) above, which is a matter of record, but has not been prosecuted for such conduct, or has made an admission of guilt of such conduct, which is a matter of record, pursuant to formal prosecution. An admission of guilt shall be construed to include a plea of nolo contendere; or
- (5) where an officer, official, agent or employee of a business entity has been convicted of or has admitted guilt to any of the crimes set forth above on behalf of such an entity and pursuant to the direction or authorization of an official thereof (including the person committing the offense, if he is an official of the business entity), the business shall be chargeable with the conduct herein above set forth. A business entity shall be chargeable with the conduct of an affiliated entity, whether wholly owned, partially owned, or one which has common ownership or a common Board of Directors. For purposes of this Form, business entities are affiliated if, directly or indirectly, one business entity controls or has the power to control another business entity, or if an individual or group of individuals controls or has the power to control both entities. Indicia of control shall include, without limitation, interlocking management or ownership, identity of interests among family members, shared organization of a business entity following the ineligibility of a business entity under this Article, or using substantially the same management, ownership or principles as the ineligible entity.

(Continued)

Any person or entity who claims that this Article is inapplicable to him/her/it because a conviction or judgment has been reversed by a court of competent jurisdiction shall prove the same with documentation satisfactory to County's Purchasing Official. Upon presentation of such satisfactory proof, the person or entity shall be allowed to contract with County.

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR MANATEE COUNTY IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT ANY CONTRACT OR BUSINESS TRANSACTION SHALL PROVIDE FOR SUSPENSION OF PAYMENTS, OR TERMINATION, OR BOTH, IF THE CONTRACTING OFFICER OR COUNTY ADMINISTRATOR DETERMINES THAT SUCH PERSON OR ENTITY HAS MADE FALSE CERTIFICATION.

		[Signature]	
STATE OF FLORIDA COUNTY OF			
Sworn to and subscribed before me this	_ day of	, 20by	
Personally known OI	R Produced identi	fication[Type of identification]	
	My	commission expires	
Notary Public Signature			
Print. type or stamp Commissioned name o	(Notes B 181		

Signatory Requirement - In the case of a business entity other than a partnership or a corporation, this affidavit shall be executed by an authorized agent of the entity. In the case of a partnership, this affidavit shall be executed by the general partner(s). In the case of a corporation, this affidavit shall be executed by the corporate president.

FORM C SWORN STATEMENT THE FLORIDA TRENCH SAFETY ACT

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR BY AN OFFICER AUTHORIZED TO ADMINISTER OATHS.

1.	This Sworn Statement is su	bmitted with <u>IFE</u>	3 No. 14-03640	<u>:D</u>	
2.	business address is				and, if
	applicable, its Federal Emp no FEIN, include the Social			IIN) IS	If the entity has
3.	Name of individual signing whose relationship to the a				
4.	The Trench Safety Standa include, but are not limited RULES AND REGULATION	to: Laws of Flor	rida, Chapters 9	0-96, TRENCH SA	FETY ACT, and OSHA
5.	The undersigned assures the agrees to indemnify and he from any claims arising from	old harmless Co	unty and Engin	eer, and any of the	h Safety Standards and ir agents or employees
6.	The undersigned has appro	priated the follo Units of	wing costs for c	compliance with the	applicable standards:
	Trench Safety Measure (Description)	Measure (LF, SY)	Unit <u>Quantity</u>	Unit Cost	Extended <u>Cost</u>
	a			\$	
	b				
	C				
	d				
7.	The undersigned intends to	comply with the	ese standards b	y instituting the foll	owing procedures:
	THE UNDERSIGNED, in so available geotechnical information necessary to adequately de	mation and mad	de such other in	nvestigations and to	ests as they may deem
			(AL	JTHORIZED SIGN	ATURE / TITLE)
	SWORN to and subscribed (Impress official seal)	before me this _	•		•
	Notary Public, State of Flori	ida:			
	My commission expires:				

FORM D MANATEE COUNTY GOVERNMENT AFFIDAVIT AS TO LOCAL BUSINESS (Complete and Initial Items B-F)

A. Authorized Representative

I, [name]	, am the [title]	and	the	duly
authorized representative of: [nai	me of business]			,
authority to make this Affidavit o submit a Bid pursuant to this Invi preference policies of Manatee (al knowledge to make informed responses to these in behalf of myself and the business for which I a itation for Bid, shall be deemed to understand and County; and that I have the direct knowledge to so to be considered to be a local business as requ	am acting; and by d agree to the loca state that this firn	electi al bus n com	ing to siness nplies
and/or services and has a physi Sarasota County with at least on	that the above business is legally authorized to cal place of business in Manatee, DeSoto, Hard le (1) fulltime employee at that location. The phy::	ee, Hillsborough, /sical address of the	Pinell	las or cation
Business Phone Number:				
Email Address:				
	at business operations began at the above physic			
business has not admitted guil	that within the past five (5) years of the date of t nor been found guilty by any court or local, of any criminal law or administrative regulation re	state or federal	regul	latory
or notice of violation of any Man	I certify that this business is not currently subjectee County Code provision, with the exception appeal within the date of this Bid announcement.	of citations or not		which
	at this business is not delinquent in the payment all unit or taxing authority within Manatee County t legal appeal.	, with the exception		those
Each of the above certifications i the Manatee County Code.	is required to meet the qualification of "local busin	ess" under Section	n 2-20	6-6 of
	Signature of Affiant			
STATE COUNTY OF	OF		FLC	ORIDA
Sworn to (or affirmed) and subscrib statement).	ped before me this day of, 20	by (name of per	son m	naking
(Notary Seal) Signature of Notary:_				
Name of Notary: (Typ	ped or Printed)	<u></u>		
Personally Known OR Produced	Identification Type of Identification Produced			

Submit executed copy to Manatee County Purchasing Division - 1112 Manatee Avenue West - Suite 803 - Bradenton, FL 34205



R. B. "Chips" Shore

CLERK OF THE CIRCUIT COURT AND COMPTROLLER OF MANATEE COUNTY

1115 Manatee Avenue West, Bradenton, Florida 34205 - Phone (941) 749-1800 - Fax (941) 741-4082 P.O. Box 25400, Bradenton, Florida 34206 - www.manateeclerk.com

E PAYABLES APPLICATION

Company name	
Contact person	
Phone number	
Email Address	
	FINANCE USE ONLY
Open orders: YES or NO PEID CREATE DATE	
CONFIRMED WITH	
	Name and phone number
FAS	
BANK	Return completed form to: Via email to: lori.bryan@manateeclerk.com
NITIALS	Via fax to: (941) 741-4011 Via mail: PO Box 1000 Bradenton, Fl 34206
Revised: June 26, 2013	

MAILING LABEL

Cut along the outside border and affix this label to your sealed Bid envelope to identify it as a "Sealed Bid". Be sure to include the name of the company submitting the Bid and the Bid due date and time where requested.

MAILING LABEL TO AFFIX TO OUTSIDE OF SEALED BID PACKAGE:

i
SEALED BID - DO NOT OPEN
CONTRACTOR:
SEALED BID NO: 14-0364CD
BID TITLE: Roof Replacement for Manatee County Public Safety/
Traffic Management Center
DUE DATE/TIME: @



2017 Fiesta Dr Sarasota, FL 34231 Tel: (941) 927-8525 Fax: (941) 927-8075 www.keg-engineering.com

PROJECT MANUAL

KEG File: 13DS-1004.02 December 05, 2013

Roof Replacement for Manatee County Public Safety/Traffic Management Center 2101 47th Terrace E, Bradenton, FL 34203

Florida Certificate of Authorization Number 8371

St. Petersburg Sarasota – Main Office Ft. Lauderdale Naples / Ft. Myers

Manatee County Roof Replacement

Manatee County Public Safety/Traffic Management Center

2101 47th Terrace E Bradenton, FL 34203

December 05, 2013

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SECTION 00050 CODE SUMMARY

PART 1 - GENERAL

1.01 **Related Documents**

Drawings, Specifications and general provisions of the Contract, including General and Α. Supplementary Conditions apply to this Section.

1.02 **Summary**

- A. This Section specifies the Design Loads and Building Codes applicable to this project.
- B. It is intended that this Project Manual cover replacement of roofing membrane.
- C. For more information on work items, refer to the appropriate Section(s) of the Contract Documents.

Building Code 1.03

A. All work performed under this Project Manual shall meet the requirements of the Florida Building Code, Existing Building, 2010 Edition. The subsequent listed sections are from this code and are provided as a general reference as they relate to this project.

B. **SECTION 405 ALTERATION LEVEL 3**

405.1 Scope. Level 3 alterations apply where the work area exceeds 50 percent of the aggregate area of the building and made within any 12-month period.

Exception: Work areas in which the alteration work is exclusively plumbing, mechanical or electrical shall not be included in the computation of total area of all work areas.

405.2 Application. Level 3 alterations shall comply with the provisions of Chapters 6 and 7 for Level 1 and 2 alterations, respectively, as well as the provisions of Chapter 8.

C. **SECTION 801 GENERAL**

- 801.1 Scope. Alterations classified as Level 3 alterations as described in Section 405 shall comply with the requirements of this chapter.
- 801.2 Compliance. In addition to the provisions of this chapter, work shall comply with all of the requirements of Chapters 6 and 7. The requirements of Sections 703, 704, and 705 shall apply within all work areas whether or not they include exits and corridors shared by more than one tenant and regardless of the occupant load.

Exception: Buildings in which the reconfiguration of space affecting exits or shared egress access is exclusively the result of compliance with the accessibility requirements of Section 605 shall not be required to comply with this chapter.

D. **SECTION 802 SPECIAL USE AND OCCUPANCY**

802.1 High-rise buildings. Any building having occupied floors more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access shall comply with the requirements of Sections 802.1.1 and 802.1.2.

E. **SECTION 442 STORM SHELTERS**

442.1 General. In addition to other applicable requirements in this code, storm shelters shall be constructed in accordance with ICC 500.

SECTION 00050 CODE SUMMARY

405.1 Scope. This section applies to the construction of storm shelters constructed as separate detached buildings or constructed as safe rooms within buildings for the purpose of providing safe refuge from storms that produce high winds, such as tornados and hurricanes. Such structures shall be designated to be hurricane shelters, tornado shelters, or combined hurricane and tornado shelters.

F. Per ICC 500, Section 304.1, "Design wind pressures shall be determined using Method 2, Analytical Procedure, from Section 6 of ASCE 7 except as modified by this section." Based on this information, wind loads on the structure have been calculated in accordance with ASCE 7-05 for the following:

1. Design Wind Speed: 200 mph 3 second gust

2. Exposure Category: C

Internal Pressure Coefficient, GCpi: +/-0.18
 Wind Load Importance Factor: 1.00

5. Enclosure Classification: Enclosed

6. Wind Directionality Factor: 1.0

7. Components & Cladding Design Wind Pressures: See attached supplemental sheets

END OF SECTION 00050

SECTION 01010 SUMMARY OF WORK

PART 1 - GENERAL

1.01 Related Documents

A. Drawings, Specifications and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.

1.02 Summary

- A. This Section specifies the Summary of Work to be done at the Manatee County Public Safety/Traffic Management Center under the Contract Documents of which this Section is a part.
- B. The existing structural system is comprised of nearly flat roofing system over concrete topped metal decking and wide flange beams supported by wide flange beams and columns on conventional foundations. Work will be limited to the reroofing of the roof membrane and shall include structural concrete repairs, parapet coping replacement, scupper coping replacement and addition of one-way roof vents.
- C. During the progress of the Work, the building will be occupied and every effort shall be made to accommodate the occupants and building function including the phasing of Work, the scheduling of Work, the scheduling of any access to a unit as well as maintaining access to parking lots.
- D. Lack of inclusion of work items in the Summary of Work does not alleviate CONTRACTOR from its responsibility to complete items of the Work that are identified elsewhere in the Contract Documents; or are required to complete identified items of the Work or may be reasonably inferred as included in other identified items.
- E. For more information on work items, refer to the appropriate Section(s) of the Contract Documents.

1.03 Temporary Facilities

- A. CONTRACTOR will provide temporary sanitary facilities. Facilities must be maintained in a clean and orderly condition. Facility location will be provided by MANATEE COUNTY.
- B. MANATEE COUNTY will provide water and power. CONTRACTOR will be responsible for distribution of power and water from MANATEE COUNTY supplied sources.
- C. CONTRACTOR will take any necessary steps to protect building, driveways, previously replaced roofs and other items not identified for work from damage due to the work. Protection measures shall be acceptable to MANATEE COUNTY.
- D. CONTRACTOR shall phase, schedule and coordinate all Work so as to minimize the impact on the occupants of noise, access, and interruption of function.
- E. CONTRACTOR shall provide temporary facilities for on-site storage of shutters, glass, debris, etc. Facility locations will be provided by MANATEE COUNTY.

PART 2 - PRODUCTS

2.01 Project Products and Materials

A. Products and Materials to be utilized in the Work shall be as specified elsewhere in the Contract Documents of which this is a part.

SECTION 01010 SUMMARY OF WORK

B. To the extent reasonably practicable, products and materials to be incorporated in the project shall be manufactured by a single source.

PART 3 - EXECUTION

3.01 Work Description

- A. General: The quantities have been determined by visual observations on top of the existing roof system and from existing drawings.
- В. Estimated Unit Prices are for bidding purposes only. Unit Price work will be billed based upon the actual quantities as verified by ENGINEER. General Conditions shall be included in the unit price.
- C. Unit and Fixed Prices shall include the removal and replacement of finish materials. (I.e. Stucco, Paint, etc.).
- D. Mobilization shall include job start up and breakdown, staging setup, deposits on equipment, etc.
- E. General Conditions shall include, but not be limited to, office overhead, supervision, staging rental, portable sanitation, dumpsters, and any item not included elsewhere in the bid costs. General Conditions associated with additions or reductions in quantities of Unit Price Work shall be included in the unit prices.
- F. Estimated quantities in the Fixed Price are for informational purposes used during the evaluation of the bidders. Fixed Costs shall be billed at the Fixed Cost price.
- G. Permit Costs shall be billed as a direct cost to the Owner plus time expended
- Η. Fixed and Unit Price Work shall include all items such as surface preparation, sealants, control joints, installation, cant, finishes, material, labor, equipment, shoring, scaffolding, clean-up, etc. as may be necessary to complete the work and the following items:
 - 1. MANATEE COUNTY will be responsible for removing all existing debris and equipment from areas immediately adjacent to eave of roofs before the CONTRACTOR is scheduled to start work.
 - 2. The CONTRACTOR shall document the condition of the roofing system with photos and by any other means required to document the existing structure prior to the commencement of the work and shall provide a report of their findings to MANATEE COUNTY. CONTRACTOR shall protect the roof from damage while proceeding with the Work. The CONTRACTOR shall notify MANATEE COUNTY of any damage to the roof during construction to MANATEE COUNTY immediately.
 - 3. The CONTRACTOR shall remove all existing roofing membranes and insulations down to the top of the concrete filled deck in quadrants. The CONTRACTOR shall ensure that concrete deck is free of moisture before proceeding with the Work. The CONTRACTOR shall protect the concrete filled deck and all sub-components from damage while proceeding with the Work. All damage caused by the CONTRACTOR is the responsibility of the CONTRACTOR to repair at no cost to MANATEE COUNTY. The CONTRACTOR shall immediately notify MANATEE COUNTY of any damage to the concrete filled deck during demolition.
 - 4. Install the new SBS Modified Bituminous roofing system in quadrants and in accordance with Section 07500 and shall include items from Section 01010, Subsection 1.02 Part B.

END OF SECTION 01010

PART 1 - GENERAL

1.01 Summary

- A. The scope of this section of the Contract Documents is to further define the items included in each Bid Item in the Bid Form section of the Contract Documents. Payment will be made based on the specified items included in the description in this section for each bid item.
- B. All contract prices included in the Bid Form section will be full compensation for all shop drawings, working drawings, labor, materials, tools, testing, restoration, equipment and incidentals necessary to complete the construction as shown on the Drawings and/or as specified in the Contract Documents to be performed under this Contract. Actual quantities of each item contracted on a unit price basis will be determined upon completion of the construction and payment will be based on actual quantities. Payment for all items listed in the Bid Form will constitute full compensation for all work shown and/or specified to be performed under this Contract.

1.02 Estimated Quantities

A. The quantities shown are approximate and are given only as a basis of calculation upon which the award of the Contract is to be made. Manatee County and Engineer do not assume any responsibility for the final quantities, nor shall the Contractor claim misunderstanding or discrepancies because of such estimate of quantities. Final payment will be made only for satisfactory completed quantity of each item.

1.03 Work Outside Authorized Limits

A. No payment will be made for work constructed outside the authorized limits of work.

1.04 Measurement Standards

- A. Unless otherwise specified for the particular items involved, all measurements of distance shall be taken horizontally, unless documented otherwise.
- B. In the measurement of items to be paid for on the basis of area of finished work, the lengths and/or widths to be used in the calculation shall be the final dimensions measured along the surface of the completed work within the neat lines shown or designated.
- C. Measurements of the completed work shall be in accordance with and by instruments and devices calibrated to United States Standard Measures and the units of measurement for payment, and the limits thereof, shall be made as shown in the contract documents.
- D. Measurements shall be in accordance with U.S. Standard Measures. The unit of liquid measure is the U.S. gallon.

1.05 Payment Items

A. Lump Sum Price: Where payment for items is shown to be paid for on a lump sum price basis, neither separate nor additional payment will be made for any item of work required to complete the lump sum price items. Lump sum price items shall be complete, tested, and fully operable prior to request for final payment. Contractor shall provide an itemized break-down of the lump sum price items in a detailed Schedule of Values.

- B. Unit Price: Separate payment will be made for the items of work described herein and listed on the Bid Form. Any related work not specifically listed, but required for the satisfactory completion of the work associated with the bid item, shall be considered to be included in the scope of the appropriate listed bid items.
 - 1. No separate payment will be made for the following items and the cost of such work shall be included in the applicable pay items of work:
 - a. Shop Drawings
 - b. Product Submittals
 - c. Product Samples
 - d. Product Testing

PART 2 - DESCRIPTION OF BID ITEMS

1.01 General

- 1. A general description of the bid items contained in the various Bid Sections are described below and are presented to indicate major categories of the work for purposes of comparative bid analysis and payment breakdown. All items of work referenced in the contract documents, plans, and specifications shall be included in the various lump sum and unit prices in the Bid Form/Contract if not specifically included as a pay item on the Bid Form.
- 2. Duration of Prices Quoted prices accepted by Manatee County shall be held good and in effect until the Work is completed and accepted by Manatee County.
- 3. Bid Items Compensation for all plant, equipment, tools, materials, labor, service, travel, and incidentals, and for doing the work and all other items required to complete the WORK in conformity with the Contract Documents shall be included in the payment provided in this Section unless specifically excluded. No other compensation will be made except for the items listed in the Bid Form. Work for which no separate payment has been provided will be considered as a subsidiary obligation of the Contractor, and the cost therefore included in the applicable contract price for the item to which the work applies. All measurements of work done will be made by the CONTRACTOR and verified by the ENGINEER. No adjustment in prices will be made where any quantities provided in the item description vary from the actual quantities, unless the work described and shown in the Contract Documents has been modified by Manatee County.

1. Mobilization:

a. The contract price paid shall include full compensation for the required 100 percent (100%) Performance Bond, 100 Percent (100%) Payment Bond, all required insurance for the project, and any permits not already obtained by the County. The mobilization pay item also includes demobilization of all equipment, personnel, supplies and incidentals from the project site upon final completion. Payment for mobilization shall not exceed 10 percent (10%) of the total Contract cost unless the Contractor can prove to the County that his actual mobilization cost exceeds 10 percent (10%).

- b. The contract price paid shall also include all work necessary to coordinate and administer all parts indicated in the approved drawings and specifications, including but not limited to submittals, permitting and inspection fees, inspections, staging rentals, and all incidentals related to the Bid Item, such as miscellaneous related expenses, clean-up, temporary facilities, dumpster services, etc. or referenced by other Sections.
- c. This price shall be inclusive per drawings and specifications for supervision and coordination of all personnel and trades assigned, and of the scheduling and coordinating of a full and complete project.
- d. The basis of payment for all work associated with Mobilization shall be paid for under the Lump Sum Pay Item and in accordance with the following schedule:

Percent of Total Contract Amount Earned	Allowable Percent of the Lump Sum Price for Mobilization
5	25
10	50
25	75
100	100

2. Reroof Using SBS Modified Bitumen System:

- a. The contract price paid shall include all work necessary to coordinate and administer all parts indicated in the approved drawings and specifications, including but not limited to removal and disposal of entire existing roof membrane/system(s) and flashings, removal and disposal of all existing insulation and substrates down to the structural decking, preparation of roofing deck, wood nailers for roofing attachment, as required, tapered Insulation, cover boards, modified bitumen roofing, walkway, service and equipment pads, as required, AC stands and related equipment with shop drawings, as required, access ladders and access hatches with shop drawings, other roofing-related items specified or indicated on the drawings or otherwise necessary to provide a complete weatherproof roofing system with new accessories, and any other items noted in Section 07500.
- b. Payment for all work under this Bid Item shall be paid for as lump sum price work and in the amount shown in the Bid Form and will be made directly related to the percentage of that portion of the project completed. (i.e. 60% of that portion of the project completion equals 60% payment of that portion of the project)

3. Structural Concrete Repairs:

- a. The contract price paid shall include all work necessary to coordinate and administer all parts indicated in the approved drawings and specifications, including but not limited to quality assurance, materials testing, mixing, placing, consolidating, finishing, and curing of concrete, shoring, as required, surface preparation, reinforcing steel replacement, as required, crack repair, sloping, and any other items noted in Section 03700.
- b. Payment for all work under this Bid Item shall be paid for as unit price work per square foot of required roof repair.

c. Measurement for periodic payments of this unit price Bid Item shall be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

4. Relative Humidity Testing:

- a. The contract price paid shall include all work necessary to coordinate and administer all parts indicated in the approved drawings and specifications, including but not limited to Section 07500.
- Payment for all work under this Bid Item shall be paid for as unit price work per test.
- c. Measurement for periodic payments of this unit price Bid Item shall be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

5. Parapet Coping Replacement:

- a. The contract price paid shall include all work necessary to coordinate and administer all parts indicated in the approved drawings and specifications, including but not limited to Section 07500.
- Payment for all work under this Bid Item shall be paid for as unit price work per linear foot.
- c. Measurement for periodic payments of this unit price Bid Item shall be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

6. Scupper Coping Replacement:

- a. The contract price paid shall include all work necessary to coordinate and administer all parts indicated in the approved drawings and specifications, including but not limited to Section 07500.
- b. Payment for all work under this Bid Item shall be paid for as unit price work per unit.
- c. Measurement for periodic payments of this unit price Bid Item shall be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

7. One-Way Roof Vent Addition:

- a. The contract price paid shall include all work necessary to coordinate and administer all parts indicated in the approved drawings and specifications, including but not limited to Sections 07500 and 07720.
- Payment for all work under this Bid Item shall be paid for as unit price work per unit.
- c. Measurement for periodic payments of this unit price Bid Item shall be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

8. Lead Boot Replacement:

- a. The contract price paid shall include all work necessary to coordinate and administer all parts indicated in the approved drawings and specifications, including but not limited to Section 07500.
- b. Payment for all work under this Bid Item shall be paid for as unit price work per unit.
- c. Measurement for periodic payments of this unit price Bid Item shall be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

9. Protection of Roofing System During Down Time:

- a. The contract price paid shall include all work necessary to coordinate and administer all parts indicated in the approved drawings and specifications, including but not limited to Section 07500.
- b. Payment for all work under this Bid Item shall be paid for as unit price work per day.
- c. Measurement for periodic payments of this unit price Bid Item shall be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

END OF SECTION

PART 1 - GENERAL

1.01 Related Documents

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

1.02 Submittals Schedule

- A. Prepare and transmit a Submittals Schedule showing required submittals and their initial submittal dates as required for coordination of the Work.
- B. Transmit submittals schedule within ten (10) days of date of Manatee County-Contractor Agreement.
- C. Assign each required submittal a sequential "Submittal Number" reflecting the chronological order in which the submittal is to be transmitted to Manatee County.
- D. Submittals for the same or directly related units of work must be submitted at the same time in order to avoid delays resulting from the Manatee County's need to review submittals concurrently for coordination. No extension of time or substitution of materials will be granted because of failure to transmit submittals to Manatee County sufficiently in advance of the Work.
- E. Provide an *Original* signed copy of the Manufacturer's Intent to Warrant and a copy of the Manufacturer's Warranty that will be issued at the completion of the work, prior to the commencement of the work. Included in the Intent to Warrant shall be a statement that the Manufacturer or Manufacturer's Representative has read and understands the Project Specifications. The Manufacturer shall provide any discrepancies or additions in the Specifications to Manatee County in writing prior to the commencement of the work. Failure of the Manufacturer to do so shall constitute full acceptance of the work and shall in no way constitute a breach of warranty to be provided.

1.03 Submittal Procedure

- A. Submittals are to be submitted directly to Project Manager to review and distribute.
- B. The Contractor on this project shall provide submittals in accordance with the requirements of this section and in accordance with the General Conditions. Where the Contractor requires a submittal but assistance is required from others, the Contractor shall participate and cooperate to expedite each submittal.
- C. Where submission of samples, shop drawings, or other items are required from suppliers or subcontractors, it shall be the responsibility of the Contractor to see that the submittal items required are complete and properly submitted at the time and in the order required so as not to delay the progress of the Work.
- D. The Contractor shall check shop drawings, samples, and other submittals and submit them to Manatee County with a letter of transmittal giving his approval, comments, and suggestions.
- E. Sequentially number the transmittal forms, submittal materials, and subsequent correspondence concerning a submittal with the submittal number established in the Submittal Schedule. Resubmittals shall have the original submittal number with an alphabetic suffix.

- F. Mark each component of submittal with a permanent label for identification. Provide the following information on the label as required:
 - 1. **Project Name**
 - 2. Submittal Number (as outlined above)
 - 3. Date
 - Name and Address of Manatee County 4.
 - 5. Name and Address of Engineer
 - 6. Name and Address of General Contractor
 - 7. Name and Address of Subcontractor
 - 8. Name and Address of Supplier
 - 9. Name of Manufacturer
 - 10. Number and Title of Related Specification Section
 - Drawing Number and Detail References as Necessary 11.
 - 12. Similar definitive Information as Necessary
- G. Apply Contractor's stamp, signed and dated, certifying that review, verification of product required, field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the Work and Contract Documents.
- Deliver submittals to Manatee County Project Management. Coordinate submission of related Η. items.
- I. Specifically note and identify submittals that have variations from Contract Documents and product or system limitations, no matter how minor, which may be detrimental to successful performance of the completed Work.
- J. Provide space for Contractor's and Engineer's review stamps.
- K. Revise and resubmit submittals as required, identify changes made since previous submittal.
- Distribute copies of reviewed submittals to concerned parties, including: subcontractors, suppliers, fabricators, manufacturer's, installer, and others as required for proper performance of the Work.
- M. Instruct parties to report inability to comply with provisions promptly.
- N. Prevent incorporation into the Work products requiring submittal, until the Engineer and Manatee County have approved such submittal.
- Ο. Do not reproduce Contract Documents as the basis of the submittal.
- Ρ. Maintain copies of approved submittals at the project site for quality control comparisons throughout the course of performing the Work.
- The Contractor shall prepare and review, stamp with his approval, and submit, with reasonable Q. promptness or within the specified time periods and in orderly sequence so as to cause no delay in the Work, submittals required by these Contract Documents or subsequently required by modifications.
- R. Manatee County and the Engineer shall review and take action on submittals with reasonable promptness, to cause no delay in the progress. A reasonable period for review and action to submittals shall be as specified herein, but in no case shall it be less than ten (10) calendar days from the time it is received by Engineer until the time the submittal is marked and forwarded or returned. Contractor shall allow sufficient mailing time for submittals.

1.04 **Proposed Products List**

- Α. Within five (5) days after date of Manatee County-Contractor Agreement, submit complete list of products proposed for use, with name of manufacturer, and model number of each product.
- B. For products specified only by reference standards, give manufacturer, model or catalog designation, and reference standards.

Required Submittals 1.05

- A. List of Subcontractors, Suppliers, and Manufacturers
 - A list of the major subcontractors to be used on this project shall be submitted by Contractor with his/her bid. The list shall be Complete with names, street addresses, cities, states, and zip codes and shall include requested subcontractors, suppliers, and manufacturers.
 - 2. The Contractor shall submit a complete list for all areas of Work where subcontractors, suppliers, manufacturers, fabricators, shop drawings, and samples, including products and colors are required as submittals on this Project. The Contractor shall complete this requested list and provide five (5) copies to Manatee County.
 - 3. In addition to the names of subcontractors, suppliers and manufacturers, the Contractor shall be aware of the required dates that shop drawings and samples are to be submitted for approval and the critical date for delivery. Dates submitted for shop drawings and samples shall be realistic and be coordinated with the Progress Schedule for critical dates that affect the progress of Construction.

B. Construction Schedules

- 1. The Contractor, in cooperation with the subcontractors on the Project, shall prepare and submit two (2) copies of a proposed schedule of construction for the entire Work for review by the Engineer and Manatee County. Schedule shall be submitted at the time of the required pre-construction meeting. After review by the Engineer and Manatee County, the Contractor shall provide two (2) copies to each subcontractor working on this project.
- 2. The Progress Schedule shall be prepared in bar chart format and submitted to and Manatee County prior to first progress payment request.
- 3. Content of Progress Schedule shall be coordinated with the Contractor's Schedule of Values and List of Shop Drawings and Samples. Provide a complete sequence of construction by activity for each item of work.
- 4. Progress Schedule shall be regularly reviewed at progress meetings and updated as required. Date and time of completion shall remain unchanged unless revised by Change Order and the requirements of the General and Supplementary Conditions.

C. Schedule of Values

1. Contractor shall prepare and submit to Manatee County a Schedule of Values for review within five (5) days after issuance of the Notice to Proceed. The Schedule of Values shall consist of a complete breakdown of the Contractor's contract sum showing the various items of the Work, divided to facilitate the approval of payments to the Contractor for work completed. The Schedule of Values shall be prepared on AIA Document G703, Continuation Sheet, showing the breakdown of items of Work and supported by such data to substantiate its correctness as Manatee County may require.

- 2. The contract breakdown shall be the same form as that to be used in submitting request for payments. Each item of work shall have indicated a separate cost for labor and materials. This schedule, when reviewed by the Engineer shall be used as the basis of approving payments along with establishing percentages of Work complete.
- Schedule of Values shall be coordinated with the Construction Schedules such that the 3. percentages of Work completed closely relate to the values for Work shown on the request for payments. At the beginning of the Project, the Contractor shall prepare a schedule of monthly payments showing the amount the Contractor may require for the Work proposed to be completed. The purpose of this schedule is to allow the Engineer to determine what amounts of funds Manatee County will be required to have available each month during the progress of construction for progress payments.
- 4. Where work is to be performed in phases, the Schedule of Values shall also be prepared in phases.

D. Project Use Site Plan

- 1. Contractor shall prepare a proposed project use site plan and submit two (2) copies to Manatee County for review.
- 2. Contractor shall confine operations at the site to boundaries within the areas indicated and as accepted by the Engineer and as permitted by law, ordinances, and permits. Site shall not be unreasonably encumbered with materials, products, or construction equipment.

E. Shop Drawings and Product Use

- 1. Shop drawings are drawings, diagrams, illustrations, schedules, performance charts, brochures, and other data which are prepared by the Contractor or a subcontractor, manufacturer, supplier, or distributor and which illustrates some portion of the Work. Reproduction of the contract documents for submission as shop drawings will be returned to the Contractor without review.
- 2. Product data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate a material, product, or system for some portion of the Work.
- 3. When professional certification of performance criteria of materials, systems, or equipment is required by the Contract Documents, Manatee County shall be entitled to rely upon the accuracy and completeness of such calculations and certification.
- 4. By approving and submitting shop drawings, product data, and similar submittals, the Contractor thereby represents that he has determined and verified all field measurements, field construction criteria, materials, catalog numbers, and similar data, and that he has checked and coordinated each shop drawing with the requirements of the work and of the Contract Documents prior to submitting. Submittals not properly checked and approved by the Contractor prior to submitting will be returned without approval, requiring resubmittal.
- 5. Contractor shall make corrections required and shall resubmit the required number of corrected copies of shop drawings until approved. Contractor shall direct specific attention in writing or on resubmitted shop drawings, to revisions other than the corrections requested on previous submissions.
- 6. Engineer will review shop drawings only for conformance with the design concept of the Project and with the information given in the Contract Documents. Manatee County's review of a separate item shall not indicate review of an assembly in which the item functions.

- 7. Engineer's review of shop drawing shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents unless Contractor has informed Manatee County / the Engineer in writing of such deviation at the time of submission and Manatee County / the Engineer has given written approval to the specific deviation, nor shall Manatee County / the Engineer's action relieve the Contractor from responsibility for errors or omissions in the shop drawings.
- 8. Notations and remarks added to shop drawings by Manatee County / the Engineer are to insure compliance to Drawings and specifications and do not imply a requested or approved change to contract cost.
- 9. Should deviations, discrepancies, or conflict between shop drawings and contract drawings and specifications be discovered, either prior to or after review, Contract Documents shall control and be followed.
- 10. The following number of shop drawings and product data submittals shall be made on this project. Where an insufficient number of copies are submitted, no action will be taken until the proper number of copies has been received. Additional copies beyond the number required will be discarded.

Schedule of Required Shop Drawings and Product Data

Five (5) Copies Required, Breakdown as Follows:

- One (1) copy Engineer's office file
- One (1) copy Contractor's office file
- One (1) copy Field copy (Job Record)
- One (1) copy Supplier or Subcontractor
- One (1) copy Manatee County's office file
- 11. Shop drawings will be marked as follows: Contractor shall take the following action for each respective marking:
 - a. APPROVED Copies will be distributed as indicated under above schedule.
 - b. "APPROVED AS NOTED" Contractor may proceed with fabrication, taking into account the necessary corrections. Corrected shop drawings shall be resubmitted before each fabrication of that Work is completed.
 - c. "REJECTED" Contractor will be required to resubmit shop drawings in their entirety. No fabrication or installation shall be started until shop drawings so marked have been completely revised, resubmitted and marked by Manatee County according to preceding Paragraph 1 or 2.
 - d. "REVISE AND RESUBMIT" Contractor will be required to make the corrections noted and resubmit. No release of products or fabrication shall be performed until the revised data is furnished and approved according the Paragraphs 1 or 2.
 - e. "SUBMIT SPECIFIC ITEM"-- Contractor is directed that if the product submitted does not satisfy the requirements of the documents this particular product should not be resubmitted. Contractor should resubmit on a product as recognized in the documents as meeting the project requirements.

F. Manufacturer's Instructions

- 1. Where specified in individual Specification Sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation, start-up, adjusting and finishing, in quantities specified for product data.
- 2. Identify conflicts between manufacturer's instructions and Contract Documents.

G. Manufacturer's Certificates

- 1. When specified in individual Specification Sections, submit manufacturer's certificate to Manatee County for review, in quantities specified for product data.
- 2. Indicate material product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- 3. Certificates may be recent or previous test results on material or products, but must be acceptable to Engineer.

H. Miscellaneous Submittal

- 1. Inspection and test Reports: Classify each inspection and test report as either a "shop drawing" or "product data" depending upon whether the report is specifically prepared for the Project, or a standard publication of workmanship testing at the point of production. Process inspection and testing reports accordingly.
- 2. Standards: Where submittal of a standard is required, and where copies of the standards are specified as an integral part of "Product Data" submittal, submit a single copy of the standard to Engineer for his use.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

END OF SECTION 01300

SECTION 02070 SELECTIVE DEMOLITION

PART 1 – GENERAL

1.01 Related Documents

- A. Drawings and general provisions of Contract, including General Supplementary Conditions and Division 1 Specification sections, apply to work of this section.
- B. Related Sections:
 - 1. Section 07500 SBS Hybrid Roofing System
 - 2. Section 07900 Joint Sealants

1.02 Summary

- A. Provide labor, materials, equipment and supervision necessary to complete the following:
 - 1. Required demolition of designated existing elements.
 - 2. Removal of all existing roofing material, including all flashing, existing roofing system, insulation board and any other element attached to the roof.
 - Demolition work shown on the drawings, including schedules, notes and details.

1.03 Notification to Manatee County of Utility Lines and Equipment

- A. Notify Manatee County or local authority owning conduits, wires, pipes or equipment that is affected by demolition.
- B. Arrange for removal or relocation of affected items and pay fees or costs in conjunction with removal or relocation, except as otherwise noted.
- C. If asbestos or other abatable substance is discovered during excavation, Manatee County shall be notified immediately prior to the continuance of the work as defined under this section. All activity involving asbestos containing materials including demolition shall be designed and preformed in compliance with Chapter 445, Florida Statues.

1.04 Protections

- A. Prior to starting demolition operations, provide necessary protections of existing spaces to remain.
- B. Manatee County will be continuously occupying areas of the building immediately adjacent to areas of selective demolition.
 - 1. Conduct demolition work in a manner that will minimize disruption of Manatee County's normal operation.
 - 2. Provide protective measures as required to provide free and safe passage of Manatee County's personnel and general public to occupied portions of the facilities.
 - 3. Provide minimum of 72 hours advance notice to Manatee County of demolition activities that will influence Manatee County's normal operations.
- C. Manatee County assumes no responsibility for actual condition of items to be demolished. Conditions at time of commencement of contract will be maintained by Manatee County as practicable.
- D. Protect existing finish work that is to remain in place and becomes exposed during demolition operations.

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E. Erect and maintain dust resistant partitions and enclosures as required to prevent the spread of dust or fumes to occupied portions of the structure.

1.05 Coordination

- A. All demolition work shall be coordinated with related trades.
- B. Demolition shall be accomplished in conjunction with the phasing requirements established in the related section.
- C. Temporary enclosure and roofing, in accordance with Division 7 shall be provided for all areas of the facility affected by the demolition work to maintain the building in a watertight manner.

PART 2 – PRODUCTS (not applicable)

PART 3 – EXECUTION

3.01 Preparation

- Verify that abandoned utilities have been properly disconnected and capped.
- B. Verify that required barricades and other protective measures are in place.
- C. Provide necessary shoring, bracing, and other precautions required to properly support existing structure during cutting and demolition operations.
- D. Photograph existing conditions of structure, surfaces, equipment or surrounding areas which could be misconstrued as damage resulting from selective demolition work; submit photographs and written report of existing damage to Owner prior to starting work. Repair to existing facilities shall be provided by the Contractor at no cost to Owner unless such documentation is provided.

3.02 Demolition Operations

- A. Comply with precautions and procedures specified in the Summary of Work.
- B. Cut and remove elements as designated is the project specification herein, or at the direction as determined by the Engineer.
- C. Execute demolition in a careful and orderly manner with least possible disturbance or damage to adjoining surfaces and structure.
- D. Exercise extreme caution in cutting and demolition of portions of existing structure. Do not cut or remove structural members for any reason without advance notification and approval of Engineer.
- E. Avoid excessive vibrations in demolition procedures that would be transmitted through existing structure and finish materials.

SELECTIVE DEMOLITION SECTION 02070

- F. Contractor shall maintain a dust free operation and remove debris from work areas either by chutes, hoist crane, high lift truck or other approved method.
- G. If hazardous materials are encountered during demolition operations, comply with applicable regulations, laws, and ordinances concerning removal, handling and protection against exposure or environmental pollution.

3.03 Disposal

- A. Materials, equipment and debris resulting from demolition operations shall become property of Contractor. Remove demolition debris at least once each day in accordance with applicable City, State, and Federal Laws.
- B. Cover debris in truck with approved netting to prevent spillage while being transported.
- C. Do not store or burn materials on site. Remove combustible waste materials in a manner approved by local Fire Department. Remove, handle and dispose of any hazardous waste and debris in accordance with applicable City, State, and Federal Laws.
- D. Transport demolition debris to off-site disposal area and legally dispose of debris.
- E. Use street routes specifically designated by local jurisdiction for hauling debris.

3.04 Cleaning and Repair

- A. Leave building broom clean and free of debris.
- B. Repair demolition performed in excess of that required. Return structures and surfaces not designated for alteration to condition existing prior to commencement of selective demolition.
- C. Keep areas clean during the repair operation. Remove and clean promptly,
- D. Collect and maintain the site in a clean, safe, and orderly condition.
- E. Remove debris daily from the site.

END OF SECTION 02070

PART 1 - GENERAL

1.01 Related Documents

- A. Drawings and general provisions of Contract including Divisions 00 and 01 apply to work in this section.
- B. Related Sections:
 - Section 07500 Membrane Roofing
 - 2. Section 07620 Sheet Metal Flashing and Trim
 - 3. Section 07720 Roofing Accessories
 - 4. Section 07900 Joint Sealants

1.02 Description of the Work

- A. This Section specifies materials and procedures for repair of deteriorated reinforced concrete.
- B. The procedures specified in this Section shall constitute minimum requirements. Where manufacturer has required procedures more stringent than those contained within this Section, the manufacturer's procedures shall govern.

1.03 References

- A. American Concrete Institute (ACI):
 - 1. ACI 224 Causes, Evaluation, and Repair of Crack in Concrete Structures
 - 2. ACI 301 Specifications for Structural Concrete for Buildings
 - 3. ACI 304 Guide for Measuring, Mixing, Transporting and Placing Concrete
 - 4. ACI 305 Hot Weather Concreting
 - 5. ACI 306 Cold Weather Concreting
 - 6. ACI 311 Recommended Practice for Concrete Inspection
 - 7. ACI 318 Building Code Requirements for Reinforced Concrete
 - 8. ACI 347 Guide to Formwork for Concrete
 - 9. ACI 503.4 Standard Specification for Repairing Concrete with Epoxy Mortars
 - 10. ACI 546 Concrete Repair Guide
 - 11. ACI 614 Recommended Practice for Measuring, Mixing, and Placing Concrete
- B. American Society for Testing and Materials (ASTM):
 - ASTM A185 Standard Specification for Steel Welded Wire Fabric, Plain, for Concrete Reinforcement
 - ASTM A615/A615M Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
 - 3. ASTM C31/C31M Standard Practice for Making and Curing Concrete Test Specimens in the Field
 - 4. ASTM C33 Standard Specification of Concrete Aggregate
 - 5. ASTM C39/C39M Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

- 6. ASTM C469 Standard Test Method for Static Modulus of Elasticity and Poisson's Ratio of Concrete in Compression
- 7. ASTM /C496MC496 Standard Test Method for Splitting Tensile Strength of Cylindrical Concrete Specimens
- 8. ASTM C596 Standard Test Method for Drying Shrinkage of Mortar Containing Portland Cement
- 9. ASTM C881/C881M Standard Specification for Epoxy-Resin-Base Bonding Systems for Concrete
- ASTM C882 Test Method for Bond Strength of Epoxy Resin Systems Used with Concrete
- 11. ASTM C1042 Standard Test Method for Bond Strength of Latex Systems used with Concrete
- 12. ASTM C1202 Standard Test Method for Electrical Indication of Concrete's Ability to Resistance to Chloride Ion Penetration
- C. International Concrete Repair Institute (ICRI):
 - 1. ICRI Guideline No. 03730 Guide for Surface Preparation for the Repair of Deteriorated Concrete Resulting from Reinforcing Steel Corrosion
 - 2. ICRI Technical Guideline No. 03731 Guide for Selecting Application methods for the Repair of Concrete Surfaces.
 - 3. ICRI Technical Guideline No. 03732 Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays

1.04 Project Conditions

- A. Follow manufacturer's recommendations regarding ambient weather conditions and other additional installation information.
- B. Where shoring is required, formwork and shoring shall remain in place as specified by Contractor's specialty shoring Engineer until structural element repair materials have reached a strength equal to the original design strength of the structural element under repair, as verified by the testing procedures set forth in this Section or a minimum of (14) fourteen calendar days.

1.05 Quality Assurance

- A. Contractor Qualification: Company specializing in the repair of reinforced concrete structures with a minimum of five (5) years documented experience acceptable to Manatee County and Engineer.
- B. Construction Materials Testing:
 - 1. Contractor shall retain an Engineering Testing Laboratory, acceptable to Engineer, to perform concrete testing. The laboratory shall conform to the applicable requirements of ASTM C1077 "Standard Practice for Laboratory Testing of Concrete and Concrete Aggregates for use in Construction and Criteria for Laboratory Evaluation" and shall be inspected and accredited by the Concrete and Materials Engineering Council, Inc. The agent of the testing Laboratory performing the field sampling of concrete shall be certified by the American Concrete Institute as a Concrete Field Testing Technician Grade 1.

- 2. Testing Laboratory shall take samples and make test as hereinafter listed for each 50 yards of ready-mix concrete of fraction thereof as placed in the project but not less than one set for each days concreting. One set of specimens for each week of placement shall be sufficient for pre-proportioned bag-goods if initial test results are acceptable to Engineer.
 - Compression and Strength Tests: Each test shall consist of four (4) standard 6" a. by 12" cylinders: three (3) cylinders to be tested at the ages of 3, 7, 28 days respectively. One cylinder is to be held in reserve. Sample from which the compressive tests specimens are molded shall be secured in accordance with ASTM C172. Specimens made to check adequacy of design for strength of concrete, or as a basis for acceptance with ASTM C31. Strength test shall be made in accordance with ASTM C39.
 - Slump Test: Test for slump shall be made at place of deposit and in accordance b. with ASTM C143. Slump shall be reported on test reports to Engineer.
 - Air-Entrainment Tests: At least two tests will be made at place of deposit for C. each day's placing and as often as required when a change in consistency of concrete mix is noted. Test for slump shall be made in accordance with ASTM C138 or C173 and shall be reported on test reports to Engineer.
- Test Reports: Except as otherwise directed, copies of test reports shall be sent directly 3. to Manatee County, Engineer, and Ready-mix Producer.

1.06 Delivery, Storage and Handling

- Α. Deliver products in original unopened containers with the manufacturer's name, labels, product identification, and batch numbers.
- B. Store and condition the specified products as recommended by the manufacturer.
- C. Products shall remain in unopened containers until ready for use.
- D. Where mixing of components is required, use complete pre-measured units.

1.07 **Submittals**

- A. Submittals to be provided in accordance with Section 01300.
- B. Submittals by Contractor to Manatee County shall be made in a timely manner to cause no delay in the work.
- C. Submittals shall bear a stamp indicating review and approval by Contractor.
- D. Any deviations in the submittals from the requirements of the Project Manual shall be clearly identified in writing by Contractor.
- E. Approval by Engineer is required before beginning work affected by submittals.
- F. Submittals required by this Section include the following:
 - 1. Manufacturer's current Data Sheets, Specifications, Material Safety Data Sheets sample warranties including manufacturer's intent to warrant, and schedule of intended use locations for each product used under this section.
 - 2. Contractor's written identification of intended construction materials testing laboratory.
 - 3. Testing for aggregates unless aggregates are incorporated in the premixed repair materials.
 - 4. Transit mix design and back-up data (if applicable).

5. Intent to Warrant: Provide a signed original Manufacturer's Intent to Warrant and a copy of the Manufacturer's Warranty that will be issued at the conclusion of the Work, prior to the commencement of the Work. Included in the Intent to Warrant shall be a statement that the Manufacturer or Manufacturer's Representative has read and understands the Project Specifications. The Manufacturer shall provide any discrepancies or additions in the specifications to the Engineer in writing prior to the commencement of the Work. Failure of the Manufacturer to do so shall constitute full acceptance of the Work and shall in no way constitute a breach of the warranty to be provided.

1.08 Engineer Observations of Work-In-Progress

- A. Contractor shall provide 24 hour minimum notice of readiness to Engineer for the following observations but is not limited to:
 - Verification of identified repair areas.
 - 2. Following initial excavation prior to corrosion removal.
 - 3. Following final repair preparation prior to placemen of repair materials.
 - 4. Following placement and curing prior to coating.

1.09 Special Guarantees

- A. Provide minimum five (5) year, non-prorated labor and materials warranty, issued by Contractor and product manufacturer.
- B. Other than the duration of the warranty, correction of defective items shall be as contained in Article 13 of the General Conditions.

PART 2 - PRODUCTS

2.01 Manufacturers

- A. Allowable manufacturers of products under this section include the following:
 - BASF Building Systems
 - 2. Euclid
 - 3. Sika Corporation
 - 4. W.R. Meadows Inc.
 - 5. Sto Corporation
 - 6. Substitutions: Data sheets shall be submitted to Engineer from both the approved Manufacturer above and the new Manufacturer. The use of substituted materials shall only be used after the acceptance of Engineer. It shall be the judgment of Engineer to determine the approved equivalent and Engineer reserves the right to accept or reject the Manufacturer. Contractor may request substitution of products. Contractor shall demonstrate the substituting product is compliant.
 - 7. Acceptance of manufacturers, listed or substitute is dependent on compliance with Project requirements. Contractor shall review, verify and be responsible for manufacturer's compliance with all Project requirements.

2.02 Manufactured Repair Materials

- A. Water used for mixing shall be potable for all manufactured repair materials.
- B. Contractor shall utilize repair materials from a single manufacturer for the duration of the project.
- C. Conventional Repairs:
 - BASF Building Systems:
 - a. EMACO R300 CI Horizontal and vertical resurfacing of deteriorated concrete with repair depths from feathered edge to 1/4" (horizontal) and feathered edge to 1" (vertical).
 - b. EMACO S77-CI (S66-CI) Horizontal and formed vertical and overhead structural repairs and overlays with repair depths from 3/8" to 1-1/2":
 - i For deeper repairs, extend using manufacturer recommended procedure.
 - ii Aggregates shall be tested prior to use.
 - c. LA 40 Repair Mortar Pourable and pumpable pre-extended, shrinkage-compensated repair mortar. 2" to full Depth.
 - d. EMACO S88-CI Vertical and overhead structural repairs and overlays with repair depths from 3/8" to 2" (vertical) or 3/8" to 1-1/2" (overhead).
 - i For deeper repairs, apply in lifts.
 - e. Gel Patch Non-sag concrete repair for vertical and overhead applications:
 - i Can be placed in lifts up to 2".
 - f. 10-61 Rapid Mortar Shrinkage Compensated cement based mortar with extended working time:
 - i Can be extended up to 100% by weight with 3/8" aggregate.
 - ii BASF Deck Coatings can be applied 24 hours after placement.
 - g. EMACO T430 For surface repairs 1/4 inch to 1inch in depth:
 - i For deeper repairs, extend using manufacturer recommended procedure.
 - ii Aggregates shall be tested prior to use.
 - iii BASF Deck Coatings can be applied in 24 hours after placement.
 - h. EMACO P24 Reinforcing bar bonding and anti-corrosion agent.
 - i. Concrete Substrate Bond Coat Slurry mixture of repair material:
 - i Substrate must be Saturated Surface Dry prior to applying slurry coat or Emaco P24 Bonding agent.
 - j. Concresive Standard LVI low viscosity epoxy adhesive for concrete crack repair.
 - k. Aggregates shall be tested prior to use.
 - 2. Sherwin Williams:
 - a. SherCrete Trowable Mortar with CI Horizontal structural repairs and overlays with repair depths from 1/4" to 2":
 - For deeper repairs, extend using manufacturer recommended procedure.

- b. SherCrete Vertical/Overhead Mortar with CI Vertical and overhead structural repairs and overlays with repair depths from 1/4" to 2":
 - i For deeper repairs, apply in lifts.
- SherCrete Rebar Coating and Bonding Agent Reinforcing bar bonding and anticorrosion agent.
- d. Concrete Substrate Bond Coat Slurry mixture of repair material:
 - i Substrate must be Saturated Surface Dry prior to applying slurry coat.
- e. SherCrete extended Deep Pour Mortar with CI Horizontal structural repairs with repair depths from 1-1/2" to 12" without extension.
- f. SherCrete AnchorPoxy3 Anchoring Gel Structural anchoring of reinforcing bar, bolts and dowels.
- g. SherCrete Thin Coat Vertical and horizontal patching from 1/8" to 1/2" or in lifts for deeper applications.

3. Sika Corporation:

- a. Sika Top 122 Plus Two component modified concrete. Horizontal and vertical resurfacing of deteriorated concrete with repair depths from feathered edge to 1/4" (horizontal) and feathered edge to 1" (vertical).
- b. Sika Top 123 Plus –Two component polymer modified cementitious repair mortar for 1" repairs neat and full depth with extension with 3/8" course non-reactive aggregates, 35 pound per bag:
 - i Aggregates shall be tested prior to use.
- c. Sika Top 123 Plus Vertical and overhead repairs applications up to 2-3/4" per lift. Non-Structural Repairs.
- d. Sika 611 For structural overhead, vertical and formed and poured repairs.
- e. Sika Armetec 110 EpoCem Epoxy Modified Bonding and Anti-Corrosion Agent.
- f. Concrete Substrate Bond Coat Slurry mixture of repair material:
 - i Substrate must be Saturated Surface Dry prior to applying slurry coat.
- g. Sikadur 35, Hi-Mod LV low viscosity epoxy adhesive for concrete crack repair.
- h. Zinc Rich primers will not be allowed.

4. Euclid Chemical:

- a. Duralprep AC Epoxy/Cement Protective Coating for Reinforced Steel.
- b. Thin-Top Supreme Horizontal repair of deteriorated concrete with repair depths less than 1/2".
- c. Concrete-Top Supreme Horizontal repair of deteriorated concrete with repair depths greater than 1/2".
- d. Eurocrete Horizontal and full depth repair of deteriorated concrete for pumped repairs, open and close forms.
- e. Verticoat Supreme Vertical and overhead structural repairs.
- f. Euco 700 Epoxy/Semi Rigid adhesive for concrete crack repair.

5. W.R. Meadows Inc:

- a. Meadow-Crete GPS- Horizontal, Vertical, and overhead structural repairs and overlays with repair depths from 1/8" up to 3", depending on application:
 - i For deeper repairs, apply in lifts.
 - ii May also be wet sprayed applied.
- b. Meadow-Crete H2 with Acrylok Horizontal structural repairs and overlays with repair depths from 1/8" to 2":
 - i For deeper repairs, extend using manufacturer recommended procedure.
- c. Meadow-Patch T2 with Acrylok Horizontal and Vertical repairs and overlays with repair depths from feathered edge to 1":
 - i For deeper repairs, extend using manufacturer recommended procedure.
- d. Meadow-Crete FNP (FNP Ext) Horizontal structural repairs and overlays with repair depths from 1/8" to 2":
 - i For deeper repairs, extend using manufacturer recommended procedure.
 - ii Aggregates shall be tested prior to use.
- e. Concrete Substrate Bond Coat Slurry mixture of repair material. Substrate must be Saturated Surface Dry prior to applying slurry coat.
- Rezi-Weld LV State low viscosity epoxy adhesive for concrete crack repair.
- g. Aggregates shall be tested prior to use.

6. Sto:

- a. Sto Overhead CR702 Horizontal and vertical resurfacing of deteriorated concrete with repair depths from 1/4" to 2":
 - i For deeper repairs, extend using manufacturer recommended procedure.
 - ii Aggregates shall be tested prior to use.
- b. Sto Flowable CR730 Horizontal and formed vertical and overhead structural repairs and overlays with repair depths from 1/2" to 2":
 - i For deeper repairs, extend using manufacturer recommended procedure.
 - ii Aggregates shall be tested prior to use.
- c. Sto Bonding Agent and Anti-Corrosion Agent CR246 Reinforcing bar bonding and anti-corrosion agent.
- d. Sto Trowel-Grade Mortar CR701 For surface repairs 1/4 inch 2 inch in depth:
 - i For deeper repairs, extend using manufacturer recommended procedure.
 - ii Aggregates shall be tested prior to use.
- e. Concrete Substrate Bond Coat Slurry mixture of repair material:
 - i Substrate must be Saturated Surface Dry prior to applying slurry coat.
- f. Sto Epoxy Binder LM CR650 low viscosity epoxy adhesive for concrete crack repair.
- g. Aggregates shall be tested prior to use.

- D. Substitutions and "Or Equal" items:
 - 1. Requests for Substitutions or "Or Equal" items may be made in accordance with Section 6.05 of the General Conditions.
 - 2. Requests for Substitutions to be included in the Contractor's bid shall be requested by the Contractor not less than seven (7) days prior to the bid due date.

2.03 Alternate Field or Transit Mixes

- A. Alternate Field or Transit Mixes may be considered for selective applications for areas where a larger portion of the element is to be repaired.
- B. Bids shall be compiled based on pre-mixed manufactured repair materials unless otherwise specified.
- C. Materials:
 - 1. Cement: ASTM C150
 - Pozzolans:
 - a. Flyash ASTM C618
 - b. Ground Granulated Blast-furnace Slag
 - 3. Fine and Course Aggregates: ASTM C33. Provide aggregates from a single source throughout project.
 - a. Aggregate shall be clean and suitable for concrete and free from chlorides.
 - b. Aggregates shall be tested prior to use.
 - c. Testing shall be supplied to Engineer prior to use.
 - Water: Potable
 - 5. Fibrous Concrete Reinforcement: Polypropylene fibers by Fibermesh with dosage rate 1.5 lbs per cubic yard.

D. Admixtures:

- 1. Air Entrainment: ASTM C260; 4 to 6 percent
- Chemical admixtures shall comply with ASTM C49. Admixtures shall not include added chlorides.
 - a. Type A Water Reducing
 - b. Type D Water Reducing Retarding Admixture
 - c. Type F or G High Range Water Reducing Admixture
- 3. Corrosion Inhibitor Admixture:
 - Mix shall contain Rheocrete 222+ by Master Builders or Engineer approved substitute.

E. Concrete Mix Design:

- 1. Contractor shall submit mix design and supporting back-up data (according to the latest edition of ACI 318).
- Prepare concrete mix designs in accordance with ACI 301.

- 3. Provide concrete to the following criteria:
 - a. Minimum Compressive Strength (28 days): 4000 psi
 - b. Maximum Water/Cement Ratio: 0.40
 - c. Max may contain either flyash (not more than 20 percent cement replaced by weight) or Granulated Ground Blast-furnace slag (not more than 30 percent cement replacement by weight).

2.04 Curing and Protection

- A. Protect freshly placed concrete or repair mortar from premature drying and moisture loss as necessary.
 - 1. Evaporation Retarders:
 - a. Master Builders Technologies Confilm
 - b. Euclid Chemical Eucobar
 - c. Evapre RTU or Evapre W.R. Meadows Inc.
 - 2. Curing Compound:
 - a. ASTM C309, BURKE "Agua Resin"
 - b. W.R. Meadows Inc. 2200 (2250) White or 1100 (1130) Clear
 - c. Sonneborn Kure-n-seal W
 - d. Euclid Chemical Super Aqua Cure VOX and Super Diamond Clear VOX
 - 3. Application of burlene must be saturated and kept moist until the concrete has cured to prevent premature cracking or until acceptance by the Manufacturer.

2.05 Reinforcing Materials

- A. Reinforcing steel bars: MMFX 2, or ASTM A615, Grade 75, deformed.
- B. Supports of reinforcement: Bolsters, chairs, spacers for spacing, supporting, and fastening reinforcing steel bars in place. Use wire-bar-type supports complying with CRSI MSP-1.

PART 3 - EXECUTION

3.01 General

A. Mix, place, consolidate, finish, and cure concrete in accordance with ACI 301.

3.02 Shoring

- A. Contractor shall provide shoring, bracing or support for all existing structural elements during repairs.
- B. Contractor shall submit shoring plan signed and sealed by a Florida Licensed Engineer having experience in shoring design to Engineer. Shoring design shall be certified without conditions or exceptions. Contractor shall employ the shoring specialty Engineer unless otherwise directed by Engineer and Manatee County.

3.03 Surface Preparation

- A. Prior to the commencement of the work, the Contractor shall verify the Scope of Work for the repair. Should the repair include more than 25 percent of the cross sectional area of a column or beam or large areas of concrete, Contractor shall contact Engineer prior to the commencement of the Work.
- B. All repair areas shall be prepared in accordance with the International Concrete Repair Institute's "Guide for Surface Preparation for the Repair of Deteriorated Concrete Resulting from Reinforcing Steel Corrosion" (ICRI Guideline No. 03730), repair product manufacturer's directions and the Supplemental Drawings. ICRI Guideline No. 03730 includes but is not limited to the following:
 - 1. Remove loose or delaminated concrete above corroded reinforcing steel.
 - 2. Once initial removals are made, proceed with the undercutting of all exposed corroded bars. Undercutting will provide clearance for under bar cleaning and full bar circumference bonding to surrounding concrete, and will secure the repair structurally. Provide minimum 3/4" clearance between exposed reinforcing steel and surrounding concrete or 1/4" larger than largest aggregate in repair material, whichever is greater.
 - 3. Concrete removals shall extend along the bars to locations along the bar free of bond inhibiting corrosion, and where the bar is well bonded to surrounding concrete. (See 3.03.E)
 - 4. If non-corroded reinforcing is exposed during the undercutting process, care shall be taken not to damage the bar's bond to surrounding concrete. If bond between bar and concrete is broken, undercutting of bar shall be required.
 - 5. Any reinforcement that is loose shall be secured in place by tying to other secured bars or by approved methods.
 - 6. All heavy corrosion and scale should be removed from the bar as necessary to promote maximum bond of replacement material. Oil free abrasive blast is the preferred method.
 - 7. At edge locations, provide right angle cuts to the concrete surface by saw-cutting 1/2" or less as required to avoid cutting reinforcing steel. Avoid feathered edges.
 - 8. Repair Configurations should be kept as simple as possible with rectangular shapes and 90° corners.
 - 9. After removals and edge conditioning are complete, remove bond-inhibiting materials (dirt, concrete slurry, loosely bonded aggregates) by abrasive blasting or high-pressure water blasting with or without abrasive. Check the concrete surface after cleaning to insure that surface is free from additional loose aggregate, or that additional delaminations are not present.
- C. Reinforcing steel with a section loss of 15 percent or greater shall be reported to Engineer. Engineer shall determine necessity of replacing/supplementing reinforcing steel with reduced cross sectional area resulting from corrosion. Install additional reinforcing as directed by Engineer.
- D. Repairs shall be prismatic and uniform in depth throughout repair area unless otherwise directed by Engineer.
- E. The area of the concrete to be removed shall extend along the length of the reinforcing steel bar, beyond the limits of the reinforcing steel deterioration a minimum of 2" into sound concrete.
- F. Application of repair concrete shall not be less than 1/2" depth.

- G. Where practicable and as directed by Engineer, provide a minimum of 1" concrete cover over existing reinforcing bars.
- H. Repair of excess demolition as determined by Engineer shall be the responsibility of Contractor and shall not be included in Application for Payment quantities.

3.04 Reinforcing Steel Replacement

- A. All reinforcing steel with deterioration of more than 15 percent of the original bar section shall be reported to the Engineer.
- B. Prior to the repair, the Contractor shall support the area to be repaired. This support shall remain in place for 14 days to 75 percent of the design capacity; which ever is greater, or until otherwise directed by the Engineer.
- C. The concrete shall be removed to ensure a minimum of 1" clearance around the existing reinforcing steel and the new reinforcing steel.
- D. At the repair location, the concrete shall be excavated a minimum of 12" beyond the damaged reinforcing steel at each end into sound concrete to allow for splicing.
- E. After existing reinforcing steel is prepared, lap new reinforcing steel beside the existing reinforcing steel; Engineer shall provide lapping requirements.
- F. Where the removal of the existing concrete to achieve the required lap length is not deemed practical as determined by the Engineer, bar development could be achieved by epoxy doweling the reinforcing steel into the existing sound concrete. Embedment depth shall be provided by the Engineer.
- G. Follow all other procedures as defined in this section for concrete repair and placement.
- H. All reinforcing steel shall be MMFX 2, ASTM A615 grade 75 minimum.

3.05 Manufactured Repair Materials: Mixing

A. Mixing procedures and water quantities shall be accomplished according to the manufacturer's recommendations.

3.06 Manufactured Repair Materials: Application

- A. Application of manufactured repair materials shall be accomplished according to the manufacturer's recommendations.
- B. Contractor shall coordinate observation of repairs by manufacturer's representative. Manufacturer's representative shall periodically observe repairs in progress not less than once per week while repairs are underway and shall observe initial surface preparation and installation of repair materials.
- C. Completed repair surfaces shall be straight, level and true; ready to receive coating materials.
- D. Manufactured cementitious repair materials shall be cured according to manufacturer's recommendations.

3.07 Crack Repair

- A. Crack repairs will be performed for all areas as identified by the Engineer.
- B. Remove all loose and unsound concrete within and adjacent to the crack.

- C. For surface cracks, "V" notch the surface of the crack with a mechanical router, hand chipping tool, or other, or the combination thereof, to a maximum width of 1/4 inch. Remove loose debris and dust by air blasting the repair area. The substrate may be dry or damp prior to the product application. If the crack propagates through the structural element, contact Engineer before proceeding. Seal the underside with epoxy resin, adhesive paste or Portland cement-based quick setting compound as a dam for the liquid epoxy resin adhesive until cured.
- D. At the direction of the Engineer, if a control joint is to be installed at or near the crack location, saw cut the control joint a 1/4" wide by 1/2" in depth. Care shall be taken to avoid damage to the existing reinforcing steel. Prepare the control joint in accordance with Section 07900.
- E. For overhead cracks, install injection ports that intersect the crack at slab mid-depth. Injection ports shall be sealed prior to performing injection repairs.
- F. Finish grind all surfaces following crack repairs.

3.08 Sloping

- A. Water test areas to determine the level and locations of areas to be sloped. Engineer shall be present during water test.
- B. Allow water to stand a minimum of one hour to allow excess water to drain.
- C. Mark perimeter of ponding areas.
- D. Saw cut marked perimeter approximately 1/4" wide and 1/2" deep. Care shall be taken to avoid damaging the existing reinforcing steel.
- E. Provide a Concrete Surface Profile (CSP) of a minimum of a CSP 5 in accordance with ICRI Guideline 03732.
- F. Install repair materials while ensuring slope correction.
- G. Grind areas flush with the existing concrete surface profile.
- H. Re-water test to ensure proper drainage.
- I. Additional sloping required due to improper sloping procedures by the Contractor shall be the responsibly of the Contractor.

3.09 Surface Finishing Concrete Repairs

- A. In areas where new concrete has been placed and in areas adjacent to such areas, install skim coat mortar, epoxy mortar, or stucco, as required, to fill voids and match surface texture of surrounding surfaces.
- B. Finished concrete surfaces shall be uniform with a positive slope for drainage to the exterior of the structure.

END OF SECTION 03700

SECTION 06100 ROUGH CARPENTRY

PART 1 - GENERAL

1.01 Related Documents

A. Drawings and general provisions of the Contract Documents, including General and Supplementary Conditions apply to this Section.

1.02 Summary

- A. This Section specifies materials and procedures for structural wood framing and other rough carpentry.
- B. The procedures specified in this Section shall constitute minimum requirements. Where the Manufacturer has required procedures are more stringent than those contained within this Section, the Manufacturer's procedures shall govern.

1.03 References

- A. American Forest & Paper Association National Design Specification Current Edition with Supplement
- B. Florida Building Code, Current Edition
- C. Southern Pine Inspection Bureau Technical Data, Southern Pine
- D. American Plywood Association Plywood Design Specification
- E. American Institute of Timber Construction AITC-109
- F. American Wood Preservers Association Standard C-3
- G. Applicable American Society for Testing and Materials Standards and other applicable standards as referenced in the standards listed above

1.04 Project Conditions

A. Components covered by this Section shall be installed when ambient weather conditions are favorable.

1.05 Quality Assurance

- A. Wood products installed under this section shall bear grade stamps or other markings as follows
 - 1. Framing Lumber:
 - Grade stamps indicating species and grade according to American Forest & Paper Association
 - b. For preservative treated lumber, evidence of CCA content shall be maintained on site
 - 2. Plywood:
 - a. Grade stamps indicating span rating, species, thickness and glue type according to the requirements of the American Plywood Association
 - b. For preservative or fire resistant treated lumber, evidence of treatment method and extent shall be maintained on site.

SECTION 06100 ROUGH CARPENTRY

- Other Wood-Based Materials Installed Under This Section:
 - a. Identification shall be accomplished by the appropriate stamp of the agency listed in the reference standards, or by other means as directed by the ENGINEER.

1.06 Delivery, Storage and Handling

- A. Store materials in area(s) designated by MANATEE COUNTY.
- B. Identify framing lumber by grade and store similar grades separately from other grades.
- C. Protect stored materials against damage due to exposure using blocking, moisture protection, etc.
- D. Use care off-loading lumber to prevent damage, splitting and breaking of materials.
- E. Stockpile materials sufficiently in advance of need to ensure their availability in a timely manner.

1.07 Submittals

- A. Submittals by CONTRACTOR to MANATEE COUNTY / ENGINEER shall be made in a timely manner so as to cause no delay in the work.
- B. Submittals shall be made in triplicate.
- C. Submittals shall bear a stamp indicating review and approval by CONTRACTOR.
- D. Any deviations in the submittals from the requirements of the Project Manual shall be clearly identified in writing by CONTRACTOR.
- E. Approval by ENGINEER is required before beginning work affected by submittals.
- F. Submittals required by this Section include the following:
 - 1. Manufacturer's current Data Sheets, Specifications and Material Safety Data Sheets for products used under this section.

PART 2 - PRODUCTS

2.01 Acceptable Products

- A. Framing Lumber:
 - No. 2 Grade Southern Pine, Surfaced Four Sides unless noted otherwise
- B. Framing Lumber in Contact with Concrete, Masonry or Other Source of Moisture:
 - Preservative Treated No. 2 Grade Southern Pine
- C. Plywood:
 - Roof Sheathing: 1/2 inch APA Rated Sheathing, Exposure 1, 32/16 minimum span rating unless noted otherwise
 - 2. Wall Sheathing: 1/2 inch APA Rated Sheathing, Exposure 1 unless noted otherwise
- D. Laminated Veneer Lumber (LVL):
 - Georgia Pacific G-P Lam or engineer approved substitution w/ Fb=2850 psi, E=2,000,000 psi, Fv=285 psi

SECTION 06100 ROUGH CARPENTRY

E. Hardware:

- 1. Connectors: Type and size necessary to suit the conditions encountered as manufactured by Simpson Strong-tie Co. Finish shall be hot dip galvanized. Connectors shall be installed according to manufacturer's directions.
- 2. Connectors, Nails, Screws or Bolts for Installation of Manufactured Building Materials: As recommended by the product manufacturer, unless noted otherwise.
- 3. Other carbon steel hardware (Nails, Bolts, Anchors, etc.) shall be hot-dip galvanized.

F. Preservative Treatment:

1. All preservative treated wood products shall be treated by the pressure process for the species of wood selected per the American Wood Preservers Association Standard C-3 to 0.4 CCA.

2.02 Substitute Products

A. CONTRACTOR may request substitution of products as provided in the General Conditions.

PART 3 - EXECUTION

3.01 General

A. Materials installed under this Section shall be installed according to applicable provisions of the 2010 Edition of the Florida Building Code, Chapter 23 – Wood.

3.02 Framing

- A. Replace damaged or deteriorated framing with new framing of like dimensions as directed by ENGINEER.
- B. Fastening shall meet or exceed the requirements of the Florida Building Code. All fasteners shall be hot-dip galvanized.
- C. All framing members shall be installed plumb, level and true.
- D. Framing elements shall be constructed of full-length members, free of splices unless directed by ENGINEER.
- E. Provide solid blocking for accessories, flashing, and other ancillary items fastened to framing.

END OF SECTION 06100

PART 1 - GENERAL

1.01 Summary

- A. Furnish and install an Insulated Deck, SBS Torch Applied System, including (but not limited to):
 - 1. Roofing manufacturer's requirements for the specified warranty.
 - 2. Removal and disposal of entire existing roof membrane/system(s) and flashings.
 - 3. Removal and disposal of all existing insulation and substrates down to the structural decking.
 - 4. Preparation of roofing deck.
 - 5. Wood nailers for roofing attachment, as required.
 - 6. Tapered Insulation.
 - 7. Cover boards.
 - 8. Modified bitumen roofing.
 - Metal roof copings.
 - 10. Flashings.
 - 11. Walkway, service and equipment pads, as required.
 - 12. AC stands and related equipment with shop drawings, as required.
 - 13. Access ladders and access hatches with shop drawings.
- B. Disposal of demolition debris and construction waste is the responsibility of Contractor. Perform disposal in manner complying with all applicable federal, state, and local regulations. Include removal and disposal of abandoned generators. Locations of the crane and/or trash chutes are to be determined.
- C. Comply with the published recommendations and instructions of the roofing membrane manufacturer.
- D. Commencement of work by the Contractor shall constitute acknowledgement by the Contractor that this specification can be satisfactorily executed, under the project conditions and with all necessary prerequisites for warranty acceptance by roofing membrane manufacturer. No modification of the Contract Sum will be made for failure to adequately examine the Contract Documents or the project conditions.

1.02 Related Requirements

- A. Section 06100 Rough Carpentry: Wood nailers associated with roofing and roof insulation.
- B. Section 07620 Sheet Metal Flashing and Trim: Formed metal flashing and trim items associated with roofing.

1.03 Definitions

A. Roofing Terminology: Refer to ASTM D1079 for definition of terms related to roofing work not otherwise defined in the section.

B. LTTR: Long Term Thermal Resistance, as defined by CAN-ULC S770.

1.04 References

- A. Referenced Standards: These standards form part of this specification only to the extent they are referenced as specification requirements.
- B. ASTM C 208 Standard Specification for Cellulosic Fiber Insulating Board; 1995 (Reapproved 2001).
- C. ASTM C 1289 Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board; 2012.
- D. ASTM D 312 Standard Specification for Asphalt Used in Roofing; 2000.
- E. ASTM D 2824 Standard Specification for Aluminum-Pigmented Asphalt Roof Coatings, Nonfibered, Asbestos Fibered, and Fibered without Asbestos; 2004.
- F. ASTM D 4601 Standard Specification for Asphalt-Coated Glass Fiber Base Sheet Used in Roofing; 2004.
- G. ASTM D 6163 Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Glass Fiber Reinforcements; 2000.
- H. ASTM D 6164 Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Polyester Reinforcements; 2000.
- ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials; 2012.
- J. PS 1 Construction and Industrial Plywood; 2009.
- K. PS 20 American Softwood Lumber Standard; 2010.
- L. ASTM C 728 Standard Specification for Perlite Thermal Insulation Board; 2005 (Reapproved 2010).
- M. ASTM C 1177/C 1177M Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing; 2008.
- N. ASTM D 1079 Standard Terminology Relating to Roofing, Waterproofing, and Bituminous Materials; 2010.

1.05 Submittals

A. Product Data:

- Provide membrane manufacturer's printed data sufficient to show that all components of roofing system, including insulation and fasteners, comply with the specified requirements and with the membrane manufacturer's requirements and recommendations for the system type specified. This submittal shall be provided to Manatee County prior to any fabrication or construction, shall follow Section 01300, and shall include at least the following:
 - a. Technical data sheet for SBS FR roof membrane.
 - b. Technical data sheets for Interply SBS Base Sheet.
 - c. Technical data sheet for M B Base Sheet / Anchor Sheet.

- d. Technical data sheet for each insulation type.
- e. Technical data sheet for each cover board type.
- f. Technical data sheet for one-way roof vents.
- g. Technical data sheet for lead boots.
- B. Samples: This submittal shall be provided to Manatee County prior to any fabrication or construction, shall follow Section 01300, and shall have samples of each product to be used.
 - 1. Sample of SBS FR roof membrane, SBS Base Sheet and M B Base Sheet.
 - 2. Sample of each insulation type.
- C. Shop Drawings: Provide:
 - 1. For tapered insulation, provide project-specific layout and dimensions for each board.
 - 2. For access ladders, provide signed and sealed shop drawings from the manufacturer.
 - 3. For access hatches, provide signed and sealed shop drawings from the manufacturer.
- D. Specimen Warranty: Submit prior to starting work.
- E. Installer Qualifications: This submittal shall be provided to Manatee County prior to any fabrication or construction, shall follow Section 01300, and shall include a letter from manufacturer attesting that the roofing installer meets the specified qualifications.
- F. Pre-Installation Notice: This submittal shall be provided to Manatee County prior to any fabrication or construction, shall follow Section 01300, and shall provide a copy to show that manufacturer's required Pre Installation Notice (PIN) has been accepted and approved by the manufacturer.

1.06 Quality Assurance

- A. Applicator Qualifications: Roofing installer shall have the following:
 - 1. Current Firestone Red Shield Licensed Contractor status, or equal.
 - 2. Current approval, license, or authorization as applicator by the manufacturer.
 - 3. At least five (5) years experience in installing specified system.
 - 4. Current Member in good standing with the Florida Roofing and Sheet Metal Contractors Association (FRSA).
- B. Pre-Installation Conference: Before start of roofing work, Contractor shall hold a meeting to discuss the proper installation of materials and requirements to achieve the warranty.
 - 1. Require attendance with all parties directly influencing the quality of roofing work or affected by the performance of roofing work.
 - 2. Notify Manatee County / Engineer well in advance of meeting.
 - 3. A record of the discussions of the conference shall be made and distributed to all parties involved and shall include decisions and (dis)agreements reached. If substantial disagreements and/or outstanding items exist at the conclusion of the conference, determine how and when these items will be resolved. If needed, a subsequent meeting shall be held to resolve any of these items.

1.07 Delivery, Storage, and Handling

- A. Deliver products in manufacturer's original containers, dry and undamaged, with seals and labels intact and legible. The seals and labels shall include the following:
 - 1. Manufacturer's name.
 - 2. Product brand name.
 - Product type.
 - Date of manufacture.
 - 5. Directions for storage.

B. Storage:

- Store materials clear of ground and moisture with weather protective covering.
- Store rolls of felt and other sheet materials on end on pallets or other raised surfaces. Do not double stack rolls.
- 3. Handle and store roofing materials and place equipment in a manner to avoid significant or permanent damage to deck or other structural supporting members.

C. Handling:

- 1. Protect liquid materials from direct sunlight. Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.
- 2. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources.
- 3. Keep combustible materials away from ignition sources.

1.08 Warranty

- A. Comply with all warranty procedures required by manufacturer, including notifications, scheduling, and inspections.
- B. Warranty: Firestone 30 year Limited Warranty, or equal, with Increased Wind Speed covering membrane, roof insulation, and other indicated components of the system.
 - 1. Limit of Liability: No dollar limitation.
 - 2. Scope of Coverage: Repair leaks in the roofing system caused by:
 - a. Ordinary wear and tear of the elements.
 - b. Unintentional damage due to normal rooftop inspections, maintenance or service.
 - c. Manufacturing defect in materials.
 - d. Defective workmanship used to install these materials.
 - e. Damage due to winds up to 120 mph (193 km/h).
 - 3. Not Covered:
 - a. Damage due to winds in excess of 120 mph (193 km/h).
 - b. Hail.
 - c. Intentional damage.

- C. Insulation Warranty: Separate Firestone ISO 95+ Insulation Warranty, or equal, with warranty term coinciding with warranty noted above.
 - 1. Limit of Liability: No dollar limitation.
 - 2. Scope of Coverage: Provide replacement for insulation that warps, bows, or is on the point of causing a roof leak as a result of manufacturing defect.

PART 2 - PRODUCTS

2.01 Manufacturers

- A. Acceptable Manufacturer Roofing System: Firestone Building Products Co., Carmel, IN. www.firestonebpco.com. Roofing systems by other manufacturers may be considered and must meet all aspects as shown in this Section.
- B. Manufacturer shall include documentation showing that they have installed this product on a minimum of 20 projects and that at least 15 of those projects were in hurricane prone regions.
- C. Manufacturer of Insulation and Cover Boards: Firestone Building Products Co, or equal.

2.02 Roofing System Description

- A. Roofing System: Styrene-butadiene-styrene modified bituminous membrane:
 - 1. Membrane: SBS FR modified bitumen.
 - 2. Thickness: As specified elsewhere.
 - 3. Membrane Attachment: Mineral granule surfaced cap sheet interply sheet and base sheet, heat welded (torch applied).
 - 4. Slope: Deck is sloped but not enough; provide additional slope of 1/4 inch per foot (1:48) by means of tapered insulation.
 - 5. Comply with applicable local building code requirements and Miami Dade County NOA No.: 11-0119.11, page 42 of 92 for a -442.5 psf (See Section 3.05, line item F of the installation instructions for insulation adhesive bead spacing requirements that supersede the NOA requirements).
 - 6. Provide assembly having Underwriters Laboratories, Inc. (UL) Class A Fire Hazard Classification and shall comply with ASTM E 108 for all applications and slopes indicated.
- B. Roofing System Components: Listed in order from the top of the roof down:
 - Insulation Cover Board: Gypsum-based board, 1/2 inch thick; Low Rise Foam Adhesive Attached.
 - Insulation:
 - a. Tapered: Slope as indicated; provide minimum R-value at thinnest point; place tapered layer on bottom.
 - b. Top Layer: Polyisocyanurate foam board, non-composite; Low Rise Foam Adhesive Attached.
 - c. Intermediate Layer(s), If Any: Polyisocyanurate foam board, non-composite; Low Rise Foam Adhesive Attached.
 - d. Bottom Layer: Polyisocyanurate foam board, non-composite; Low Rise Foam Adhesive Attached.

e. Crickets: Tapered insulation of same type as specified for top layer; slope as indicated.

2.03 SBS Modified Bitumen Materials

- A. Cap Sheet: Granule surfaced SBS polymer-modified bitumen sheet, reinforced with non-woven polyester fabric, complying with ASTM D 6164, Type II, Grade G, with the following additional characteristics:
 - 1. Formulated for torch application.
 - 2. Reinforcing Fabric: 7.8 oz per sq yd (265 g/sq m), with continuous fiberglass strands in machine direction.
 - 3. Nominal Thickness: 0.160 inch (4.1 mm).
 - 4. Post-Consumer Recycled Content: 5 percent, nominal.
 - 5. Sheet Width: 3.3 feet (1 m), nominal.
 - 6. Granule Color: White.
 - 7. Acceptable Product: SBS Premium FR Torch by Firestone.
- B. Interply Base Sheet: Torch grade SBS polymer-modified bitumen sheet, complying with ASTM D 6164, Type I, Grade S, with non-woven fabric, formulated for torch application to substrate and cap sheet, with the following additional characteristics:
 - 1. Reinforcing Fabric: 5.3 oz per sq yd (180 g/sq m) polyester
 - 2. Nominal Thickness: 0.12 inch (3.1 mm).
 - 3. Post-Consumer Recycled Content: 4 percent, nominal.
 - 4. Sheet Width: 3.3 feet (1 m), nominal.
 - 5. Acceptable Product: SBS Poly Torch Base by Firestone.
- C. Base Sheet: Same as Interply Base Sheet:
 - 1. Acceptable Product: SBS Ply Torch Base by Firestone.
- D. Flashings: Same materials and configuration as roofing membrane.
- E. Liquid Applied Flashings: UltraFlash Liquid Applied Flashing System by FSBP:
 - 1. See Section 3.08 Line Items B and E for specified UltraFlash flashing requirements.

2.04 Asphalt Roofing Materials

- A. Base Sheet / Anchor Sheet: Asphalt impregnated and coated glass fiber mat reinforced roofing sheet, complying with ASTM D 4601, Type II, formulated for mechanical attachment to substrate and hot asphalt and cold adhesive application to substrate and cap sheet, with the following additional characteristics:
 - 1. Nominal Thickness: 0.12 inch (1.0 mm).
 - 2. Approved for use in Factory Mutual tested assemblies.
 - 3. Complying with criteria for UL G-2 base sheet.
 - 4. Sheet Width: 3.3 feet (1 m), nominal.
 - 5. Acceptable Product: MB Base M by Firestone.

- 6. Reinforcing Fabric
- B. Roof Walkway Pads: Additional layer of Granule surfaced SBS polymer-modified cap sheet with a contrasting color.

2.05 Roof Insulation and Cover Boards

- A. Polyisocyanurate Board Insulation: Closed cell polyisocyanurate foam with black glass reinforced mat laminated to faces, complying with ASTM C 1289 Type II Class 1, with the following additional characteristics:
 - 1. Thickness: As indicated elsewhere.
 - 2. Size: asphalt applied insulation may be no larger than 48 inches (1220 mm) by 48 inches (1220 mm), nominal.
 - a. Exception: Insulation to be attached using adhesive or asphalt may be no larger than 48 inches by 48 inches, nominal
 - 3. Compressive Strength: 20 psi (138 kPa) when tested in accordance with ASTM C 1289.
 - 4. Ozone Depletion Potential: Zero; made without CFC or HCFC blowing agents.
 - 5. Recycled Content: 19 percent post-consumer and 15 percent post-industrial, average.
 - 6. Acceptable Product: ISO 95+ GL Polyisocyanurate Insulation by Firestone.
- B. Gypsum-Based Cover Board: Non-combustible, water resistant gypsum core with embedded glass mat facers, complying with ASTM C 1177/C 1177M, and with the following additional characteristics:
 - 1. Size: 48 inches (1220 mm) by 48 inches (1220 mm), nominal.
 - a. Exception: Board to be attached using adhesive or asphalt may be no larger than 48 inches by 48 inches, nominal.
 - 2. Thickness: As indicated elsewhere.
 - 3. Surface Water Absorption: 2.5 g, maximum, when tested in accordance with ASTM C 473.
 - 4. Spanning Capability: Recommended by manufacturer for following minimum flute spans:
 - a. 1/2 inch Thickness: 5 inches, minimum.
 - 5. Surface Burning Characteristics: Flame spread of 0, smoke developed of 0, when tested in accordance with ASTM E 84.
 - 6. Combustibility: Non-combustible, when tested in accordance with ASTM E 136.
 - 7. Factory Mutual approved for use with FM 1-60 and 1-90 rated roofing assemblies.
 - 8. Mold Growth Resistance: Zero growth, when tested in accordance with ASTM D 3273 for minimum of four (4) weeks.
 - 9. Pre-primed for better adhesion.
 - 10. Acceptable Product: USG Securerock Gypsum Fiber Roof Board.
- C. Adhesive for Insulation and coverboard attachment: Type as required by roof membrane manufacturer for roofing system and warranty to be provided; use only adhesives furnished by roof membrane manufacturer.
 - 1. Acceptable Product: Iso Stick Insulation Adhesive by Firestone Building Products.

2.06 Metal Accessories

- A. Parapet Copings and exposed metal flashings: Shop fabricated by installing Contractor. Fabricate utilizing Firestone Una-Clad flat sheets, 24 gauge, Kynar finish, color selected by Engineer / Manatee County.
- B. Access Ladders and Hatches: shop fabricated based on filed measurements such as **O'Keeffe** (or equivalent). Provide engineered shop drawings.

2.07 Accessory Materials

- A. Wood Nailers: PS 20 dimension lumber, Structural Grade No. 2 or better Southern Pine, Douglas Fir; or PS 1, APA Exterior Grade plywood; pressure preservative treated.
 - 1. Width: 3-1/2 inches, nominal minimum, or as wide as the nailing flange of the roof accessory to be attached to it.
 - Thickness: Same as thickness of roof insulation.
- B. Cant Strips and Tapered Edge Strips: 45 degree face slope and minimum 5 inch (127 mm) face dimension; provide at all angle changes between vertical and horizontal planes that exceed 45 degrees.
 - 1. Type: Non-flammable perlite, complying with ASTM C 728.
 - 2. Install using hot asphalt (Type IV), roofing mastic, or mechanically fastened using fasteners and plates approved by roofing manufacturer.

PART 3 – INSTALLATION

3.01 General

- A. Install roofing, insulation, flashings, and accessories in accordance with roofing manufacturer's published instructions and recommendations for the specified roofing system. Where manufacturer provides no instructions or recommendations, follow good roofing practices and industry standards. Comply with federal, state, and local regulations.
- B. Obtain all relevant instructions and maintain copies at project site for duration of installation period.
- C. Do not start work until the Pre-Installation Notice has been submitted to the manufacturer as notification that this project requires a manufacturer's warranty.
- D. Perform work using competent and properly equipped personnel.
- E. Temporary closures, which prevents wetting of concrete roof deck and ensures that moisture does not damage any completed section of the new roofing system, are the responsibility of the applicator. Completion of flashings, terminations, and temporary closures shall be completed as required to provide a watertight condition.

- F. Install roofing membrane only when surfaces are clean, dry, smooth and free of snow or ice; do not apply roofing membrane during inclement weather or when ambient conditions will not allow proper application; consult manufacturer for recommended procedures during cold weather. Concrete roof slab shall have relative humidity of not more than 80% at ½" below top surface of each work area prior to installation of roofing system. The Contractor shall employ an independent testing agency to perform all relative humidity tests to ensure that the concrete decking meets dryness criteria for membrane installation. Do not work with sealants and adhesives when material temperature is outside the range of 60 to 80 degrees F (15 to 25 degrees C).
- G. Protect adjacent construction, property, vehicles, and persons from damage related to roofing work; repair or restore damage caused by roofing work.
 - 1. Protect from spills and overspray from bitumen, adhesives, sealants and coatings.
 - 2. Particularly protect metal, glass, plastic, and painted surfaces from bitumen, adhesives, and sealants within the range of wind-borne overspray.
 - 3. Protect finished areas of the roofing system from roofing related work traffic and traffic by other trades.
 - 4. The Contractor shall be responsible for the water tightness of the roofing system during all work. Any damage to property at the exterior and interior of the building related to water intrusion or negligence by Contractor shall be repaired by the Contractor at no cost to Manatee County.
- H. Until ready for use, keep materials in their original containers as labeled by the manufacturer.
- I. Consult membrane manufacturer's instructions, container labels, and Material Safety Data Sheets (MSDS) for specific safety instructions. Keep all adhesives, sealants, primers and cleaning materials away from all sources of ignition.
- J. Provide all mechanical, electrical and plumbing work to facilitate the transfer of AC condensers and the installation of a complete weatherproofing system.
- K. All work is to comply with the current building codes, the 2010 Florida Building Code Building, along with the 2010 Florida Building Code Existing.
- L. Schedule all work to minimize the time that AC units are disconnected.

3.02 Examination

- A. Examine roof deck to determine that it is sufficiently rigid and a minimum 22 Gauge to support installers and their mechanical equipment and that deflection will not strain or rupture roof components or deform deck.
- B. Verify that surfaces and site conditions are ready to receive work. Correct defects in the substrate before commencing with roofing work.
- C. Examine roof substrate to verify that it is properly sloped to scuppers.
- D. Verify that the specifications and drawing details are workable and not in conflict with the roofing manufacturer's recommendations and instructions; start of work constitutes acceptable of project conditions and requirements.

3.03 Preparation

- A. Remove all of the existing roof system down to the roof deck including all existing composition base flashings. Dispose of all materials properly. Perform asbestos removal in accordance with federal, state and local regulations and dispose of waste in legal manner.
 - 1. At penetrations, remove all existing flashings, including lead, asphalt, mastic, etc.
 - 2. At walls, curbs, and other vertical and sloped surfaces, remove loose and unsecured flashings; remove mineral surfaced and coated flashings; remove excessive asphalt to provide a smooth, sound surface for new flashings.
- B. Take appropriate measures to ensure that fumes from adhesive solvents are not drawn into the building through air intakes.
- C. Prior to proceeding, prepare roof surface so that it is clean, dry, and smooth, and free of sharp edges, fins, roughened surfaces, loose or foreign materials, oil, grease and other materials that may damage the membrane.
- D. Fill all surface voids in the immediate substrate that are greater than 1/4 inch (6 mm) wide with fill material acceptable insulation to membrane manufacturer.
- E. Seal, grout, or tape deck joints, where needed, to prevent bitumen seepage into building.
- F. Wood Nailers: Provide wood nailers at all perimeters and other locations where indicated on the drawings, of total height matching the total thickness of insulation being used.

3.04 Insulation and Cover Board Installation

- A. Install insulation in configuration and with attachment method(s) specified in PART 2, under Roofing System.
- B. Install insulation in a manner that will not compromise the vapor retarder integrity.
- C. Install only as much insulation as can be covered with the completed roofing system before the end of the day's work or before the onset of inclement weather.
- D. Lay roof insulation in courses parallel to roof edges.
- E. Neatly and tightly fit insulation to all penetrations, projections, and nailers, with gaps not greater than 1/4 inch (6 mm). Fill gaps greater than 1/4 inch (6 mm) with acceptable insulation. Do not leave the roofing membrane unsupported over a space greater than 1/4 inch (6 mm).
- F. Foam Adhesive Attachment: Apply in accordance with membrane manufacturer's instructions and recommendations; "walk-in" individual roof insulation boards to obtain maximum adhesive contact. Bead spacing to be 4" o.c. 0.75" to 1" bead width for both tapered insulation and coverboard installations to satisfy FSBP increased wind speed warranty requirements.

3.05 Installation of Interply Base for Modified Bitumen Sheet

- A. Starting at the low point, lay each ply so that flow of water is over or parallel to, never against, the lap.
 - 1. One-Ply SBS Base Sheet.
 - 2. End Laps: Install all sheets with minimum 2 inch (50 mm) end laps.
 - Maintain minimum 12 inches (305 mm) stagger between end laps in adjacent layers.

- B. Embed the full width of plies in full mopping of asphalt applied to the substrate at rate recommended by roofing manufacturer; a minor flow of hot asphalt should be seen coming from the side laps.
- C. Extend membrane up cant strips a minimum of 4 inches (100 mm) onto vertical surfaces.
- D. Keep sheets free of wrinkles, buckles and fishmouths; "broom in" promptly to eliminate voids and obtain proper embedment.
- E. Seal seams and ends to insure water tightness. Seal membrane around roof penetrations.
- F. Install waterproof cut-off to membrane at end of day's operation. Remove cut-off before resuming roofing.
- G. Complete entire membrane assembly without undue delay.
 - 1. Exception: The cap sheet may be installed not more than 14 days after installation of the interply base sheet.
 - a. Before resuming installation, be sure the surface of the last sheet is clean and dry; broomed and cleaned sufficiently using the necessary equipment.
 - Remove materials that show evidence of water intrusion and replace with like material.
 - c. Cover materials that have been damaged with additional layers of ply sheets installed over them equal in quantity to those originally installed.
 - d. Prepare the surface as required for cap sheet attachment method.

3.06 Modified Bitumen Installation by Heat Welding (Torch)

- A. In air temperature below 50 degrees F (10 degrees C), unroll sheets and allow to relax; flatten with broom if necessary to eliminate voids and obtain proper embedment.
- B. Start at the low point with a full width sheet. Align and unroll remaining sheets during heat fusing operation.
- C. Maintain one-half sheet stagger between first and second layer; install with minimum 3 inch (75 mm) side laps and 6 inch (150 mm) end laps; keep sheets free of wrinkles, buckles and fish mouths.
- D. Granule Surfaced Sheets: In areas that form the substrate for heat fusing, such as laps, flashings, and patches, embed the granules prior to fusing subsequent sheet. Apply additional granules to all exposed surfaces that have none or cover with additional piece of granule surfaced material.
- E. Complete the entire membrane installation without undue delay.

3.07 Flashing and Accessories Installation

- A. Install flashings, including laps, splices, joints, bonding, adhesion, and attachment, as required by membrane manufacturer's recommendations and details.
- B. Existing Scuppers: Remove existing metal flashing and flash with UltraFlash Liquid Applied Flashing / Membrane System by FSBP, in a 2 application process as follows: base coat of UltraFlash Liquid Membrane, (1) ply of UltraFlash Fabric, additional coat of UltraFlash Liquid Membrane, additional (1) ply of UltraFlash Fabric, top coat of UltraFlash Liquid Membrane followed by an application of Granules.

- C. Metal Accessories: Install metal edgings, gravel stops, roof vents, and copings in locations indicated on the drawings, with horizontal leg of edge member over membrane and flashing over metal onto membrane.
 - 1. Follow roofing manufacturer's instructions.
 - 2. Remove protective plastic surface film immediately before installation.
 - Install water block sealant under the membrane anchorage leg.
 - 4. Flash with manufacturer's recommended flashing sheet unless otherwise indicated.
 - 5. Where single application of flashing will not completely cover the metal flange, install additional piece of flashing to cover the metal edge.
 - 6. If the roof edge includes a gravel stop and sealant is not applied between the laps in the metal edging, install an additional piece of self-adhesive flashing membrane over the metal lap to the top of the gravel stop; apply seam edge treatment at the intersections of the two flashing sections.
 - 7. When the roof slope is greater than 1:12, apply seam edge treatment along the back edge of the flashing.
- D. Flashing at Walls, Curbs, and Other Vertical and Sloped Surfaces: Install weather tight flashing at all walls, curbs, parapets, curbs, skylights, and other vertical and sloped surfaces that the roofing membrane abuts to; extend flashing at least 8 inches (200 mm) high above membrane surface.
 - 1. Use the longest practical flashing pieces.
 - 2. Evaluate the substrate and overlay and adjust installation procedure in accordance with membrane manufacturer's recommendations.
 - 3. Complete the splice between flashing and the main roof sheet with specified splice adhesive before adhering flashing to the vertical surface.
 - 4. Provide termination directly to the vertical substrate as shown on roof drawings.
 - 5. Confirm the proper slope of the flat areas at the fifth floor lanai roofs, install new sealants and make corrections as required.

E. Roof Drains:

- 1. Existing Drains: Remove all existing flashings, drain leads, roofing materials and cement from the drain; remove clamping ring.
- 2. Taper insulation around drain to provide smooth transition from roof surface to drain. Use specified pre-manufactured tapered insulation with facer or suitable bonding surface to achieve slope; slope not to exceed manufacturer's recommendations.
- 3. Position membrane, then cut a hole for roof drain to allow 1/2 to 3/4 inch (12 to 19 mm) of membrane to extend inside clamping ring past drain bolts.
- 4. Make round holes in membrane to align with clamping bolts; do not cut membrane back to bolt holes.
- 5. Apply sealant on top of drain bowl where clamping ring seats below the membrane
- 6. Install roof drain clamping ring and clamping bolts; tighten clamping bolts to achieve constant compression.

- F. Flashing at Penetrations: Flash all penetrations passing through the membrane; make flashing seals directly to the penetration.
 - 1. Pipes, Round Supports, and Similar Items: UltraFlash by FSBP, Liquid Applied Flashing / Membrane System in a 2 application process as follows: base coat of UltraFlash Liquid Membrane, (1) ply of UltraFlash Fabric, additional coat of UltraFlash Liquid Membrane, additional (1) ply of UltraFlash Fabric, top coat of UltraFlash Liquid Membrane followed by an application of Granules.
 - 2. Pipe Clusters and Unusual Shaped Penetrations: UltraFlash by FSBP, Liquid Applied Flashing / Membrane System in a 2 application process as follows: base coat of UltraFlash Liquid Membrane, (1) ply of UltraFlash Fabric, additional coat of UltraFlash Liquid Membrane, additional (1) ply of UltraFlash Fabric, top coat of UltraFlash Liquid Membrane followed by an application of Granules.
 - 3. Field verify the plumbing stack elevations and extend where required by code.
 - 4. Flexible and Moving Penetrations: Provide weather tight goosenecks set in sealant and secured to deck, flashed as recommended by manufacturer.
 - 5. High Temperature Surfaces: Where the in-service temperature is, or is expected to be, in excess of 180 degrees F, protect the elastomeric components from direct contact with the hot surfaces using an intermediate insulated sleeve as flashing substrate as recommended by membrane manufacturer.
- G. AC Condenser Stands: Install new stands to the structure according to the shop drawings. All mechanical, electrical and plumbing work is to be included.
- H. Access Ladders and Hatches: Install new ladders and hatches according to the shop drawings.

3.08 Finishing and Walkway Installation

- A. Install walkways at access points to the roof, around rooftop equipment that may require maintenance, and where indicated by the ENGINEER / Manatee County.
 - 1. All Pads: Shall be a contrasting color.
 - 2. All Pads: Shall adhere to the roofing membrane.

3.09 Field Quality Control

- A. Inspection by Manufacturer: Provide final inspection of the roofing system by a Technical Representative employed by roofing system manufacturer specifically to inspect installation for warranty purposes (i.e. not a sales person).
- B. Perform all corrections necessary for issuance of warranty.
- C. A core sample of the entire roofing system at four independent quadrant locations specified by Manatee County to be reviewed prior to approval of roofing system. If any core does not meet the required specifications contractor shall remove and replace the quadrant at no cost to Manatee County.

3.10 Cleaning

A. Clean all contaminants generated by roofing work from building and surrounding areas, including bitumen, adhesives, sealants, and coatings.

- B. Repair or replace building components and finished surfaces damaged or defaced due to the work of this section; comply with recommendations of manufacturers of components and surfaces.
- C. Remove leftover materials, trash, debris, equipment from project site and surrounding areas.

3.11 Protection

A. Where construction traffic must continue over finished roof membrane, provide durable protection and replace or repair damaged roofing to original condition.

SECTION 07620 SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.01 SUMMARY

A. Fabricated sheet metal items, including flashings, and counterflashings.

1.02 RELATED REQUIREMENTS

A. Section 06100 - Rough Carpentry: Wood nailers associated with roofing and roof insulation.

1.03 REFERENCES

- A. Referenced Standards: These standards form part of this specification only to the extent they are referenced as specification requirements.
- B. ASTM B209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2010.
- C. ASTM B209M Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate [Metric]; 2010.
- D. SMACNA (ASMM) Architectural Sheet Metal Manual; Sheet Metal and Air Conditioning Contractors' National Association; 2012.

1.04 SUBMITTALS

- A. See Section 01300 Submittals, for submittal procedures.
- B. Shop Drawings: Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details.
- C. Samples: Submit two samples 2"x 3" inch in size illustrating metal finish color.

1.05 QUALITY ASSURANCE

- A. Perform work in accordance with SMACNA Architectural Sheet Metal Manual requirements and standard details, except as otherwise indicated.
- B. Pre-Installation Conference: Before start of roofing work, Contractor shall hold a meeting to discuss the proper installation of materials and requirements to achieve the warranty.
 - 1. Require attendance with all parties directly influencing the quality of roofing work or affected by the performance of roofing work.
 - 2. Notify Manatee County / Engineer well in advance of meeting.
 - 3. A record of the discussions of the conference shall be made and distributed to all parties involved and shall include decisions and (dis)agreements reached. If substantial disagreements and/or outstanding items exist at the conclusion of the conference, determine how and when these items will be resolved. If needed, a subsequent meeting shall be held to resolve any of these items.
- C. Fabricator and Installer Qualifications: Company specializing in sheet metal work with five (5) years of documented experience.

SECTION 07620 SHEET METAL FLASHING AND TRIM

1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver products in manufacturer's original containers, dry and undamaged, with seals and labels intact and legible. The seals and labels shall include the following:
 - 1. Manufacturer's name.
 - Product brand name.
 - Product type.
 - Date of manufacture.
 - Directions for storage.

B. Storage:

- 1. Store materials clear of ground and moisture with weather protective covering.
- 2. Store on pallets or other raised surfaces. Stack material to prevent twisting, bending, and abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.
- 3. Handle and store roofing materials and place equipment in a manner to avoid significant or permanent damage to deck or other structural supporting members.

C. Handling:

- 1. Protect liquid materials from direct sunlight. Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.
- 2. Protect roof insulation materials from physical damage and from deterioration, discoloration or staining by sunlight, moisture, soiling, and other sources.
- 3. Keep combustible materials away from ignition sources.

PART 2 - PRODUCTS

2.01 SHEET MATERIALS

- A. Pre-Finished Aluminum: ASTM B209 (ASTM B209M); 0.050" inch thick; plain finish shop precoated with fluoropolymer coating.
 - 1. Fluoropolymer Coating: High Performance Organic Finish, AAMA 2604; multiple coat, thermally cured fluoropolymer finish system.
 - Color: To match approved sample.
 - 3. Manufacturer: Firestone Building Products, or equal Flat Sheets.

2.02 ACCESSORIES

- A. Fasteners: Stainless steel, with soft neoprene washers.
- B. Sealant: Firestone AP Sealant, or equal.

SECTION 07620 SHEET METAL FLASHING AND TRIM

2.03 FABRICATION

- A. Form sections true to shape, accurate in size, square, and free from distortion or defects.
- B. Form pieces in longest possible lengths.
- C. Hem exposed edges on underside 1/2 inch; miter and seam corners.
- D. Fabricate corners from one piece with minimum 18 inch long legs; seam for rigidity, seal with sealant.
- E. Fabricate vertical faces with bottom edge formed outward 1/4 inch and hemmed to form drip.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located.
- B. Verify roofing termination and base flashings are in place, sealed, and secure.

3.02 PREPARATION

A. Install starter and edge strips, and cleats before starting installation.

3.03 INSTALLATION

- A. Secure flashings in place using concealed fasteners. Use exposed fasteners only where permitted.
- B. Fit flashings tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- C. Seal metal joints watertight.

3.04 FIELD QUALITY CONTROL

A. Inspection will involve surveillance of work during installation to ascertain compliance with specified requirements.

SECTION 07720 ROOF ACCESSORIES (ONE-WAY VENTS)

PART 1 - GENERAL

1.01 SUMMARY

A. Furnish and install one-way rooftop pressure relief vents.

1.02 RELATED REQUIREMENTS

A. Section 07720 – Roof Accessories.

1.03 REFERENCES

- A. Referenced Standards: These standards form part of this specification only to the extent they are referenced as specification requirements.
- B. National Roofing Contractors Association (NRCA).

1.04 SUBMITTALS

- A. All components of this submittal shall comply with Section 01330.
- B. Product Data: Submit manufacturer's product data including installation instructions.
- C. Shop Drawings: Submit manufacturer's shop drawings including plans, elevations, sections, and details, indicating dimensions, materials, hardware, sizes, spacing, and installation layout.
- D. Samples: Submit manufacturer's sample of one-way rooftop pressure relief vents.
- E. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- F. Warranty Documentation: Submit manufacturer's standard warranty.

1.05 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Manufacturer shall have the following:
 - 1. At least five (5) years experience in manufacturing specified system.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver products in manufacturer's original containers, dry and undamaged, with seals and labels intact and legible. The seals and labels shall include the following:
 - 1. Manufacturer's name.
 - Product brand name.
 - 3. Product type.
 - 4. Date of manufacture.
 - Directions for storage.

SECTION 07720 ROOF ACCESSORIES (ONE-WAY VENTS)

B. Storage:

- 1. Store materials in clean and dry indoor area.
- 2. Store products in manufacturer's original containers, dry and undamaged, with seals and labels intact and legible.

C. Handling:

1. Handle products throughout to prevent damage.

1.07 WARRANTY

A. Comply with all warranty procedures required by manufacturer, including notifications, scheduling, and inspections.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Acceptable Manufacturer – OMG, Inc., 153 Bowles Road, Agawam, Massachusetts 01001. Phone number 800-633-3800 and fax number 413-821-0417. www.olyfast.com Roofing accessories by other manufacturers may be considered.

2.02 ROOFING SYSTEM DESCRIPTION

- A. Roofing Accessories: One-way roof vents with two-way breathers.
 - 1. **Membrane: SBS** FR modified bitumen.

PART 3 – INSTALLATION

3.01 GENERAL

- A. Install roofing accessories in accordance with manufacturer's published instructions and recommendations for the specified system. Where manufacturer provides no instructions or recommendations, follow good roofing practices and industry standards. Comply with federal, state, and local regulations.
- B. Obtain all relevant instructions and maintain copies at project site for duration of installation period.
- C. Do not start work until the Pre-Installation Notice has been submitted to the manufacturer as notification that this project requires a manufacturer's warranty.
- D. Perform work using competent and properly equipped personnel.
- E. Completion of flashings, terminations, and temporary closures shall be completed as required to provide a watertight condition.

SECTION 07720 ROOF ACCESSORIES (ONE-WAY VENTS)

- F. Protect adjacent construction, property, vehicles, and persons from damage related to roofing work; repair or restore damage caused by roofing work. The Contractor shall be responsible for the water tightness of the roofing system during all work. Any damage to property at the exterior and interior of the building related to water intrusion or negligence by Contractor shall be repaired by the Contractor at no cost to Manatee County.
- G. Until ready for use, keep materials in their original containers as labeled by the manufacturer.

3.02 EXAMINATION

- A. Notify Manatee County of conditions that would adversely affect installation or subsequent use.
- B. Verify that surfaces and site conditions are ready to receive work. Correct defects in the substrate before commencing with roofing work.
- C. Verify that the specifications and drawing details are workable and not in conflict with the manufacturer's recommendations and instructions; start of work constitutes acceptable of project conditions and requirements.

3.03 PREPARATION

A. Vent may be used as a template for cutting flashing felts or membrane by simply placing vent upside down and scribing a mark around the vent cap.

3.04 INSTALLATION

- A. Install at locations noted on supplemental sheets.
- B. Cut and remove opening through membrane and insulating material down to concrete deck.
- C. Attach vent to concrete deck per manufacturer's recommendations.
- D. Provide flashing per Section 07500. CAUTION: Do not apply direct flame of torch to area of vent stack. Excessive heat will damage the one-way valve inside of the vent.

3.05 PROTECTION

- A. Protect installed roofing accessories to ensure that, except for normal weathering, roofing accessories will be without damage or deterioration at time of Substantial Completion.
- B. Where construction traffic must continue around roofing accessories, provide durable protection and replace or repair damaged roofing to original condition.

PART 1 – GENERAL

1.01 Related Documents

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division I specification sections, apply to work in this Section.

1.02 Summary

- A. This Contractor shall furnish and install all joint sealants as shown on the drawings and/or herein specified.
- B. The procedures specified in this Section shall constitute minimum requirements. Where Manufacturer has required procedures more stringent than those contained within this Section, the Manufacturer's procedures shall govern.
- C. It is intended that this manual direct the removal and replacement of all in-service perimeter sealants. It is not expected that metal-to-metal sealants will need to be replaced at this time.

1.03	References	
A.	ASTM C920	Elastomeric Joint Sealants
B.	ASTM C719	Adhesion and Cohesion of Elastomeric Joint Sealants Under Cyclic Movement (Hockman Cycle)
C.	ASTM C661	Indentation Hardness of Elastomeric-Type Sealants by Means of a Durometer
D.	ASTM C792	Effects of Heat Aging on Weight Loss, Cracking and Chalking of Elastomeric Sealants
E.	ASTM C794	Adhesion-in-Peel of Elastomeric Joint Sealants
F.	ASTM D412	Vulcanized Rubbers and Thermoplastic Rubbers and Thermoplastic Elastomers – Tension
G.	ASTM C 1521-02a	Standard Practice for Evaluating Adhesion of Installed Weatherproofing

1.04 Project Conditions

A. This Contractor shall inspect the job conditions. Commencement of work shall constitute approval of existing conditions.

Sealant Joints

- B. Follow Manufacturer's recommendations regarding ambient weather conditions, temperature, humidity and other additional installation information.
- C. Install products only with adequate ventilation.

1.05 Quality Assurance

- A. Installation of Products shall be performed exclusively by manufacturer-approved applicators.
- B. Follow Manufacturer's recommendations regarding curing considerations and other additional quality control information.
- C. Manufacturer shall have a minimum of ten (10) years experience specializing in specified items. The applicator shall be approved by Sealant Manufacturer and shall have five (5) years experience.

- D. Where mixing of components is required, use complete pre-measured units.
- E. Engineer of record or their designee shall perform ASTM C 1521-02a, Standard Practice for Evaluating Adhesion of Installed Weatherproofing Sealant Joints a minimum of two (2) times per drop no matter the height. A Failure of the test standard shall require the Contractor to remove and replace all sealant installed on the drop tested.

1.06 Delivery, Storage and Handling

- A. All Manufacturers' items must be factory labeled on the material or its container.
- B. Deliver products in original unopened containers with factory-installed Manufacturer's name, labels, product identification and batch numbers.
- C. Store and condition the specified products as recommended by the Manufacturer.
- D. Products shall remain in unopened containers until ready for use.

1.07 Submittals

- A. Submittals to be provided in accordance with Section 01300.
- B. Submittals by Contractor to Manatee County Manatee County shall be made in a timely manner to cause no delay in the work.
- C. Submittals shall bear a stamp indicating review and approval by Contractor.
- D. Any deviations in the submittals from the requirements of the Project Manual shall be clearly identified in writing by Contractor.
- E. Approval by Manatee County / Engineer is required before beginning work affected by submittals.
- F. Submittals required by this Section include the following:
 - 1. Manufacturer's current Data Sheets, Specifications, Material Safety Data Sheets and sample warranty for products used under this section.
 - Intent to Warrant: Provide an Original signed copy of the Manufacturer's Intent to Warrant and a copy of the Manufacturer's Warranty that will be issued at the balance of the Work, prior to the commencement of the Work. Included in the Intent to Warrant shall be a statement that the Manufacturer or Manufacturer's Representative has read and understands the Project Specifications. The Manufacturer shall provide any discrepancies or additions in the specifications to the Engineer in writing prior to the commencement of the Work. Failure of the Manufacturer to do so shall constitute full acceptance of the Work and shall in no way constitute a breach of the warranty to be provided.

1.08 Special Guarantees

- A. Provide non-prorated labor and materials warranty, issued by Contractor and Product Manufacturer. Contractor shall obtain and provide maximum available manufacturer's warranty.
- B. Duration of warranty should be as follows:
 - 1. Silicone sealants: minimum twenty (20) years from the date of final payment.
 - 2. Urethane sealants: minimum five (5) years from the date of final payment.
 - 3. Sonneborn 150 minimum ten (10) years from date of final payment.

PART 2 - PRODUCTS

2.01 Acceptable Manufacturers

- A. The following manufacturers' offer products that may be incorporated into the Work subject to the submittal to Manatee CountyManatee County:
 - 1. Sonneborn
 - 2. Sika
 - Dow Corning
 - 4. Vulkem
- B. Requests for Substitutions to be included in the Contractor's bid shall be requested by the Contractor not less than seven (7) days prior to the bid due date.

2.02 Acceptable Products

- A. Joint Backing
 - Closed-Cell/Soft Backer Rod for Joints Up To 2" in width BASF Closed-Cell Backer Rod and Soft Backer Rod Installed as directed.
 - 2. Kool-Rod by W.R. Meadows Inc.
 - 3. "Backerseal" by Emseal Joint Systems, Ltd. for joints over 1/2" width.
- B. Bond Breaker
 - 1. As recommended by the Manufacturer to suit application.
- C. Color
 - 1. At visible locations and in conjunction with moving joints, color shall match adjacent surfaces.
 - 2. At permanently concealed locations, color may be other than that of adjacent surfaces.
- D. Single Component: For use on doorsills, tracks, thresholds, and other concealed locations, not to exceed 1/2" in depth. ASTM C-920, Type S, Grade NS, Class 25, use NT, M, A, G and O.
 - 1. Sonneborn NP-1 (concealed locations) or Ultra (areas exposed to ultraviolet rays)
 - a. Primer: Sonneborn Primer 733/Aluminum, metals typically non-porous or 766
 - 2. Sika 1a
 - a. Primer: Sikaflex Primer/Primer necessary under certain conditions, verify with manufacturer.
 - 3. Vulkem 116/Textured Moisture Cured Sealant

Primer: 171

- E. Single Component, Cold Applied, Non-Sagging Silyl-terminated Polyether Sealant. For use on expansion joints with cover plates, window and sliding glass door perimeters. ASTM C-920, Type S, Grade NS, Class 100/50, use NT, M, G, A and O.
 - Sonneborn Sonolastic 150
 - a. Primer: Sonneborn Primer 2000/Porous Surfaces, 733/Aluminum, metals typically non-porous, fluorocarbon coatings such as Kynar 500, etc. 766/Glass.

- 2. Vulkem 931
 - a. Primer: 171 or TremPrime Non-Porous Primer as necessary per substrate for Vulkem.
- F. Two Component Self Leveling or Non Sag: For use on control joints, isolation joints, horizontal and vertical expansion joints forming cants at intersections of vertical surfaces in conjunction with waterproofing system, routed cracks, and sealing perimeter joints of penetrations. ASTM C-920, Type M, Grade NS, Class 25, use NT, T, M, G, A and O.
 - 1. Sonneborn NP-2
 - Primer: Sonneborn Primer 733 or 766 as listed above for Sonneborn.
 - Sikaflex 2c, NSSikaflex 2c
 - a. Primer: Sikaflex Primer,# 260 for Metallic and Plastic Substrates, Sikaflex # 429, Concrete Masonry, EIFS, Wood, Sikaflex Primer # 449 for PVC, Solvent Based Coatings and Most Plastic Products.
 - 3. Vulkem 227 Two-Part Gun Grade Polyurethane Sealant
 - a. Primer: 171-Porous Surfaces Under Urethanes
 - b. Primer: TREMprime Non-Porous Primer
- G. Single Component, Cold Applied, Non-Sagging Silicone Sealant: For use on metal to metal and glass to metal connections. ASTM C-920, Type S, Grade NS, Class 25, use NT, M, G and A.
 - 1. Dow Corning 795 Silicone
 - a. Primer None. Use oil-free solvent wipe.
 - 2. Vulkem Spectrem 3 Silicone Sealant
 - a. Primer: Tremco Primer Tremprime Silicone Porous Primer –Porous Surfaces.

PART 3 - EXECUTION

3.01 Joint Preparation

- A. The Contractor shall notify Engineer when work is complete and ready for inspection.
- B. Verify surfaces and joint openings that are ready to receive work. All joints shall be uniform in width and shall be 1/4" minimum thickness unless otherwise noted.
- C. Provide saw-cut or smooth edged joints configured to limit joint movement to +/- 25%.
- D. Provide sealant joint width to depth ratio of approximately 2:1.

3.02 Surface Preparation

- A. Prepare joints to receive joint sealers in accordance with Manufacturer's recommendations.
- B. Protect existing adjacent work from damage during application.
- C. Clean and prime joints following Manufacturers' specifications and recommendations.
- D. Remove loose materials and foreign matter that might impair adhesion of sealants.
- E. Verify that joint backing and release tapes are compatible with sealants.
- F. Abrade surfaces as required to ensure bond to surfaces.

3.03 Installation

- A. All products shall be installed in strict accordance to all Manufacturers' recommendations.
- B. Install joint backing rod to achieve a neck dimension no greater than one-half the joint width.
- C. Measure joint dimensions and size materials to achieve the Manufacturer's required width/depth ratio.
- D. Install bond breaker tape where joint backing is not used.
- E. Install sealants in strict accordance to Manufacturers' specifications and recommendations.
- F. Install sealants free of air pockets, foreign embedded matter, ridges and sags.
- G. Tool sealants using appropriate sized spatula. Finger tooling is not acceptable.
- H. Areas adjacent to joints may be masked to insure neat sealant lines. Do not allow masking tape to touch clean surfaces on which sealant is to adhere
- I. Protect sealants until cured.

3.04 Adjustment and Cleaning

- A. Clean adjacent soiled surfaces.
- B. Repair or replace damaged, defaced, or disfigured sealants as recommended by the Engineer and/or by specific Manufacturer.