#### Solicitation 1701-135

## Roof reconstruction/improvements for Justice Center and Sheriff's Office

**Bid Designation: Public** 



Williamson County, Texas

#### Bid 1701-135

#### Roof reconstruction/improvements for Justice Center and Sheriff's Office

Bid Number 1701-135

Bid Title Roof reconstruction/improvements for Justice Center and Sheriff's Office

Bid Start Date In Held

Bid End Date Feb 14, 2017 11:00:00 AM CST

Question & Answer

**End Date** 

Feb 9, 2017 2:00:00 PM CST

Bid Contact Teri Jeffries

Senior Purchasing Specialist

512-943-1553

Teri.jeffries@wilco.org

Contract Duration 90 days

Contract Renewal Not Applicable

Prices Good for 180 days

Pre-Bid Conference Feb 2, 2017 10:00:00 AM CST

Attendance is mandatory

Location: Williamson County Road and Bridge Facility, located at 3151 S.E. Innerloop,

Georgetown, TX

**Bid Comments** 

This project is for roof improvements to the Williamson County Justice Center, Courthouse Annex, located at 405 Martin Luther King Street, and the Williamson County Jail and Sheriff's Office, located at 508 Rock Street, Georgetown, Texas, per the specifications provided by Jim Whitten Roof consultants, LLC, and all requirements incorporated into this request for proposals.

**Summary of Work and Requirements** 

Williamson County seeks qualified roofing contractors to complete the roof improvements to the JUSTICE CENTER COURTHOUSE ANNEX, located at 405 MARTIN LUTHER KING STREET and the JAIL/SHERIFF'S OFFICE, located at 508 ROCK ST, GEORGETOWN, TEXAS.

The existing roof assemblies are gravel surfaced, insulated asphalt, multi-ply built-up roofing (BUR).

A general summary of the roof improvement scope of work, in part, consists of:

Removal and disposal of loose gravel from the multi-ply built-up roof membrane

Replace needed insulation materials,

Install retrofit roof drains:

Additional rigid board insulation to obtain a total LTTR Value of 20;

Furnish and install fully adhered 60 mil TPO Membrane System and associated flashings, UL Class A firerated that meets the applicable Codes of the City of Georgetown TX and qualifies for the Manufacturer's Twenty Year NDL Guarantee.

Furnish and install new 24 gauge pre-finished metal flashings and counter-flashings

The Jail and Sheriff's Office located at 508 Rock Street will include selected exterior wall sealant joint and caulking work, and the re-certification of the lightning arrestor system.

NOTE: The work to be performed shall fully comply with all the specifications and requirements provided by Jim Whitten Roof Consultants, and as directed by the County.

#### REQUIRED QUALIFICATIONS OF RESPONDENTS

Respondent must be currently approved and certified by the manufacturer of the roofing materials to be

#### used.

Only skilled roofers that are completely familiar with the products and manufacturer's current recommended methods of installation will be considered. Respondent must include qualifications of the roofers that will install the products.

Respondent shall provide letters from a minimum of three major roofing materials manufacturers stating that your company has been an approved or certified applicator for a minimum of five (5) years, and that your company is approved to install those manufacturer's products with a 20 twenty year, no dollar limit, (NDL) Warranty and Guarantee.

Respondent shall provide a sample manufacturer's twenty year no dollar limit (NDL) Warranty Guarantee. Respondent must submit a list of a minimum of three (3) projects there respondent completed within the last 10 years that are of similar size, scope and value. List shall include a description of the project, location of the project, contact information of the Owner, Architect/Roof Consultant, and General Contractor if applicable. Evidence of Respondent's qualifications to do business in the State of Texas and the County of Williamson, or covenant to obtain such qualification prior to award of the contract.

Respondent shall submit with its proposal a letter from Respondent's bond company registered to issue bonds in the State of Texas, stating the ability of the Respondent to obtain a Performance and Payment Bond for the Project.

Respondent shall submit a statement that it can and will commence work on the project, within 5 days of the Work Authorization and or Notice to Proceed. Respondent shall also provide information that it can and will continue to daily performance the work until fully completed.

#### **Preferred Qualifications**

Contractor shall maintain a permanent office and operate and/or own full-service sheet metal shop within a 60 mile radius of the job.

#### Evaluation of respondents shall be determined upon the following:

In order to be considered for this project, the respondent must fully comply and satisfy all requirements.

Only those qualified respondents that meet all the requirements will be considered,

The respondents that also have the preferred qualification will have a preference, and

The qualified respondent with the lowest pricing that provides the County with the best overall value will be selected.

Contract negotiations may also be a part of the selection process.

#### Item Response Form

Item	1701-13501-01 - Please add all documents and required items to this line item.
Quantity	1 each
Unit Price	
Delivery Location	Williamson County, Texas
	Purchasing Department
	901 S. Austin Avenue
	Georgetown TX 78626
	<b>Qty</b> 1

#### Description

Please attach all documents and items required to submit your proposal to this line item.



#### PUBLIC ANNOUNCEMENT AND GENERAL INFORMATION

## WILLIAMSON COUNTY PURCHASING DEPARTMENT SOLICIATION 1701-135

Roof reconstruction/improvements for Justice Center and Sheriff's Office

## PROPOSALS MUST BE RECEIVED ON OR BEFORE: Feb 14, 2017 11:00:00 AM CST

## PROPOSAL WILL BE PUBLICLY OPENED: Feb 14, 2017 11:00:00 AM CST

Notice is hereby given that sealed Proposals for the above-mentioned goods and/or services will be accepted by the Williamson County Purchasing Department. Williamson County uses BidSync to distribute and receive proposals. Specifications for this RFP may be obtained by registering at www.bidsync.com.

## Williamson County prefers and requests electronic submittal of this Proposal.

All electronic proposal must be submitted via: www.bidsync.com

Electronic proposals are requested, however paper proposals will currently still be received, until further notice and may be mailed or delivered to the address listed below.

### Respondents are strongly encouraged to carefully read this entire RFP.

All interested Respondents are invited to submit a Proposal in accordance with the Instructions and General Requirements, Proposal Format, Proposal Specifications, and Definitions, Terms and Conditions stated in this RFP.

Please note that a complete package must be submitted choosing one of the above two methods. Split packages submitted will be considered "unresponsive" and will not be accepted or evaluated.

Williamson County will not accept any Proposals received after the submittal deadline, and shall return such Proposals unopened to the Respondent.

#### General Information:

 If mailed or delivered in person, Proposal and Proposal addenda are to be delivered in sealed envelope on or before the submittal deadline, as noted in the Public Announcement and General Information listed above for this RFP, to:

> Williamson County Purchasing Department Attn: **PROPOSAL NAME AND NUMBER** 901 South Austin Avenue Georgetown, Texas 78626

- Respondents should list the Proposal Number, Proposal Name, Name and Address of Respondent, and the Date of the Proposal opening on the outside of the box or envelope and note "Sealed Proposal Enclosed."
- o Respondent should submit one (1) original.
- Williamson County will NOT be responsible for unmarked or improperly marked envelopes.
- Williamson County will not accept any responsibility for Proposals being delivered by third party carriers.
- o Facsimile transmittals will NOT be accepted.
- Proposals will be opened publicly in a manner; however, to avoid public disclosure of contents, only the names of Respondents and pricing will be read aloud.
- All submitted questions with their answers will be posted and updated on www.bidsync.com.
- It is the Respondent's responsibility to review all documents in BidSync, including any Addenda that may have been added after the document packet was originally released and posted.
  - o Any Addenda and/or other information relevant to the RFP will be posted on www.bidsync.com.
  - The Williamson County Purchasing Department takes no responsibility to ensure any interested Respondent has obtained any outstanding addenda or additional information.



#### Williamson County - Request for Proposal (RFP)

#### **SECTION 1 - DEFINITIONS**

**Addendum/Addenda** – means any written or graphic instruments issued by the County prior to the consideration of Proposals which modify or interpret the Proposal Documents by additions, deletions, clarifications, or corrections.

**Agreement/Ensuing Agreement(s)** – means the Successful Respondent may be required by the County to sign an additional Agreement containing terms necessary to ensure compliance with the RFP and the Respondent's Proposal. Such Ensuing Agreement(s) shall contain the Proposal specifications, terms and conditions that are derived from the RFP.

**Contract** – means this RFP and the Proposal of the Successful Respondent shall become a Contract between the Successful Respondent and the County once the Successful Respondent's Proposal is properly accepted by the Williamson County Commissioners Court (sometimes referred to herein as the Commissioner's Court").

Commissioner's Court - means the Williamson County Commissioners Court.

**County –** means Williamson County, a political subdivision of the State of Texas.

**Executive Summary** – means the document submitted by Respondent that represents a concise summary of the contents of the Proposal. It does not include any information concerning costs.

**Proposal Documents** – means the Legal Notice, RFP including attachments, and any Addenda issued by the County prior to the consideration of any Proposals.

**Proposal** – means the complete, properly signed document, and ALL required forms and documentation listed in the proposal package which have been submitted in accordance with this RFP package. A Proposal submitted in accordance with this RFP is irrevocable during the specified time period for evaluation and acceptance of Proposals, unless a waiver is obtained from the Williamson County Purchasing Agent.

**Respondent** – means a person or entity who submits a Proposal in response to this RFP.

**Request for Proposals (RFP)** – means this document, together with the attachments thereto and any future Addenda issued by the County.

**Successful Respondent** – means the responsible Respondent who, in the County's sole opinion, submits the Proposal which is in the best interest of the County, taking into account factors identified

herein, and to whom the County intends to award the Contract.

#### **SECTION 2 - RESPONSE FORMAT AND SUBMISSION**

#### 2.1 INTRODUCTION

Each Proposal submitted in response to this RFP should clearly reference the numbered sections of this RFP that require a response. Failure to arrange the Proposal as requested may result in the disqualification of the Proposal.

Though there is not a page limit for Proposals, to save natural resources including paper, and to allow the County staff to efficiently evaluate all submitted Proposals, the County requests that Proposals be orderly, concise, but comprehensive in providing the requested information. Conciseness and clarity of content are emphasized and encouraged. If mailed or delivered in person, please limit additional, non requested information.

Please provide your Proposal response using:

- A. 8 ½" x 11" pages, inclusive of any cover letter or supporting materials.
- B. The least amount of plastic/laminate or other non-recyclable binding materials.
- C. Single-sided printing.

Vague and general Proposals will be considered non-responsive, and may, at the County's sole discretion, result in disqualification. Proposals must be legible and complete. Failure to provide the required information may result in the disqualification of the Proposal. All pages of the Proposal should be numbered and the Proposal should contain an organized, paginated table of contents corresponding to the sections and pages of the Proposal.

#### 2.2 ORGANIZATION OF PROPOSAL CONTENTS AND TABLE OF CONTENTS

Each Proposal should be submitted with a table of contents that clearly identifies and denotes the location of all enclosures of the Proposal. The table of contents should follow the RFP's structure as much as is practical.

Each Proposal should be organized in the manner described below:

- A. Transmittal Letter. Please see Section 2.3, Transmittal Letter, for more information.
- B. Table of Contents.
- C. Executive Summary. Please see Section 2.4, Executive Summary.
- D. Proposal Response to Criteria. (Please see the sections in this RFP package that list the Specifications & Cost Proposal, Experience and Qualifications, References, and Implementation Strategy to respond to our criteria in a clear and concise manner)
- E. Price Sheet.
- F. References: Identification of three (3) references within the last four (4) years, for which the Respondent is providing, or has provided, the goods and/or services (public sector) of the type requested in this RFP. Include the name, position/title, and telephone number of a contact person at each entity.
- G. Conflict of Interest Questionnaire.

- H. Proposal Affidavit (Signature Page).
- Attach your entities sample Contract, if applicable, for the County's review and consideration. This should include any additional terms or conditions. The County is not required to use the sample Contract submitted.

#### 2.3 TRANSMITTAL LETTER

The Respondent should submit a Transmittal Letter that provides the following information:

- A. Name and address of individual or business entity submitting the Proposal.
- B. Respondent's type of business entity (i.e., Corporation, General Partnership, Limited Partnership, LLC, etc.). See Section 3.5, Signature of Respondent, for more information.
- C. Place of incorporation or organization, if applicable.
- D. Name and location of major offices and other facilities that relate to the Respondent performance under the terms of this RFP.
- E. Name, physical address, email address, business and fax number of the Respondent's principal contact person regarding all contractual matters relating to this RFP.
- F. The Respondent's Federal Employer Identification Number.
- G. A commitment by the Respondent to provide the services required by the County;
- H. A statement that the Proposal is valid for the time specified on page three (3), under the section named *Prices Good for*, of this Proposal packet. Any Proposal containing a term of less than required amount, may at the County's sole discretion, be rejected as non-responsive.
- I. If the Proposal being submitted will have an effect on air quality for the County (as it relates to any state, federal, or voluntary air quality standard), then the Respondent is encouraged to provide information in narrative indicating the anticipated air quality impact. See Section 4.40, Air Quality for more information.

The Transmittal Letter should be signed by a person legally authorized to bind the Respondent to representations in the Transmittal Letter and the Proposal. In the case of a joint Proposal, each party must sign the Transmittal Letter.

#### 2.4 EXECUTIVE SUMMARY

The Respondent should provide an Executive Summary of its Proposal that asserts that the Respondent is providing in its response all of the requirements of this RFP. The Executive Summary should not include any information concerning the cost of the Proposal, but instead must represent a full and concise summary of the contents of the Proposal. It is recommended the Executive Summary include the following information:

A. Identify any goods and/or services that are provided beyond those specifically requested. If the Respondent is providing services and/or goods that do not meet the specific requirements of this RFP, but in the opinion of the Respondent are equivalent or superior to those specifically requested, any such differences should be noted in the Executive Summary. However, the Respondent must realize that failure to provide the goods and/or services specifically required, at the County's sole discretion, may result in disqualification of the Proposal.

- B. Indicate why the Respondent believes that it is the most qualified Respondent to provide the services described in this RFP. The Successful Respondent must demonstrate extensive experience and understanding of the intent of this project. The Respondent should describe in detail the current and historical experience the Respondent and its subcontractors have that would be relevant to completing the project. References must contain the name of key personnel and telephone numbers for each contact, as described in Section 3.14, References.
- C. Briefly state why the Respondent believes its proposed goods and/or services best meet a County's needs and RFP requirements, and the Respondent also should concisely describe any additional features, aspects, or advantages of its goods and/or services in any relevant area not covered elsewhere in its Proposal.

#### 2.5 CONFLICT OF INTEREST

No public official shall have interest in a contract, in accordance with Vernon's Texas Codes Annotated, Local Government Code, Title 5, Subtitle C, Chapter 171, as amended.

As of January 1, 2006, all Respondents are responsible for complying with Local Government Code, Title 5, Subtitle C, Chapter 176. Additional information may be obtained from the County's website at the following link:

http://www.wilco.org/CountyDepartments/Purchasing/ConflictofInterestDisclosure/tabid/689/language/en US/Default.aspx

Each Respondent must disclose any existing or potential conflict of interest relative to the performance of the requirements of this RFP. Examples of potential conflicts of interest may include an existing business or personal relationship between the Respondent, its principal, or any affiliate or subcontractor with the County or any other entity or person involved in any way with the project that is subject to this RFP. Similarly, any personal or business relationship between the Respondent, the principals, or any affiliate or subcontractor with any employee, or official of the County or its suppliers must be disclosed. Any such relationship that might be perceived or represented as a conflict must be disclosed. Failure to disclose any such relationship or reveal personal relationships with the County employees or officials may be cause for termination.

The County will decide if an actual or perceived conflict should result in Proposal disqualification.

By submitting a Proposal in response to this RFP, all Respondents affirm they have not given, nor intend to give, at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a the County public servant or any employee, official or representative of same, in connection with this procurement.

Each Respondent must provide a Conflict of Interest Statement with their Proposal Package. Package may be deemed incomplete without this form.

#### 2.6 CERTIFICATE OF INTERESTED PARTIES - FORM 1295

As of January 1, 2016, all Respondents are responsible for complying with the Texas Government Code, Section 2252.908. The law states that the County may not enter into certain contracts with a Respondent unless the Respondent submits a disclosure of interested parties to the County at the time the Respondent submits the signed contract. The law applies only to a contract of the County on or after January 1, 2016 that either:

A. Requires an action or vote by the Commissioners Court before the contract may be signed (all contracts that fall under the jurisdiction of the Commissioners Court approval, such as contracts resulting from an Initiation for Bid (IFB), RFP, Request for Qualifications (RFQ), etc., excluding,

- but not limited to, certain Juvenile Service contracts, contracts funded with Sheriff's seized fun monies, etc.); or
- B. Has a value of at least \$1,000,000.

By January 1, 2016, the Texas Ethics Commission will make available on its website, a new filing application that must be used to file Form 1295. Information regarding how to use the filing application is available on the Texas Ethics Commission website at the following link:

https://www.ethics.state.tx.us/whatsnew/elf\_info\_form1295.htm

#### A Respondent must:

- A. Use the online application to process the required information on Form 1295.
- B. Print a copy of the form which will contain a unique certification number.
- C. An authorized agent of the Respondent must sign the printed copy of the form.
- D. Have the form notarized.
- E. File the completed Form 1295 and certification of filing (scanning and emailing form is sufficient) with Williamson County Purchasing Agent at the time the signed Contract is submitted for approval.

After the Commissioners Court award of the contract, the County shall notify the Texas Ethics Commission, using the Texas Ethics Commission's filing application, of the receipt of the filed Form 1295 and certification of filing not later than the 30th day after the date the contract binds all parties to the contract. The Texas Ethics Commission will post the completed Form 1295 to its website within seven business days after receiving notice from the County.

#### 2.7 PROPOSAL SUBMITTAL DEADLINE

The Proposal is due no later than the submittal date and time set forth in the Public Announcement and General Information listed in this RFP package. Contents of each Proposal shall be submitted in accordance with this RFP.

#### 2.8 ETHICS

The Respondent shall not accept or offer gifts or anything of value, nor enter into any business arrangement with any employee, official or agent of the County.

#### 2.9 DELIVERY OF PROPOSALS

The County uses BidSync to distribute and receive bids and Proposals. It is preferred that Proposals be submitted electronically through BidSync; however, Respondents can submit a hard copy.

Refer to <a href="https://www.bidsync.com\_forfurther">www.bidsync.com\_forfurther</a> information on how to submit electronically.

If mailed or delivered in person, Proposal and Proposal Addenda are to be delivered in sealed envelope on or before the submittal deadline, as noted in the Public Announcement and General Information listed in this RFP package, to:

Williamson County Purchasing Department

Attn: **Proposal Name and Number** 901 South Austin Avenue Georgetown, Texas 78626

Also, all Respondents should list their Name and Address, and the Date of the Proposal opening on a outside of the box or envelope and note "Sealed Proposal Enclosed." Williamson County will not accept any Proposals after the submittal deadline, and shall return such Proposals unopened to the Respondent. The County will not accept any responsibility for Proposals being delivered by third party carriers.

Proposals will be opened publicly; however, in a manner to avoid public disclosure of contents, only names of Respondents will be read aloud: no pricing will be announced at the opening.

#### **SECTION 3 - INSTRUCTIONS AND GENERAL REQUIREMENTS**

#### 3.1 INSTRUCTIONS

Read this document carefully, and follow all instructions and requirements. All Respondents are responsible for fulfilling all requirements and specifications. Be sure to have a clear understanding of this RFP.

General requirements apply to all advertised RFPs; however, these may be superseded, in whole or in part, by the proposal specifications, Addenda and modifications issued as a part of this RFP. Be sure your Proposal package is complete.

#### 3.2 AMBIGUITY, CONFLICT, OR OTHER ERRORS IN THIS RFP

If a Respondent discovers any ambiguity, conflict, discrepancy, omission or other error in this RFP, the Respondent shall immediately notify the County Purchasing Department of such error in writing at request modification or clarification of the document.

Modifications will be made by issuing Addenda. If the Respondent fails to notify the County prior to a date and time fixed for submission of Proposals of an error or ambiguity in the RFP known to the Respondent, or an error or ambiguity that reasonably should have been known to the Respondent, then the Respondent shall be deemed to have waived the error or ambiguity or its later resolution.

The County may also modify the RFP, no later than forty-eight (48) hours prior to the date and time for submission of Proposals, by issuance of an Addendum. All Addenda will be numbered consecutively, beginning with one (1).

#### 3.3 NOTIFICATION OF MOST CURRENT ADDRESS

All Respondents in receipt of this RFP shall notify the Williamson County Purchasing Department of address changes, contact person changes, and/or telephone number changes no later than forty-eight (48) hours prior to the date and time fixed for submission of Proposals.

#### 3.4 SIGNATURE OF RESPONDENT

A Transmittal Letter, which shall be considered an integral part of the Proposal as stated in Section 2.3, Transmittal Letter, shall be signed by an individual who is authorized to bind the Respondent contractually.

- A. If the Respondent is a Corporation or Limited Liability Company, the legal name of the Corporation or Limited Liability Company shall be provided together with the signature of the officer or officers authorized to sign on behalf of such entity.
- B. If the Respondent is a General Partnership, the true name of the firm shall be provided with signature of each partner authorized to sign.
- C. If the Respondent is a Limited Partnership, the name of the Limited Partner's General Partner shall be provided with the signature of the officer authorized to sign on behalf of the General Partner.
- D. If the Respondent is a Sole Proprietor(s) (individual), each Sole Proprietor(s) shall sign.
- E. If signature is by an agent, other than the Sole Proprietor(s) or an officer of a Corporation, Limited

Liability Company, General Partner or a member of a General Partnership, a power of attorney equivalent document must be submitted to the Williamson County Purchasing Department.

#### 3.5 ASSUMED BUSINESS NAME

If the Respondent operates business under an Assumed Business Name, the Respondent must have file with the Williamson County Clerk a current Assumed Name Certificate and provide a file marked copy of same prior to contract award.

#### 3.6 ECONOMY OF PRESENTATION

Proposals should not contain promotional or display materials, except as they may directly answer in whole or in part questions contained in the RFP. Such exhibits shall be clearly marked with the applicable reference number of the question in the RFP. Proposals must address the technical requirements as specified in the RFP. All questions posed by the RFP must be answered concisely and clearly. Proposals that do not address each criterion may be, at the sole discretion of the County, rejected and not considered.

#### 3.7 PROPOSAL OBLIGATION

The contents of the RFP, Proposal, and any clarification thereof submitted by the Successful Respondent shall become part of the contractual obligation and incorporated by reference into the Contract and any Ensuing Agreement(s).

#### 3.8 COMPLIANCE WITH RFP SPECIFICATIONS

It is intended that this RFP describe the requirements and the Proposal format in sufficient detail to secure comparable Proposal. Failure to comply with all provisions of the RFP may, at the sole discretion of the County, result in disqualification.

#### 3.9 EVALUATION

The County reserves the right to use all pertinent information (also learned from sources other than disclosed in the RFP process) that might affect the County's judgment as to the appropriateness of award to the best evaluated Respondent. This information may be appended to the Proposal evaluation process results. Information on a Respondent from reliable sources, and not within the Respondent Proposal, may also be noted and made part of the evaluation file. The County shall have sole discretion for determining the reliability of the source. The County reserves the right to conduct written and/or oral discussions/interviews after the Proposal opening. The purpose of such discussions/interviews is to provide clarification and/or additional information to make an award that is in the best interest of the County.

#### 3.10 WITHDRAWAL OF PROPOSAL

The Respondent may withdraw its Proposal by submitting a written request with the company letterhead and the signature of an authorized individual, as described in Section 3.4, Signature of Respondent, to the Williamson County Purchasing Department any time prior to the submission deadline.

The Respondent may submit a new Proposal prior to the deadline. Alterations of the Proposal in any manner will not be considered if submitted after the deadline. Withdrawal of a Proposal after the deadline will be subject to written approval of the Williamson County Purchasing Agent.

#### 3.11 RESPONSIBILITY

It is expected that a Respondent will be able to affirmatively demonstrate responsibility. A prospective Respondent should be able to meet the following requirements:

- A. Have adequate financial resources, or the ability to obtain such resources as required;
- B. Be able to comply with the required or proposed delivery schedule;
- C. Have a satisfactory record of performance that can be determined thru references provided; and
- D. Be otherwise qualified and eligible to receive an award.

The County may request representation and other information sufficient to determine the Respondent ability to meet these minimum standards listed above.

#### 3.12 PURCHASE ORDERS

If required by the Williamson County Purchasing Department, a purchase order(s) may be generated to the Successful Respondent for goods and/or services. If a purchase order is issued, the purchase order number must appear on all itemized invoices and/or requests for payment.

#### 3.13 SILENCE OF SPECIFICATIONS

The apparent silence of any RFP specifications as to any detail or to the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best practices are to prevail. All interpretations of these specifications shall be made on the basis of this statement.

#### 3.14 REFERENCES

Respondents shall furnish a list of contracts where similar responsibilities and goods and/or services have been required and/or performed for the past five (5) years, to include names, titles, phone numbers and email addresses of reference contacts, contract numbers and dates of performance.

Also, Respondents shall include a list of any contracts that have been cancelled or terminated within the last five (5) years, along with an explanation of the cancellation and the names, email address and phone number of a reference person with that institution.

The County may contact some or all of the references in order to determine the Respondent performance record on work similar to that described in this RFP. The County reserves the right to contact references other than those provided in the response and to use the information gained from them in the evaluation process.

References should be provided in accordance with this RFP. Proposal may not be deemed complete without the inclusion of requested references.

#### **SECTION 4 - TERMS AND CONDITIONS**

#### 4.1 VENUE AND GOVERNING LAW

The Respondent hereby agrees and acknowledges that venue and jurisdiction of any suit, right, or cause of action arising out of or in connection with this RFP, the Contract and any Ensuing Agreement(s), shall lie exclusively in either Williamson County, Texas or in the Austin Division of the Western Federal District of Texas, and the parties hereto expressly consent and submit to such jurisdiction. Furthermore, except to the extent that this RFP, the Contract and any Ensuing Agreement(s) is governed by the laws of the United States, this RFP, the Contract and any Ensuing Agreement(s) shall be governed by and construed in accordance with the laws of the State of Texas, excluding, however, its choice of law rules.

#### 4.2 INCORPORATION BY REFERENCE AND PRECEDENCE

- A. The Contract shall be derived from the RFP and its Addenda (if applicable), and the Respondent Proposal. In the event of a dispute under the Contract, applicable documents will be referred to for the purpose of clarification or for additional detail in the following order of precedence:
  - 1. The RFP and its Addenda (if applicable); and
  - 2. The Respondent's Proposal.
- B. In the event the County requires that an Ensuing Agreement be executed following award and a dispute arises between the terms and conditions of the Ensuing Agreement, the RFP and its Addenda (if applicable), and the Respondent's Proposal, applicable documents will be referred to for the purpose of clarification or for additional detail in the following order of precedence:
  - 1. The terms and conditions of the Ensuing Agreement;
  - 2. The RFP and its Addenda; and
  - 3. The Respondent's Proposal.

#### 4.3 OWNERSHIP OF PROPOSAL

Each Proposal shall become the property of the County upon submittal and will not be returned to Respondents unless received after the submittal deadline.

#### 4.4 DISQUALIFICATION OF RESPONDENT

Upon signing and submittal of the Proposal, a Respondent offering to sell supplies, materials, services, or equipment to the County, certifies that the Respondent has not violated the antitrust laws of the State of Texas codified in Business & Commerce Code, Section 15.01, or the Federal Antitrust Laws, and has not communicated directly or indirectly the offer made to any competitor or any other person engaged such line of business. Any or all Proposals may be rejected if the County believes that collusion exists among the Respondents.

#### 4.5 FUNDING

The County intends to budget and make sufficient funds available and authorize funds for expenditure to finance the costs of the Contract. All Respondents understand and agree that the County's payment of

amounts under the Contract shall be contingent on the County receiving appropriations or other expenditure authority sufficient to allow the County, in the exercise of reasonable administrative discretion, to make payments under this Contract.

#### 4.6 ASSIGNMENT, SUCCESSORS AND ASSIGNS

The Successful Respondent may not assign, sell, or otherwise transfer the Contract or any other rights or interests obtained under the Contract without written permission of the Williamson County the Commissioners Court. The Contract and any Ensuing Agreement(s) shall be binding upon and inure to the benefit of the contracting parties hereto and their respective successors and permitted assigns.

#### 4.7 IMPLIED REQUIREMENTS

Products or services not specifically described or required in the RFP, but are necessary to provide the functional capabilities described by the Respondent, shall be implied and deemed to be included in the Proposal.

#### 4.8 TERMINATION

- A. Termination for Cause: The County reserves the right to terminate the Contract and/or any Ensuing Agreement(s) for default if the Successful Respondent breaches any of the Proposal specifications, terms and conditions, including warranties of the Respondent, if any, or if the Successful Respondent becomes insolvent or commits acts of bankruptcy. Such right of termination is in addition to and not in lieu of any other remedies the County may have at law or equity or as may otherwise be provided hereunder. Default may be construed as, but not limited to, failure to deliver the proper goods and/or services within the proper amount of time, and/or to properly perform any and all other requirements to the County's satisfaction, and/or to meet all other obligations and requirements.
- **B.** Termination for Convenience: The County may terminate the Contract and/or any Ensuing Agreement(s) for convenience and without cause or further liability, upon no less than thirty (30) calendar days written notice to the Successful Respondent. The County reserves the right to extend this period if it is in the best interest of the County. In the event the County exercises its right to terminate without cause, it is understood and agreed that only the amounts due to the Successful Respondent for goods, commodities and/or services provided and expenses incurred to and including the date of termination, will be due and payable. No penalty will be assessed for the County's termination for convenience.

#### 4.9 NON-PERFORMANCE

It is the objective of the County to obtain complete and satisfactory performance of the requirements set forth herein. In addition to any other remedies available at law, in equity or that may be set out herein, failure to perform may result in a deduction of payment equal to the amount of the goods and/or services that were not provided and/or performed to the County's satisfaction.

In the event of such non-performance, the County shall have the right, but shall not be obligated, to complete the services itself or by others and/or purchase the goods from other sources. If the County elects to acquire the goods or perform the services itself or by others, pursuant to the foregoing, the Successful Respondent shall reimburse the County, within ten (10) calendar days of demand, for all costs incurred by the County (including, without limitation, applicable, general, and administrative expenses, and field overhead, and the cost of necessary equipment, materials, and field labor) in correcting the nonperformance which the Successful Respondent fails to meet pursuant to the requirements set out herein. In the event the Successful Respondent refuses to reimburse the County as set out in this provision, the County shall have the right to deduct such reimbursement amounts from any amounts that may be then owing or that may become owing in the future to the Successful Respondent.

#### 4.10 PROPRIETARY INFORMATION AND THE TEXAS PUBLIC INFORMATION ACT

All material submitted to the County shall become public property and subject to the Texas Public Information Act upon receipt. If a Respondent does not desire proprietary information in the Proposal to be disclosed, each page must be clearly identified and marked proprietary at time of submittal or, more preferably, all proprietary information may be placed in a folder or appendix and be clearly identified marked as being proprietary. Failure to clearly identify and mark information as being proprietary as set forth under this provision will result in all unmarked information being deemed non-proprietary and available to the public. For all information that has not been clearly identified and marked as proprietary by the Respondent, the County may choose to place such information on the County's website and/or a similar public database without obtaining any type of prior consent from the Respondent.

The County will, to the extent allowed by law, endeavor to protect from public disclosure the information that has been identified and marked as proprietary. The final decision as to what information must be disclosed, however, lies with the Texas Attorney General.

To the extent, if any, that any provision in this RFP or in the Respondent's Proposal is in conflict with Texas Government Code, Chapter 552, as amended (the "Public Information Act"), the same shall be of no force or effect. Furthermore, it is expressly understood, and agreed, that the County, and its officers and employees, may request advice, decisions and opinions of the Attorney General of the State of Texas in regard to the application of the Public Information Act to any items or data furnished to the County as to whether or not the same are available to the public. It is further understood that that the County, and its officers and employees, shall have the right to rely on the advice, decisions and opinions of the Attorney General, and that the County, its officers and employees shall have no liability or obligation to any party hereto for the disclosure to the public, or to any person or persons, of any items or data furnished to the County by a party hereto, in reliance of any advice, decision or opinion of the Attorney General of the State of Texas.

#### 4.11 RIGHT TO AUDIT

The Successful Respondent agrees that the County or its duly authorized representatives shall, until the expiration of three (3) years after termination or expiration of the services to be performed, have access to and the right to examine and photocopy any and all books, documents, papers and records of the Successful Respondent, which are directly pertinent to the services to be performed or goods to delivered for the purposes of making audits, examinations, excerpts and transcriptions. The Successful Respondent agrees that the County shall have access during normal working hours to all necessary facilities and shall be provided adequate and appropriate work space in order to conduct audits in compliance with the provisions of this section. The County shall give the Successful Respondent reasonable advance notice of intended audits.

#### 4.12 TESTING AND INSPECTIONS

The County reserves the right to inspect and test equipment, supplies, materials and goods for quality and compliance with this RFP, and ability to meet the needs of the user. Demonstration units must be available for review. Should the goods or services fail to meet requirements and/or be unavailable for evaluation, the County can deem the Respondent to be in breach and terminate the Contract and/or any Ensuing Agreement(s).

#### 4.13 PROPOSAL PREPARATION COSTS

The cost of developing Proposals is the sole responsibility of the Respondents and shall not be charged to the County. There is no expressed or implied obligation for the County to reimburse the Respondents for any expense incurred in preparing a Proposal in response to this RFP and the County will not reimburse the Respondents for such expenses.

#### 4.14 INDEMNIFICATION

The Successful Respondent shall indemnify, defend and save harmless, the County, its officials, employees, agents and agent's employees from, and against, all claims, liability, and expenses including reasonable attorneys' fees, arising from activities of the Respondent, its agents, servants or employees, performed hereunder that result from the negligent act, error, or omission of the Respondent or any of the Respondent's agents, servants or employees, as well as all claims of loss or damage to the Respondent's and the County's property, equipment, and/or supplies.

Furthermore, the County, its officials, employees, agents and agents' employees shall not be liable for damages to the Successful Respondent arising from any act of any third party, including, but not limited to, theft. The Successful Respondent further agrees to indemnify, defend and save harmless, the County from its officials, employee, agents and agents' employees against all claims of whatever nature arising from any accident, injury, or damage whatsoever, caused to any person, or the property of any person, occurring in relation to the Successful Respondent's performance of any services requested hereunder during the term of the Contract and/or any Ensuing Agreement(s).

The Successful Respondent shall timely report all claims, demands, suits, actions, proceedings, liens or judgements to the County and shall, upon the receipt of any claim, demand, suit, action, proceeding, lien or judgement, not later than the fifteenth (15<sup>th</sup>) day of each month; provide the County with a written report on each such matter, setting forth the status of each matter, the schedule or planned proceedings with respect to each matter and the cooperation or assistance, if any, of the County required by the Successful Respondent in the defense of each matter. The Successful Respondent's duty to defend, indemnify and hold the County harmless shall be absolute. It shall not abate or end by reason of the expiration or termination of the Contract and/or any Ensuing Agreement(s), unless otherwise agreed by the County in writing. The provisions of this section shall survive the termination of the Contract and shall remain in full force and effect with respect to all such matters no matter when they arise.

In the event of any dispute between the parties, as to whether a claim, demand, suit, action, proceeding, lien or judgement, that appears to have been caused by or appears to have arisen out of or in connection with acts or omissions of the County, the Respondent shall nevertheless fully defend such claim, demand, suit or action, proceeding, lien or judgement, until and unless there is a determination by a court of competent jurisdiction that the acts and omissions of the Respondent are not an issue in the matter.

The Successful Respondent's indemnification shall cover, and the Successful Respondent agrees to, indemnify the County, in the event the County is found to have been negligent for having selected the Successful Respondent to perform the work described in this request. The provision by the Successful Respondent of insurance shall not limit the liability of the Successful Respondent under the Contract and/or any Ensuing Agreement(s).

#### 4.15 WAIVER OF SUBROGATION

The Successful Respondent and the Successful Respondent's insurance carrier waive any and all rights whatsoever with regard to subrogation against the County as an indirect party to any suit arising out of personal or property damages resulting from the Respondent's performance under this Contract and any Ensuing Agreement(s).

#### 4.16 RELATIONSHIP OF THE PARTIES

The Successful Respondent shall be an independent contractor and shall assume all of the rights, obligations, liabilities, applicable to it as such independent contractor hereunder and any provisions herein which may appear to give the County the right to direct the Successful Respondent as to details of doing work herein covered, or to exercise a measure of control over the work, shall be deemed to mean that the Successful Respondent shall follow the desires of the County in the results of the work only. The County shall not retain or have the right to control the Successful Respondent's means, methods or

details pertaining to the Successful Respondent's performance of the work. The County and the Successful Respondent hereby agree and declare that the Successful Respondent is an independent contractor and as such meets the qualifications of an "Independent Contractor" under Texas Workers Compensation Act, Texas Labor Code, Section 406.141, that the Successful Respondent is not an employee of the County, and that the Successful Respondent and its employees, agents and subcontractors shall not be entitled to workers compensation coverage or any other type of insurance coverage held by the County.

#### 4.17 SOLE PROVIDER

The Successful Respondent agrees and acknowledges that it shall not be considered a sole provider of the goods and/or services described herein and that the County may contract with other providers of such goods and/or services if the County deems, at its sole discretion, that multiple providers of the same goods and/or services will serve the best interest of the County.

#### 4.18 FORCE MAJEURE

If the party obligated to perform is prevented from performance by an act of war, order of legal authority, act of God, or other unavoidable cause not attributable to the fault or negligence of said party, the other party shall grant such party relief from the performance. The burden of proof for the need of such relief shall rest upon the party obligated to perform. To obtain release based on force majeure, the party obligated to perform shall file a written request with the other party.

#### 4.19 SEVERABILITY

If any provision of this RFP, the Contract or any Ensuing Agreement(s) shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision thereof, but rather the entire RFP, Contract or any Ensuing Agreement (s) will be construed as if not containing the particular invalid or unenforceable provision or provisions, and the rights and obligation of the parties shall be construed and enforced in accordance therewith. The parties acknowledge that if any provision of this RFP, the Contract or any Ensuing Agreement(s) is determined to be invalid or unenforceable, it is the desire and intention of each that such provision be reformed and construed in such a manner that it will, to the maximum extent practicable, give effect to the intent of this RFP, the Contract or any Ensuing Agreement(s) and be deemed to be validated and enforceable.

#### 4.20 EQUAL OPPORTUNITY

Neither party shall discriminate against any employee or applicant for employment because of race, color, sex, religion or national origin.

#### 4.21 NOTICE

Any notice to be given shall be in writing and may be distributed by personal delivery, or by registered or certified mail, return receipt requested, addressed to the proper party, at the following address:

The County: Williamson County Purchasing Department

Attn: Purchasing Agent 901 South Austin Avenue Georgetown, Texas 78626

The Respondent: Address set out in Respondent's Transmittal Letter

Notices given in accordance with this provision shall be effective upon (1) receipt by the party to which notice is given, or (2) on the third (3rd) calendar day following mailing, whichever occurs first.

#### 4.22 SALES AND USE TAX EXEMPTION

The County is a body, corporate and politic, under the laws of the State of Texas and claims exemption from sales and use taxes under Texas Tax Code, Section 151.309, as amended, and the services and/or goods subject hereof are being secured for use by the County.

#### 4.23 COMPLIANCE WITH LAWS

The County and the Successful Respondent shall comply with all federal, state, and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts or administrative bodies or tribunals in any matter affecting the performance of the Contract and any Ensuing Agreement(s), including, without limitation, Workers' Compensation laws, salary and wage statutes and regulations, licensing laws and regulations. When required, the Successful Respondent shall furnish the County with certification of compliance with said laws, statues, ordinances, rules, regulations, orders, and decrees above specified.

#### 4.24 INCORPORATION OF EXHIBITS, APPENDICES AND ATTACHMENTS

All of the Exhibits, Appendices and Attachments referred to herein are incorporated by reference as if set forth verbatim herein. Any conflicting terms in the Contract documents will be resolved at the sole discretion of the Commissioners Court.

#### 4.25 NO WAIVER OF IMMUNITIES

Nothing herein shall be deemed to waive, modify or amend any legal defense available at law or in equity to the County, its past or present officers, employees, or agents, nor to create any legal rights or claim on behalf of any third party. The County does not waive, modify, or alter to any extent whatsoever the availability of the defense of governmental immunity under the laws of the State of Texas and of the United States.

#### 4.26 NO WAIVER

The failure or delay of any party to enforce at any time or any period of time any of the provisions of this RFP, the Contract or any Ensuing Agreement(s) shall not constitute a present or future waiver of such provisions nor the right of either party to enforce each and every provision. Furthermore, no term or provision hereof shall be deemed waived and no breach excused unless such waiver or consent shall be in writing and signed by the party claimed to have waived or consented. Any consent by any party to, or waiver of, a breach by the other, whether expressed or implied, shall not constitute a consent to, waiver of or excuse for any other, different or subsequent breach.

#### 4.27 CURRENT REVENUES

The obligations of the parties under the Contract and any Ensuing Agreement(s) do not constitute a general obligation or indebtedness of the County for which the County is obligated to levy, pledge, or collect any of taxation. It is understood and agreed that the County shall have the right to terminate the Contract and any Ensuing Agreement(s) at the end of any the County fiscal year if the governing body of the County does not appropriate sufficient funds as determined by the County's budget for the fiscal year in question. The County may effect such termination by giving written notice of termination to Successful Respondent at the end of its then-current fiscal year.

#### 4.28 BINDING EFFECT

This Contract and any Ensuing Agreement(s) shall be binding upon and inure to the benefit of the parties and their respective permitted assigns and successors.

#### 4.29 ASSIGNMENT

The Successful Respondent's interest and duties hereunder may not be assigned or delegated to a third party without the express written consent of the County.

#### 4.30 SAFETY

The Successful Respondent is responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with any services to be provided hereunder. The safety program shall comply with all applicable requirements of the current federal Occupational Safety and Health Act and all other applicable federal, state and local laws and regulations.

#### 4.31 GENERAL OBLIGATIONS AND RELIANCE

The Successful Respondent shall perform all services and/or provide all goods, as well as those reasonably inferable and necessary for completion and provision of services and/or goods required hereunder. The Successful Respondent shall keep the County informed of the progress and quality the services. The Successful Respondent agrees and acknowledges that the County is relying on the Successful Respondent's represented expertise and ability to provide the goods and/or services described herein. The Successful Respondent agrees to use its best efforts, skill, judgment, and abilities to perform its obligations in accordance with the highest standards used in the profession and to further the interests of the County in accordance with the County's requirements and procedures. The Successful Respondent's duties, as set forth herein, shall at no time be in any way diminished by reason of any approval by the County, nor shall the Successful Respondent be released from any liability reason of such approval by the County, it being understood that the County at all times is ultimately relying upon the Successful Respondent's skill and knowledge in performing the services and providing any goods required hereunder.

#### 4.32 CONTRACTUAL DEVELOPMENT

The Commissioners Court may award the Contract on the basis of the initial Proposals received, without any further or additional discussions. Therefore, each initial Proposal should contain the Respondent best terms and offer. The contents of the RFP and the selected Proposal will become an integral part of the Contract, but may be modified, at Williamson County's sole discretion, by provisions of an Ensuing Agreement. Therefore, the Respondent must agree to inclusion in an Ensuing Agreement of Proposal specifications, terms and conditions of this RFP. Williamson County may, at its discretion, opt to conduct further discussions with responsible offerors and request the highest ranked firm's Best and Final Offer (BAFO).

#### 4.33 ENTIRE AGREEMENT

The Contract and any Ensuing Agreement(s) shall supersede all prior Agreements, written or oral between the Successful Respondent and the County and shall constitute the entire Agreement and understanding between the parties with respect to the services and/or goods to be provided. Each of the provisions herein shall be binding upon the parties and may not be waived, modified, amended or altered, except by writing signed by the Successful Respondent and the County.

#### 4.34 SURVIVABILITY

All applicable agreements that were entered into between the Successful Respondent and the County, under the terms and conditions of the Contract and/or any Ensuing Agreement(s), shall survive the expiration or termination thereof for ninety (90) days unless a new contract has been awarded.

The County may exercise, by written notice to the Successful Respondent no later than ten (10) calendar days of the Contract expiration, this clause for emergency cases only.

#### 4.35 PAYMENT

The County's payment for goods and services shall be governed by the Texas Government Code, Chapter 2251. An invoice shall be deemed overdue the thirty-first (31 st) day after the later of the following:

- A. The date the County receives the goods under the Contract;
- B. The date the performance of the service under the Contract is completed; or
- C. The date the Williamson County Auditor receives an invoice for the goods or services.

Interest charges for any overdue payments shall be paid by the County in accordance with Texas Government Code, Section 2251.025. More specifically, the rate of interest that shall accrue on a late payment is the rate in effect on September 1 of the County's fiscal year in which the payment becomes due. The said rate in effect on September 1 shall be equal to the sum of one (1) percent and the prime rate published in the Wall Street Journal on the first (1<sup>st</sup>) day of July of the preceding fiscal year that does not fall on a Saturday or Sunday.

In the event that an error appears in an invoice submitted by the Successful Respondent, the County shall notify the Successful Respondent of the error not later than the twenty-first (21st) day after the date the County receives the invoice. If the error is resolved in favor of the Successful Respondent, the Successful Respondent shall be entitled to receive interest on the unpaid balance of the invoice submitted by the Successful Respondent beginning on the date that the payment for the invoice became overdue. If the error is resolved in favor of the County, the Successful Respondent shall submit a corrected invoice that must be paid in accordance within the time set forth above. The unpaid balance accrues interest as provided by the Texas Government Code, Chapter 2251, if the corrected invoice is not paid by the appropriate date.

As a minimum, invoices shall include:

- A. Name, address, and telephone number of the Successful Respondent and similar information in the event the payment is to be made to a different address.
- B. The County Contract, Purchase Order.
- C. Identification of items or service as outlined in the Contract.
- D. Quantity or quantities, applicable unit prices, total prices and total amount.
- E. Any additional payment information which may be called for by the Contract.

Payment inquiries should be directed to the following address:

Williamson County Auditor's Office, Accounts Payable Department

Email: accountspayable@wilco.org

Phone: 512-943-1500

#### 4.36 CONTRACTUAL FORMATION AND ENSUING AGREEMENT

The RFP and the Respondent's Proposal, when properly accepted by the Commissioners Court, shall constitute a Contract equally binding between the Successful Respondent and the County. The Successful Respondent may be required by Williamson County to sign an additional Agreement containing terms necessary to ensure compliance with the RFP and Respondent's Proposal.

#### 4.37 LEGAL LIABILITY INFORMATION

The Successful Respondent shall disclose all legal liability information by listing any pending litigation anticipated litigation that your firm is involved in including, but not limited to, potential or actual ligal matters with private parties and any local, state, federal or international governmental entities. The County reserves the right to consider legal liability information in the recommendation of any proposed contract to the Commissioners Court.

#### 4.38 CONFIDENTIALITY

Respondent expressly agrees that it will not use any direct or incidental confidential information that may be obtained while working in a governmental setting for its own benefit, and agrees that it will not access unauthorized areas or confidential information and it will not disclose any information to unauthorized third parties, and will take care to guard the security of the information at all times.

#### 4.39 INCLEMENT WEATHER

In case of inclement weather or any other unforeseen event causing the County to close for business on the date of a Proposal submission deadline, the Proposal closing will automatically be postponed until the next business day the County is open. If inclement weather conditions or any other unforeseen event causes delays in carrier service operations, the County may issue an Addendum to all known Respondents interested in the project to extend the deadline. It will be the responsibility of the Respondent to notify the County of their interest in the project if these conditions are impacting their ability to turn in a submission within the stated deadline. The County reserves the right to make the final judgement call to extend any deadline.

#### 4.40 AIR QUALITY

In determining the overall best Proposal, the County may, to the extent applicable, exercise the option granted to local governments under the Texas Local Government Code, Section 271.907.

This option allows the County to evaluate Proposals and give preference to goods and/or services of Respondent that demonstrates that the Respondent meets or exceeds any and all state or federal environmental standards, including voluntary standards, relating to air quality. If the Proposal being submitted will have an effect on air quality for the County (as it relates to any state, federal, or voluntary air quality standard), then the Respondent is encouraged to provide information in narrative indicating anticipated air quality impact. All Respondents are expected to meet all mandated state and federal air quality standards.

#### 4.41 COOPERATIVE PURCHASING PROGRAM

During the term of the Contract resulting from this RFP, the County would like to afford the same prices, terms and conditions to other political subdivisions or public entities. Another entity's participation in the Contract resulting from this RFP is subject to a properly authorized Purchasing Cooperative Inter
Agreement (ILA) with the County. Any liability created by purchase orders issued against the Contract shall be the sole responsibility of the governmental agency placing the order.

#### 4.42 PREVAILING WAGE RATES

To the extent this procurement is for the construction of a public work, including a building, highway, road, excavation, and repair work or other project development or improvement, paid for in whole or in part from public funds, without regard to whether the work is done under public supervision or direction, Texas Government Code, Chapter 2258, shall apply and the contractor shall pay not less than the wage scale of the various classes of labor as shown on the "Prevailing Wage Schedule" provided by the County. Pursuant to Texas Government Code, Section 2258.022(a)(2), the County has determined the general prevailing rate of the "Prevailing Wage Schedule" in the locality in which the public work is to be performed for each craft or type of worker needed to execute the contract and the prevailing rate for legal holiday and overtime work by using the prevailing wage rate as determined by the United States

Department of Labor in accordance with the United States Code, Section 276a (Davis-Bacon Act).

The specified wage rates are minimum rates only, and are not representations that qualified labor adequate to perform the work is available locally at the prevailing wage rates. The County is not bound to pay—and will not consider—any claims for additional compensation made by any contractor because the contractor pays wages in excess of the applicable minimum rate contained in the Contract Documents. The "Prevailing Wage Schedule" is not a representation that quantities of qualified labor adequate to perform the work may be found locally at the specified wage rates.

For classifications not shown, workers shall not be paid less than the wage indicated for laborers. The contractor shall notify each worker commencing work on the project the worker's job classification and the established minimum wage rate required to be paid, as well as the actual amount being paid. The notice must be delivered to and signed in acknowledgement of receipt by the employee and must list both the monetary wages and fringe benefits to be paid or furnished for each classification in which the worker is assigned duties. When requested by the County, competent evidence of compliance with the Texas Prevailing Wage Law shall be furnished by contractor. A copy of each worker wage rate notification shall be submitted to the County with the Application for Payment for the period during which the worker began on-site activities.

Should the contractor at any time become aware that a particular skill or trade not reflected on the County's "Prevailing Wage Schedule" will be or is being employed in the work, whether by the contractor or by a subcontractor, the contractor shall promptly inform the County and shall specify a wage rate for that skill or trade, which shall bind the contractor.

The contractor and any subcontractor shall pay to the County a penalty of sixty dollars (\$60.00) for each worker employed for each calendar day, or portion thereof, that the worker is paid less than the wage rates stipulated in the "Prevailing Wage Schedule" or any supplement thereto. The contractor and each subcontractor shall keep, or cause to be kept, an accurate record showing the names and occupations of all workers employed in connection with the work, and showing the actual per diem wages paid to each worker, which records shall be open at all reasonable hours for the inspection by the County.

Within thirty-one (31) days of receipt of information concerning a violation of the Texas Government Code Chapter 2258, the County shall make an initial determination as to whether good cause exists to believe a violation occurred. The County's decision on the initial determination shall be reduced to writing and sent to the contractor or subcontractor against whom the violation was alleged, and to the affected worker. When a good cause finding is made, the County shall retain the full amounts claimed by the claimant or claimants as the difference between wages paid and wages due under the "Prevailing Wage Schedule" and any supplements thereto, together with the applicable penalties, such amounts being subtracted from successive progress payments pending a final decision on the violation.

After the County makes its initial determination, the affected contractor or subcontractor and worker have fourteen (14) calendar days in which to resolve the issue of whether a violation occurred, including the amount that should be retained by the County or paid to the affected worker. If the contractor or subcontractor and affected worker reach an agreement concerning the worker's claim, the contractor shall promptly notify the County in a written document signed by the worker. It the contractor or Subcontractor and affected worker do not agree before the fifteenth (15<sup>th</sup>) calendar day after the County determination, the contractor or subcontractor and affected worker must participate in binding arbitration in accordance with the Texas General Arbitration Act, Chapter 171, (Texas Civil Practice and Remedies Code). The parties to the arbitration have ten (10) calendar days after the expiration of the fifteen (15) calendar days referred to above, to agree on an arbitrator; if by the eleventh (11<sup>th</sup>) calendar day there is no agreement to an arbitrator, a district court shall appoint an arbitrator on the petition of any of the parties to the arbitration.

If an arbitrator determines that a violation has occurred, the arbitrator shall assess and award against the contractor or subcontractor the amount of penalty as provided above and the amount owed the worker. The County may use any amounts retained hereunder to pay the worker the amount as designated in the

arbitration award. If the County has not retained enough from the contractor or subcontractor to pay the worker in accordance with the arbitration award, the worker has a right of action against the contractor and subcontractor as appropriate, and the surety of either to receive the amount owed, attorneys' is and court costs. The contractor shall promptly furnish a copy of the arbitration award to the County.

Money retained pursuant to the provisions above shall be used to pay the claimant or claimants the difference between the amount the worker received in wages for labor on the project at the rate paid by the contractor or subcontractor and the amount the worker would have received at the general prevailing wage rate as provided by the agreement of the claimant and the contractor or subcontractor affected, or in the arbitrator's award. The full statutory penalty of sixty dollars (\$60.00) per calendar day of violation per worker shall be retained by Williamson County to offset its administrative costs, pursuant to Texas Government Code, Section, 2258.023. Any retained funds in excess of these amounts shall be paid to the contractor on the earlier of the next progress payment or final payment. Provided, however, that the County shall have no duty to release any funds to either the claimant or the contractor until it has received the notices of agreement or the arbitration award as provided under the provision herein-above.

#### 4.43 CONFIDENTALITY

The Respondent expressly agrees that it will not use any direct or incidental confidential information that may be obtained while working in a governmental setting for its own benefit, and agrees that it will not access unauthorized areas or confidential information and it will not disclose any information to unauthorized third parties, and will take care to guard the security of the information at all times.



#### RFP 1701-135

# ROOF IMPROVEMENTS for WILLIAMSON COUNTY JUSTICE CENTER COURTHOUSE ANNEX, 405 MARTIN LUTHER KING STREET and WICO JAIL/SHERIFF'S OFFICE, 508 ROCK ST GEORGETOWN, TEXAS

#### **Summary of Work and Requirements**

Williamson County seeks qualified roofing contractors to complete the roof improvements to the JUSTICE CENTER COURTHOUSE ANNEX, located at 405 MARTIN LUTHER KING STREET and the JAIL/SHERIFF'S OFFICE, located at 508 ROCK ST, GEORGETOWN, TEXAS.

The existing roof assemblies are gravel surfaced, insulated asphalt, multi-ply built-up roofing (BUR).

A general summary of the roof improvement scope of work, in part, consists of:

- 1. Removal and disposal of loose gravel from the multi-ply built-up roof membrane
- 2. Replace needed insulation materials,
- 3. Install retrofit roof drains;
- 4. Additional rigid board insulation to obtain a total LTTR Value of 20;
- 5. Furnish and install fully adhered 60 mil TPO Membrane System and associated flashings, UL Class A fire-rated that meets the applicable Codes of the City of Georgetown TX and qualifies for the Manufacturer's Twenty Year NDL Guarantee.
- 6. Furnish and install new 24 gauge pre-finished metal flashings and counter-flashings

The Jail and Sheriff's Office located at 508 Rock Street will include selected exterior wall sealant joint and caulking work, and the re-certification of the lightning arrestor system.

NOTE: The work to be performed shall fully comply with all the specifications and requirements provided by Jim Whitten Roof Consultants, and as directed by the County.

Page **1** of **2** 

#### REQUIRED QUALIFICATIONS OF RESPONDENTS

- 1. Respondent must be currently approved and certified by the manufacturer of the roofing materials to be used.
- 2. Only skilled roofers that are completely familiar with the products and manufacturer's current recommended methods of installation will be considered. Respondent must include qualifications of the roofers that will install the products.
- 3. Respondent shall provide letters from a minimum of three major roofing materials manufacturers stating that your company has been an approved or certified applicator for a minimum of five (5) years, and that your company is approved to install those manufacturer's products with a 20 twenty year, no dollar limit, (NDL) Warranty and Guarantee.
- 4. Respondent shall provide a sample manufacturer's twenty year no dollar limit (NDL) Warranty Guarantee.
- 5. Respondent must submit a list of a minimum of three (3) projects there respondent completed within the last 10 years that are of similar size, scope and value. List shall include a description of the project, location of the project, contact information of the Owner, Architect/Roof Consultant, and General Contractor if applicable.
- 6. Evidence of Respondent's qualifications to do business in the State of Texas and the County of Williamson, or covenant to obtain such qualification prior to award of the contract.
- 7. Respondent shall submit with its proposal a letter from Respondent's bond company registered to issue bonds in the State of Texas, stating the ability of the Respondent to obtain a Performance and Payment Bond for the Project.
- 8. Respondent shall submit a statement that it can and will commence work on the project, within 5 days of the Work Authorization and or Notice to Proceed. Respondent shall also provide information that it can and will continue to daily performance the work until fully completed.

#### **Preferred Qualifications**

1. Contractor shall maintain a permanent office and operate and/or own full-service sheet metal shop within a 60 mile radius of the job.

#### **Evaluation of respondents shall be determined upon the following:**

In order to be considered for this project, the respondent must fully comply and satisfy all requirements.

- 1. Only those qualified respondents that meet all the requirements will be considered,
- 2. The respondents that also have the preferred qualification will have a preference, and
- 3. The qualified respondent with the lowest pricing that provides the County with the best overall value will be selected.
- 4. Contract negotiations may also be a part of the selection process.

Page **2** of **2** 

# ROOF IMPOROVEMENTS-2016 WILLIAMSON COUNTY JUSTICE CENTER COURTHOUSE ANNEX

## 405 MARTIN LUTHER KING STREET GEORGETOWN, TEXAS 78726



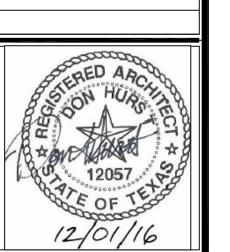
VICINITY MAP Source: Google Maps (No Scale)



**AERIAL PHOTO** Source: Google Earth Pro (No Scale)

INDEX OF DRAWINGS		
R-0.0	COVER	
R-1.0	GENERAL NOTES AND SCOPE OF WORK	
R-2.0	ROOF PLAN	
R-3.0	ROOF DETAILS	
R-3.1	ROOF DETAILS	

REVISIONS



12/01/16 AS SHOWN SHEET NO.

1. READ THE PROJECT MANUAL.

2. VERIFY ALL DIMENSIONS AND COORDINATE ALL DRAWINGS WITH ACTUAL FIELD CONDITIONS PRIOR TO BIDDING ON THE PROJECT. NOTIFY ROOF CONSULTANT OF ANY DISCREPANCIES PRIOR TO BIDDING.

3. COMPLY WITH THE CURRENT EDITION OF THE APPLICABLE BUILDING, PLUMBING, ELECTRIC OR FIRE CODES, OR OTHER LOCAL APPLICABLE CODE, WHICHEVER IS THE MORE STRINGENT.

4. FASTENING OR ATTACHMENT OF WOOD BLOCKING, NAILERS, STEEL ANGLES, DECKING AND SHEET METAL SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS FOR THE LATEST EDITION OF FACTORY MUTUAL BULLETIN 1-49.

5. ALL WOOD BLOCKING AND LUMBER SHALL BE KILN-DRIED AFTER TREATMENT (KDAT) AND SHALL BE SCREWED TO ANCHORING SUBSTRATE. STAGGER JOINTS WHEN STACKING LUMBER IN MULTIPLE LAYERS.

6. INSTALL A 1/2" PER FOOT MINIMUM BEVELED OR SLOPED KDAT WOOD SURFACE TO THE TOP OF COPINGS AND EXPANSION JOINTS FOR DRAINAGE. SLOPE THE TOP OF THE COPING TOWARDS THE ROOF SIDE OF THE BUILDING.

7. USE HOT DIPPED GALVANIZED FASTENERS FOR TREATED LUMBER, UNLESS SPECIFIED OTHERWISE.

8. FURNISH AND INSTALL PLYWOOD IN ACCORDANCE WITH THE AMERICAN PLYWOOD ASSOCIATION.

9. SHEET METAL WORK SHALL COMPLY WITH SMACNA.

10. PROVIDE CONTINUOUS 22 GA. GALVANIZED STEEL CLEATS WITH FASTENERS SPACED 8" 0.C. AT ALL SHEET METAL GRAVEL GUARD, FASCIA AND COPING. FOR METALS OTHER THAN GALVANIZED STEEL, INSTALL CONTINUOUS CLEAT ONE GAUGE HEAVIER THAN SHEET METAL COMPONENT BEING ATTACHED. STAGGER CLEAT JOINTS FROM JOINTS OF ATTACHED COMPONENTS.

11. PROVIDE BACK-UP PLATES AND COVER PLATES AT ALL GRAVEL GUARD/FASCIA JOINTS.

12. PROVIDE CONTINUOUS WATERPROOFING MEMBRANE BETWEEN SHEET METAL AND TREATED LUMBER.

13. HEM ALL EXPOSED SHEET METAL EDGES A MINIMUM OF 1/2".

14. PROVIDE SHEET METAL COMPONENT CORNERS, INTERSECTIONS, AND TERMINATIONS WITH JOINTS SPACED A MINIMUM OF 18" IN EITHER DIRECTION.

15. SOLDER ALL VERTICAL GALVANIZED STEEL SHEET METAL JOINTS, EXCEPT FOR PRE-FINISHED GALVANIZED STEEL. POP-RIVET AND SEAL ALL VERTICAL JOINTS OF PRE-FINISHED GALVANIZED

16. DO NOT INSTALL WATER DISCHARGE POINTS OVER DOORS, WINDOWS OR SIDEWALKS. IF THE DRAWINGS CONFLICT WITH THE ABOVE REQUIREMENT, CONTRACTOR IS RESPONSIBLE FOR NOTIFYING ROOF CONSULTANT FOR DIRECTION PRIOR TO INSTALLING.

17. PROVIDE TAPERED CRICKETS ON THE UP-SLOPE SIDE OF ALL CURBS WIDER THAN 18" PERPENDICULAR TO THE ROOF SLOPE DIRECTION.

18. MINIMUM INSULATION THICKNESS IS 1.5", UNLESS OTHERWISE SPECIFIED OR SHOWN IN DRAWINGS.

19. PROVIDE A MINIMUM BASE FLASHING HEIGHT OF 8" ABOVE THE PLANE OF THE FINISHED ROOF FOR ALL CURBS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING IF GREATER THAN 8" BASE FLASHING HEIGHT IS SPECIFIED OR SHOWN IN DRAWINGS.

20. PROVIDE TWO-PIECE COUNTERFLASHING AND RECEIVER FOR ALL ROOFTOP EQUIPMENT CURBS.

21. PROVIDE WOOD BLOCKING BENEATH ALL EMBEDDED METAL FLASHINGS. WOOD BLOCKING SHALL EXTEND A MINIMUM OF 1-1/2" PAST THE METAL FLANGE OF THE FLASHING.

#### GENERAL NOTES FOR MECHANICAL ROOF PENETRATIONS:

1. INSTALL MECHANICAL EQUIPMENT OR ACCESSORY CURBS TO BEAR ON STRUCTURAL ROOF DECK. ALL ROOFTOP MEP EQUIPMENT SHALL BE SUPPORTED BY KDAT WOOD CURBS WITH MINIMUM 8" BASE FLASHING HEIGHT.

2. INSTALL MECHANICAL EQUIPMENT CURB BASE FLASHING AND SHEET METAL COUNTERFLASHING PRIOR TO SETTING EQUIPMENT ON CURB. PROVIDE MINIMUM 1" CLEARANCE BETWEEN OUTSIDE SURFACE OF CURB AND INSIDE SURFACE OF EQUIPMENT FLANGE. DO NOT INSTALL EQUIPMENT PRIOR TO OBSERVATION AND ACCEPTANCE BY ROOF CONSULTANT.

3. SCOPE OF WORK FOR RAISING MECHANICAL EQUIPMENT CURBS TO SPECIFIED HEIGHTS INCLUDES MODIFYING ALL MECHANICAL, ELECTRICAL AND PLUMBING ASSOCIATED WITH THE EQUIPMENT FOR A COMPLETE OPERATIONAL ASSEMBLY THAT MEETS CURRENT CODE REQUIREMENTS. WORK SHALL BE PERFORMED BY LICENSED INSTALLERS FOR THE APPLICABLE TRADE.

4. SUPPORT ALL ROOF MOUNTED PIPING AND CONDUIT WITH SPECIFIED PIPE HANGERS OR APPROVED EQUIVALENT, SPACED MAXIMUM 10 FEET O.C. COMPLY WITH MANUFACTURER'S INSTALLATION REQUIREMENTS. SUPPORT PIPE AND CONDUIT SO THAT BOTTOM ELEVATION OF PIPE OR CONDUIT IS A MINIMUM OF 6" ABOVE THE PLANE OF THE FINISHED ROOF.

#### GENERAL SCOPE OF WORK, ROOF SURFACES A, B, C:

Note: the below list is intended as a general description. Contractor shall refer to all drawings and specifications for scope items not listed below.

BASE BID: Scope of Work covered by the Contract Documents includes the following roof improvements at the Project:

1. Vacuum and dispose existing loose gravel from the multi-ply built-up roof membrane.

2. Replace any wet insulation material on a per-unit cost basis as specified in the Project Manual.

3. Furnish and install two (2) layers 1.5" polyisocyanurate insulation board, fully adhered over existing spudded BUR roof.

4. Furnish and install one (1) layer of  $\frac{1}{2}$ " High Density polyiso insulation, fully adhered to top layer of 1.5" ISO.

5. Fully adhere 60-mil TPO roof membrane and flashings over  $\frac{1}{2}$ " HD ISO.

6. Roof system shall be U.L. Class A fire-rated, and shall qualify for roof membrane manufacturer's 20-Year No Dollar Limit (NDL) Guarantee.

7. Scope of work to include new retro-fit roof drains and TPO coated sheet metal scuppers as specified.

8. Scope of work to include installation of new wood nailers fastened to existing stone parapet coping and new pre-finished sheet metal coping cap system as specified.

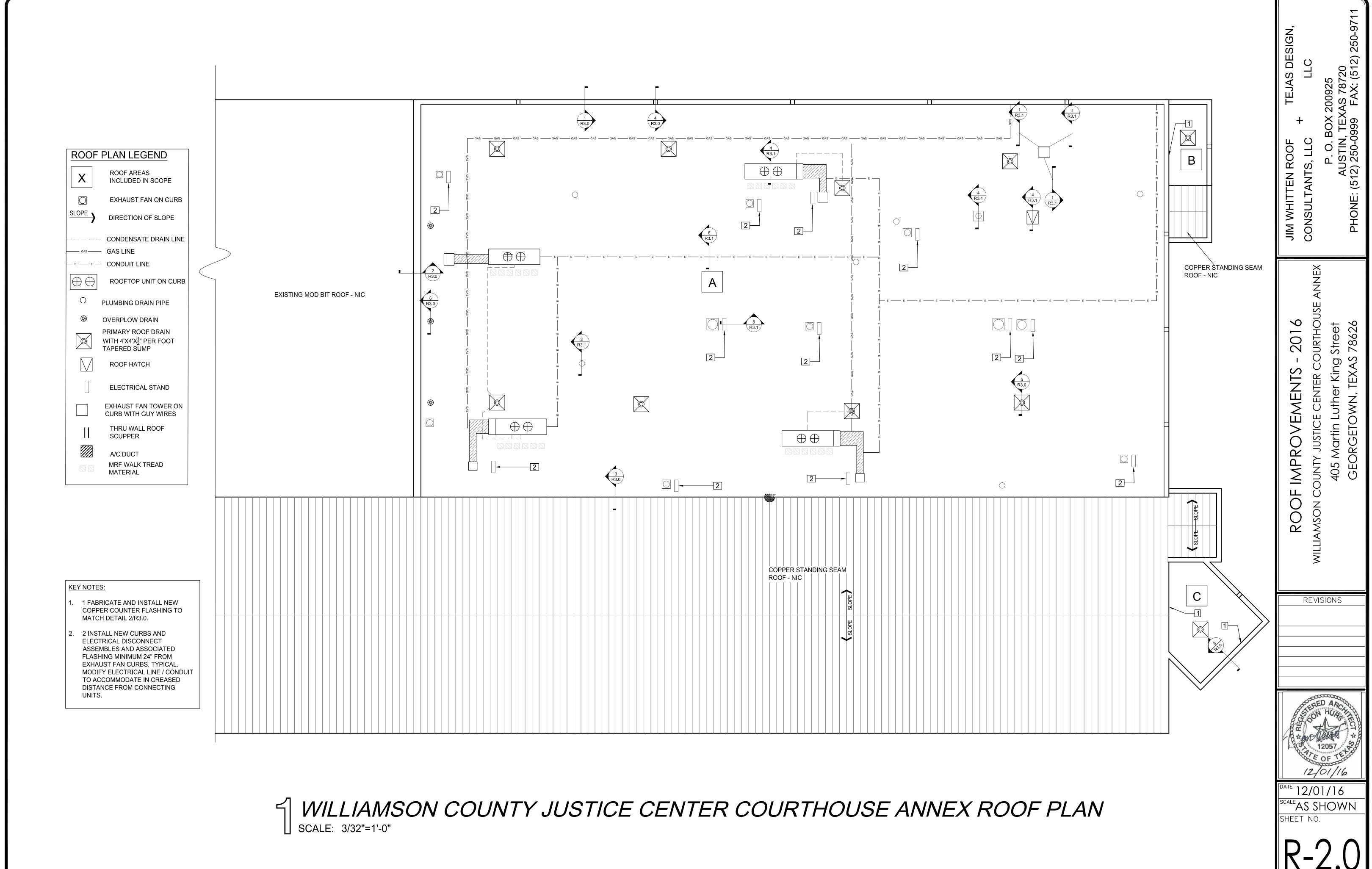
EJAS DESIGN

JIM WHITTEN ROOF

COURTHO Stre ROOF IMPR SON

REVISIONS

12/01/16 AS SHOWN SHEET NO.



Williamson Count

3/2017 11:41 AM

PRE-MFD PLUMBING VENT FLASHING
SCALE: 3"= 1"

EXISTING PLUMBING VENT STACK

SEALANT

STAINLESS STEEL

SEALANT TAPE

INSTALL SEALANT OR

BETWEEN PIPE AND

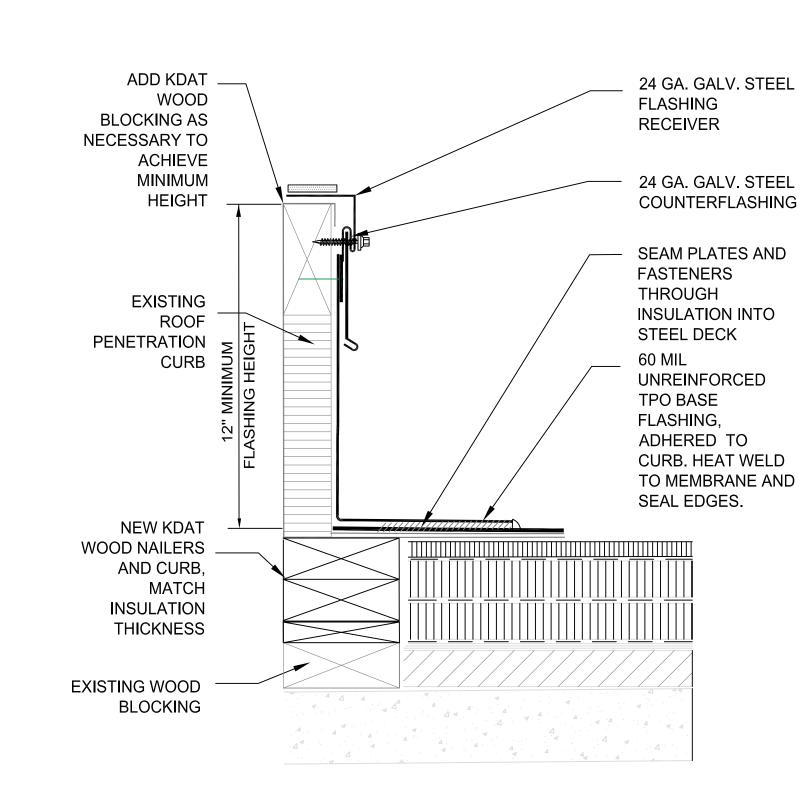
PRE-MANUFACTURED

MEMBRANE FLASHING

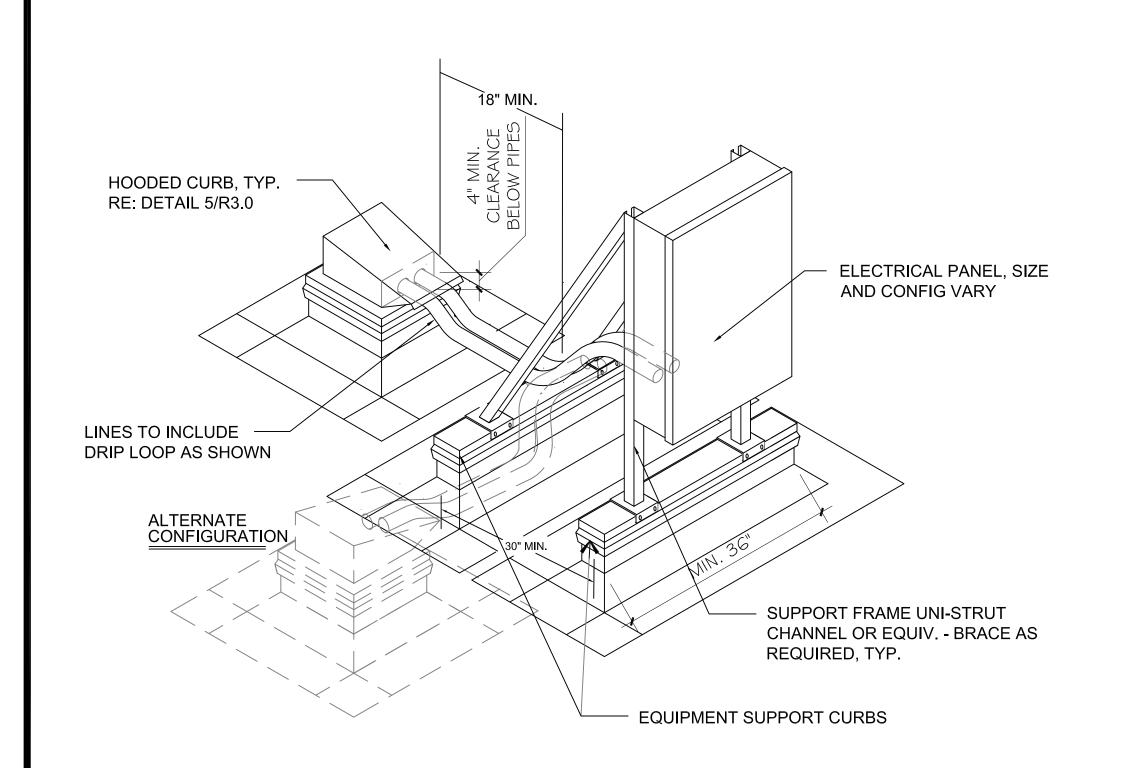
PRE-MANUFACTURED MEMBRANE FLASHING

HOT-AIR-WELDED SEAM

DRAWBAND



EXISTING EQUIPMENT CURB FLASING
SCALE: N.T.S



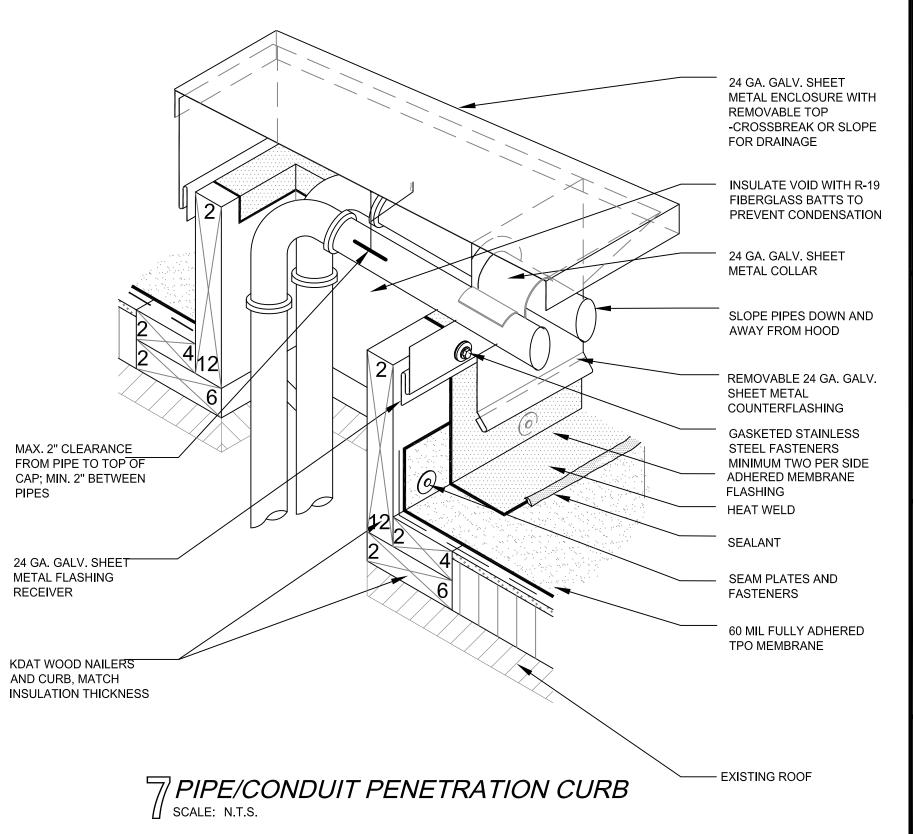
ELETRICAL DISCONNECT CURB FLASHING
SCALE: N.T.S.

☐ LIGHTWEIGHT EQUIPMENT SUPPORT CURB

SCALE: 3"= 1'

**CHANNEL & HANGER** PP10 W/ ROLLER PP10 W/ CHANNEL PORTABLE PIPE HANGERS MODEL NO. APPLICATION PIPE DIAMETERS UP TO 3.5" PP10 WITH ROLLER PP10 WITH PIPE DIAMETERS UP TO 3.5" CHANNEL PP10 WITH PIPE DIAMETERS UP TO 2.5" CHANNEL AND **HANGER** PS-1-2 PIPE DIAMETERS 2.5" TO 8.0" PIPE DIAMETERS 2.5" AND LARGER INSULATED AND NON-INSULATED

ROOFTOP PIPE SUPPORTS
SCALE: N.T.S.



JIM WHITTEN ROOF TEJAS DESIGN,
CONSULTANTS, LLC
P. O. BOX 200925
AUSTIN, TEXAS 78720
PHONE: (512) 250-0999 FAX: (512) 250-9711

ROOF IMPROVEMENTS - 2016
WILLIAMSON COUNTY JUSTICE CENTER COURTHOUSE
405 Martin Luther King Street
GEORGETOWN, TEXAS 78626

REVISIONS

12057 12/01/16

DATE 12/01/16
SCALE AS SHOWN
SHEET NO.

R-3.1

## PROJECT MANUAL **ROOF IMPROVEMENTS – 2016 WILLIAMSON COUNTY JUSTICE CENTER COURTHOUSE ANNEX**

405 MARTIN LUTHER KING STREET **GEORGETOWN, TEXAS 78626** 



Prepared by: JIM WHITTEN ROOF CONSULTANTS, LLC

TEJAS DESIGN, LLC P.O. BOX 200925 - AUSTIN, TEXAS 78720

December 1, 2016

JIM WHITTEN ROOF CONSULTANTS, LLC
WILLIAMSON COUNTY JUSTICE CENTER COURTHOUE ANNEX

ROOF IMPROVEMENTS-2016 December 1, 2016

## DISCLOSURE STATEMENT

ALL INFORMATION CONTAINED IN OR DISCLOSED BY THIS DOCUMENT IS CONSIDERED CONFIDENTIAL AND PROPRIETARY INFORMATION BY JIM WHITTEN ROOF CONSULTANTS, LLC + TEJAS DESIGN, LLC. IT SHALL NOT BE REPRODUCED OR USED IN WHOLE OR IN PART WITHOUT PERMISSION OF JIM WHITTEN ROOF CONSULTANTS, LLC + TEJAS DESIGN, LLC. COPIES REQUIRED FOR PROJECT BIDDING AND CONSTRUCTION WILL BE SUPPLIED BY JIM WHITTEN ROOF CONSULTANTS, LLC +TEJAS DESIGN, LLC

JIM WHITTEN ROOF CONSULTANTS, LLC
WILLIAMSON COUNTY JUSTICE CENTER COURTHOUE ANNEX

ROOF IMPROVEMENTS-2016 December 1, 2016

#### TABLE OF CONTENTS

#### Division 0 – Procurement and Contracting Requirements

Section 000860 - List of Drawings

#### Division 1 - General Requirements:

Section 011100 Summary of Work

Section 013100 Project Management and

Coordination

Section 013300 Submittal Procedures

Section 015000 Temporary Facilities and Controls

Section 015113 Temporary Heating, Cooling, and Ventilating

Section 015123 Temporary Electricity

Section 016000 Product Requirements

Section 017100 Cleaning

Section 017700 Closeout Procedures

Division 2 - Site Work

Section 024100 Demolition

Divisions 3-4 - Not Used

Division 5 - Steel

Section 050150 Roof Deck Repair

#### Division 6 - Wood and Plastics

Section 061050 Rough Carpentry

#### Division 7 - Thermal and Moisture Protection:

Section 07220 Roof and Deck

Insulation

Section 075300 TPOMembrane

Section 076000 Flashing and Sheet Metal

#### Division 9 – (Not Used)

Division 8-14 - Not

Used

Division 15 - Misc.

Mechanical

Section 15000 Incidental Mechanical Work

#### Division 16 - Misc. Electrical

Section 16010 Incidental Electrical Work

#### **END OF TABLE OF CONTENTS**



JIM WHITTEN ROOF CONSULTANTS, LLC
WILLIAMSON COUNTY JUSTICE CENTER COURTHOUE ANNEX

ROOF IMPROVEMENTS-2016 December 1, 2016

#### PROJECT DIRECTORY

Owner's Representative Mr. Dwayne Gossett

Facilities
Maintenance
Williamson County
3101 SE Inner Loop Rd.

3101 SE Inner Loop Rd. Email: DGossett@wilco.org Georgetown, Texas 78626 Phone: (512)943-1611 Office

Cell: (254)654-1495

Roof Consultant Jim Whitten Roof Consultants

Architect Tejas Design, LLC Phone: 512.250.0999

P. O. Box 200925

Austin, Texas 78720 Fax: 512.250.9711

Don Hurst, Architect Mobile 512-507-6989

 $E\text{-mail: }\underline{\text{dhurst2@austin.rr.com}}$ 

Jim Whitten, Senior Consultant Mobile: 512.914.4943

E-mail: jim@jimwhitten.com

Rob Hernandez, Senior Consultant Mobile: 512.963.4995

Email: rob@jimwhitten.com

Wayne Carriker, Project Manager Mobile: 512.596.6440

Email: wayne@jimwhitten.com

Ted Miears, Field Technician Mobile: 512-750-5916

E-mail: ted@jimwhitten.com

Jeremy Fabinski, Cadd Operator Mobile: 903-360-1072

E-mail: jeremy@jimwhitten.com

**END OF PROJECT DIRECTORY** 

ROOF IMPROVEMENTS-2016 December 1, 2016

# SECTION 000860 LIST OF DRAWINGS

SHEET NO.	DESCRIPTION
R-0.0	TITLE SHEET
R-1.0	ROOFING GENERAL NOTES AND GENERAL SCOPE OF WORK
R-2.0	ROOF PLAN
R-3.0 -3.1	ROOF DETAILS

**END OF SECTION** 

LIST OF DRAWINGS 000860

ROOF IMPROVEMENTS-2016 December 1, 2016

## **SECTION 011100 SUMMARY OF WORK**

#### PART I - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings, provisions of the, and other Division 1 Specification Sections, apply to this Section.

### 1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project: Roof Improvements 2016
- B. Williamson County Justice Center Courthouse Annex 405 MLK Street, Georgetown, Texas
- C. Contract Documents dated August \_\_\_, 2016

Prepared by: Jim Whitten Roof Consultants, LLC + Tejas Design, LLC

P.O. Box 200925, Austin, Texas, 78720 512.250.0999/ Fax: 512.250.9711/ Cell:

512.914.4943

E-mail: jim@jimwhitten.com

- D. Base and Alternate Bids –Gravel Surfaced Roofs (Areas A, B, C as indicated in Project Drawings): Scope of Work covered by the Contract Documents includes the following roof improvements at the Project:
  - 1. Vacuum and dispose existing loose gravel from the multi-ply built-up roof membrane.
  - 2. Identify and replace any wet insulation material on a per-unit cost basis as specified.
  - 3. Furnish and fully adhere two (2) layers 1.5" polyisocyanurate (ISO) insulation.
  - 4. Furnish and fully adhere one (1) layer ½" High Density ISO insulation.
  - 5. Furnish and fully adhere 60-mil TPO roof membrane and associated flashings.
  - 6. Roof system shall be U.L. Class A fire-rated, and shall qualify for the roof membrane manufacturer's 20-year No Dollar Limit (NDL) Guarantee.
  - 7. Install new retrofit primary and overflow roof drains.
  - 8. Install new 24-guage TPO coated metal scuppers.
  - 9. Install wood nailers over the existing stone coping at the parapet walls and install new sheet metal coping cap system as specified.
  - E. Contingency Allowance
    - 1. Owner Contingency Allowance: An Owner's Contingency Allowance of \$2,000 is to be included in the Total Bid.
  - F. Unit Prices: A unit price is a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if estimated quantities of Work required by the Contract Documents are increased or decreased. Unit prices include all necessary material, plus cost for delivery, installation, insurance, overhead, and profit.

#### 1.3 SCOPE OF WORK

A. The Contract Documents, to the best of Owner's and Roof Consultant's knowledge, reflect existing conditions. Should minor conditions be encountered which are not exactly as indicated, modify the scope of Work as required, at no additional cost to Owner.

SUMMARY OF WORK 011100-1

ROOF IMPROVEMENTS-2016 December 1, 2016

- B. To achieve satisfactory performance from the Work, it may be necessary to perform unanticipated, minor work items encountered during the course of the Work. Consultant and Owner will suggest additional work items as appropriate. Contractor shall assist Owner in applying for and obtaining any available rebates from electrical power provider.
- C. No Change Orders for additional payment will be considered for such additional Work items, unless they represent a substantial change to the Scope of Work.
- D. The Contractor shall assume full responsibility and liability for the compliance with all applicable Federal, State, and local regulations pertaining to work practices, hauling, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site.

## 1.4 TIMING OF WORK

A. Work is to be performed within an operating facility space. Owner intends for work to be performed in such a manner that disruption of operations is to be minimized.

## 1.5 GUARANTEE AND WARRANTY

- A. Roofing: Provide Manufacturer's Twenty Year No Dollar (NDL) System Warranty and Two-Year Contractor's Warranty for materials and installation.
  - Manufacturer's Warranty and Contractor's Warranty effective date shall be the Date of Substantial Completion.
  - 2. Both the Manufacturer's Warranty and Contractor's Warranty shall cover damage to Work resulting from failure to resist penetration of moisture and replacement of assembly components that fail due to material failure or faulty workmanship.

**END OF SECTION** 

SUMMARY OF WORK 011100-2

ROOF IMPROVEMENTS-2016 December 1, 2016

#### SECTION 013100 PROJECT MANAGEMENT AND COORDINATION

#### PART 1 - GENERAL

## 1.1 PROJECT COORDINATION, SEQUENCING AND SCHEDULING

- A. Coordinate Work with Owner to minimize interference with normal building and inconvenience to facility users, and to expedite the Work.
- B. The facility spaces adjacent to the work are to be occupied for the conduct of normal operations.
- C. Coordinate Work to assure efficient and orderly sequence of application of construction elements, with provisions for accommodating items installed later.
- D. Coordinate Work to allow observations by the Owner and Consultant.
- E. Provide sufficient and adequate materials, personnel and equipment to facilitate rapid completion of the Work without undue delays.

### 1.2 USE OF THE PREMISES

- A. Before beginning work, Contractor must verify in writing to Owner that all Owner security measures are understood and followed, and secure approval from the Owner for access to the following:
  - 1. Site: No parking or storage on the designated parking areas.
  - 2. Areas permitted for personnel parking.
  - 3. Areas permitted for storage of materials and debris.
  - 4. Areas permitted for the location of cranes, hoists and chutes for loading and unloading materials to and from the roof.
- B. Roof Areas not included in this Contract (designated by "NIC" on the Roof Plan) may not be used for personnel or equipment rooftop traffic, including removing debris or delivering materials, except as authorized by the Owner and Consultant, and only after adequate protection covering over the existing roof surfaces is approved and provided.
- C. The Owner reserves the right to have criminal background checks performed on all Contractor personnel to be onsite.

# 1.3 EXISTING CONDITIONS

- A. Review the existing conditions of the facility, prior to commencing the Work, for access, clearances, existing mechanical and electrical equipment, plumbing, structural components and interior finishes that will require removal, replacement or relocation to complete the Work of this Contract.
- B. Notify Owner and Consultant of any additional required work not included in the Contract Documents.
  - C. Notify Owner and Consultant upon discovery of any items that differ or conflict

PROJECT MANAGEMENT AND COORDINATION

013100-1

ROOF IMPROVEMENTS-2016 December 1, 2016

with the Contract Documents.

#### 1.4 PRE-JOB DAMAGE SURVEY OF FACILITY

- A. Perform a thorough survey of property and all affected areas of the buildings with Owner prior to starting the Work to document existing damage and operational status of existing rooftop equipment. Non-functional or damaged items identified on this survey will not be the responsibility of Contractor to repair or replace unless further damaged by Contractor during execution of the Work.
- B. Include with Pre-Job Submittals, both written description and digital documentation (CD with digital photos or DVD with video) of all items considered to be previously damaged.
- C. Consider any damage to buildings or property not identified in the pre-job damage survey as having resulted from execution of this Contract and correct at no additional expense to Owner.

# 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Limited storage area will be provided by Owner where available. Provide lockable temporary storage containers for storage of equipment and materials. Coordinate with Owner for areas designated for temporary storage.
- B. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, and directions for storing and mixing with other components.
- C. Store membrane rolls lying down on pallets and fully protected from the weather with clean canvas tarpaulins. Un-vented polyethylene tarpaulins are prohibited. Secure all stored materials at roof levelin a manner to resist high wind speeds.
- D. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.
  - Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.
- E. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.
- F. Handle and store roofing materials and place equipment in a manner to avoid permanent deflection of deck.

# 1.6 PROTECTION

A. Contractor shall take necessary and adequate precautions to avoid damaging windows, doors, grass, trees, shrubs, walks, drives, etc.

ROOF IMPROVEMENTS-2016 December 1, 2016

- B. Contractor shall be responsible for damage to adjacent buildings, property, and vehicles near the building resulting from its operations. Clean, repair or replace any surfaces, materials or equipment which are marked, soiled or otherwise damaged as a result of the Work to the satisfaction of the Owner to the extent that it is returned to its condition prior to commencement of the work.
- C. Furnish and erect barricades to protect building occupants and vehicles and to prevent pedestrian or vehicular traffic adjacent to any area affected by construction activities.
- D. Protect finished Work from damage, traffic and adverse weather conditions until proper curing, drying and/or finishing are complete. Do not use finished roof membrane as a working surface. Provide temporary means of roof membrane protection.

# E. Existing Drawings and Utilities:

- Some original drawings may be available from the Owner. The Owner has not verified
  the information contained on those Drawings. Those Drawings are not a part of the
  Contract Documents.
- 2. Repair or replace damaged utilities to a condition equivalent to that before damage occurred. Negligently damaged utilities to be repaired or replaced at no cost to the Owner.

## 1.7 WORKING HOURS AND SCHEDULE

- A. Working hours shall be between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday, except holidays and black-out dates and times assigned by Owner.
- B. The Contract Time will be adjusted by Change Order in the event Owner initiated work stoppages are required.
- C. Alternate work schedules will be considered by Owner with prior notification and approval by Owner.
- D. Obtain approval from Owner prior to altering Workschedule.

## 1.8 INTERIOR ACCESS

- A. Restrict access to interior spaces of the building to Contractor's Project Superintendent and only those workers required to perform work inside the building.
- B. Coordinate with Owner and obtain Owner approval prior to accessing interior space.

## 1.9 CLEANING

- A. Maintain areas free of waste materials, debris and rubbish. Maintain site at all times in a clean and orderly fashion.
- B. Remove waste materials, debris, and rubbish from site periodically and dispose off-site in a legal manner. Do not use Owner's trash containers for disposal of waste materials, debris and rubbish.
- C. Periodically clean interior areas affected by the Work to provide suitable conditions for occupied

PROJECT MANAGEMENT AND COORDINATION

013100-3

ROOF IMPROVEMENTS-2016 December 1, 2016

areas.

D. Restore existing facilities used during construction to their condition prior to commencement of work.

#### 1.10 USE OF UTILITIES

- A. Coordinate use of utilities with Owner.
  - B. Provide temporary electric feeder from electrical service at location as directed by Owner. Provide temporary wiring and hardware as required for execution of the Work. Ground fault interruption devices and similar protection measures required by authorities having jurisdiction are the responsibility of the Contractor. All such work shall be performed by a licensed electrician.
- C. Connect to existing water sources for temporary use of water. Furnish and maintain all necessary adapters and hoses required to complete the Work.
- D. Restore electrical and water service to original condition at completion of each day's activities, and at the completion of the Work to Owner's approval.

#### 1.11 MONITORING

A. Owner and Roof Consultant intend to observe the quality and progress of the Work for substantial compliance with the design contract documents. This does not relieve Contractor of his own quality control, testing and supervision responsibilities.

### 1.12 QUALITY ASSURANCE

- A. Review all Drawings and Specifications before commencing and performing the Work.
- B. Provide at least one copy of the final Drawings and Specifications, Addenda and Modifications for permanent use at the site whenever work is in progress.
- C. Maintain workmanship of the highest quality in accordance with the best trade practices.
- D. Obtain all materials specified in the Contract Documents from the same source throughout the Work. Notify Owner if plans are made to change sources.
- E. Possess a minimum of five years experience, installing/applying the respective materials described in each section of the Specification.
- F. Possess current written approval as an applicator of each material used in the Work.
- G. Provide workmen, engaged in the respective items of the Work, which have satisfactorily completed a program of certification by the manufacturers of materials described in the Specifications, or can demonstrate significant experience on similar projects to verify their qualifications to perform this Work.
- G. Perform quality control test and verifications as required by manufacturers or other

ROOF IMPROVEMENTS-2016 December 1, 2016

entities to comply with the requirements of this Contract. Do not use Owner's site observations and testing in lieu of Contractor's own quality control.

H. Contractor shall have a full-time English speaking non-working superintendent on site when workers are present.

# 1.13 PARKING

A. Park only in spaces approved by Owner.

PART 2 - PRODUCTS

PART 3 – EXECUTION

**END OF SECTION** 

## SECTION 013300 SUBMITTAL PROCEDURES

#### PART I - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and provisions of the Documents including the Statement of Work and other Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

## A. Submittals:

- 1. Provide submittals required by the Contract Documents in a timely manner and at appropriate times in the execution of the Work to allow for sufficient and prompt review by Owner and Consultant.
- 2. Provide submittals, all in form and substance satisfactory to the Consultant and Owner.
- Revise and re-submit submittals as necessary to establish compliance with specified requirements.
- B. Related Sections: Individual requirements for submittals are described in the pertinent Sections of these Specifications.
- C. Color selections and any other aesthetic material approvals shall be in writing by Owner.

# 1.3 PROCEDURES

- A. Submit complete sets of the Pre-Construction, Progress and Post-Construction Submittals that are available in electronic format or other Windows compatible format if transmitted on a compact disk to Owner and Consultant for review. Submit product samples concurrently with electronic submittals.
- B. Owner and Consultant will review submittals for compliance with Contract Documents. Consultant will compile Owner and Consultant's review comments and issue to Contractor for coordination prior to Contractor distribution of reviewed submittals.
- C. Provide three complete bound sets of reviewed submittals and product samples to Owner; provide one complete bound set of reviewed submittals and product samples to Consultant.

## 1.4 QUALITY ASSURANCE

- A. Coordination of submittals:
  - 1. Carefully review and coordinate all aspects of each item being submitted.
  - 2. Verify that each item and its appropriate submittal conform in all respects with the specified requirements.
  - 3. Certify that this coordination has taken place by affixing Contractors' stamp, signature and date to the corner of each submittal package.

# PART 2 - PRODUCTS (Not Applicable)

SUBMITTAL PROCEDURES 013300-1

#### PART 3 - EXECUTION

#### 3.1 IDENTIFICATION OF SUBMITTALS

- A. Submittals shall be identified by applicable Specification Section. Number individual submittal items within a specification section consecutively. Provide a table of contents for each specification section. Show on at least the first page of each submittal and elsewhere as required for positive identification, the applicable submittal section and number.
- B. Identify submittal data applicable to the Work of this Contract when submittal lists more than one option.
- C. Strike through submittal data that does not apply to the Work of this Contract.
- Accompany each submittal package with a letter of transmittal showing all information required for identification checking.

#### 3.2 GROUPING OF SUBMITTALS

- A. Group submittals into packages identified as Pre-Construction Submittals, Progress Submittals, and Post- Construction Submittals.
- B. Partial submittals may be rejected as not complying with the provisions of the Contract.

#### 3.3 TIMING OF SUBMITTALS

- A. Make submittals far enough in advance of scheduled dates for commencement, execution or installation to provide time required for reviews, for securing necessary approvals, for possible revisions and re-submittals, and for placing orders and securing delivery.
- Allow at least 5 working days for review by the Owner following his/her receipt of submittals.
- C. Contractor will be held responsible for delays occasioned by incomplete or tardy submittal packages.
- D. Pre-construction Submittals: Submit within 5 business days following Notice of Award.
- E. Progress Submittals: Submit, as required, throughout the performance of the Work of the Contract.
- F. Post-Construction Submittals: Submit with final payment request.

# 3.4 PRE-CONSTRUCTION SUBMITTALS

- A. The Contractor's Pre-Construction Submittal package shall include the following:
  - 1. Contract Execution Package executed by Contractor, containing:
    - a. Standard Form of Agreement between Owner and Contractor
    - b. Certificates of Insurance, properly endorsed.
    - c. Supplementary Conditions

SUBMITTAL PROCEDURES 013300-2

ROOF IMPROVEMENTS-2016 December 1, 2016

- d. Addenda
- e. Bonds
- 2. Certification of insurance for all subcontractors.
- 3. Proposed Progress Schedule.
- 4. Proposed Schedule of Values, with subdivisions for costs associated with requirements stated in the General Services Agreement and Statement of Work, material and labor broken out by phases of the Work, including but not limited to demolition, insulation, membrane, sheet metal, plumbing and closeout.
- 5. Names of supervisory personnel and their qualifications.
- Scaled Roof Plans indicating tapered insulation slope, flashing Details, perimeter edge conditions, and proposed gutter and downspout size and locations.
- 7. Product data for materials proposed to be used.
- 8. Subcontractor list.
- 9. Any required building/construction permits.
- 10. Sample of No-Dollar Limit Guarantee.
- 11. Copy of blank Daily Report to be utilized.

#### 3.5 PROGRESS SUBMITTALS

- A. Daily Reports: Prepare daily reports and submit to Owner and Roof Consultant no later than 10:00 AM of the following work day as a single attachment to an email. Include in report, the following minimum items:
  - 1. Description of Work completed by area, include sketch of area on 8.5" x 11" schematic roof plan, six (6) photos in PDF format of work in progress.
  - 2. Number of personnel present, including names, phone numbers, and Texas Drivers' License numbers.
  - 3. Description and estimated quantity of materials removed and materials installed.
  - 4. Description, quantity and location of unit priced items, if any.
  - 5. Estimate of remaining quantity of tear off remaining.
  - 6. Planned activity for following work day.
  - 7. Reason and justification for not working if no work was performed.
  - 8. Report to include weather conditions at start of work, noon and end of work.
  - 9. Report to include name of supervisory person overseeing the work.
- B Applications for payment: The Contractor's applications for payment shall include the following:
  - 1. An invoice on the contractor's companyletterhead.
  - 2. An Application for Payment, and Waiver of Lien.
  - Unconditional, notarized Waiver of Liens from the Contractor for the amount of Work performed for which payment less retainage was requested in the previous payment request.
  - 4. Unconditional, notarized Waivers of Liens from Subcontractors, and material and equipment suppliers for the Work performed or materials and equipment supplied during the period covered by the previous payment request. Data for materials proposed to be used.
  - 5. Updated, current progress schedule.
- C. Other Submittals required by the Contract Documents.

SUBMITTAL PROCEDURES 013300-3

ROOF IMPROVEMENTS-2016 December 1, 2016

# 3.6 OWNER AND CONSULTANT REVIEW

- A. Review by Owner and Consultant does not relieve Contractor from responsibility for errors that may exist in the submitted data.
- B. Make revisions if required by Owner and Consultant and resubmit for review.
- C. "Or equivalent":
  - Do not assume where the phrase "or equivalent", or "or equivalent as approved by the Owner", occurs in the Contract Documents, that particular materials, equipment, or methods will be approved as equivalent unless the item has been specifically approved for this Work by the Owner.
  - 2. Decision of the Owner shall be final.

**END OF SECTION** 

SUBMITTAL PROCEDURES 013300-4

#### SECTION 015000 TEMPORARY FACILITIES AND CONTROLS

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the General Services Agreement, including the Statement of Work and other Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Provide temporary facilities and controls as needed and as specified for the Work.
- B. Maintain temporary facilities and controls in proper and safe condition throughout progress of the Work.
- C. Related Sections: Additional requirements may also be prescribed in other Sections of these Specifications.

## PART 2 - PRODUCTS (NOT USED)

#### PART 3 - EXECUTION

## 3.1 TELEPHONE SERVICE

- A. Contractor shall provide his own telephone service as required. Contractor's Project Manager and Superintendent shall have a cell phone available at all times.
- B. Use of Owner's private phones is not allowed unless authorized by Owner.

#### 3.2 TOILET FACILITIES

- A. Contractor shall provide and maintain an adequate number of temporary toilets with proper enclosures as necessary for use of workmen during construction. Keep toilets clean and comply with all local and state health requirements and sanitary regulations.
- B. Locate toilet facilities in Parking/Staging storage area as approved by Owner.

#### 3.3 FIRST AID SUPPLIES

A. Provide medical supplies and equipment at the site for first-aid service to persons injured in connection with the Work.

## 3.4 FIRE PROTECTION

A. Fire Protection:

TEMPORARY FACILITIES AND CONTROLS

015000-1

ROOF IMPROVEMENTS-2016 December 1, 2016

- 1. Provide temporary fire protection as required by federal, state, as local laws, codes, and ordinances.
- 2. Provide minimum two (2) charged and functioning fire extinguishers of appropriate size, within 10′- 0″ of combustible materials. Ensure that all personnel are fully trained in operation of provided extinguishers.
- Reasonable precautions against fire shall be taken throughout Operations.
   Flammable material shall be properly handled and stored in accordance with governing code requirements.
- 4. Open fires are prohibited at the site.

#### 3.5 DRAINS AND SEWERS

- A. Contractor shall keep drains and sewers clean and free of construction debris during all phases of Work.
- B. Do not permit debris or other contaminants deleterious to the City sewer system to be washed down drains or sewers.
- C. Protect City of Georgetown storm drainage facilities that are adjacent to or affected by the Work of this Contract. Comply with City of Georgetown requirements for protecting storm sewer system from construction generated waste water.

#### 3.6 TRAFFIC CONTROL AND PROTECTION

- A. Provide signs, flagmen, lights, or other warning devices as required to control pedestrian traffic around the building and to prevent pedestrians from entering areas of the Work.
- B. All sidewalks shall remain open and accessible at all times. Protective canopies or other appropriate means shall be installed over building entrances when work is occurring overhead or adjacent to those areas.
- C. Furnish and erect barricades to protect building occupants and vehicles and to prevent pedestrian or vehicular traffic adjacent to any area affected by construction activities.
- D. Contractor shall be responsible for maintaining any means of egress required by governing building codes for continual public use of the building.
- E. Provide barricades as necessary at building entrances to protect occupants during work in these areas.

## 3.7 SPECIAL CONTROLS

- A. Parking: Park only in areas approved by Owner.
- B. Dust, Debris and Water Control:
  - 1. Contractor shall take precautions as necessary to prevent dust, dirt, construction-related water and particles, etc. from leaving the immediate work area.
  - 2. Contractor shall take appropriate means if dust or debris exceeds levels established by City laws and ordinances.

ROOF IMPROVEMENTS-2016 December 1, 2016

C. Construction Warning Signs: Provide and maintain suitable signs at each building entrance to warn guests and public of work while repair work is inprogress.

#### 3.8 MAINTENANCE

A. Maintain temporary facilities and controls as long as necessary for safe and proper completion of the Work.

# 3.9 REMOVAL

A. Remove temporary facilities and controls as rapidly as progress of the Work will safely permit.

## 3.10 CLEANING

- A. Maintain areas free of waste materials, debris and rubbish. Maintain site at all times in a clean and orderly fashion.
- B. Remove waste materials, debris, and rubbish from site periodically and dispose off-site in a legal manner. Do not use Owner's trash containers for disposal of waste materials, debris and rubbish.
- C. Periodically clean interior areas affected by the Work to provide suitable conditions for occupied areas.
- D. Restore existing facilities used during construction to their condition prior to commencement of work.

**END OF SECTION** 

# SECTION 015113 TEMPORARY HEATING, COOLING, AND VENTILATING

## PART 1 - GENERAL

#### 1.1 DESCRIPTION

A. For those Projects requiring incidental Mechanical Work; includes installation of temporary mechanical work, disconnects, reconnects, and other incidental mechanical, and plumbing work, not specified herein but necessary for the successful execution of the Work as set forth in the Contract Documents.

## PART 2 - PRODUCTS

### 2.1 MATERIAL AND WORKMANSHIP

- A. All materials and equipment required shall be:
  - 1. Installed by mechanics skilled in their trades, working under the direct supervision of competent experienced foremen or superintendents.
  - 2. Installed in compliance with all applicable Occupational Safety and Health Administration Rules and Regulations.
  - Installed in compliance with all applicable local, Ventilating, Air Conditioning, and Plumbing Codes.
- B. Prior to conducting any mechanical work, perform a complete survey of all roof top mechanical equipment with the Owner's representative to verify the functional condition of the equipment. Document the survey in writing, signed by the Owner's representative and the Contractor. Provide a copy to the Roof Consultant.

# 2.2 TIMELY PLACEMENT OF MATERIALS AND EQUIPMENT

A. Install items specified in Paragraph 2.01 of this Section at the proper time during progress of construction. Coordinate work operations with other trades as necessary.

## PART 3 - EXECUTION

## 3.1 GENERAL

- A. Install temporary mechanical work necessary to comply with the work of other Sections.
- B. Remove temporary mechanical work necessary to comply with other Sections at completion of Project and correct any damage to property.
- C. At the end of the Project, any non-functional mechanical equipment (not noted on the survey list) will be the responsibility of the Contractor to restore to functional working order.

### **END OF SECTION**

TEMPORARY ELECTRICITY 015123-1

ROOF IMPROVEMENTS-2016 December 1, 2016

#### SECTION 015123 TEMPORARY ELECTRICITY

#### PART 1 - GENERAL

#### 1.1 DESCRIPTION

A. For those Projects requiring incidental Electrical Work: Included installation of temporary power, disconnects, reconnects, lightning arrestor systems, and other incidental electrical work necessary to perform the Work of the Contract Documents.

## PART 2 - PRODUCTS

#### 2.1 MATERIALS AND WORKMANSHIP

- A. All materials and equipment required shall be:
  - 1. Approved by Underwriters Laboratories and so labeled.
  - 2. For wire and cable, marked as required by Article 310-1- National Electrical Code.
  - 3. Installed by mechanics skilled in their trades, working under the direct supervision of competent experience foremen or superintendents.
  - 4. Installed in compliance with all applicable Occupational Safety and Health Administration and applicable local electrical codes.
- B. Prior to conducting any electrical work, perform a complete survey of all roof top electrical lines and service with the Owner's representative to verify the functional condition of the electrical service. Document the survey in writing, signed by the Owner's representative and the Contractor. Provide a copy to the Roof Consultant.

# 2.2 TIMELY PLACEMENT OF MATERIALS AND EQUIPMENT

A. Install items specified in Paragraph 2.01 of this Section at the proper time during progress of construction. Coordinate work operations with other trades as necessary.

#### PART 3 - EXECUTION

#### 3.1 GENERAL

- A. Provide temporary electrical power as required to perform the Work of the Contract Documents.
- B. Remove all temporary electrical items at completion of Project and correct any damage to property.
- C. At the end of the Project, any non-functional electrical service (not noted on the survey list) will be the responsibility of the Contractor to restore to functional working order.

**END OF SECTION** 

TEMPORARY ELECTRICITY 015123-1

## SECTION 016000 PRODUCT REQUIREMENTS

#### PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the General Services Agreement, including the Statement of Work and other Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for handling requests for substitutions made after award of the Contract.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
  - 1. Section 013300 "Submittal Procedures" specifies requirements for submitting the Contractor's Construction Schedule and the Submittal Schedule.

## 1.3 DEFINITIONS

- A. Definitions in this Article do not change or modify the meaning of other terms used in the Contract Documents.
- B. Substitutions: Changes in products, materials, equipment, and methods of construction required by the Contract Documents proposed by the Contractor after award of the Contract are considered to be requests for substitutions. The following are not considered to be requests for substitutions:
  - 1. Substitutions requested during the bidding period, and accepted by Addendum prior to award of the Contract, are included in the Contract Documents and are not subject to requirements specified in this Section for substitutions.
  - 2. Revisions to the Contract Documents requested by the Owner.
  - 3. Specified options of products and construction methods included in the Contract Documents.
  - 4. The Contractor's determination of and compliance with governing regulations and orders issued by governing authorities.

#### 1.4 SUBMITTALS

- A. Substitution Request Submittal: The Owner will consider requests for substitution if received within 10 days after commencement of the Work. Requests received more than 10 days after commencement of the Work may be considered or rejected at the discretion of the Owner.
  - 1. Submit 3 copies of each request for substitution for consideration. Submit requests in the form and according to procedures required for change-order proposals.
  - 2. Identify the product or the fabrication or installation method to be replaced in each request. Include related Specification Section and Drawing numbers.
  - 3. Provide complete documentation showing compliance with the requirements for substitutions, and the following information, as appropriate:

PRODUCT REQUIREMENTS 016000-1

p. 55

# JIM WHITTEN ROOF CONSULTANTS, LLC WILLIAMSON COUNTY JUSTICE CENTER COURTHOUE ANNEX

ROOF IMPROVEMENTS-2016 December 1, 2016

- a. Coordination information, including a list of changes or modifications needed to
  other parts of the Work and to construction performed by the Owner and
  separate contractors that will be necessary to accommodate the proposed
  substitution.
- b. A detailed comparison of significant qualities of the proposed substitution with those of the Work specified. Significant qualities may include elements, such as performance, weight, size, durability, and visual effect.
- c. Product Data, including Drawings and descriptions of products and fabrication and installation procedures.
- d. Samples, where applicable or requested.
- e. A statement indicating the substitution effect on the Contractor's Construction Schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on overall Contract Time.
- f. Cost information, including a proposal of the net change, if any in the Contract Sum.
- g. The Contractor's certification that the proposed substitution conforms to requirements in the Contract Documents in every respect and is appropriate for the applications indicated.
- The Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of the failure of the substitution to perform adequately.
- 4. Owner's Action: If necessary, the Owner will request additional information or documentation for evaluation within one week of receipt of a request for substitution. The Owner will notify the Contractor of acceptance or rejection of the substitution within two weeks of receipt of the request, or one week of receipt of additional information or documentation, whichever is later. Acceptance will be in the form of a change order.
  - a. Use the product specified if the Owner cannot make a decision on the use of a proposed substitute within the time allocated.

#### PART 2 - PRODUCTS

# 2.1 SUBSTITUTIONS

- A. Conditions: The Owner will receive and consider the Contractor's request for substitution when one or more of the following conditions are satisfied, as determined by the Owner. If the following conditions are not satisfied, the Owner will return the requests without action except to record noncompliance with these requirements.
  - 1. Extensive revisions to the Contract Documents are not required.
  - 2. Proposed changes are in keeping with the general intent of the Contract Documents,
  - 3. The request is timely, fully documented, and properly submitted.
  - 4. The specified product or method of construction cannot be provided within the ContractTime. The Owner will not consider the request if the product or method cannot be provided as a result of failure to pursue the Work promptly or coordinate activities properly.
  - 5. The request is directly related to an "or-equivalent" clause or similar language in the Contract Documents.
  - 6. The requested substitution offers the Owner a substantial advantage, in cost,

PRODUCT REQUIREMENTS 016000-2

ROOF IMPROVEMENTS-2016 December 1, 2016

time, energy conservation, or other considerations, after deducting additional responsibilities the Owner must assume.

7. The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.

The specified product or method of construction cannot be provided in a manner that is compatible with other materials and where the Contractor certifies that the substitution will overcome the incompatibility.

- 8. The specified product or method of construction cannot be coordinated with other materials and where the Contractor certifies that the proposed substitution can be coordinated.
- 9. The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution provides the required warranty.
- B. The Contractor's submittal and the Owner's acceptance of Shop Drawings, Product Data, or Samples for construction activities not complying with the Contract Documents do not constitute an acceptable or valid request for substitution, nor do they constitute approval.

PART 3 – EXECUTION (Not Applicable)

**END OF SECTION** 

PRODUCT REQUIREMENTS 016000-3

## **SECTION 017100 CLEANING**

#### PART 1 - GENERAL

## 1.1 DESCRIPTION

- A. Work included: Maintain the building and site in a standard of cleanliness throughout the construction period as described in this Section.
- B. Clean roof upon completion of all Work to satisfaction of Owner and Roof Consultant.

## 1.2 QUALITY ASSURANCE

- A. Conduct daily inspections, and more often if necessary, to verify that requirements for cleanliness are being met.
- B. In addition to the standards described in this Section, comply with pertinent requirements of governmental agencies having jurisdiction.

## PART 2 - PRODUCTS

#### 2.1 CLEANING MATERIALS AND EQUIPMENT

A. Provide required personnel, equipment and materials needed to maintain the specified standard of cleanliness.

## 2.2 COMPATIBILITY

A. Use only the cleaning materials and equipment, which are compatible with the surface being cleaned, as recommended by the manufacturer of the materials.

## **PART 3 - EXECUTION**

### 3.1 PROGRESS CLEANING

- A. Do not allow accumulation of scrap, debris, waste material, and other items not required for construction of the Work to remain overnight on the roof.
- B. Daily, and more often if necessary, inspect the site and pick up all scrap, debris, and waste material. Remove such items to the place designated for their storage.
- C. Provide adequate storage for all items awaiting removal from the job site, observing requirements for fire protection and protection of the ecology.
- D. At least once each week, and more often if necessary, completely remove all scrap, debris, and waste material from the job site.

CLEANING 017100-1

p. 58

# JIM WHITTEN ROOF CONSULTANTS, LLC WILLIAMSON COUNTY JUSTICE CENTER COURTHOUE ANNEX

ROOF IMPROVEMENTS-2016 December 1, 2016

## 3.2 FINAL CLEANING

- A. "Clean", for the purpose of this Article, and except as may be specifically provided otherwise, shall be interpreted as meaning the level of cleanliness generally provided by skilled cleaners using commercial quality materials.
- B. Prior to completion of the Work remove from the job site all tools, surplus materials, equipment, scrap, debris and waste. Conduct final progress cleaning as described in Article 3.01 above.
- C. Membrane: Power wash roof membrane per manufacturer's instructions upon completion of substantial completion punch list to provide a roof membrane surface that is free of stains (adhesives, dirt, etc.) incurred during completion of the work.
- D. Site:
  - 1. Unless otherwise specifically directed by the Owner, broom clean paved areas on the site and public paved areas adjacent to the site.
  - 2. Completely remove resultant debris.
  - 3. Remove evidence of construction operations from all landscaped and pervious surfaces.
- E. Interior: remove all evidence of construction operations; surfaces ground smooth; finishes replaced.
- F. Schedule final cleaning as approved by Owner.

# **END OF SECTION**

CLEANING 017100-2

## SECTION 017700 CLOSEOUT PROCEDURES

#### PART 1 - GENERAL

## 1.1 DESCRIPTION

A. Work Included: Provide an orderly and efficient transfer of the completed Work to the Owner.

#### 1.2 OUALITY ASSURANCE

A. Prior to requesting Substantial and Final Completion Inspections, use adequate means to assure that the Work is completed in accordance with the specified requirements and is ready for the requested inspection.

#### 1.3 PROCEDURES

- A. Final Completion:
  - 1. Verify in writing by written request to Owner and Consultant.
  - 2. Certify that:
    - a. Contract Documents have been reviewed.
    - b. Work has been inspected for compliance with the Contract Documents.
    - c. Work has been completed in accordance with the Contract Documents.
    - d. Work is completed and ready for Final Punchlist Inspection.
  - 3. The Owner and Consultant will observe the Work to document status of completion. Provide Owner and Consultant access to the Work, as required to perform Inspection.
  - 4. Should the Owner and Consultant determine that the Work is incomplete or defective:
    - a. The Owner promptly will so notify the Contractor, in writing, listing the incomplete or defective work.
    - b. Remedy the deficiencies promptly, and notify the Owner when ready for reinspection. Provide the Owner with access to the Work, as required to perform reinspection.
  - 5. When the Owner determines that the Work is acceptable under the Contract Documents, he will request the Contractor to make closeout submittals.
- B. Closeout submittals include, but are not necessarily limited to:
  - 1. Manufacturer's product literature for all proprietary products used in the Work.
  - 2. As-built drawings and specifications, indicating changes (Change Orders, RFIs, Field Directives, etc.) in construction affecting the contract documents.
  - 3. Operation and maintenance data for items so listed in pertinent other Sections of these Specifications, and for other items when so directed by the Owner.
  - 4. Warranties and bonds.
  - 5. Evidence of compliance with requirements of governmental agencies having jurisdiction including but not necessarily limited to Certificate of Inspection.

CLOSEOUT PROCEDURES 017700-1

ROOF IMPROVEMENTS-2016 December 1, 2016

- 6. Certificates of Insurance for products and completed operations.
- 7. Evidence of payment and release of liens.
- 8. List of subcontractors, service organizations, and principal vendors, including names, addresses, email addresses, and telephone numbers where they can be reached.

# C. Final Adjustment of Accounts:

- 1. Submit a final statement of accounting to the Owner, showing all adjustments to the Contract Sum.
- 2. If so required, the Contractor will prepare final Charge Order showing adjustments to the Contract Sum, which was not made previously by Change Orders.
- 3. Final payment may be withheld if warranties and other closeout submittals do not comply with requirements of the Contract Documents.

## 1.4 INSTRUCTION

A. Instruct the Owner's personnel in proper operation and maintenance of all applicable items provided as part of the Work.

## 1.5 WARRANTIES

- B. Stucco Manufacturer's Warranty
- C. Contractor's Two Year Warranty: Warranty shall be assigned to Owner and submitted on the form provided in Section 017836
- D. Warranties shall be fully transferable.

**END OF SECTION** 

CLOSEOUT PROCEDURES 017700-2

# **SECTION 024100 DEMOLITION**

#### PART 1 - GENERAL

## 1.1 SECTION INCLUDES

- A. Removal of existing surface gravel from built-up roof to accept the new re-cover system.
- B. Removal of any wet or otherwise non-functional existing insulation.
- C. Contractor shall dispose of all materials in a licensed landfill and provide the Owner with signed documentation of all materials disposed.

## 1.2 SUBMITTALS

- A. Submit demolition and removal procedures and schedule under provisions of Division 1.
- B. Submit record documents under provisions of Division 1.

## 1.3 SEQUENCING AND SCHEDULING

A. Sequence and schedule work to accommodate Owner's use of premises.

#### 1.4 EXISTING CONDITIONS

- A. Conduct demolition to minimize interference with adjacent roofing, roof-mounted equipment, and roof deck and structure to remain.
- B. Provide, erect, and maintain temporary barriers and security devices.
- C. Conduct operations with minimum interference to public or private thoroughfares. Maintain egress and access at all times.
- D. Do not close or obstruct roadways or sidewalks without Owner's written consent.

# PART 2 - PRODUCTS

Not Used

## **PART 3 - EXECUTION**

## 3.1 EXAMINATION

- A. Verify that areas to be demolished are clear of encumbrances.
- B. Beginning of demolition means acceptance of existing conditions.

DEMOLITION 024100-1

ROOF IMPROVEMENTS-2016 December 1, 2016

#### 3.2 PREPARATION

- A. Protect existing landscaping materials, appurtenances, structures, paving, roofing and siding, roof mounted equipment, roof deck and structure, which are not to be demolished.
- B. Verify abandoned equipment and penetrations to be removed and obtain written confirmation from Owner's representative prior to removal and repair of deckopening.

## 3.3 EXECUTION

- A. Contractor shall only perform demolition at areas that can be recovered watertight in the same day. Contractor shall not leave demolished materials in a non-watertight condition overnight.
- B. Evenly cut edges of existing materials that are to be expanded, replaced, or modified.
- C. Cease operations and notify Owner immediately if adjacent structures or materials appear to be endangered. Do not resume operations until corrective measures have been taken.
- D. Except when instructed otherwise, immediately remove demolished material from site daily.
- E. Remove materials to be re-installed or retained by Owner in a manner to prevent damage.
- F. Do not burn or bury materials on site.
- G. Remove demolished materials from site daily as the work progresses. Keep common areas free of debris at all times. Leave site in clean condition.
- H. Stop demolition work and notify the Owner and Roof Consultant immediately if suspected hazardous or unknown materials are encountered.
- Exercise care in demolition work to prevent damage to interior finishes.

**END OF SECTION** 

DEMOLITION 024100-2

#### **SECTION 061050 ROUGH CARPENTRY**

#### PART I - GENERAL

## 1.1 SECTION INCLUDES

A. All materials and labor for work requiring new lumber such as nailers and curbs will be provided and installed by Contractor.

### 1.2 QUALITY ASSURANCE

- A. Rough Carpentry Lumber: Visible grade stamp of agency certified by SFPA.
- B. Provide Underwriters' Laboratories (UL) approved identification for fire resistant treated materials.

#### 1.3 REGULATORY REQUIREMENTS

- A. Conform to applicable building code, latest edition, for fire retardant requirements of wood.
- B. Conform to FM Loss Data Bulletin I-49 for securement requirements.

## 1.4 SUBMITTALS

- A. Submit shop drawings and product data under provisions of Section 013300.
- B. Indicate materials, fastening methods, accessories, and locations.
- C. Submit manufacturer's certifications under provisions of Section 013300 that wood treatment is in accordance with applicable requirements.

## PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. Lumber and Wood Cants: No. 2 Grade Yellow Pine, Standard Douglas Fir.
- B. Curbs and curb extensions: No. 2 grade yellow pine, Standard Douglas Fir, pressure treated, KDAT 19%.
- C. Plywood: Wolmanized, 5/8-inch, exterior grade CDX or better, APA grade marked.

## 2.2 WOOD TREATMENT

A. Wood Preservative (Pressure Treatment): Shop pressure treatment using waterborne preservatives; 0.25 pounds per cubic foot of preservative, kiln dried after treatment (KDAT) to maximum 19 percent moisture content, meeting Federal Specification TT-W-550, or the latest Federal approval for wood preservative pressure treatment.

ROUGH CARPENTRY 061050-1

ROOF IMPROVEMENTS-2016 December 1, 2016

#### 2.3 SCHEDULE OF FASTENERS

#### A. Fasteners – General:

- 1. Exposed fasteners: non-ferrous stainless steel with bonded neoprene washers.
- 2. Fasteners compatible to all materials to which they come in contact so that dielectric corrosion does not occur.

#### B. Wood Nailer Fasteners:

- 1. Wood Substrate: Non-ferrous stainless steel screws, gauge and length to suit application and as necessary to penetrate underlying wood support members a minimum of 1-1/4 inch. Each screw to have a minimum pull out resistance of 100 pounds.
- 2. Metal Substrate: A No. 12 Factory Mutual approved, fluorocarbon coated roofing screw.
- 3. Concrete or masonry surfaces: Non-ferrous stainless steel anchor with expansion shank, length as recommended by manufacturer for minimum 1,000 pound pull-outresistance.

## **PART 3 - EXECUTION**

#### 3.1 EXAMINATION

- A. Verify that surfaces are ready to receive work.
- B. Verify mechanical, electrical, and building items affecting work of this Section are placed and ready to receive this work.
- C. Beginning of installation means acceptance of existing conditions.

# 3.2 PREPARATION

A. Before installation, prime paint wood surfaces of items or assembles to be in contact with cementitious materials.

#### 3.3 INSTALLATION

- A. Set and secure materials and components in place, plumb and level.
- B. Install components with approved fasteners suited to materials.

## C. Curbs:

- 1. Install new wood to provide total height of a minimum of 8 inches above the finished roof surface, and to allow for height of tapered insulation system and crickets, as applicable.
- 2. Fasten securely to substrate.
- 3. Treat surfaces exposed by cutting as recommended by preservative manufacturer.
- 4. Fasten wood curb to nailer prior to installation with appropriate wood nailer fasteners on 12-inch centers.
- D. Wood Nailer Installation: Attach nailers to wood substrates with two rows of appropriate fasteners on 12-inch centers, or as shown in Drawings. Offset fasteners from underlying wood nailerfasteners.

#### END OF SECTION

ROUGH CARPENTRY 061050-2

#### SECTION 07220 ROOF AND DECK INSULATION

#### **PART 1 - GENERAL**

## 1.1 SECTION INCLUDES

A. Roof and Deck Insulation.

## 1.2 RELATED WORK

- A. Section 06100 Rough Carpentry
- B. Section 07015 Preparation for Reroofing
- C. Section 07530 Fully Adhered Single-Ply Membrane System
- D. Section 07600 Flashing and Sheet Metal

#### SYSTEM DESCRIPTION

.

- A. New Roof System Insulation: Rigid insulation board consisting of two (2) layers (1.5") inch polyiso rigid insulation board as specified to achieve a complete and proper substrate for the specified roof membrane system.
- B. ½" High Density polyiso board.
- C. Tapered Polyisocyanurate Insulation for crickets, saddles and sumps: ASTM C1289, closed cell foam core bonded to fiberglass facers top and bottom, slope as required to achieve minimum two times the opposing slope per foot; minimum ¾-inch starting thickness and maximum thickness of 2"; 4'x4' maximum board dimension.

## 1.4 SUBMITTALS

- A. Submit manufacturer's installation instructions, samples and product data, in accordance with the provisions of Section 01300.
- B. Submit two full size samples of each insulation board type and thickness.
- C. Submit manufacturer's certificate, in accordance with the provisions of Section 01300, that products meet or exceed specified requirements.
- D. Submit certification from roof membrane manufacturer that board insulation materials are acceptable for use with roof membrane materials.

ROOF AND DECK INSULATION

07220-1

ROOF IMPROVEMENTS-2016 December 1, 2016

E. For mechanically attached systems, submit results of the fastener pull-out resistance testing. Provide fastener pull-out resistance test results. Pull-out resistance testing is to be performed by a technical representative of the fastener manufacturer. A minimum number resistance tests shall be performed and documented. Any pull tests falling below the value required by the system manufacturer shall be re-tested in the same vicinity of the low value test.

## 1.5 STORAGE AND HANDLING

- A. Store products of this Section in lockable watertight storage containers.
- B. Rooftop storage shall be limited to quantities of material that can be installed daily. No overnight rooftop storage of materials is permitted.

#### **PART 2 - PRODUCTS**

## 2.1 INSULATION BOARD

A. Polyiso Rigid Insulation Board: , closed cell foam core bonded to fiberglass facers top and bottom, in compliance with ASTM C 1289

Thickness: two (2) layers of 1.5" polyiso.

One (1) layer of ½" HD polyiso.

C. Tapered Polyisocyanurate Insulation for crickets, saddles and sumps: ASTM C1289, closed cell foam core bonded to fiberglass facers top and bottom, slope as required to achieve minimum two times the opposing slope per foot; minimum ¾-inch starting thickness and maximum thickness of 2"; 4'x4' maximum board dimension.

## 2.2 FASTENERS

- A. Fasteners and Plates: Polymer coated case-hardened steel screw with pre- assembled galvanized steel plate, as approved by the insulation and membrane manufacturer to be included in their SystemWarranty.
- B. Bead Adhesive: Insulation manufacturer's recommended bead adhesive, with bead spacing as recommended by manufacturer.

## **PART 3 - EXECUTION**

## 3.1 PREPARATION

A. Clean deck. If necessary, repair deteriorated or non-serviceable steel deck in accordance with Section 07015.

#### 3.2 INSTALLATION

ROOF AND DECK INSULATION 07220-2

ROOF IMPROVEMENTS-2016 December 1, 2016

- A. Verify and document in Daily Report that the existing deck/substrate is functional; insulation board is free from moisture and suitable as substrate for roof membrane.
- B. Install insulation in accordance with the primary roofing materials manufacturer's latest published recommendations.

# **END OF SECTION**

**ROOF AND DECK INSULATION** 

07220-3

## SECTION 07530 THERMOPLASTIC TPO MEMBRANE SYSTEM

#### **PART 1 - GENERAL**

## 1.1 DESCRIPTION

- A. <u>Base Bid</u>: Installation of fully adhered TPO roof membrane and flashings.
- B. The roof system (membrane, flashings, accessories, and insulation) shall qualify for the Manufacturer's Twenty (20) Year No Dollar Limit (NDL) System Guarantee. The Warranty shall be fully transferable.

### 1.2 RELATED SECTIONS

- A. Section 06100 Rough Carpentry
- B. Section 07220 Roof and Deck Insulation
- C. Section 07600 Flashings and Sheet Metal

#### 1.3 EXTENT OF WORK

- A. Provide all labor, material, tools, equipment, and supervision necessary to complete the installation of a .060" (60-mil) thick, white, reinforced TPO (Thermoplastic Polyolefin) membrane, and flashings as specified herein and as indicated on the Drawings in accordance with the manufacturer's most current specifications, details, and the Specifications and Drawings, whichever is more stringent.
- B. Contractor shall be fully knowledgeable of all requirements of the Contract Documents and shall make themselves aware of all job site conditions that will affect their work.
- C. Contractor shall confirm all given information and advise the Roof Consultant and Architect, prior to bid, of any conflicts that will affect their cost proposal.
- D. Any Contractor who intends to submit a bid using a roofing system other than the approved manufacturers must submit for pre-qualification in writing a minimum of four calendar days prior to the bid date. Any Contractor who fails to submit all information as requested will be subject to rejection. Bids stating "as per plans and specs" will be unacceptable.

## 1.4 SUBMITTALS

- A. Prior to starting work, the Contractor must submit the following:
  - 1. Shop drawings showing layout, details of construction and identification of materials.

TPO MEMBRANE 07530-4

ROOF IMPROVEMENTS-2016 December 1, 2016

- 2. Sample of the manufacturer's Twenty (20) Year NDL Membrane System Warranty, and copy of the Application for Warranty.
- 3. Submit a letter of certification from the manufacturer, which certifies that the Contractor has been authorized a minimum of 5 years to install the manufacturer's Twenty Year NDL System Warranty and list foremen who have received training from the manufacturer along with the dates training was received.
- 4. For mechanically fastened systems, certification from the membrane manufacturer indicating the fasteners are capable of providing a static back out resistance of 300 pounds minimum.
- 5. Certification from the membrane manufacturer indicating the membrane thickness over the reinforcing scrim (top ply membrane thickness) is nominal .015" (15-mil).
- 6. Certification of the manufacturer's warranty reserve.
- 7. Copy of the Energy Star Rebate Application to the primary electric power provider for the Project, as applicable.
- 8. Copy of the pre-existing damage documentation.
- B. Upon completion of the installed work, submit:
  - 1. Copies of the manufacturer's final inspection prior to the issuance of the manufacturer's warranty.

# 1.5 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to the job site in the manufacturer's original, unopened containers or wrappings with the manufacturer's name, brand name and installation instructions intact and legible. Deliver in sufficient quantity to permit work to continue without interruption.
- B. No overnight rooftop storage will be permitted.
- C. Comply with the manufacturer's written instructions for proper material storage.
  - 1. Store membrane in the original undisturbed plastic wrap in a cool, shaded area and cover with light-colored, breathable, waterproof tarpaulins. Membrane that has been exposed to the elements for approximately 7 days must be prepared with manufacturer's membrane cleaner prior to hot air welding.
  - 2. Store curable materials (adhesives and sealants) between 60 degrees F and 80 degrees F in dry areas protected from water and direct sunlight. If exposed to lower temperature, restore to 60 degrees F minimum temperature before using.
  - 3. Store materials containing solvents in dry, well-ventilated spaces with proper

TPO MEMBRANE 07530-5

ROOF IMPROVEMENTS-2016 December 1, 2016

fire and safety precautions. Keep lids on tight. Use before expiration of their shelf life.

D. Any materials which are found to be damaged shall be removed and replaced at the applicator's expense.

# 1.6 WORK SEQUENCE

- A. Schedule and execute work to prevent leaks and excessive traffic on completed roof sections. Care should be exercised to provide protection for the interior of the building and to ensure water does not flow beneath any completed sections of the membrane system.
- B. Furnish and install temporary membrane protection for all foot and equipment traffic required over newly installed completed roofing sections.
- C. Do not disrupt activities in occupied spaces.

#### 1.7 USE OF THE PREMISES

- A. Before beginning work, the Contractor must secure approval from the building owner's representative for the following:
  - 1. Areas permitted for personnel parking.
  - 2. Access to the site.
  - 3. Areas permitted for storage of materials and debris.
  - 4. Areas permitted for the location of cranes, hoists and chutes for loading and unloading materials to and from the roof.

#### 1.8 EXISTING CONDITIONS

A. If discrepancies are discovered between the existing conditions and those noted on the drawings, immediately notify the Architect and Roof Consultant by phone and solicit the manufacturer's approval prior to commencing with the work. Necessary steps shall be taken to make the building watertight until the discrepancies are resolved.

## 1.9 TEMPORARY FACILITIES AND CONTROLS

- A. Temporary Utilities:
  - 1. Water, power for construction purposes and lighting are available at the site and will be made available to the Contractor, by prior approval of the Owner; and said use will not interfere with the building's operations.
  - 2. Provide all hoses, valves and connections for water from source designated by the owner when made available.
  - 3. When available, electrical power should be extended as required from the

TPO MEMBRANE 07530-6

ROOF IMPROVEMENTS-2016 December 1, 2016

source. Provide all trailers, connections and fused disconnects.

## B. Temporary Sanitary Facilities

1. Sanitary facilities will not be available at the job site. The Contractor shall be responsible for the provision and maintenance of portable toilets or their equal.

# C. Building Site:

- 1. Contractor shall use reasonable care and responsibility to protect the building and site against damages. The contractor shall be responsible for the correction of any damage incurred as a result of the performance of the Contract.
- 2. A pre-roof construction walk-through of the interior and exterior of the building shall be performed by the Contractor's Project Manager and a representative of the Owner to document all pre-existing damage by digital photographs or by video, to be submitted to the Architect and Roof Consultant. At the end of the Project, the correction of all roof related damages not previously documented, shall be the responsibility of the Contractor to correct.
- 3. The Contractor shall remove all debris from the job site in a timely and legally acceptable manner so as to not detract from the aesthetics or the functions of the building.

## D. Security:

1. Comply with the owner's requirements for personnel identification, inspection and other security measures.

#### 1.10 JOB SITE PROTECTION

- A. The Contractor shall adequately protect building, paved areas, service drives, lawn, shrubs, trees, etc. from damage while performing the required work. Provide canvas, boards and sheet metal (properly secured) as necessary for protection and remove protection material at completion. The contractor shall repair or be responsible for costs to repair all property damaged during the roofing application.
- B. During the Contractor's performance of the work, the building owner will continue to occupy the existing building. The contractor shall take precautions to prevent the spread of dust and debris, particularly where such material may sift into the building. The Contractor shall provide labor and materials to construct, maintain and remove necessary temporary enclosures to prevent dust or debris in the construction area(s) from entering the remainder of the building.
- C. Do not overload any portion of the building, either by use of or placement of equipment, storage of debris, or storage of materials.
- D. Protect against fire and flame spread. Maintain proper and adequate fire extinguishers.
- E. Take precautions to prevent drains, gutters and downspouts from clogging during

TPO MEMBRANE 07530-7

ROOF IMPROVEMENTS-2016 December 1, 2016

the roofing application. Remove debris at the completion of each day's work and clean drains and gutters if required. At completion, test drains and gutters to ensure the system is free running and drains are watertight. Remove strainers and plug drains in areas

Where work is in progress. Install flags or other telltales on plugs. Remove plugs each night and replace strainers.

F. Remove all traces of piled bulk materials and return the job site to its original condition upon completion of the work.

#### 1.11 WORKMANSHIP

- A. Applicators installing new roof, flashing and related work shall be factory trained and approved by the manufacturer they are representing.
- B. All work shall be of highest quality and in strict accordance with the manufacturer's published specifications and to the building owner's and Roof Consultant's satisfaction.
- C. Provide at least one thoroughly trained and experienced, non-working English speaking superintendent on the job at all times roofing work is in progress.

# 1.12 QUALITY ASSURANCE

- A. The roofing system must achieve a UL Class A and fastening pattern equal to FM 1-75 rating.
- B. Unless otherwise noted in this specification, the Contractor must strictly comply with the manufacturer's current specifications and details.
- C. The roofing system must be installed by an applicator authorized and trained by the manufacturer in compliance with shop drawings as approved by the manufacturer.
- D. Provide an adequate number of experienced workmen regularly engaged in this type of work who are skilled in the application techniques of the materials specified.
- E. There shall be no deviations made from this specification or the approved shop drawings without the prior written approval of the Architect and Roof Consultant. Any deviation from the manufacturer's installation procedures must be supported by a written certification on the manufacturer's letterhead and presented for the Architect and Roof Consultant's consideration.
- F. Before commencement of the roof construction, the Contractor shall arrange for inspections to be made by a non-sales technical representative of the membrane manufacturer, as follows:
  - 1. On the first day of roof membrane installation;
  - 2. A minimum of one interim inspection;
  - 3. A final inspection in order to determine whether or not corrective work will be required before the warranty will be issued.

TPO MEMBRANE 07530-8

- 4. Notify the Architect and Roof Consultant seventy-two (72) hours prior to the manufacturer's inspections, and coordinate the inspection visits to coincide with visits by the Contractor's Project Manager, and the Roof Consultant.
- 5. Provide copies of the membrane manufacturer's inspection reports to the Architect and Roof Consultant not later than five (5) calendar days following the inspection.

# 1.13 JOB CONDITIONS, CAUTIONS AND WARNINGS

- A. Material Safety Data Sheets (MSDS) must be on location at all times during the transportation, storage and application of materials.
- B. When positioning membrane sheets, locate all field splices away from low spots and out of drain sumps. All field splices shall be shingled to prevent bucking of water.
- C. When loading materials onto the roof, the installer must comply with the requirements of the building owner to prevent overloading and possible disturbance to the building structure.
- D. Proceed with roofing work only when weather conditions are in compliance with the manufacturer's recommended limitations, and when conditions will permit the work to proceed in accordance with the manufacturer's requirements and recommendations.
- E. Proceed with work so new roofing materials are not subject to construction traffic. When necessary, new roof sections shall be protected and inspected upon completion for possible damage.
- F. Provide temporary protection, such as 3/4 inch thick plywood over minimum 1-inch thick rigid insulation board, for all roof areas exposed to traffic during construction. Plywood must be smooth and free of fasteners and splinters. Ensure temporary protection is weighed down to prevent wind uplift.
- G. The surface on which the insulation or roofing membrane is to be applied shall be clean, smooth, dry, and free of projections or contaminants that would prevent proper application of or be incompatible with the new installation, such as fins, sharp edges, foreign materials, oil and grease.
- H. New roofing shall be complete and weathertight at the end of each workday.
- I. Contaminants such as grease, fats and oils shall not be allowed to come in direct contact with the roofing membrane.
- J. Pro-rated System Warranties shall not be accepted. The System Warranty shall be fully transferable, and transfer of the Warranty shall not be unreasonably withheld.

Evidence of the manufacturer's warranty reserve shall be included as part of the project submittals for the Roof Consultant's approval.

TPO MEMBRANE 07530-9

# **PART 2 - PRODUCTS**

#### 2.1 GENERAL

- A. All components of the specified roofing system shall be products of the following approved manufacturers:
  - 1. Carlisle-Syntec
  - 2. GAF Mfr.
  - 3. Firestone Building Products
  - 4. Pre-bid approved equivalent.
- B. All products (including insulation, fasteners, fastening plates and edgings) must be manufactured and supplied by the roofing system manufacturer and covered by the warranty. Any products required by the Project not manufactured by the roofing system manufacturer shall be approved for use, in writing, by the roofing systems manufacturer.

# 2.2 MEMBRANE

A. Furnish .060" (60-mil) thick, white reinforced TPO (Thermoplastic Polyolefin) membrane as needed to complete the roofing system. Membrane thickness over the reinforcing scrim (top-ply thickness) shall be nominal .015" thick (15-mil).

# 2.3 INSULATION/UNDERLAYMENT

A. The rigid insulation board shall be as specified in Section 07220.

# 2.4 ADHESIVES AND CLEANERS

All products shall be furnished by the primary membrane manufacturer, and specifically formulated for the intended purpose.

- A. Bonding Adhesive
- B. Edge Sealant
- C. Water Cut-Off Mastic and Sealant
- D. Pocket Sealant
- E. Membrane Cleaner

TPO MEMBRANE 07530-10

JIM WHITTEN ROOF CONSULTANTS, LLC
WILLIAMSON COUNTY JUSTICE CENTER COURTHOUE ANNEX

ROOF IMPROVEMENTS-2016 December 1, 2016

# 2.5 FASTENERS AND PLATES

A. Seam Fastening Plates at Concrete Walls: 1-1/4" long expansion anchor with a zinc plated steel drive pin, 8 inches on center maximum, with 3" diameter round galvanized plate.

# **PART 3 - EXECUTION**

# 3.1 GENERAL

- A. Inspect the deck/existing spudded roof assembly and verify preparation to provide an installation of the membrane system.
- B. Comply with the manufacturer's published instructions for the installation of the membrane roofing system including proper substrate preparation, jobsite considerations and weather restrictions.
- C. Position sheets to accommodate contours of the roof deck and shingle splices to avoid bucking water.

# 3.2 MEMBRANE PLACEMENT AND ATTACHMENT

- A. Unroll and position membrane without stretching. Provide and secure both perimeter and field membrane sheets in accordance with the manufacturer's most current specifications, details, the Contract Document Specifications and Drawings, and FM 1-75.
- B. Secure the membrane with bonding adhesive, in strict accordance with the manufacturer's requirements to qualify for a Twenty (20) Year NDL system warranty.
- C. Install adjoining membrane sheets in the same manner in accordance with the manufacturer's specifications.

#### 3.3 MEMBRANE SPLICING/HOT AIR WELDING PROCEDURES

- A. Perform calibration test of the automatic hot air welding machine or hot air hand welder in accordance with the manufacturer's specifications, with Roof Consultant present prior to commencing installation. Record calibration test in Daily Logs.
- B. Hot air weld the membrane using the calibrated automatic hot air welding machine or hot air hand welder in accordance with the manufacturer's specifications. At all splice intersections, roll the seam with a silicone roller prior to membrane seam cooling.
- C. Probe all seams once the hot air welds have thoroughly cooled (approximately 30 minutes). Document in Daily Log that all seams have been probed and the results of probes. Provide a minimum of two (2) side lap seam "tear" samples, indicating compliant seaming
- D. as indicated by exposed scrim in lap "tear".

  Date and retain samples including one (1) dated sample for Roof Consultant's Field Observer.
- E. Repair all seam deficiencies the same day they are discovered. Document in Daily Log

TPO MEMBRANE 07530-11

JIM WHITTEN ROOF CONSULTANTS, LLC
WILLIAMSON COUNTY JUSTICE CENTER COURTHOUE ANNEX

ROOF IMPROVEMENTS-2016 December 1, 2016

when deficient seams are discovered and repaired.

F. Apply cut edge sealant on all cut edges of reinforced membrane (where the scrim reinforcement is exposed) after seam probing is complete.

# 3.4 FLASHING

- A. Flashing of parapets, curbs, expansion joints and other parts of the roof must be performed using reinforced TPO membrane.
- B. Non-reinforced TPO membrane can be used for flashing pipe and tube penetrations, sealant pockets, scuppers, as well as inside and outside corners, only when the use of pre- fabricated accessories is not feasible, in accordance with the membrane manufacturer, Contract Document requirements, and if approved by Roof Consultant in writing.

# 3.5 WALKWAYS

- A. Install walkway pads where shown in the Drawings, and as required by the membrane manufacturer.
- B. Hot air weld walkway pads to the membrane in accordance with the manufacturer's specifications.

# 3.6 DAILY SEAL

- A. On phased roofing, when the completion of flashings and terminations is not achieved by the end of the work day, a daily seal must be performed to temporarily close the membrane to prevent water infiltration.
- B. Complete an acceptable membrane seal in accordance with the manufacturer's requirements.

#### 3.7 CLEAN UP

- A. Perform daily clean-up to collect all wrappings, empty containers, paper, and other debris from the project site. Remove all debris from roof on a daily basis. Overnight storage of debris is prohibited. Upon completion, all debris must be disposed of in a legally acceptable manner.
- B. Prior to the manufacturer's inspection for warranty and request for Substantial Completion site visit, the applicator must perform a pre-inspection to review all work and to verify all flashing has been completed as well as the application of all caulking. Submit pre-inspection report to Architect and Roof Consultant no later than three (3) calendar days following inspection.

# END OF SECTION

TPO MEMBRANE 07530-12

# SECTION 076000 FLASHING AND SHEET METAL

# **PART I - GENERAL**

# 1.1 WORK INCLUDED

- A. Install flashing and sheet metal as indicated on Drawings and in these specifications as required for a complete and proper installation. The following items are included:
  - 1. Curb Flashing.
  - 2. Counter flashing.
  - 3. Counter flashing and termination bars, roof mounted mechanical equipment, vent stacks, and other terminations.
  - 4. Coping cap metal.

# 1.2 RELATED WORK

- A. Section 07015 Preparation for Reroofing
- B. Section 06100 Rough Carpentry
- C. Section 07220 Roof And Deck Insulation
- D. Section 07530 Fully Adhered Single Ply Membrane System

# 1.3 SUBMITTALS

- A. Submit shop drawings and product data under provisions of Section 01300.
- B. Describe material profile, jointing pattern, jointing details, fastening methods, and installation details.
- C. Submit samples under provisions of Section 01300.
- D. Provide full sized sample of metal flashing and post supports illustrating typical seam, external corner, internal corner, material, and finish.

# 1.4 QUALITY ASSURANCE

A. Perform work in accordance with SMACNA and NRCA standard details and requirement.

# 1.5 QUALIFICATIONS

A. Company specializing in sheet metal flashing work with a minimum of 10-years documented experience.

#### 1.6 STORAGE AND HANDLING

FLASHING AND SHEET METAL

- A. Stack pre-formed materials to prevent twisting, bending, or abrasion, and to provide ventilation.
- B. Prevent contact with materials during storage that may cause discoloration, staining, or damage. "White rust" is considered damage and is cause for rejection.
- C. Deliver materials to the job site in the manufacturer's original, unopened packages and containers bearing manufacturer's name and label.

# 1.7 WARRANTY

- A. Sheet Metal work and accessories to be included in Two-Year Contractor's Warranty.
- B. Provide pre-finished metal manufacturer's twenty-year coating guarantee.
- C. Provide pre-finished metal manufacturer's twenty-year galvanized steel guarantee.

# **PART 2 - PRODUCTS**

# 2.1 SHEET METALS

- A. Sheet metal flashing: 24 gauge galvanized steel.
- B. Sheet metal flashing:
  - 1. Base Bid: 24 gauge galvanized steel, TPO coatedmetal.
- C. Pre-finished metal: 24 gauge galvanized steel, Kynar 500.
- D. Lead: FS QQ-L-171e, hard lead, containing no less than 4 percent or more than 6 percent antimony.
- E. Copper: 16 oz. sheet

# 2.2 SHEET METAL COMPONENTS (as applicable)

- A. Counterflashing: 24 gauge galvanized steel.
- B. Edge flashing, Expansion Joint Covers, Coping, Conductor heads, Gutters, and Downspouts: Pre-finished 24 gauge galvanized steel.
- C. Two-piece fascia extension is required whenever fascia vertical height exceeds 8 inches.
- D. Downspout Hangers: Minimum 1/8-inch by 1-inch galvanized steel.
- E. Cover Plates, End Caps and Miscellaneous Sheet Metal: Same materials, gauge and profile as edge metal or expansion joint material.
- F. Cleats: 22 gauge galvanized steel.

FLASHING AND SHEET METAL

- G. Tubular Penetration Sleeves and Rain Hoods: Minimum 24 gauge galvanized steel.
- H. Lead Sleeves: Minimum 2 1/2-pound lead.
- I. Splash Block: Pre-cast concrete at ground level, where downspout discharges on surfaces other than asphalt or concrete only.
- J. Termination Bar: 1/8-inch by 1-inch galvanized bar with pre-drilled holes minimum 8-inches on center.

# 2.3 ACCESSORIES

- A. Solder: ANSI/ASTM B 32 50/50 type.
- B. Elastomeric Membrane: 30 mil-thick PVC vinyl water barrier.
- C. Ice and Water Shield: as manufactured by W. R. Grace and Company, or approved equivalent.
- D. Clamping Collar: Stainless steel of size necessary to fit over vent or pipe circumference, as applicable.
- E. Self-Sealing Moisture Barrier Sheet: Heat resistant, self –adhering moisture barrier.

# 2.4 SEALANT

- A. Type I: Application exposures to sunlight, ASTM C-920-87, Federal Specification TT-S- 00230-C one component gun-grade polyurethane sealant suitable for continuous immersion and resistant to asphalt products.
- B. Type II: Applications not exposed to sunlight, butyl rubber based.
- C. Hot vent sealant: one component neutral moisture curing silicone sealant.

# 2.5 SCHEDULE OF FASTENERS

- A. Exposed fasteners: Shall be non-ferrous stainless steel with stainless steel bonded neoprene or EPDM washers.
- B. Fasteners shall be compatible to all materials to which they come in contact.
- C. Cleat, Counter-flashing, and Surface Fastened Components.
  - 1. Wood Substrate: No. 10 non-ferrous stainless steel wood screws with stainless steel bonded neoprene washers of length necessary to penetrate wood substrate one inch.
  - 2. Metal Substrate: Minimum No. 10 non-ferrous stainless steel sheet metal screws or as necessary to suit application with stainless steel bonded neoprene washers.

FLASHING AND SHEET METAL

JIM WHITTEN ROOF CONSULTANTS, LLC
WILLIAMSON COUNTY JUSTICE CENTER COURTHOUE ANNEX

ROOF IMPROVEMENTS-2016 December 1, 2016

D. Blind Pop-Rivets: Non-ferrous Stainless steel.

# 2.6 FABRICATION

- A. Form sections to match existing profiles, true to shape, accurate in size, square, and free from distortion or defects.
- B. Fabricate continuous cleats and starter strips of same material as sheet, inter-lockable with sheet.
- C. Form pieces in longest practical lengths.
- D. Hem exposed edges of metal 1/2-inch; miter and seam corners.
- E. Form materials with cover plate seam.
- F. Fasten and seal metal joints.
- G. Fabricate corners from one piece with minimum 18-inch and maximum 36-inch long legs; fasten for rigidity, seal with sealant.
- H. Fabricate vertical faces with bottom edge formed outward 1/4-inch and hemmed to form drip.
- I. Form edge metal/fascia as existing profiles as specified herein and as shown on Drawings.
- J. Form sections square, true, and accurate in size, in maximum possible lengths and free of distortion or defects detrimental to appearance or performance. Allow for expansion at joints
- K. Enlarge holes for fastening counter flashing, coping, and pressure bars as necessary to allow for thermal expansion and contraction. Cover exposed holes with appropriate washers.
- L. All fabrication and installation of sheet metal shall be in accordance with the latest published SMACNA and NRCA guidelines and recognized roofing and sheet metal industry standards.

# **PART 3 - EXECUTION**

#### 3.1 EXAMINATION

- A. Verify roof openings, curbs, pipes, sleeves, ducts, or vents through roof are solidly set, and cant strips in place, and nailing strips located.
- B. Verify membrane termination and base flashings are in place, sealed, and secure.
- C. Beginning of installation means acceptance of existing conditions.

FLASHING AND SHEET METAL

# 3.2 PREPARATION

- A. Field measure site conditions prior to fabricating work.
- B. Apply bituminous protective backing on surfaces in contact with dissimilar materials.
- C. Tie-ins or contact with dissimilar metals: Install separation layer of elastomeric membrane between metal surfaces.

# 3.3 INSTALLATION - GENERAL

- A. Provide flashings of materials indicated on Drawings at all junctures of the roof with perimeters, curbs, mechanical, electrical equipment, etc., that a completely watertight installation is achieved.
- B. Fabricate and install sheet metal work with lines, arises and angles sharp and true, and plane surfaces free from warps and buckles. Bead or return all exposed edges. Tin metal for full area of contact on soldered seams and joints. Do soldering slowly with well heated coppers, thoroughly heating seams and completely filling them with solder.
- C. Prime all sheet metal to receive roofing plies or to be set in mastic.
- D. Submit details not covered in Drawings for approval by Owner or Roof Consultant.
- E. Install starter and edge strips, and cleats before starting installation.
- F. Secure flashings in place using concealed fasteners. Use exposed fasteners only in locations approved by Roof Consultant.
- G. Lock and seal all joints.
- H. Fit flashings tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- I. Fasten sheet metal with approved fasteners at a minimum of 12 inches on centers unless otherwise specified in these Specifications or the Drawings.

# 3.4 TWO-PIECE COUNTERFLASHING INSTALLATION

- A. Secure counterflashing receiver over base flashing to substrate with appropriate fasteners. Secure counterflashing to receiver with stainless steel screws with bonded neoprene washers spaced 12-inches on centers.
- B. Pop-rivet and solder all seams.

# 3.5 CLEAT INSTALLATION

A. Install cleats for edge/coping flashing with appropriate fasteners on eight-inch centers.

# 3.4 COPING CAP INSTALLATION

A. Fabricate and install these flashings according to the latest published SMACNA and

FLASHING AND SHEET METAL

JIM WHITTEN ROOF CONSULTANTS, LLC
WILLIAMSON COUNTY JUSTICE CENTER COURTHOUE ANNEX

ROOF IMPROVEMENTS-2016 December 1, 2016

NRCA guidelines and in accordance with recognized roofing and sheet metal industry standards.

- B. All horizontal joints shall have a 1" standing seam as shown in the Drawings.
- C. Vertical flanges shall have a minimum height of three (3) inches. High side (outside) shall be cleated continuously; other side mechanically fastened as shown on the drawings.
- D. All corners shall be shop mitered, and all shall not be more than two feet beyond a corner in either direction.

# **END OF SECTION**

FLASHING AND SHEET METAL

076000-6

# SECTION 15000 INCIDENTAL MECHANICAL WORK

#### **PART 1 - GENERAL**

# 1.01 DESCRIPTION

For those Projects requiring incidental Mechanical Work; includes installation of temporary mechanical work, disconnects, reconnects, and other incidental mechanical, and plumbing work, not specified herein but necessary for the successful execution of the Work as set forth in the Contract Documents.

#### **PART 2 - PRODUCTS**

# 2.1 MATERIAL AND WORKMANSHIP

- A. All materials and equipment required shall be:
  - 4. Installed by mechanics skilled in their trades, working under the direct supervision of competent experienced foremen or superintendents.
  - 5. Installed in compliance with all applicable Occupational Safety and Health Administration Rules and Regulations.
  - 6. Installed in compliance with all applicable local, Ventilating, Air Conditioning, and Plumbing Codes.
- B. Prior to conducting any mechanical work, perform a complete survey of all roof top mechanical equipment with the Owner's representative to verify the functional condition of the equipment. Document the survey in writing, signed by the Owner's representative and the Contractor. Provide a copy to the Roof Consultant.

# 2.2 TIMELY PLACEMENT OF MATERIALS AND EQUIPMENT

A. Install items specified in Paragraph 2.1 of this Section at the proper time during progress of construction. Coordinate work operations with other trades as necessary.

#### **PART 3 - EXECUTION**

# 3.01 GENERAL

- A. Install temporary mechanical work necessary to comply with the work of other Sections.
- B. Remove temporary mechanical work necessary to comply with other Sections at completion of Project and correct any damage to property.
- C. At the end of the Project, any non-functional mechanical equipment (not noted on the survey list) will be the responsibility of the Contractor to restore to functional working order.

# **END OF SECTION**

INCIDENTAL MECHANICAL WORK 15000-1

# SECTION 16010 INCIDENTAL ELECTRICAL WORK

# **PART 1 - GENERAL**

#### 1.01 DESCRIPTION

A. For those Projects requiring incidental Electrical Work: Included installation of temporary power, disconnects, reconnects, lightning arrestor systems, and other incidental electrical work necessary to perform the Work of the Contract Documents.

# **PART 2 - PRODUCTS**

# 2.1 MATERIALS AND WORKMANSHIP

- A. All materials and equipment required shall be:
  - 5. Approved by Underwriters Laboratories and so labeled.
  - 6. For wire and cable, marked as required by Article 310-1- National Electrical Code.
  - 7. Installed by mechanics skilled in their trades, working under the direct supervision of competent experience foremen or superintendents.
  - 8. Installed in compliance with all applicable Occupational Safety and Health Administration and applicable local electrical codes.
- B. Prior to conducting any electrical work, perform a complete survey of all roof top electrical lines and service with the Owner's representative to verify the functional condition of the electrical service. Document the survey in writing, signed by the Owner's representative and the Contractor. Provide a copy to the Roof Consultant.

# 2.2 TIMELY PLACEMENT OF MATERIALS AND EQUIPMENT

A. Install items specified in Paragraph 2.01 of this Section at the proper time during progress of construction. Coordinate work operations with other trades as necessary.

# **PART 3 - EXECUTION**

# 3.01 GENERAL

- A. Provide temporary electrical power as required to perform the Work of the Contract Documents.
- B. Remove all temporary electrical items at completion of Project and correct any damage to property.

INCIDENTAL ELECTRICAL WORK 16010-1

JIM WHITTEN ROOF CONSULTANTS, LLC WILLIAMSON COUNTY JUSTICE CENTER COURTHOUE ANNEX

ROOF IMPROVEMENTS-2016 December 1, 2016

C. At the end of the Project, any non-functional electrical service (not noted on the survey list) will be the responsibility of the Contractor to restore to functional working order.

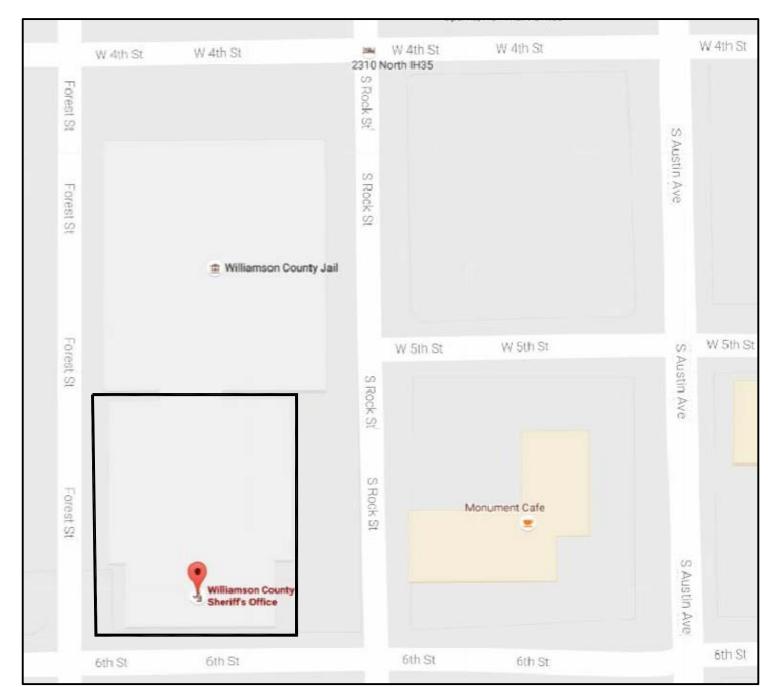
**END OF SECTION** 

INCIDENTAL ELECTRICAL WORK

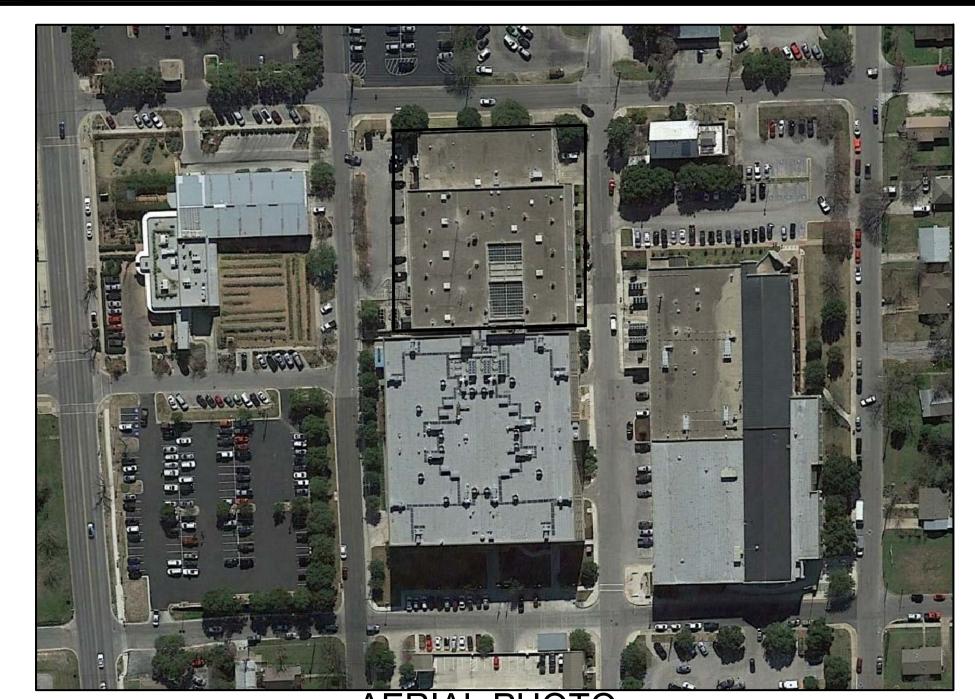
16010-2

# ROOF IMPROVEMENTS-2016 WILLIAMSON COUNTY JAIL AND SHERIFF'S OFFICE

508 ROCK STREET GEORGETOWN, TEXAS 78626



VICINITY MAP
Source: Google Maps (No Scale)



AERIAL PHOTO
Source: Google Earth Pro (No Scale)

	INDEX OF DRAWINGS
R-0.0	COVER
R-1.0	GENERAL NOTES AND SCOPE OF WORK
R-2.0	ROOF PLAN
R-3.0	ROOF DETAILS
R-3.1	ROOF DETAILS
R-3.2	CROSSOVER DETAIL

AS DESIGN, LLC

TEJAS DESIG

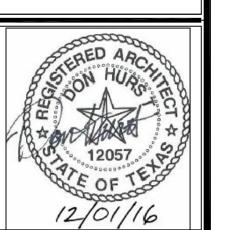
LLC <sup>†</sup> 1

NSULTANTS, LLC
P. O. B

LIVIL AND SHERIFF'S OFFICE

S O

REVISIONS



DATE 12/01/16
SCALE AS SHOWN
SHEET NO.

R-0.0

READ THE PROJECT MANUAL.

2. VERIFY ALL DIMENSIONS AND COORDINATE ALL DRAWINGS WITH ACTUAL FIELD CONDITIONS PRIOR TO BIDDING ON THE PROJECT. NOTIFY ROOF CONSULTANT OF ANY DISCREPANCIES PRIOR TO BIDDING.

3. COMPLY WITH THE CURRENT EDITION OF THE APPLICABLE BUILDING, PLUMBING, ELECTRIC OR FIRE CODES, OR OTHER LOCAL APPLICABLE CODE, WHICHEVER IS THE MORE STRINGENT.

4. FASTENING OR ATTACHMENT OF WOOD BLOCKING, NAILERS, STEEL ANGLES, DECKING AND SHEET METAL SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS FOR THE LATEST EDITION OF FACTORY MUTUAL BULLETIN 1-49.

5. ALL WOOD BLOCKING AND LUMBER SHALL BE KILN-DRIED AFTER TREATMENT (KDAT) AND SHALL BE SCREWED TO ANCHORING SUBSTRATE. STAGGER JOINTS WHEN STACKING LUMBER IN MULTIPLE LAYERS.

6. INSTALL A 1/2" PER FOOT MINIMUM BEVELED OR SLOPED KDAT WOOD SURFACE TO THE TOP OF COPINGS AND EXPANSION JOINTS FOR DRAINAGE. SLOPE THE TOP OF THE COPING TOWARDS THE ROOF SIDE OF THE BUILDING.

7. USE HOT DIPPED GALVANIZED FASTENERS FOR TREATED LUMBER, UNLESS SPECIFIED OTHERWISE.

8. FURNISH AND INSTALL PLYWOOD IN ACCORDANCE WITH THE AMERICAN PLYWOOD ASSOCIATION.

9. SHEET METAL WORK SHALL COMPLY WITH SMACNA.

10. PROVIDE CONTINUOUS 22 GA. GALVANIZED STEEL CLEATS WITH FASTENERS SPACED 8" 0.C. AT ALL SHEET METAL GRAVEL GUARD, FASCIA AND COPING. FOR METALS OTHER THAN GALVANIZED STEEL, INSTALL CONTINUOUS CLEAT ONE GAUGE HEAVIER THAN SHEET METAL COMPONENT BEING ATTACHED. STAGGER CLEAT JOINTS FROM JOINTS OF ATTACHED COMPONENTS.

11. PROVIDE BACK-UP PLATES AND COVER PLATES AT ALL GRAVEL GUARD/FASCIA JOINTS.

12. PROVIDE CONTINUOUS WATERPROOFING MEMBRANE BETWEEN SHEET METAL AND TREATED LUMBER.

13. HEM ALL EXPOSED SHEET METAL EDGES A MINIMUM OF 1/2".

14. PROVIDE SHEET METAL COMPONENT CORNERS, INTERSECTIONS, AND TERMINATIONS WITH JOINTS SPACED A MINIMUM OF 18" IN EITHER DIRECTION.

15. SOLDER ALL VERTICAL GALVANIZED STEEL SHEET METAL JOINTS, EXCEPT FOR PRE-FINISHED GALVANIZED STEEL. POP-RIVET AND SEAL ALL VERTICAL JOINTS OF PRE-FINISHED GALVANIZED

16. DO NOT INSTALL WATER DISCHARGE POINTS OVER DOORS, WINDOWS OR SIDEWALKS. IF THE DRAWINGS CONFLICT WITH THE ABOVE REQUIREMENT, CONTRACTOR IS RESPONSIBLE FOR NOTIFYING ROOF CONSULTANT FOR DIRECTION PRIOR TO INSTALLING.

17. PROVIDE TAPERED CRICKETS ON THE UP-SLOPE SIDE OF ALL CURBS WIDER THAN 18" PERPENDICULAR TO THE ROOF SLOPE DIRECTION.

18. MINIMUM INSULATION THICKNESS IS 1.5", UNLESS OTHERWISE SPECIFIED OR SHOWN IN DRAWINGS.

19. PROVIDE A MINIMUM BASE FLASHING HEIGHT OF 8" ABOVE THE PLANE OF THE FINISHED ROOF FOR ALL CURBS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING IF GREATER THAN 8" BASE FLASHING HEIGHT IS SPECIFIED OR SHOWN IN DRAWINGS.

20. PROVIDE TWO-PIECE COUNTERFLASHING AND RECEIVER FOR ALL ROOFTOP EQUIPMENT CURBS.

21. PROVIDE WOOD BLOCKING BENEATH ALL EMBEDDED METAL FLASHINGS. WOOD BLOCKING SHALL EXTEND A MINIMUM OF 1-1/2" PAST THE METAL FLANGE OF THE FLASHING.

# GENERAL NOTES FOR MECHANICAL ROOF PENETRATIONS:

1. INSTALL MECHANICAL EQUIPMENT OR ACCESSORY CURBS TO BEAR ON STRUCTURAL ROOF DECK. ALL ROOFTOP MEP EQUIPMENT SHALL BE SUPPORTED BY KDAT WOOD CURBS WITH MINIMUM 8" BASE FLASHING HEIGHT.

2. INSTALL MECHANICAL EQUIPMENT CURB BASE FLASHING AND SHEET METAL COUNTERFLASHING PRIOR TO SETTING EQUIPMENT ON CURB. PROVIDE MINIMUM 1" CLEARANCE BETWEEN OUTSIDE SURFACE OF CURB AND INSIDE SURFACE OF EQUIPMENT FLANGE. DO NOT INSTALL EQUIPMENT PRIOR TO OBSERVATION AND ACCEPTANCE BY ROOF CONSULTANT.

3. SCOPE OF WORK FOR RAISING MECHANICAL EQUIPMENT CURBS TO SPECIFIED HEIGHTS INCLUDES MODIFYING ALL MECHANICAL, ELECTRICAL AND PLUMBING ASSOCIATED WITH THE EQUIPMENT FOR A COMPLETE OPERATIONAL ASSEMBLY THAT MEETS CURRENT CODE REQUIREMENTS. WORK SHALL BE PERFORMED BY LICENSED INSTALLERS FOR THE APPLICABLE TRADE.

4. SUPPORT ALL ROOF MOUNTED PIPING AND CONDUIT WITH SPECIFIED PIPE HANGERS OR APPROVED EQUIVALENT, SPACED MAXIMUM 10 FEET O.C. COMPLY WITH MANUFACTURER'S INSTALLATION REQUIREMENTS. SUPPORT PIPE AND CONDUIT SO THAT BOTTOM ELEVATION OF PIPE OR CONDUIT IS A MINIMUM OF 6" ABOVE THE PLANE OF THE FINISHED ROOF.

Note: the below list is intended as a general description. Contractor shall refer to all drawings and specifications for scope items not listed below.

A. BASE AND ALTERNATE BIDS -GRAVEL SURFACED ROOFS (AREAS A, B, C AS INDICATED IN PROJECT DRAWINGS): SCOPE OF WORK COVERED BY THE CONTRACT DOCUMENTS INCLUDES THE FOLLOWING ROOF IMPROVEMENTS AT THE PROJECT:

1. VACUUM AND DISPOSE EXISTING LOOSE GRAVEL FROM THE MULTI-PLY BUILT-UP ROOF MEMBRANE.

2. IDENTIFY AND REPLACE ANY WET INSULATION MATERIAL ON A PER-UNIT COST BASIS AS SPECIFIED.

3. FURNISH AND FULLY ADHERE TWO (2) LAYERS 1.5" POLYISOCYANURATE (ISO) INSULATION.

4. FURNISH AND FULLY ADHERE ONE (1) LAYER 1/2" HIGH DENSITY ISO INSULATION.

5. FURNISH AND FULLY ADHERE 60-MIL TPO ROOF MEMBRANE AND ASSOCIATED FLASHINGS.

6. ROOF SYSTEM SHALL BE U.L. CLASS A FIRE-RATED, AND SHALL QUALIFY FOR THE ROOF MEMBRANE MANUFACTURER'S 20-YEAR NO DOLLAR LIMIT (NDL) GUARANTEE.

7. INSTALL NEW RETROFIT PRIMARY AND OVERFLOW ROOF DRAINS.

8. INSTALL NEW 24-GUAGE TPO COATED METAL SCUPPERS.

9. INSTALL WOOD NAILERS OVER THE EXISTING STONE COPING AT THE PARAPET WALLS AND INSTALL NEW SHEET METAL COPING CAP SYSTEM AS SPECIFIED.

BASE BID: REPLACE CONTROL JOINT MASONRY SEALANTS AT ALL EXTERIOR WALLS

ALTERNATE BID: REPLACE CONTROL JOINT MASONRY SEALANTS AT ALL INTERIOR WALLS OF RECREATION AREA

11. COORDINATE WITH LIGHTNING PROTECTION COMPANY THE DIS-CONNECT, RE-CONNECT AND RE-CERTIFICATION OF THE EXISTING LIGHTNING ARRESTOR SYSTEM.

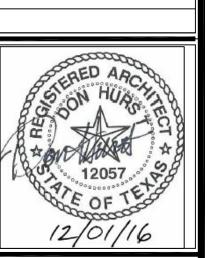
DESIGN EJAS

WHITTEN

N TR IMPR WILLIAMSON

REVISIONS

 $\Delta$ 



12/01/16 AS SHOWN SHEET NO.

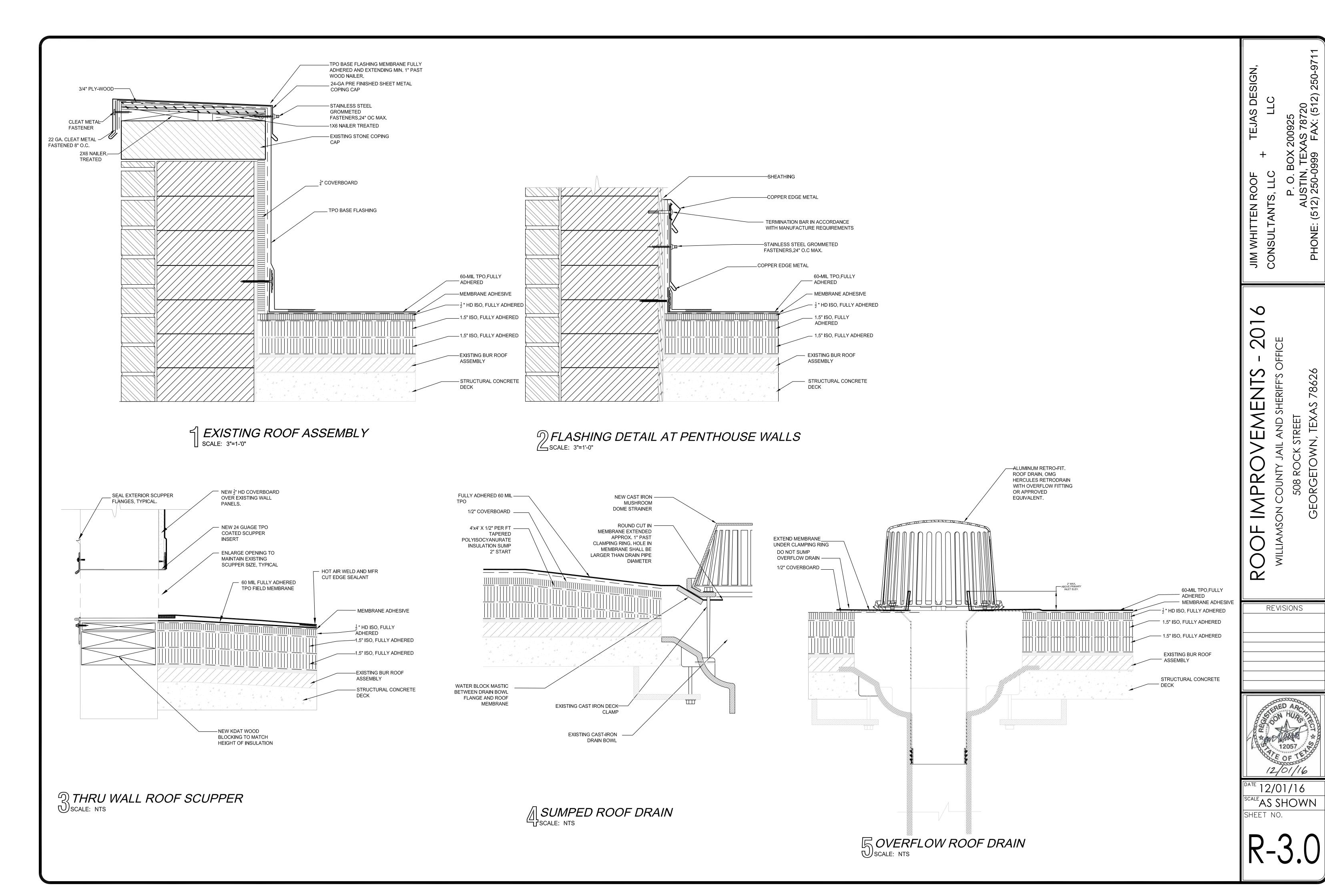
DATE 12/01/16
SCALE AS SHOWN

R-2.0

ROOF PLAN LEGEND EXHAUST FAN ON CURB SLOPE DIRECTION OF SLOPE ROOFTOP UNIT ON CURB OVERPLOW DRAIN PRIMARY ROOF DRAIN
WITH 4'X4'X½" PER FOOT
TAPERED SUMP ROOF HATCH EXHAUST FAN TOWER ON CURB WITH GUY WIRES THRU WALL ROOF SCUPPER MRF WALK TREAD MATERIAL 

WILLIAMSON COUNTY JAIL AND SHERIFF'S OFFICE ROOF PLAN
SCALE: 1/16"=1'-0"

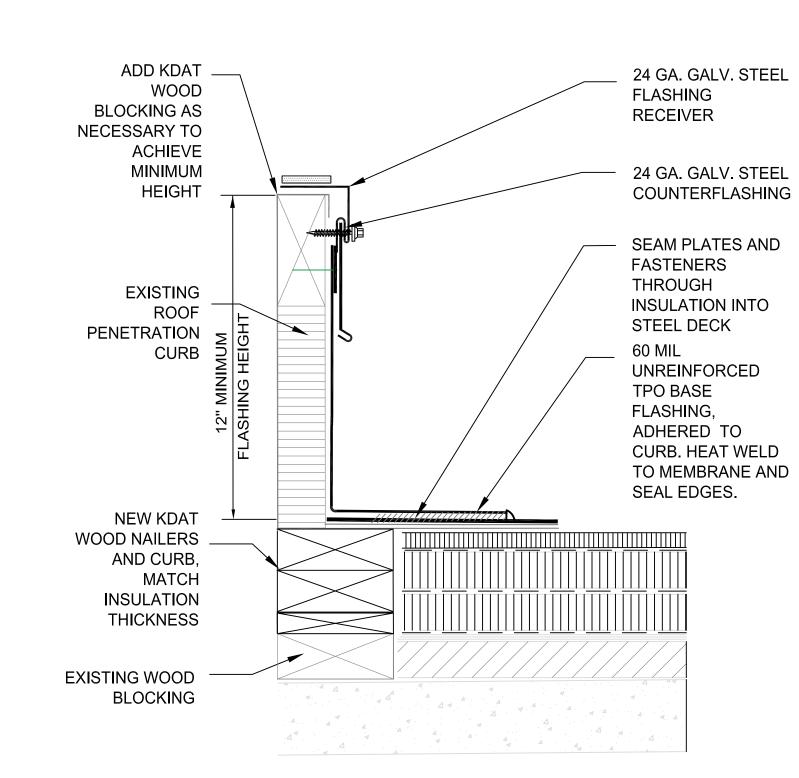
'illiamson County, Texas



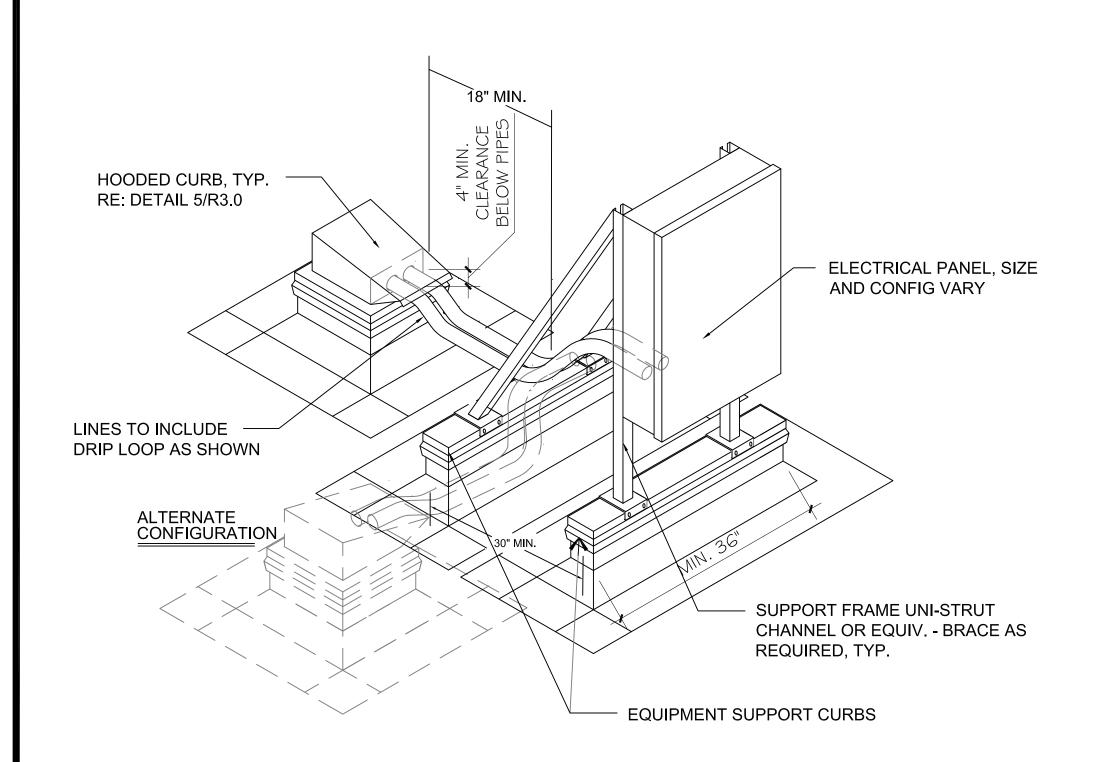
VENT STACK SEALANT STAINLESS STEEL DRAWBAND INSTALL SEALANT OR SEALANT TAPE BETWEEN PIPE AND PRE-MANUFACTURED MEMBRANE FLASHING PRE-MANUFACTURED MEMBRANE FLASHING HOT-AIR-WELDED SEAM

**EXISTING PLUMBING** 

PRE-MFD PLUMBING VENT FLASHING
SCALE: 3"= 1"



EXISTING EQUIPMENT CURB FLASING



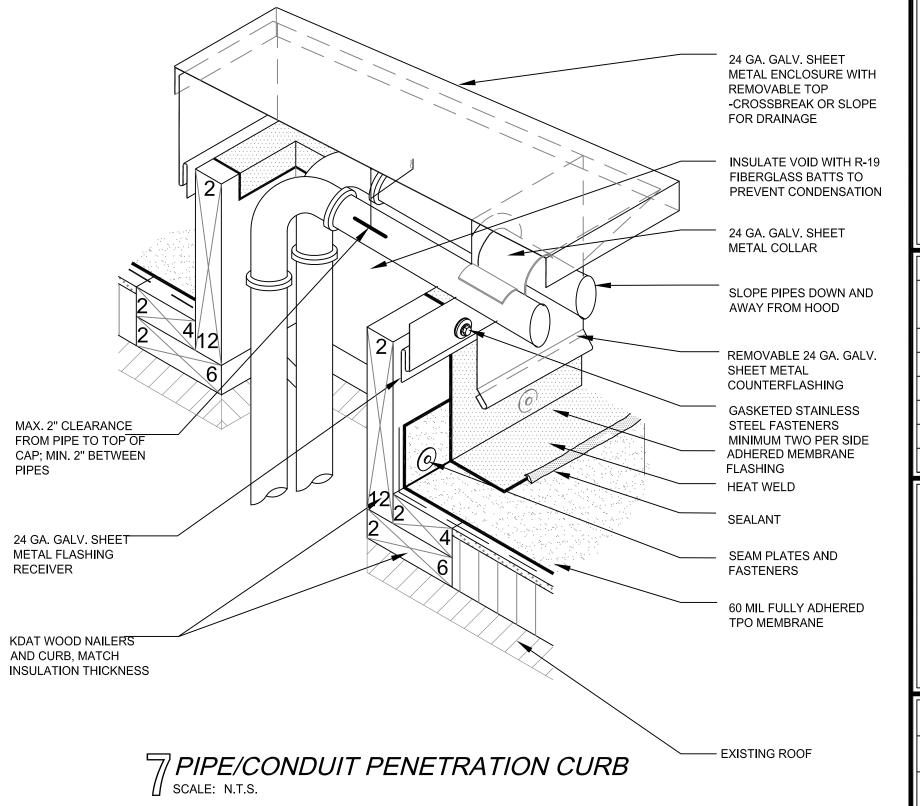
ELETRICAL DISCONNECT CURB FLASHING
SCALE: N.T.S.

☐ LIGHTWEIGHT EQUIPMENT SUPPORT CURB

SCALE: 3"= 1'

**CHANNEL & HANGER** PP10 W/ ROLLER PP10 W/ CHANNEL PORTABLE PIPE HANGERS MODEL NO. APPLICATION PIPE DIAMETERS UP TO 3.5" PP10 WITH ROLLER PP10 WITH PIPE DIAMETERS UP TO 3.5" CHANNEL PP10 WITH PIPE DIAMETERS UP TO 2.5" CHANNEL AND **HANGER** PS-1-2 PIPE DIAMETERS 2.5" TO 8.0" PIPE DIAMETERS 2.5" AND LARGER INSULATED AND NON-INSULATED

ROOFTOP PIPE SUPPORTS
SCALE: N.T.S.



IMPR REVISIONS

TEJAS DESIGN

JIM WHITTEN ROOF CONSULTANTS, LLC

201

STREET

508

AUSTIN, TEX (512) 250-0999

12/01/16 cale AS SHOWN

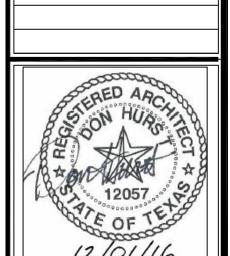
SHEET NO.

ROCK STREET

TEJAS DESIGN JIM WHITTEN ROOF CONSULTANTS, LLC 2016

ROOF IMPRO WILLIAMSON COUR

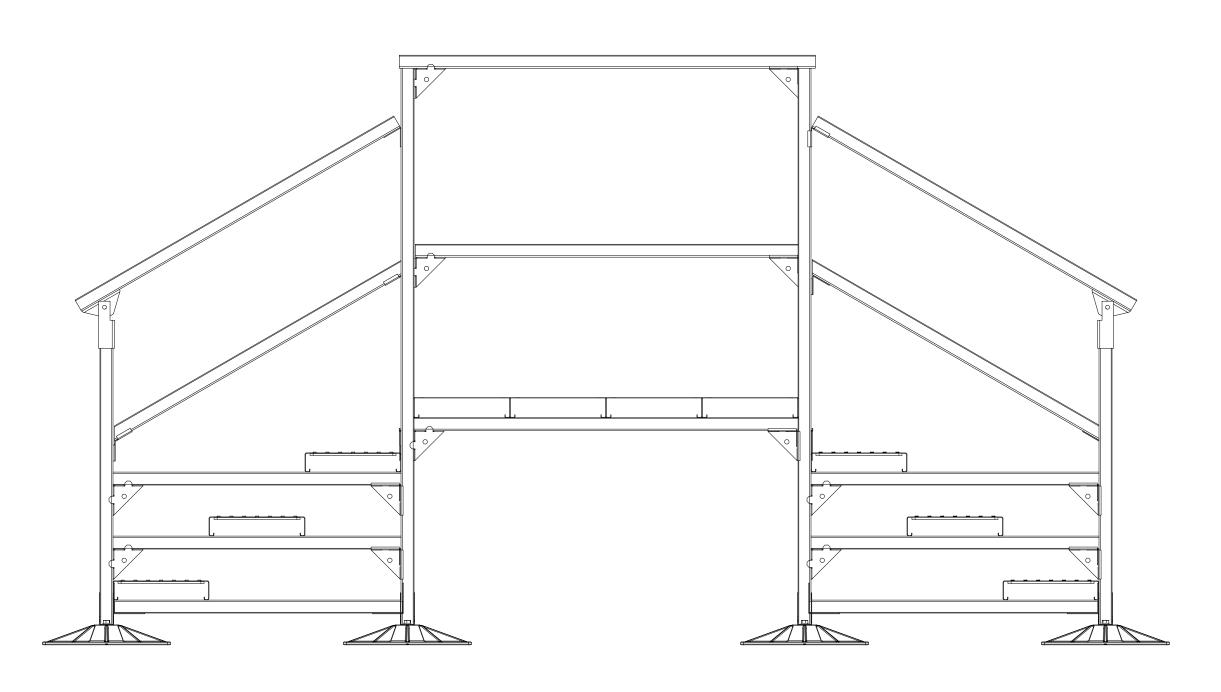
REVISIONS



TE 12/01/16 AS SHOWN SHEET NO.

**END VIEW** 

**TOP VIEW ISOMETRIC VIEW** 

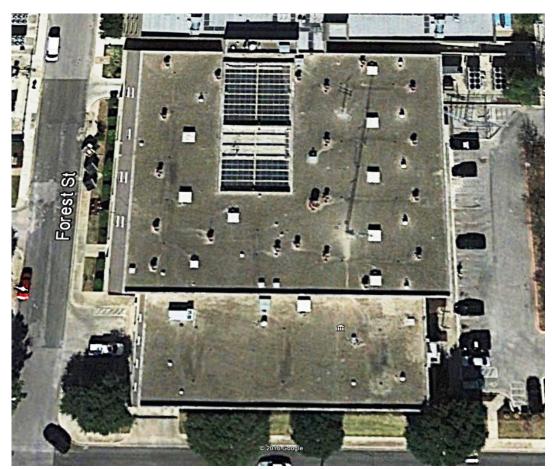


**SIDE VIEW** 

CROSSOVER
SCALE: 1"=1'-0"

# PROJECT MANUAL ROOF IMPROVEMENTS – 2016 WILLIAMSON COUNTY JAIL AND SHERIFF'S OFFICE

508 ROCK STREET GEORGETOWN, TEXAS 78626



Prepared by: JIM WHITTEN ROOF CONSULTANTS, LLC

TEJAS DESIGN, LLC P.O. BOX 200925 – AUSTIN, TEXAS 78720



**DECEMBER 01, 2016** 

ROOF IMPROVEMENTS-2016 December 1, 2016

# DISCLOSURE STATEMENT

ALL INFORMATION CONTAINED IN OR DISCLOSED BY THIS DOCUMENT IS CONSIDERED CONFIDENTIAL AND PROPRIETARY INFORMATION BY JIM WHITTEN ROOF CONSULTANTS, LLC + TEJAS DESIGN, LLC. IT SHALL NOT BE REPRODUCED OR USED IN WHOLE OR IN PART WITHOUT PERMISSION OF JIM WHITTEN ROOF CONSULTANTS, LLC + TEJAS DESIGN, LLC. COPIES REQUIRED FOR PROJECT BIDDING AND CONSTRUCTION WILL BE SUPPLIED BY JIM WHITTEN ROOF CONSULTANTS, LLC +TEJAS DESIGN, LLC

ROOF IMPROVEMENTS-2016 December 1, 2016

# TABLE OF CONTENTS

# Division 0 – Procurement and Contracting Requirements

Section 000860 - List of Drawings

# Division 1 - General Requirements:

Section 011100 Summary of Work

Section 013100 Project Management and

Coordination

Section 013300 Submittal Procedures

Section 015000 Temporary Facilities and Controls

Section 015113 Temporary Heating, Cooling, and Ventilating

Section 015123 Temporary Electricity

Section 016000 Product Requirements

Section 017100 Cleaning

Section 017700 Closeout Procedures

Division 2 – Site Work

Section 024100 Demolition

Divisions 3-4 - Not Used

Division 5 - Steel

Section 050150 Roof Deck Repair

# Division 6 - Wood and Plastics

Section 061050 Rough Carpentry

# Division 7 - Thermal and Moisture Protection:

Section 07220 Roof and Deck Insulation

Section 075300 TPOMembrane

Section 076000 Flashing and Sheet Metal

Section 079000 Joint Sealants

Division 9 - (NotUsed)

Division 8-14 - (Not Used)

Division 15 - Misc.

# Mechanical

Section 15000 Incidental Mechanical Work

# Division 16 - Misc. Electrical

Section 16010 Incidental Electrical Work

Section 16670 Lightning Protection System for Reroofing Structures

**END OF TABLE OF CONTENTS** 



ROOF IMPROVEMENTS-2016 December 1, 2016

# PROJECT DIRECTORY

Owner's Representative Mr. Dwayne Gossett

Facilities
Maintenance
Williamson County
3101 SE Inner Loop Rd.
Georgetown, Texas 78626

Email: DGossett@wilco.org Phone: (512)943-1611 Office

Cell: (254)654-1495

Roof Consultant Jim Whitten Roof Consultants + Architect Tejas Design, LLC

Tejas Design, LLC Phone: 512.250.0999

P. O. Box 200925

Austin, Texas 78720 Fax: 512.250.9711

Don Hurst, Architect Mobile 512-507-6989

E-mail: <a href="mailto:dhurst2@austin.rr.com">dhurst2@austin.rr.com</a>

Jim Whitten, Senior Consultant Mobile: 512.914.4943

E-mail: jim@jimwhitten.com

Rob Hernandez, Senior Consultant Mobile: 512.963.4995

Email: <a href="mailto:rob@jimwhitten.com">rob@jimwhitten.com</a>

Wayne Carriker, Project Manager Mobile: 512.596.6440

Email: wayne@jimwhitten.com

Ted Miears, Field Technician Mobile: 512-750-5916

E-mail: ted@jimwhitten.com

Jeremy Fabinski, CADD Tech/Staff Tech Mobile: 903-360-1072

E-mail: jeremy@jimwhitten.com

**END OF PROJECT DIRECTORY** 

ROOF IMPROVEMENTS-2016 December 1, 2016

# SECTION 000860 LIST OF DRAWINGS

SHEET NO.	DESCRIPTION
R-0.0	TITLE SHEET
R-1.0	ROOFING GENERAL NOTES AND GENERAL SCOPE OF WORK
R-2.0	ROOF PLAN
R-3.0	ROOF DETAILS
R-3.1	ROOF DEAILS
R-3.2	CROSSOVER DETAILS

**END OF SECTION** 

LIST OF DRAWINGS 000860

ROOF IMPROVEMENTS-2016 December 1, 2016

# **SECTION 011100 SUMMARY OF WORK**

# PART I - GENERAL

# 1.1 RELATED DOCUMENTS

A. Drawings, provisions of the, and other Division 1 Specification Sections, apply to this Section.

# 1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project: Roof Improvements 2016
- B. Williamson County Jail and Sheriff's Office 508 Rock Street, Georgetown, Texas
- C. Contract Documents dated December 1, 2016

Prepared by: Jim Whitten Roof Consultants, LLC + Tejas Design, LLC

P.O. Box 200925, Austin, Texas, 78720 512.250.0999/ Fax: 512.250.9711/ Cell:

512.914.4943

E-mail: jim@jimwhitten.com

- D. Base and Alternate Bids –Gravel Surfaced Roofs (Areas A, B, C as indicated in Project Drawings): Scope of Work covered by the Contract Documents includes the following roof improvements at the Project:
  - 1. Vacuum and dispose existing loose gravel from the multi-ply built-up roof membrane.
  - 2. Identify and replace any wet insulation material on a per-unit cost basis as specified.
  - 3. Furnish and fully adhere two (2) layers 1.5" polyisocyanurate (ISO) insulation.
  - 4. Furnish and fully adhere one (1) layer 1/2" High Density ISO insulation.
  - 5. Furnish and fully adhere 60-mil TPO roof membrane and associated flashings.
  - Roof system shall be U.L. Class a fire-rated, and shall qualify for the roof membrane manufacturer's 20-year No Dollar Limit (NDL) Guarantee, and meet all applicable City of Georgetown, TX codes.
  - 7. Install new retrofit primary and overflow roof drains.
  - 8. Install new 24-guage TPO coated metal scuppers.
  - 9. Install wood nailers over the existing stone coping at the parapet walls and install new sheet metal coping cap system as specified.
  - 10. Joint Sealants:

Base Bid: Replace Control Joint Masonry sealants at all exterior walls Alternate Bid: Replace Control Joint Masonry sealants at all interior walls of Recreation Area

- 11. Coordinate with Lightning Protection Company the dis-connect, re-connect and re-certification of the existing lightning arrestor system.
- E. Contingency Allowance
  - 1. Owner Contingency Allowance: An Owner's Contingency Allowance of \$5,000 is to be included in the Total Bid.
- F. Unit Prices: A unit price is a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if estimated quantities of Work required by the Contract Documents are increased or decreased. Unit prices include all necessary material, plus cost for delivery, installation, insurance, overhead, and profit.

SUMMARY OF WORK 011100-1

# 1.3 SCOPE OF WORK

- A. The Contract Documents, to the best of Owner's and Roof Consultant's knowledge, reflect existing conditions. Should minor conditions be encountered which are not exactly as indicated, modify the scope of Work as required, at no additional cost to Owner.
- B. To achieve satisfactory performance from the Work, it may be necessary to perform unanticipated, minor work items encountered during the course of the Work. Consultant and Owner will suggest additional work items as appropriate. Contractor shall assist Owner in applying for and obtaining any available rebates from electrical power provider.
- C. No Change Orders for additional payment will be considered for such additional Work items, unless they represent a substantial change to the Scope of Work.
- D. The Contractor shall assume full responsibility and liability for the compliance with all applicable Federal, State, and local regulations pertaining to work practices, hauling, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site.

#### 1.4 TIMING OF WORK

A. Work is to be performed within an operating facility space. Owner intends for work to be performed in such a manner that disruption of operations is to be minimized.

#### 1.5 GUARANTEE AND WARRANTY

- A. Roofing: Provide Manufacturer's Twenty Year No Dollar (NDL) System Warranty and Two-Year Contractor's Warranty for materials and installation.
  - Manufacturer's Warranty and Contractor's Warranty effective date shall be the Date of Substantial Completion.
- B. Joint Sealants: Provide Manufacturer's Five (5) Year Warranty for Joint Sealants.

Both the Manufacturer's Warranty and Contractor's Warranty shall cover damage to Work resulting from failure to resist penetration of moisture and replacement of assembly components that fail due to material failure or faulty workmanship.

# **END OF SECTION**

SUMMARY OF WORK 011100-2

ROOF IMPROVEMENTS-2016 December 1, 2016

# SECTION 013100 PROJECT MANAGEMENT AND COORDINATION

# PART 1 - GENERAL

# 1.1 PROJECT COORDINATION, SEQUENCING AND SCHEDULING

- A. Coordinate Work with Owner to minimize interference with normal building and inconvenience to facility users, and to expedite the Work.
- B. The facility spaces adjacent to the work are to be occupied for the conduct of normal operations.
- C. Coordinate Work to assure efficient and orderly sequence of application of construction elements, with provisions for accommodating items installed later.
- D. Coordinate Work to allow observations by the Owner and Consultant.
- E. Provide sufficient and adequate materials, personnel and equipment to facilitate rapid completion of the Work without undue delays.

# 1.2 USE OF THE PREMISES

- A. Before beginning work, Contractor must verify in writing to Owner that all Owner security measures are understood and followed, and secure approval from the Owner for access to the following:
  - 1. Site: No parking or storage on the designated parking areas.
  - 2. Areas permitted for personnel parking.
  - 3. Areas permitted for storage of materials and debris.
  - 4. Areas permitted for the location of cranes, hoists and chutes for loading and unloading materials to and from the roof.
- B. Roof Areas not included in this Contract (designated by "NIC" on the Roof Plan) may not be used for personnel or equipment rooftop traffic, including removing debris or delivering materials, except as authorized by the Owner and Consultant, and only after adequate protection covering over the existing roof surfaces is approved and provided.
- C. The Owner reserves the right to have criminal background checks performed on all Contractor personnel to be onsite.

# 1.3 EXISTING CONDITIONS

- A. Review the existing conditions of the facility, prior to commencing the Work, for access, clearances, existing mechanical and electrical equipment, plumbing, structural components and interior finishes that will require removal, replacement or relocation to complete the Work of this Contract.
- B. Notify Owner and Consultant of any additional required work not included in the Contract Documents.
  - C. Notify Owner and Consultant upon discovery of any items that differ or conflict

PROJECT MANAGEMENT AND COORDINATION

ROOF IMPROVEMENTS-2016 December 1, 2016

with the Contract Documents.

#### 1.4 PRE-JOB DAMAGE SURVEY OF FACILITY

- A. Perform a thorough survey of property and all affected areas of the buildings with Owner prior to starting the Work to document existing damage and operational status of existing rooftop equipment. Non-functional or damaged items identified on this survey will not be the responsibility of Contractor to repair or replace unless further damaged by Contractor during execution of the Work.
- B. Include with Pre-Job Submittals, both written description and digital documentation (CD with digital photos or DVD with video) of all items considered to be previously damaged.
- C. Consider any damage to buildings or property not identified in the pre-job damage survey as having resulted from execution of this Contract and correct at no additional expense to Owner.

# 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Limited storage area will be provided by Owner where available. Provide lockable temporary storage containers for storage of equipment and materials. Coordinate with Owner for areas designated for temporary storage.
- B. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, and directions for storing and mixing with other components.
- C. Store membrane rolls lying down on pallets and fully protected from the weather with clean canvas tarpaulins. Un-vented polyethylene tarpaulins are prohibited. Secure all stored materials at roof level in a manner to resist high wind speeds.
- D. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.
  - Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.
- E. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.
- F. Handle and store roofing materials and place equipment in a manner to avoid permanent deflection of deck.

# 1.6 PROTECTION

A. Contractor shall take necessary and adequate precautions to avoid damaging windows, doors, grass, trees, shrubs, walks, drives, etc.

PROJECT MANAGEMENT AND COORDINATION

ROOF IMPROVEMENTS-2016 December 1, 2016

- B. Contractor shall be responsible for damage to adjacent buildings, property, and vehicles near the building resulting from its operations. Clean, repair or replace any surfaces, materials or equipment which are marked, soiled or otherwise damaged as a result of the Work to the satisfaction of the Owner to the extent that it is returned to its condition prior to commencement of the work.
- C. Furnish and erect barricades to protect building occupants and vehicles and to prevent pedestrian or vehicular traffic adjacent to any area affected by construction activities.
- D. Protect finished Work from damage, traffic and adverse weather conditions until proper curing, drying and/or finishing are complete. Do not use finished roof membrane as a working surface. Provide temporary means of roof membrane protection.

# E. Existing Drawings and Utilities:

- Some original drawings may be available from the Owner. The Owner has not verified
  the information contained on those Drawings. Those Drawings are not a part of the
  Contract Documents.
- 2. Repair or replace damaged utilities to a condition equivalent to that before damage occurred. Negligently damaged utilities to be repaired or replaced at no cost to the Owner.

# 1.7 WORKING HOURS AND SCHEDULE

- A. Working hours shall be between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday, except holidays and black-out dates and times assigned by Owner.
- B. The Contract Time will be adjusted by Change Order in the event Owner initiated work stoppages are required.
- C. Alternate work schedules will be considered by Owner with prior notification and approval by Owner.
- D. Obtain approval from Owner prior to altering Workschedule.

# 1.8 INTERIOR ACCESS

- A. Restrict access to interior spaces of the building to Contractor's Project Superintendent and only those workers required to perform work inside the building.
- B. Coordinate with Owner and obtain Owner approval prior to accessing interior space.

# 1.9 CLEANING

- A. Maintain areas free of waste materials, debris and rubbish. Maintain site at all times in a clean and orderly fashion.
- B. Remove waste materials, debris, and rubbish from site periodically and dispose off-site in a legal manner. Do not use Owner's trash containers for disposal of waste materials, debris and rubbish.
- C. Periodically clean interior areas affected by the Work to provide suitable conditions for occupied

PROJECT MANAGEMENT AND COORDINATION

ROOF IMPROVEMENTS-2016 December 1, 2016

areas.

D. Restore existing facilities used during construction to their condition prior to commencement of work.

# 1.10 USE OF UTILITIES

- A. Coordinate use of utilities with Owner.
  - B. Provide temporary electric feeder from electrical service at location as directed by Owner. Provide temporary wiring and hardware as required for execution of the Work. Ground fault interruption devices and similar protection measures required by authorities having jurisdiction are the responsibility of the Contractor. All such work shall be performed by a licensed electrician.
- C. Connect to existing water sources for temporary use of water. Furnish and maintain all necessary adapters and hoses required to complete the Work.
- D. Restore electrical and water service to original condition at completion of each day's activities, and at the completion of the Work to Owner's approval.

# 1.11 MONITORING

A. Owner and Roof Consultant intend to observe the quality and progress of the Work for substantial compliance with the design contract documents. This does not relieve Contractor of his own quality control, testing and supervision responsibilities.

# 1.12 QUALITY ASSURANCE

- A. Review all Drawings and Specifications before commencing and performing the Work.
- B. Provide at least one copy of the final Drawings and Specifications, Addenda and Modifications for permanent use at the site whenever work is in progress.
- C. Maintain workmanship of the highest quality in accordance with the best trade practices.
- D. Obtain all materials specified in the Contract Documents from the same source throughout the Work. Notify Owner if plans are made to change sources.
- E. Possess a minimum of five years experience, installing/applying the respective materials described in each section of the Specification.
- F. Possess current written approval as an applicator of each material used in the Work.
- G. Provide workmen, engaged in the respective items of the Work, which have satisfactorily completed a program of certification by the manufacturers of materials described in the Specifications, or can demonstrate significant experience on similar projects to verify their qualifications to perform this Work.
- G. Perform quality control test and verifications as required by manufacturers or other

ROOF IMPROVEMENTS-2016 December 1, 2016

entities to comply with the requirements of this Contract. Do not use Owner's site observations and testing in lieu of Contractor's own quality control.

H. Contractor shall have a full-time English speaking non-working superintendent on site when workers are present.

# 1.13 PARKING

A. Park only in spaces approved by Owner.

PART 2 - PRODUCTS

PART 3 – EXECUTION

**END OF SECTION** 

ROOF IMPROVEMENTS-2016 December 1, 2016

# SECTION 013300 SUBMITTAL PROCEDURES

# PART I - GENERAL

# 1.1 RELATED DOCUMENTS

A. Drawings and provisions of the Documents including the Statement of Work and other Division 1 Specification Sections, apply to this Section.

# 1.2 SUMMARY

# A. Submittals:

- 1. Provide submittals required by the Contract Documents in a timely manner and at appropriate times in the execution of the Work to allow for sufficient and prompt review by Owner and Consultant.
- 2. Provide submittals, all in form and substance satisfactory to the Consultant and Owner.
- Revise and re-submit submittals as necessary to establish compliance with specified requirements.
- B. Related Sections: Individual requirements for submittals are described in the pertinent Sections of these Specifications.
- C. Color selections and any other aesthetic material approvals shall be in writing by Owner.

# 1.3 PROCEDURES

- A. Submit complete sets of the Pre-Construction, Progress and Post-Construction Submittals that are available in electronic format or other Windows compatible format if transmitted on a compact disk to Owner and Consultant for review. Submit product samples concurrently with electronic submittals.
- B. Owner and Consultant will review submittals for compliance with Contract Documents. Consultant will compile Owner and Consultant's review comments and issue to Contractor for coordination prior to Contractor distribution of reviewed submittals.
- C. Provide three complete bound sets of reviewed submittals and product samples to Owner; provide one complete bound set of reviewed submittals and product samples to Consultant.

# 1.4 QUALITY ASSURANCE

- A. Coordination of submittals:
  - 1. Carefully review and coordinate all aspects of each item being submitted.
  - 2. Verify that each item and its appropriate submittal conform in all respects with the specified requirements.
  - 3. Certify that this coordination has taken place by affixing Contractors' stamp, signature and date to the corner of each submittal package.

# PART 2 - PRODUCTS (Not Applicable)

SUBMITTAL PROCEDURES 013300-1

#### PART 3 - EXECUTION

# 3.1 IDENTIFICATION OF SUBMITTALS

- A. Submittals shall be identified by applicable Specification Section. Number individual submittal items within a specification section consecutively. Provide a table of contents for each specification section. Show on at least the first page of each submittal and elsewhere as required for positive identification, the applicable submittal section and number.
- B. Identify submittal data applicable to the Work of this Contract when submittal lists more than one option.
- C. Strike through submittal data that does not apply to the Work of this Contract.
- D. Accompany each submittal package with a letter of transmittal showing all information required for identification checking.

# 3.2 GROUPING OF SUBMITTALS

- A. Group submittals into packages identified as Pre-Construction Submittals, Progress Submittals, and Post- Construction Submittals.
- B. Partial submittals may be rejected as not complying with the provisions of the Contract.

# 3.3 TIMING OF SUBMITTALS

- A. Make submittals far enough in advance of scheduled dates for commencement, execution or installation to provide time required for reviews, for securing necessary approvals, for possible revisions and re-submittals, and for placing orders and securing delivery.
- B. Allow at least 5 working days for review by the Owner following his/her receipt of submittals.
- C. Contractor will be held responsible for delays occasioned by incomplete or tardy submittal packages.
- D. Pre-construction Submittals: Submit within 5 business days following Notice of Award.
- E. Progress Submittals: Submit, as required, throughout the performance of the Work of the Contract.
- F. Post-Construction Submittals: Submit with final payment request.

# 3.4 PRE-CONSTRUCTION SUBMITTALS

- A. The Contractor's Pre-Construction Submittal package shall include the following:
  - 1. Contract Execution Package executed by Contractor, containing:
    - Standard Form of Agreement between Owner and Contractor
      - b. Certificates of Insurance, properly endorsed.
      - c. Supplementary Conditions

SUBMITTAL PROCEDURES 013300-2

ROOF IMPROVEMENTS-2016 December 1, 2016

- d. Addenda
- e. Bonds
- 2. Certification of insurance for all subcontractors.
- 3. Proposed Progress Schedule.
- 4. Proposed Schedule of Values, with subdivisions for costs associated with requirements stated in the General Services Agreement and Statement of Work, material and labor broken out by phases of the Work, including but not limited to demolition, insulation, membrane, sheet metal, plumbing and closeout.
- 5. Names of supervisory personnel and their qualifications.
- 6. Scaled Roof Plans indicating tapered insulation slope, flashing Details, perimeter edge conditions, and proposed gutter and downspout size and locations.
- 7. Product data for materials proposed to be used.
- 8. Subcontractor list.
- 9. Any required building/construction permits.
- 10. Sample of No-Dollar Limit Guarantee.
- 11. Copy of blank Daily Report to be utilized.

# 3.5 PROGRESS SUBMITTALS

- A. Daily Reports: Prepare daily reports and submit to Owner and Roof Consultant no later than 10:00 AM of the following work day as a single attachment to an email. Include in report, the following minimum items:
  - 1. Description of Work completed by area, include sketch of area on 8.5" x 11" schematic roof plan, six (6) photos in PDF format of work in progress.
  - 2. Number of personnel present, including names, phone numbers, and Texas Drivers' License numbers.
  - 3. Description and estimated quantity of materials removed and materials installed.
  - 4. Description, quantity and location of unit priced items, if any.
  - 5. Estimate of remaining quantity of tear off remaining.
  - 6. Planned activity for following work day.
  - 7. Reason and justification for not working if no work was performed.
  - 8. Report to include weather conditions at start of work, noon and end of work.
  - 9. Report to include name of supervisory person overseeing the work.
- B. Applications for payment: The Contractor's applications for payment shall include the following:
  - 1. An invoice on the contractor's companyletterhead.
  - 2. An Application for Payment, and Waiver of Lien.
  - Unconditional, notarized Waiver of Liens from the Contractor for the amount of Work performed for which payment less retainage was requested in the previous payment request.
  - 4. Unconditional, notarized Waivers of Liens from Subcontractors, and material and equipment suppliers for the Work performed or materials and equipment supplied during the period covered by the previous payment request. Data for materials proposed to be used.
  - 5. Updated, current progress schedule.
- C. Other Submittals required by the Contract Documents.

SUBMITTAL PROCEDURES 013300-3

ROOF IMPROVEMENTS-2016 December 1, 2016

# 3.6 OWNER AND CONSULTANT REVIEW

- A. Review by Owner and Consultant does not relieve Contractor from responsibility for errors that may exist in the submitted data.
- B. Make revisions if required by Owner and Consultant and resubmit for review.
- C. "Or equivalent":
  - Do not assume where the phrase "or equivalent", or "or equivalent as approved by the Owner", occurs in the Contract Documents, that particular materials, equipment, or methods will be approved as equivalent unless the item has been specifically approved for this Work by the Owner.
  - 2. Decision of the Owner shall be final.

**END OF SECTION** 

SUBMITTAL PROCEDURES 013300-4

# SECTION 015000 TEMPORARY FACILITIES AND CONTROLS

# PART 1 - GENERAL

# 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the General Services Agreement, including the Statement of Work and other Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Provide temporary facilities and controls as needed and as specified for the Work.
- B. Maintain temporary facilities and controls in proper and safe condition throughout progress of the Work.
- C. Related Sections: Additional requirements may also be prescribed in other Sections of these Specifications.

# PART 2 - PRODUCTS (NOTUSED)

#### PART 3 - EXECUTION

# 3.1 TELEPHONE SERVICE

- A. Contractor shall provide his own telephone service as required. Contractor's Project Manager and Superintendent shall have a cell phone available at all times.
- B. Use of Owner's private phones is not allowed unless authorized by Owner.

# 3.2 TOILET FACILITIES

- A. Contractor shall provide and maintain an adequate number of temporary toilets with proper enclosures as necessary for use of workmen during construction. Keep toilets clean and comply with all local and state health requirements and sanitary regulations.
- B. Locate toilet facilities in Parking/Staging storage area as approved by Owner.

# 3.3 FIRST AID SUPPLIES

A. Provide medical supplies and equipment at the site for first-aid service to persons injured in connection with the Work.

# 3.4 FIRE PROTECTION

A. Fire Protection:

015000-1

ROOF IMPROVEMENTS-2016 December 1, 2016

- 1. Provide temporary fire protection as required by federal, state, as local laws, codes, and ordinances.
- 2. Provide minimum two (2) charged and functioning fire extinguishers of appropriate size, within 10′- 0″ of combustible materials. Ensure that all personnel are fully trained in operation of provided extinguishers.
- Reasonable precautions against fire shall be taken throughout Operations.
   Flammable material shall be properly handled and stored in accordance with governing code requirements.
- 4. Open fires are prohibited at the site.

#### 3.5 DRAINS AND SEWERS

- A. Contractor shall keep drains and sewers clean and free of construction debris during all phases of Work.
- B. Do not permit debris or other contaminants deleterious to the City sewer system to be washed down drains or sewers.
- C. Protect City of Georgetown storm drainage facilities that are adjacent to or affected by the Work of this Contract. Comply with City of Georgetown requirements for protecting storm sewer system from construction generated waste water.

#### 3.6 TRAFFIC CONTROL AND PROTECTION

- A. Provide signs, flagmen, lights, or other warning devices as required to control pedestrian traffic around the building and to prevent pedestrians from entering areas of the Work.
- B. All sidewalks shall remain open and accessible at all times. Protective canopies or other appropriate means shall be installed over building entrances when work is occurring overhead or adjacent to those areas.
- C. Furnish and erect barricades to protect building occupants and vehicles and to prevent pedestrian or vehicular traffic adjacent to any area affected by construction activities.
- D. Contractor shall be responsible for maintaining any means of egress required by governing building codes for continual public use of the building.
- E. Provide barricades as necessary at building entrances to protect occupants during work in these areas.

# 3.7 SPECIAL CONTROLS

- A. Parking: Park only in areas approved by Owner.
- B. Dust, Debris and Water Control:
  - 1. Contractor shall take precautions as necessary to prevent dust, dirt, construction-related water and particles, etc. from leaving the immediate work area.
  - 2. Contractor shall take appropriate means if dust or debris exceeds levels established by City laws and ordinances.

ROOF IMPROVEMENTS-2016 December 1, 2016

C. Construction Warning Signs: Provide and maintain suitable signs at each building entrance to warn guests and public of work while repair work is in progress.

#### 3.8 MAINTENANCE

A. Maintain temporary facilities and controls as long as necessary for safe and proper completion of the Work.

# 3.9 REMOVAL

A. Remove temporary facilities and controls as rapidly as progress of the Work will safely permit.

# 3.10 CLEANING

- A. Maintain areas free of waste materials, debris and rubbish. Maintain site at all times in a clean and orderly fashion.
- B. Remove waste materials, debris, and rubbish from site periodically and dispose off-site in a legal manner. Do not use Owner's trash containers for disposal of waste materials, debris and rubbish.
- C. Periodically clean interior areas affected by the Work to provide suitable conditions for occupied areas.
- D. Restore existing facilities used during construction to their condition prior to commencement of work.

**END OF SECTION** 

ROOF IMPROVEMENTS-2016 December 1, 2016

# SECTION 015113 TEMPORARY HEATING, COOLING, AND VENTILATING

# PART 1 - GENERAL

#### 1.1 DESCRIPTION

A. For those Projects requiring incidental Mechanical Work; includes installation of temporary mechanical work, disconnects, reconnects, and other incidental mechanical, and plumbing work, not specified herein but necessary for the successful execution of the Work as set forth in the Contract Documents.

#### PART 2 - PRODUCTS

#### 2.1 MATERIAL AND WORKMANSHIP

- A. All materials and equipment required shall be:
  - 1. Installed by mechanics skilled in their trades, working under the direct supervision of competent experienced foremen or superintendents.
  - 2. Installed in compliance with all applicable Occupational Safety and Health Administration Rules and Regulations.
  - 3. Installed in compliance with all applicable local, Ventilating, Air Conditioning, and Plumbing Codes.
- B. Prior to conducting any mechanical work, perform a complete survey of all roof top mechanical equipment with the Owner's representative to verify the functional condition of the equipment. Document the survey in writing, signed by the Owner's representative and the Contractor. Provide a copy to the Roof Consultant.

# 2.2 TIMELY PLACEMENT OF MATERIALS AND EQUIPMENT

A. Install items specified in Paragraph 2.01 of this Section at the proper time during progress of construction. Coordinate work operations with other trades as necessary.

# **PART 3 - EXECUTION**

# 3.1 GENERAL

- A. Install temporary mechanical work necessary to comply with the work of other Sections.
- B. Remove temporary mechanical work necessary to comply with other Sections at completion of Project and correct any damage to property.
- C. At the end of the Project, any non-functional mechanical equipment (not noted on the survey list) will be the responsibility of the Contractor to restore to functional working order.

### **END OF SECTION**

TEMPORARY ELECTRICITY 015123-1

ROOF IMPROVEMENTS-2016 December 1, 2016

#### SECTION 015123 TEMPORARY ELECTRICITY

#### PART 1 - GENERAL

#### 1.1 DESCRIPTION

A. For those Projects requiring incidental Electrical Work: Included installation of temporary power, disconnects, reconnects, lightning arrestor systems, and other incidental electrical work necessary to perform the Work of the Contract Documents.

#### PART 2 - PRODUCTS

#### 2.1 MATERIALS AND WORKMANSHIP

- A. All materials and equipment required shall be:
  - 1. Approved by Underwriters Laboratories and so labeled.
  - 2. For wire and cable, marked as required by Article 310-1- National Electrical Code.
  - 3. Installed by mechanics skilled in their trades, working under the direct supervision of competent experience foremen or superintendents.
  - 4. Installed in compliance with all applicable Occupational Safety and Health Administration and applicable local electrical codes.
- B. Prior to conducting any electrical work, perform a complete survey of all roof top electrical lines and service with the Owner's representative to verify the functional condition of the electrical service. Document the survey in writing, signed by the Owner's representative and the Contractor. Provide a copy to the Roof Consultant.

# 2.2 TIMELY PLACEMENT OF MATERIALS AND EQUIPMENT

A. Install items specified in Paragraph 2.01 of this Section at the proper time during progress of construction. Coordinate work operations with other trades as necessary.

#### PART 3 - EXECUTION

#### 3.1 GENERAL

- A. Provide temporary electrical power as required to perform the Work of the Contract Documents.
- B. Remove all temporary electrical items at completion of Project and correct any damage to property.
- C. At the end of the Project, any non-functional electrical service (not noted on the survey list) will be the responsibility of the Contractor to restore to functional working order.

**END OF SECTION** 

TEMPORARY ELECTRICITY 015123-1

ROOF IMPROVEMENTS-2016 December 1, 2016

# SECTION 016000 PRODUCT REQUIREMENTS

#### PART 1 - GENERAL

# 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the General Services Agreement, including the Statement of Work and other Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for handling requests for substitutions made after award of the Contract.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
  - 1. Section 013300 "Submittal Procedures" specifies requirements for submitting the Contractor's Construction Schedule and the Submittal Schedule.

# 1.3 DEFINITIONS

- A. Definitions in this Article do not change or modify the meaning of other terms used in the Contract Documents.
- B. Substitutions: Changes in products, materials, equipment, and methods of construction required by the Contract Documents proposed by the Contractor after award of the Contract are considered to be requests for substitutions. The following are not considered to be requests for substitutions:
  - 1. Substitutions requested during the bidding period, and accepted by Addendum prior to award of the Contract, are included in the Contract Documents and are not subject to requirements specified in this Section for substitutions.
  - 2. Revisions to the Contract Documents requested by the Owner.
  - 3. Specified options of products and construction methods included in the Contract Documents.
  - 4. The Contractor's determination of and compliance with governing regulations and orders issued by governing authorities.

#### 1.4 SUBMITTALS

- A. Substitution Request Submittal: The Owner will consider requests for substitution if received within 10 days after commencement of the Work. Requests received more than 10 days after commencement of the Work may be considered or rejected at the discretion of the Owner.
  - 1. Submit 3 copies of each request for substitution for consideration. Submit requests in the form and according to procedures required for change-order proposals.
  - 2. Identify the product or the fabrication or installation method to be replaced in each request. Include related Specification Section and Drawing numbers.
  - 3. Provide complete documentation showing compliance with the requirements for substitutions, and the following information, as appropriate:

PRODUCT REQUIREMENTS 016000-1

ROOF IMPROVEMENTS-2016 December 1, 2016

- a. Coordination information, including a list of changes or modifications needed to
  other parts of the Work and to construction performed by the Owner and
  separate contractors that will be necessary to accommodate the proposed
  substitution.
- b. A detailed comparison of significant qualities of the proposed substitution with those of the Work specified. Significant qualities may include elements, such as performance, weight, size, durability, and visual effect.
- c. Product Data, including Drawings and descriptions of products and fabrication and installation procedures.
- d. Samples, where applicable or requested.
- e. A statement indicating the substitution effect on the Contractor's Construction Schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on overall Contract Time.
- f. Cost information, including a proposal of the net change, if any in the Contract Sum.
- g. The Contractor's certification that the proposed substitution conforms to requirements in the Contract Documents in every respect and is appropriate for the applications indicated.
- The Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of the failure of the substitution to perform adequately.
- 4. Owner's Action: If necessary, the Owner will request additional information or documentation for evaluation within one week of receipt of a request for substitution. The Owner will notify the Contractor of acceptance or rejection of the substitution within two weeks of receipt of the request, or one week of receipt of additional information or documentation, whichever is later. Acceptance will be in the form of a change order.
  - a. Use the product specified if the Owner cannot make a decision on the use of a proposed substitute within the time allocated.

#### PART 2 - PRODUCTS

# 2.1 SUBSTITUTIONS

- A. Conditions: The Owner will receive and consider the Contractor's request for substitution when one or more of the following conditions are satisfied, as determined by the Owner. If the following conditions are not satisfied, the Owner will return the requests without action except to record noncompliance with these requirements.
  - 1. Extensive revisions to the Contract Documents are not required.
  - 2. Proposed changes are in keeping with the general intent of the Contract Documents,
  - 3. The request is timely, fully documented, and properly submitted.
  - 4. The specified product or method of construction cannot be provided within the ContractTime. The Owner will not consider the request if the product or method cannot be provided as a result of failure to pursue the Work promptly or coordinate activities properly.
  - 5. The request is directly related to an "or-equivalent" clause or similar language in the Contract Documents.
  - 6. The requested substitution offers the Owner a substantial advantage, in cost,

PRODUCT REQUIREMENTS 016000-2

ROOF IMPROVEMENTS-2016 December 1, 2016

time, energy conservation, or other considerations, after deducting additional responsibilities the Owner must assume.

7. The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.

The specified product or method of construction cannot be provided in a manner that is compatible with other materials and where the Contractor certifies that the substitution will overcome the incompatibility.

- 8. The specified product or method of construction cannot be coordinated with other materials and where the Contractor certifies that the proposed substitution can be coordinated.
- 9. The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution provides the required warranty.
- B. The Contractor's submittal and the Owner's acceptance of Shop Drawings, Product Data, or Samples for construction activities not complying with the Contract Documents do not constitute an acceptable or valid request for substitution, nor do they constitute approval.

PART 3 – EXECUTION (Not Applicable)

**END OF SECTION** 

PRODUCT REQUIREMENTS 016000-3

ROOF IMPROVEMENTS-2016 December 1, 2016

#### **SECTION 017100 CLEANING**

#### PART 1 - GENERAL

# 1.1 DESCRIPTION

- A. Work included: Maintain the building and site in a standard of cleanliness throughout the construction period as described in this Section.
- B. Clean roof upon completion of all Work to satisfaction of Owner and Roof Consultant.

# 1.2 QUALITY ASSURANCE

- A. Conduct daily inspections, and more often if necessary, to verify that requirements for cleanliness are being met.
- B. In addition to the standards described in this Section, comply with pertinent requirements of governmental agencies having jurisdiction.

### PART 2 - PRODUCTS

#### 2.1 CLEANING MATERIALS AND EQUIPMENT

A. Provide required personnel, equipment and materials needed to maintain the specified standard of cleanliness.

# 2.2 COMPATIBILITY

A. Use only the cleaning materials and equipment, which are compatible with the surface being cleaned, as recommended by the manufacturer of the materials.

# **PART 3 - EXECUTION**

### 3.1 PROGRESS CLEANING

- A. Do not allow accumulation of scrap, debris, waste material, and other items not required for construction of the Work to remain overnight on the roof.
- B. Daily, and more often if necessary, inspect the site and pick up all scrap, debris, and waste material. Remove such items to the place designated for their storage.
- C. Provide adequate storage for all items awaiting removal from the job site, observing requirements for fire protection and protection of the ecology.
- D. At least once each week, and more often if necessary, completely remove all scrap, debris, and waste material from the job site.

CLEANING 017100-1

p. 117

JIM WHITTEN ROOF CONSULTANTS, LLC
WILLIAMSON COUNTY JAIL AND SHERIFF'S OFFICE

ROOF IMPROVEMENTS-2016 December 1, 2016

# 3.2 FINAL CLEANING

- A. "Clean", for the purpose of this Article, and except as may be specifically provided otherwise, shall be interpreted as meaning the level of cleanliness generally provided by skilled cleaners using commercial quality materials.
- B. Prior to completion of the Work remove from the job site all tools, surplus materials, equipment, scrap, debris and waste. Conduct final progress cleaning as described in Article 3.01 above.
- C. Membrane: Power wash roof membrane per manufacturer's instructions upon completion of substantial completion punch list to provide a roof membrane surface that is free of stains (adhesives, dirt, etc.) incurred during completion of the work.
- D. Site:
  - 1. Unless otherwise specifically directed by the Owner, broom clean paved areas on the site and public paved areas adjacent to the site.
  - 2. Completely remove resultant debris.
  - 3. Remove evidence of construction operations from all landscaped and pervious surfaces.
- E. Interior: remove all evidence of construction operations; surfaces ground smooth; finishes replaced.
- F. Schedule final cleaning as approved by Owner.

# **END OF SECTION**

CLEANING 017100-2

ROOF IMPROVEMENTS-2016 December 1, 2016

# SECTION 017700 CLOSEOUT PROCEDURES

#### PART 1 - GENERAL

# 1.1 DESCRIPTION

A. Work Included: Provide an orderly and efficient transfer of the completed Work to the Owner.

#### 1.2 OUALITY ASSURANCE

A. Prior to requesting Substantial and Final Completion Inspections, use adequate means to assure that the Work is completed in accordance with the specified requirements and is ready for the requested inspection.

#### 1.3 PROCEDURES

- A. Final Completion:
  - 1. Verify in writing by written request to Owner and Consultant.
  - 2. Certify that:
    - a. Contract Documents have been reviewed.
    - b. Work has been inspected for compliance with the Contract Documents.
    - c. Work has been completed in accordance with the Contract Documents.
    - d. Work is completed and ready for Final Punchlist Inspection.
  - 3. The Owner and Consultant will observe the Work to document status of completion. Provide Owner and Consultant access to the Work, as required to perform Inspection.
  - 4. Should the Owner and Consultant determine that the Work is incomplete or defective:
    - a. The Owner promptly will so notify the Contractor, in writing, listing the incomplete or defective work.
    - b. Remedy the deficiencies promptly, and notify the Owner when ready for reinspection. Provide the Owner with access to the Work, as required to perform reinspection.
  - 5. When the Owner determines that the Work is acceptable under the Contract Documents, he will request the Contractor to make closeout submittals.
- B. Closeout submittals include, but are not necessarily limited to:
  - 1. Manufacturer's product literature for all proprietary products used in the Work.
  - 2. As-built drawings and specifications, indicating changes (Change Orders, RFIs, Field Directives, etc.) in construction affecting the contract documents.
  - 3. Operation and maintenance data for items so listed in pertinent other Sections of these Specifications, and for other items when so directed by the Owner.
  - 4. Warranties and bonds.
  - 5. Evidence of compliance with requirements of governmental agencies having jurisdiction including but not necessarily limited to Certificate of Inspection.

CLOSEOUT PROCEDURES 017700-1

ROOF IMPROVEMENTS-2016 December 1, 2016

- 6. Certificates of Insurance for products and completed operations.
- 7. Evidence of payment and release of liens.
- 8. List of subcontractors, service organizations, and principal vendors, including names, addresses, email addresses, and telephone numbers where they can be reached.

# C. Final Adjustment of Accounts:

- 1. Submit a final statement of accounting to the Owner, showing all adjustments to the Contract Sum.
- 2. If so required, the Contractor will prepare final Charge Order showing adjustments to the Contract Sum, which was not made previously by Change Orders.
- 3. Final payment may be withheld if warranties and other closeout submittals do not comply with requirements of the Contract Documents.

# 1.4 INSTRUCTION

A. Instruct the Owner's personnel in proper operation and maintenance of all applicable items provided as part of the Work.

# 1.5 WARRANTIES

- B. Joint Sealant Manufacturer's Warranty
- C. Contractor's Two Year Warranty: Warranty shall be assigned to Owner and submitted on the form provided in Section 017836
- D. Warranties shall be fully transferable.

**END OF SECTION** 

CLOSEOUT PROCEDURES 017700-2

p. 120

ROOF IMPROVEMENTS-2016 December 1, 2016

# **SECTION 024100 DEMOLITION**

#### PART 1 - GENERAL

# 1.1 SECTION INCLUDES

- A. Removal of existing surface gravel from built-up roof to accept the new re-cover system.
- B. Removal of any wet or otherwise non-functional existing insulation.
- C. Contractor shall dispose of all materials in a licensed landfill and provide the Owner with signed documentation of all materials disposed.

# 1.2 SUBMITTALS

- A. Submit demolition and removal procedures and schedule under provisions of Division 1.
- B. Submit record documents under provisions of Division 1.

#### 1.3 SEQUENCING AND SCHEDULING

A. Sequence and schedule work to accommodate Owner's use of premises.

#### 1.4 EXISTING CONDITIONS

- A. Conduct demolition to minimize interference with adjacent roofing, roof-mounted equipment, and roof deck and structure to remain.
- B. Provide, erect, and maintain temporary barriers and security devices.
- C. Conduct operations with minimum interference to public or private thoroughfares. Maintain egress and access at all times.
- D. Do not close or obstruct roadways or sidewalks without Owner's written consent.

# PART 2 - PRODUCTS

Not Used

# **PART 3 - EXECUTION**

# 3.1 EXAMINATION

- A. Verify that areas to be demolished are clear of encumbrances.
- B. Beginning of demolition means acceptance of existing conditions.

DEMOLITION 024100-1

ROOF IMPROVEMENTS-2016 December 1, 2016

#### 3.2 PREPARATION

- A. Protect existing landscaping materials, appurtenances, structures, paving, roofing and siding, roof mounted equipment, roof deck and structure, which are not to be demolished.
- B. Verify abandoned equipment and penetrations to be removed and obtain written confirmation from Owner's representative prior to removal and repair of deckopening.

# 3.3 EXECUTION

- A. Contractor shall only perform demolition at areas that can be recovered watertight in the same day. Contractor shall not leave demolished materials in a non-watertight condition overnight.
- Evenly cut edges of existing materials that are to be expanded, replaced, or modified.
- C. Cease operations and notify Owner immediately if adjacent structures or materials appear to be endangered. Do not resume operations until corrective measures have been taken.
- D. Except when instructed otherwise, immediately remove demolished material from site daily.
- E. Remove materials to be re-installed or retained by Owner in a manner to prevent damage.
- F. Do not burn or bury materials on site.
- G. Remove demolished materials from site daily as the work progresses. Keep common areas free of debris at all times. Leave site in clean condition.
- H. Stop demolition work and notify the Owner and Roof Consultant immediately if suspected hazardous or unknown materials are encountered.
- Exercise care in demolition work to prevent damage to interior finishes.

**END OF SECTION** 

DEMOLITION 024100-2

ROOF IMPROVEMENTS-2016 December 1, 2016

#### SECTION 061050 ROUGH CARPENTRY

#### PART I - GENERAL

# 1.1 SECTION INCLUDES

A. All materials and labor for work requiring new lumber such as nailers and curbs will be provided and installed by Contractor.

### 1.2 QUALITY ASSURANCE

- A. Rough Carpentry Lumber: Visible grade stamp of agency certified by SFPA.
- B. Provide Underwriters' Laboratories (UL) approved identification for fire resistant treated materials.

#### 1.3 REGULATORY REQUIREMENTS

- A. Conform to applicable building code, latest edition, for fire retardant requirements of wood.
- B. Conform to FM Loss Data Bulletin I-49 for securement requirements.

# 1.4 SUBMITTALS

- A. Submit shop drawings and product data under provisions of Section 013300.
- B. Indicate materials, fastening methods, accessories, and locations.
- C. Submit manufacturer's certifications under provisions of Section 013300 that wood treatment is in accordance with applicable requirements.

# PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. Lumber and Wood Cants: No. 2 Grade Yellow Pine, Standard Douglas Fir.
- B. Curbs and curb extensions: No. 2 grade yellow pine, Standard Douglas Fir, pressure treated, KDAT 19%.
- C. Plywood: Wolmanized, 5/8-inch, exterior grade CDX or better, APA grade marked.

# 2.2 WOOD TREATMENT

A. Wood Preservative (Pressure Treatment): Shop pressure treatment using waterborne preservatives; 0.25 pounds per cubic foot of preservative, kiln dried after treatment (KDAT) to maximum 19 percent moisture content, meeting Federal Specification TT-W-550, or the latest Federal approval for wood preservative pressure treatment.

ROUGH CARPENTRY 061050-1

ROOF IMPROVEMENTS-2016 December 1, 2016

#### 2.3 SCHEDULE OF FASTENERS

#### A. Fasteners – General:

- 1. Exposed fasteners: non-ferrous stainless steel with bonded neoprene washers.
- 2. Fasteners compatible to all materials to which they come in contact so that dielectric corrosion does not occur.

#### B. Wood Nailer Fasteners:

- 1. Wood Substrate: Non-ferrous stainless steel screws, gauge and length to suit application and as necessary to penetrate underlying wood support members a minimum of 1-1/4 inch. Each screw to have a minimum pull out resistance of 100 pounds.
- 2. Metal Substrate: A No. 12 Factory Mutual approved, fluorocarbon coated roofing screw.
- 3. Concrete or masonry surfaces: Non-ferrous stainless steel anchor with expansion shank, length as recommended by manufacturer for minimum 1,000 pound pull-outresistance.

# **PART 3 - EXECUTION**

#### 3.1 EXAMINATION

- A. Verify that surfaces are ready to receive work.
- B. Verify mechanical, electrical, and building items affecting work of this Section are placed and ready to receive this work.
- C. Beginning of installation means acceptance of existing conditions.

# 3.2 PREPARATION

A. Before installation, prime paint wood surfaces of items or assembles to be in contact with cementitious materials.

#### 3.3 INSTALLATION

- A. Set and secure materials and components in place, plumb and level.
- B. Install components with approved fasteners suited to materials.

# C. Curbs:

- 1. Install new wood to provide total height of a minimum of 8 inches above the finished roof surface, and to allow for height of tapered insulation system and crickets, as applicable.
- 2. Fasten securely to substrate.
- 3. Treat surfaces exposed by cutting as recommended by preservative manufacturer.
- 4. Fasten wood curb to nailer prior to installation with appropriate wood nailer fasteners on 12-inch centers.
- D. Wood Nailer Installation: Attach nailers to wood substrates with two rows of appropriate fasteners on 12-inch centers, or as shown in Drawings. Offset fasteners from underlying wood nailerfasteners.

#### **END OF SECTION**

ROUGH CARPENTRY 061050-2

ROOF IMPROVEMENTS-2016 December 1, 2016

#### SECTION 07220 ROOF AND DECKINSULATION

#### PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

A. Roof and Deck Insulation.

### 1.2 RELATED WORK

- A. Section 06100 Rough Carpentry
- B. Section 07530 Fully Adhered Single-Ply Membrane System
- C. Section 07600 Flashing and Sheet Metal

#### SYSTEM DESCRIPTION

.

- A. New Roof System Insulation: Rigid insulation board consisting of two (2) layers (1.5") inch polyiso rigid insulation board as specified to achieve a complete and proper substrate for the specified roof membrane system.
- B. ½" High Density polyiso board.
- C. Tapered Polyisocyanurate Insulation for crickets, saddles and sumps: ASTM C1289, closed cell foam core bonded to fiberglass facers top and bottom, slope as required to achieve minimum two times the opposing slope per foot; minimum ¾-inch starting thickness and maximum thickness of 2": 4'x4' maximum board dimension.

# 1.4 SUBMITTALS

- A. Submit manufacturer's installation instructions, samples and product data, in accordance with the provisions of Section 01300.
- B. Submit two full size samples of each insulation board type and thickness.
- C. Submit manufacturer's certificate, in accordance with the provisions of Section 01300, that products meet or exceed specified requirements.
- D. Submit certification from roof membrane manufacturer that board insulation materials are acceptable for use with roof membrane materials.

ROOF IMPROVEMENTS-2016 December 1, 2016

- E. For mechanically attached systems, submit results of the fastener pull-out resistance testing. Provide fastener pull-out resistance test results. Pull-out resistance testing is to be performed by a technical representative of the fastener manufacturer. A minimum number resistance tests shall be performed and documented. Any pull tests falling below the value required by the system manufacturer shall be re-tested in the same vicinity of the low value test.
- F. For fully adhered systems, submit manufacturer's latest published installation instructions for their two-component, low-rise polyurethane insulation adhesive applied in beads for adhesive attachment of approved roof insulations to acceptable substrates.

#### 1.5 STORAGE AND HANDLING

- A. Store products of this Section in lockable watertight storage containers.
- B. Rooftop storage shall be limited to quantities of material that can be installed daily. No overnight rooftop storage of materials is permitted.

# **PART 2 - PRODUCTS**

#### 2.1 INSULATION BOARD

A. Polyiso Rigid Insulation Board: , closed cell foam core bonded to fiberglass facers top and bottom, in compliance with ASTM C 1289

Thickness: Two (2) layers of 1.5" polyiso.

One (1) layer of 1/2" HD polyiso.

B. Tapered Polyisocyanurate Insulation for crickets, saddles and sumps: ASTM C1289, closed cell foam core bonded to fiberglass facers top and bottom, slope as required to achieve minimum two times the opposing slope per foot; minimum ¾-inch starting thickness and maximum thickness of 2"; 4'x4' maximum board dimension.

### 2.2 FASTENERS

- A. Fasteners and Plates: Polymer coated case-hardened steel screw with pre-assembled galvanized steel plate, as approved by the insulation and membrane manufacturer to be included in their SystemWarranty.
- B. Bead Adhesive: Insulation manufacturer's recommended bead adhesive, two-component, low-rise polyurethane insulation adhesive, in accordance with the manufacturer's latest published installation requirements, applied in beads for adhesive attachment of insulation with bead spacing as recommended by manufacturer.
- C. Provide adhesive manufacturer's Insulation Adhesive Test Report.

#### PART 3 - EXECUTION

#### 3.1 PREPARATION

A. Clean deck. If necessary, repair deteriorated or non-serviceable steel deck in accordance with Section 07015.

ROOF AND DECK INSULATION

ROOF IMPROVEMENTS-2016 December 1, 2016

# 3.2 INSTALLATION

- A. Verify and document in Daily Report that the existing deck/substrate is functional; insulation board is free from moisture and suitable as substrate for roof membrane.
- B. Install insulation in accordance with the primary roofing materials manufacturer's latest published recommendations.

**END OF SECTION** 

**ROOF AND DECK INSULATION** 

07220-3

ROOF IMPROVEMENTS-2016 December 1, 2016

# SECTION 07530 THERMOPLASTIC TPOMEMBRANE SYSTEM

# PART 1 - GENERAL

#### 1.1 DESCRIPTION

- A. <u>Base Bid</u>: Installation of fully adhered TPO roof membrane and flashings.
- B. The roof system (membrane, flashings, accessories, and insulation) shall qualify for the Manufacturer's Twenty (20) Year No Dollar Limit (NDL) System Guarantee. The Warranty shall be fully transferable.

# 1.2 RELATED SECTIONS

- A. Section 06100 Rough Carpentry
- B. Section 07220 Roof and Deck Insulation
- C. Section 07600 Flashings and Sheet Metal

#### 1.3 EXTENT OF WORK

- A. Provide all labor, material, tools, equipment, and supervision necessary to complete the installation of a .060" (60-mil) thick, white, reinforced TPO (Thermoplastic Polyolefin) membrane, and flashings as specified herein and as indicated on the Drawings in accordance with the manufacturer's most current specifications, details, and the Specifications and Drawings, whichever is more stringent.
- B. Contractor shall be fully knowledgeable of all requirements of the Contract Documents and shall make themselves aware of all job site conditions that will affect their work.
- C. Contractor shall confirm all given information and advise the Roof Consultant and Architect, prior to bid, of any conflicts that will affect their cost proposal.
- D. Any Contractor who intends to submit a bid using a roofing system other than the approved manufacturers must submit for pre-qualification in writing a minimum of four calendar days prior to the bid date. Any Contractor who fails to submit all information as requested will be subject to rejection. Bids stating "as per plans and specs" will be unacceptable.

#### 1.4 SUBMITTALS

- A. Prior to starting work, the Contractor must submit the following:
  - 1. Shop drawings showing layout, details of construction and identification of materials.

TPO MEMBRANE 07530-4

ROOF IMPROVEMENTS-2016 December 1, 2016

- 2. Sample of the manufacturer's Twenty (20) Year NDL Membrane System Warranty, and copy of the Application for Warranty.
- 3. Submit a letter of certification from the manufacturer, which certifies that the Contractor has been authorized a minimum of 5 years to install the manufacturer's Twenty Year NDL System Warranty and list foremen who have received training from the manufacturer along with the dates training was received.
- 4. For mechanically fastened systems, certification from the membrane manufacturer indicating the fasteners are capable of providing a static back out resistance of 300 pounds minimum.
- 5. Certification from the membrane manufacturer indicating the membrane thickness over the reinforcing scrim (top ply membrane thickness) is nominal .015" (15-mil).
- 6. Certification of the manufacturer's warranty reserve.
- 7. Copy of the Energy Star Rebate Application to the primary electric power provider for the Project, as applicable.
- 8. Copy of the pre-existing damage documentation.
- B. Upon completion of the installed work, submit:
  - 1. Copies of the manufacturer's final inspection prior to the issuance of the manufacturer's warranty.

#### 1.5 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to the job site in the manufacturer's original, unopened containers or wrappings with the manufacturer's name, brand name and installation instructions intact and legible. Deliver in sufficient quantity to permit work to continue without interruption.
- B. No overnight rooftop storage will be permitted.
- C. Comply with the manufacturer's written instructions for proper material storage.
  - 1. Store membrane in the original undisturbed plastic wrap in a cool, shaded area and cover with light-colored, breathable, waterproof tarpaulins. Membrane that has been exposed to the elements for approximately 7 days must be prepared with manufacturer's membrane cleaner prior to hot air welding.
  - 2. Store curable materials (adhesives and sealants) between 60 degrees F and 80 degrees F in dry areas protected from water and direct sunlight. If exposed to lower temperature, restore to 60 degrees F minimum temperature before using.
  - 3. Store materials containing solvents in dry, well-ventilated spaces with proper fire and safety precautions. Keep lids on tight. Use before expiration of their shelf life.

TPO MEMBRANE 07530-5

ROOF IMPROVEMENTS-2016 December 1, 2016

D. Any materials which are found to be damaged shall be removed and replaced at the applicator's expense.

# 1.6 WORK SEQUENCE

- A. Schedule and execute work to prevent leaks and excessive traffic on completed roof sections. Care should be exercised to provide protection for the interior of the building and to ensure water does not flow beneath any completed sections of the membrane system.
- B. Furnish and install temporary membrane protection for all foot and equipment traffic required over newly installed completed roofing sections.
- C. Do not disrupt activities in occupied spaces.

#### 1.7 USE OF THE PREMISES

- A. Before beginning work, the Contractor must secure approval from the building owner's representative for the following:
  - 1. Areas permitted for personnel parking.
  - 2. Access to the site.
  - 3. Areas permitted for storage of materials and debris.
  - 4. Areas permitted for the location of cranes, hoists and chutes for loading and unloading materials to and from the roof.

#### 1.8 EXISTING CONDITIONS

A. If discrepancies are discovered between the existing conditions and those noted on the drawings, immediately notify the Architect and Roof Consultant by phone and solicit the manufacturer's approval prior to commencing with the work. Necessary steps shall be taken to make the building watertight until the discrepancies are resolved.

# 1.9 TEMPORARY FACILITIES AND CONTROLS

- A. Temporary Utilities:
  - 1. Water, power for construction purposes and lighting are available at the site and will be made available to the Contractor, by prior approval of the Owner; and said use will not interfere with the building's operations.
  - 2. Provide all hoses, valves and connections for water from source designated by the owner when made available.
  - 3. When available, electrical power should be extended as required from the source. Provide all trailers, connections and fused disconnects.

TPO MEMBRANE 07530-6

ROOF IMPROVEMENTS-2016 December 1, 2016

# B. Temporary Sanitary Facilities

1. Sanitary facilities will not be available at the job site. The Contractor shall be responsible for the provision and maintenance of portable toilets or their equal.

# C. Building Site:

- 1. Contractor shall use reasonable care and responsibility to protect the building and site against damages. The contractor shall be responsible for the correction of any damage incurred as a result of the performance of the Contract.
- A pre-roof construction walk-through of the interior and exterior of the building shall be performed by the Contractor's Project Manager and a representative of the Owner to document all pre-existing damage by digital photographs or by video, to be submitted to the Architect and Roof Consultant. At the end of the Project, the correction of all roof related damages not previously documented, shall be the responsibility of the Contractor to correct.
- 3. The Contractor shall remove all debris from the job site in a timely and legally acceptable manner so as to not detract from the aesthetics or the functions of the building.

# D. Security:

1. Comply with the owner's requirements for personnel identification, inspection and other security measures.

# 1.10 JOB SITE PROTECTION

- A. The Contractor shall adequately protect building, paved areas, service drives, lawn, shrubs, trees, etc. from damage while performing the required work. Provide canvas, boards and sheet metal (properly secured) as necessary for protection and remove protection material at completion. The contractor shall repair or be responsible for costs to repair all property damaged during the roofing application.
- B. During the Contractor's performance of the work, the building owner will continue to occupy the existing building. The contractor shall take precautions to prevent the spread of dust and debris, particularly where such material may sift into the building. The Contractor shall provide labor and materials to construct, maintain and remove necessary temporary enclosures to prevent dust or debris in the construction area(s) from entering the remainder of the building.
- C. Do not overload any portion of the building, either by use of or placement of equipment, storage of debris, or storage of materials.
- D. Protect against fire and flame spread. Maintain proper and adequate fire extinguishers.
- E. Take precautions to prevent drains, gutters and downspouts from clogging during the roofing application. Remove debris at the completion of each day's work and clean drains and gutters if required. At completion, test drains and gutters to ensure the system is free running and drains are watertight. Remove strainers and plug drains in areas

TPO MEMBRANE 07530-7

ROOF IMPROVEMENTS-2016 December 1, 2016

Where work is in progress. Install flags or other telltales on plugs. Remove plugs each night and replace strainers.

F. Remove all traces of piled bulk materials and return the job site to its original condition upon completion of the work.

# 1.11 WORKMANSHIP

- A. Applicators installing new roof, flashing and related work shall be factory trained and approved by the manufacturer they are representing.
- B. All work shall be of highest quality and in strict accordance with the manufacturer's published specifications and to the building owner's and Roof Consultant's satisfaction.
- C. Provide at least one thoroughly trained and experienced, non-working English speaking superintendent on the job at all times roofing work is in progress.

#### 1.12 QUALITY ASSURANCE

- A. The roofing system must achieve a UL Class A and fastening pattern equal to FM 1-75 rating.
- B. Unless otherwise noted in this specification, the Contractor must strictly comply with the manufacturer's current specifications and details.
- C. The roofing system must be installed by an applicator authorized and trained by the manufacturer in compliance with shop drawings as approved by the manufacturer.
- D. Provide an adequate number of experienced workmen regularly engaged in this type of work who are skilled in the application techniques of the materials specified.
- E. There shall be no deviations made from this specification or the approved shop drawings without the prior written approval of the Architect and Roof Consultant. Any deviation from the manufacturer's installation procedures must be supported by a written certification on the manufacturer's letterhead and presented for the Architect and Roof Consultant's consideration.
- F. Before commencement of the roof construction, the Contractor shall arrange for inspections to be made by a non-sales technical representative of the membrane manufacturer, as follows:
  - 1. On the first day of roof membrane installation;
  - 2. A minimum of one interim inspection;
  - 3. A final inspection in order to determine whether or not corrective work will be required before the warranty will be issued.
  - 4. Notify the Architect and Roof Consultant seventy-two (72) hours prior to the manufacturer's inspections, and coordinate the inspection visits to coincide with visits by the Contractor's Project Manager, and the Roof Consultant.
  - 5. Provide copies of the membrane manufacturer's inspection reports to the Architect and

TPO MEMBRANE 07530-8

ROOF IMPROVEMENTS-2016 December 1, 2016

Roof Consultant not later than five (5) calendar days following the inspection.

# 1.13 JOB CONDITIONS, CAUTIONS AND WARNINGS

- A. Material Safety Data Sheets (MSDS) must be on location at all times during the transportation, storage and application of materials.
- B. When positioning membrane sheets, locate all field splices away from low spots and out of drain sumps. All field splices shall be shingled to prevent bucking of water.
- C. When loading materials onto the roof, the installer must comply with the requirements of the building owner to prevent overloading and possible disturbance to the building structure.
- D. Proceed with roofing work only when weather conditions are in compliance with the manufacturer's recommended limitations, and when conditions will permit the work to proceed in accordance with the manufacturer's requirements and recommendations.
- E. Proceed with work so new roofing materials are not subject to construction traffic. When necessary, new roof sections shall be protected and inspected upon completion for possible damage.
- F. Provide temporary protection, such as 3/4 inch thick plywood over minimum 1-inch thick rigid insulation board, for all roof areas exposed to traffic during construction. Plywood must be smooth and free of fasteners and splinters. Ensure temporary protection is weighed down to prevent wind uplift.
- G. The surface on which the insulation or roofing membrane is to be applied shall be clean, smooth, dry, and free of projections or contaminants that would prevent proper application of or be incompatible with the new installation, such as fins, sharp edges, foreign materials, oil and grease.
- H. New roofing shall be complete and weathertight at the end of each workday.
- I. Contaminants such as grease, fats and oils shall not be allowed to come in direct contact with the roofing membrane.
- J. Pro-rated System Warranties shall not be accepted. The System Warranty shall be fully transferable, and transfer of the Warranty shall not be unreasonably withheld.

Evidence of the manufacturer's warranty reserve shall be included as part of the project submittals for the Roof Consultant's approval.

PART 2 - PRODUCTS

TPO MEMBRANE 07530-9

ROOF IMPROVEMENTS-2016 December 1, 2016

#### 2.1 GENERAL

- A. All components of the specified roofing system shall be products of the following approved manufacturers:
  - Carlisle-Syntec
  - 2. GAF Mfr.
  - 3. Firestone Building Products
  - 4. Pre-bid approved equivalent.
- B. All products (including insulation, fasteners, fastening plates and edgings) must be manufactured and supplied by the roofing system manufacturer and covered by the warranty. Any products required by the Project not manufactured by the roofing system manufacturer shall be approved for use, in writing, by the roofing systems manufacturer.

#### 2.2 MEMBRANE

A. Furnish .060" (60-mil) thick, white reinforced TPO (Thermoplastic Polyolefin) membrane as needed to complete the roofing system. Membrane thickness over the reinforcing scrim (top-ply thickness) shall be nominal .015" thick (15-mil).

### 2.3 INSULATION/UNDERLAYMENT

A. The rigid insulation board shall be as specified in Section 07220.

# 2.4 ADHESIVES AND CLEANERS

All products shall be furnished by the primary membrane manufacturer, and specifically formulated for the intended purpose.

- A. Bonding Adhesive
- B. Edge Sealant
- C. Water Cut-Off Mastic and Sealant
- D. Pocket Sealant
- E. Membrane Cleaner

# 2.5 FASTENERS AND PLATES

A. Seam Fastening Plates at Concrete Walls: 1-1/4" long expansion anchor with a zinc plated steel drive pin, 8 inches on center maximum, with 3" diameter round galvanized plate.

TPO MEMBRANE 07530-10

ROOF IMPROVEMENTS-2016 December 1, 2016

#### PART 3 - EXECUTION

# 3.1 GENERAL

- A. Inspect the deck/existing spudded roof assembly and verify preparation to provide an acceptable installation of the membrane system.
- B. Comply with the manufacturer's published instructions for the installation of the membrane roofing system including proper substrate preparation, jobsite considerations and weather restrictions.
- C. Position sheets to accommodate contours of the roof deck and shingle splices to avoid bucking water.

#### 3.2 MEMBRANE PLACEMENT AND ATTACHMENT

- A. Unroll and position membrane without stretching. Provide and secure both perimeter and field membrane sheets in accordance with the manufacturer's most current specifications, details, the Contract Document Specifications and Drawings, and FM 1-75.
- B. Secure the membrane with bonding adhesive, in strict accordance with the manufacturer's requirements to qualify for a Twenty (20) Year NDL system warranty.
- C. Install adjoining membrane sheets in the same manner in accordance with the manufacturer's specifications. Using a heavy roller, recommended by the membrane manufacturer, roll the membrane into the bed of adhesive to insure solid adhesion.

# 3.3 MEMBRANE SPLICING/HOT AIR WELDING PROCEDURES

- A. Perform calibration test of the automatic hot air welding machine or hot air hand welder in accordance with the manufacturer's specifications, with Roof Consultant present prior to commencing installation. Record calibration test in Daily Logs.
- B. Hot air weld the membrane using the calibrated automatic hot air welding machine or hot air hand welder in accordance with the manufacturer's specifications. At all splice intersections, roll the seam with a silicone roller prior to membrane seam cooling.
- C. Probe all seams once the hot air welds have thoroughly cooled (approximately 30 minutes). Document in Daily Log that all seams have been probed and the results of probes.
  - Provide a minimum of two (2) side lap seam "tear" samples, indicating compliant seaming as indicated
- by exposed scrim in lap "tear".
   Date and retain samples including one (1) dated sample for Roof Consultant's Field Observer.
- E. Repair all seam deficiencies the same day they are discovered. Document in Daily Log when deficient seams are discovered and repaired.
- F. Apply cut edge sealant on all cut edges of reinforced membrane (where the scrim reinforcement is exposed) after seam probing is complete.

TPO MEMBRANE 07530-11

ROOF IMPROVEMENTS-2016 December 1, 2016

# 3.4 FLASHING

- A. Flashing of parapets, curbs, expansion joints and other parts of the roof must be performed using reinforced TPO membrane.
- B. Non-reinforced TPO membrane can be used for flashing pipe and tube penetrations, sealant pockets, scuppers, as well as inside and outside corners, only when the use of pre-fabricated accessories is not feasible, in accordance with the membrane manufacturer, Contract Document requirements, and if approved by Roof Consultant in writing.

#### 3.5 WALKWAYS

- A. Install walkway pads where shown in the Drawings, and as required by the membrane manufacturer.
- B. Hot air weld walkway pads to the membrane in accordance with the manufacturer's specifications.

# 3.6 DAILY SEAL

- A. On phased roofing, when the completion of flashings and terminations is not achieved by the end of the work day, a daily seal must be performed to temporarily close the membrane to prevent water infiltration.
- B. Complete an acceptable membrane seal in accordance with the manufacturer's requirements.

#### 3.7 CLEAN UP

- A. Perform daily clean-up to collect all wrappings, empty containers, paper, and other debris from the project site. Remove all debris from roof on a daily basis. Overnight storage of debris is prohibited. Upon completion, all debris must be disposed of in a legally acceptable manner.
- B. Prior to the manufacturer's inspection for warranty and request for Substantial Completion site visit, the applicator must perform a pre-inspection to review all work and to verify all flashing has been completed as well as the application of all caulking. Submit pre-inspection report to Architect and Roof Consultant no later than three (3) calendar days following inspection.

#### **END OF SECTION**

TPO MEMBRANE 07530-12

ROOF IMPROVEMENTS-2016 December 1, 2016

### SECTION 076000 FLASHING AND SHEET METAL

# PART I - GENERAL

#### 1.1 WORK INCLUDED

- A. Install flashing and sheet metal as indicated on Drawings and in these specifications as required for a complete and proper installation. The following items are included:
  - 1. Curb Flashing.
  - 2. Counter flashing.
  - 3. Counter flashing and termination bars, roof mounted mechanical equipment, vent stacks, and other terminations.
  - 4. Coping cap metal.

### 1.2 RELATED WORK

- A. Section 07015 Preparation for Reroofing
- B. Section 06100 Rough Carpentry
- C. Section 07220 Roof and Deck Insulation
- D. Section 07530 Fully Adhered Single Ply Membrane System

# 1.3 SUBMITTALS

- A. Submit shop drawings and product data under provisions of Section 01300.
- B. Describe material profile, jointing pattern, jointing details, fastening methods, and installation details.
- C. Submit samples under provisions of Section 01300.
- D. Provide full sized sample of metal flashing and post supports illustrating typical seam, external corner, internal corner, material, and finish.

#### 1.4 QUALITY ASSURANCE

A. Perform work in accordance with SMACNA and NRCA standard details and requirement.

# 1.5 QUALIFICATIONS

A. Company specializing in sheet metal flashing work with a minimum of 10-years documented experience.

# 1.6 STORAGE AND HANDLING

A. Stack pre-formed materials to prevent twisting, bending, or abrasion, and to provide ventilation.

FLASHING AND SHEET METAL

ROOF IMPROVEMENTS-2016 December 1, 2016

- B. Prevent contact with materials during storage that may cause discoloration, staining, or damage. "White rust" is considered damage and is cause for rejection.
- C. Deliver materials to the job site in the manufacturer's original, unopened packages and containers bearing manufacturer's name and label.

# 1.7 WARRANTY

- A. Sheet Metal work and accessories to be included in Two-Year Contractor's Warranty.
- B. Provide pre-finished metal manufacturer's twenty-year coating guarantee.
- C. Provide pre-finished metal manufacturer's twenty-year galvanized steel guarantee.

# PART 2 - PRODUCTS

#### 2.1 SHEET METALS

- A. Sheet metal flashing: 24-gauge galvanized steel.
- B. Sheet metal flashing:
  - 1. Base Bid: 24-gauge galvanized steel, TPO coated metal.
- C. Pre-finished metal: 24-gauge galvanized steel, Kynar 500.
- D. Lead: FS QQ-L-171e, hard lead, containing no less than 4 percent or more than 6 percent antimony.
- E. Copper: 16 oz. sheet

# 2.2 SHEET METAL COMPONENTS (as applicable)

- A. Counterflashing: 24-gauge galvanized steel.
- B. Edge flashing, Expansion Joint Covers, Coping, Conductor heads, Gutters, and Downspouts: Prefinished 24-gauge galvanized steel.
- C. Two-piece fascia extension is required whenever fascia vertical height exceeds 8 inches.
- D. Downspout Hangers: Minimum 1/8-inch by 1-inch galvanized steel.
- E. Cover Plates, End Caps and Miscellaneous Sheet Metal: Same materials, gauge and profile as edge metal or expansion joint material.
- F. Cleats: 22-gauge galvanized steel.
- G. Tubular Penetration Sleeves and Rain Hoods: Minimum 24-gauge galvanized steel.
- H. Lead Sleeves: Minimum 2 1/2-pound lead.

FLASHING AND SHEET METAL

ROOF IMPROVEMENTS-2016 December 1, 2016

- I. Splash Block: Pre-cast concrete at ground level, where downspout discharges on surfaces other than asphalt or concrete only.
- J. Termination Bar: 1/8-inch by 1-inch galvanized bar with pre-drilled holes minimum 8- inches on center.

# 2.3 ACCESSORIES

- A. Solder: ANSI/ASTM B 32 50/50 type.
- B. Elastomeric Membrane: 30 mil-thick PVC vinyl water barrier.
- C. Ice and Water Shield: as manufactured by W. R. Grace and Company, or approved equivalent.
- D. Clamping Collar: Stainless steel of size necessary to fit over vent or pipe circumference, as applicable.
- E. Self-Sealing Moisture Barrier Sheet: Heat resistant, self –adhering moisture barrier.

# 2.4 SEALANT

- A. Type I: Application exposures to sunlight, ASTM C-920-87, Federal Specification TT-S-00230-C one component gun-grade polyurethane sealant suitable for continuous immersion and resistant to asphalt products.
- B. Type II: Applications not exposed to sunlight, butyl rubber based.
- C. Hot vent sealant: one component neutral moisture curing silicone sealant.

#### 2.5 SCHEDULE OF FASTENERS

- A. Exposed fasteners: Shall be non-ferrous stainless steel with stainless steel bonded neoprene or EPDM washers.
- B. Fasteners shall be compatible to all materials to which they come in contact.
- C. Cleat, Counter-flashing, and Surface Fastened Components.
  - 1. Wood Substrate: No. 10 non-ferrous stainless steel wood screws with stainless steel bonded neoprene washers of length necessary to penetrate wood substrate one inch.
  - 2. Metal Substrate: Minimum No. 10 non-ferrous stainless steel sheet metal screws or as necessary to suit application with stainless steel bonded neoprenewashers.
- D. Blind Pop-Rivets: Non-ferrous Stainless steel.

# 2.6 FABRICATION

- A. Form sections to match existing profiles, true to shape, accurate in size, square, and free from distortion or defects.
- B. Fabricate continuous cleats and starter strips of same material as sheet, inter-lockable with sheet.

FLASHING AND SHEET METAL

ROOF IMPROVEMENTS-2016 December 1, 2016

- C. Form pieces in longest practical lengths.
- D. Hem exposed edges of metal 1/2-inch; miter and seam corners.
- E. Form materials with cover plate seam.
- F. Fasten and seal metal joints.
- G. Fabricate corners from one piece with minimum 18-inch and maximum 36-inch long legs; fasten for rigidity, seal with sealant.
- H. Fabricate vertical faces with bottom edge formed outward 1/4-inch and hemmed to form drip.
- I. Form edge metal/fascia as existing profiles as specified herein and as shown on Drawings.
- J. Form sections square, true, and accurate in size, in maximum possible lengths and free of distortion or defects detrimental to appearance or performance. Allow for expansion at joints
- K. Enlarge holes for fastening counter flashing, coping, and pressure bars as necessary to allow for thermal expansion and contraction. Cover exposed holes with appropriate washers.
- L. All fabrication and installation of sheet metal shall be in accordance with the latest published SMACNA and NRCA guidelines and recognized roofing and sheet metal industry standards.

#### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Verify roof openings, curbs, pipes, sleeves, ducts, or vents through roof are solidly set, and cant strips in place, and nailing strips located.
- B. Verify membrane termination and base flashings are in place, sealed, and secure.
- C. Beginning of installation means acceptance of existing conditions.

# 3.2 PREPARATION

- A. Field measure site conditions prior to fabricatingwork.
- B. Apply bituminous protective backing on surfaces in contact with dissimilar materials.
- C. Tie-ins or contact with dissimilar metals: Install separation layer of elastomeric membrane between metal surfaces.

#### 3.3 INSTALLATION - GENERAL

- A. Provide flashings of materials indicated on Drawings at all junctures of the roof with perimeters, curbs, mechanical, electrical equipment, etc., that a completely watertight installation is achieved.
- B. Fabricate and install sheet metal work with lines, arises and angles sharp and true, and plane surfaces free from warps and buckles. Bead or return all exposed edges. Tin metal for full area of contact on soldered seams and joints. Do soldering slowly with well heated coppers, thoroughly

FLASHING AND SHEET METAL

ROOF IMPROVEMENTS-2016 December 1, 2016

heating seams and completely filling them with solder.

- C. Prime all sheet metal to receive roofing plies or to be set in mastic.
- D. Submit details not covered in Drawings for approval by Owner or Roof Consultant.
- E. Install starter and edge strips, and cleats before starting installation.
- F. Secure flashings in place using concealed fasteners. Use exposed fasteners only in locations approved by Roof Consultant.
- G. Lock and seal all joints.
- H. Fit flashings tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- I. Fasten sheet metal with approved fasteners at a minimum of 12 inches on centers unless otherwise specified in these Specifications or the Drawings.

#### 3.4 TWO-PIECE COUNTERFLASHING INSTALLATION

- A. Secure counterflashing receiver over base flashing to substrate with appropriate fasteners. Secure counterflashing to receiver with stainless steel screws with bonded neoprene washers spaced 12-inches on centers.
- B. Pop-rivet and solder all seams.

# 3.5 CLEAT INSTALLATION

A. Install cleats for edge/coping flashing with appropriate fasteners on eight-inch centers.

# 3.4 COPING CAP INSTALLATION

- A. Fabricate and install these flashings according to the latest published SMACNA and NRCA guidelines and in accordance with recognized roofing and sheet metal industry standards.
- B. All horizontal joints shall have a 1" standing seam as shown in the Drawings.
- C. Vertical flanges shall have a minimum height of three (3) inches. High side (outside) shall be cleated continuously; other side mechanically fastened as shown on the drawings.
- D. All corners shall be shop mitered, and all shall not be more than two feet beyond a corner in either direction.

# **END OF SECTION**

FLASHING AND SHEET METAL

ROOF IMPROVEMENTS-2016 December 1, 2016

#### **SECTION 079000**

#### JOINT SEALANTS

#### **PART I - GENERAL**

#### 1.01 DESCRIPTION OF WORK

- A. Miscellaneous sealant work related to new roof system, flashing installation, perimeter joints, control and expansion joints. Control and expansion joints in Courtyard masonry walls above 6' (ALTERNATE BID).
- B. Security sealant work up to 6' at control and expansion joints in Courtyard masonry walls (ALTERNATE BID).

#### 1.02 GENERAL PERFORMANCE

A. Joint sealers are required to establish and maintain airtight and waterproof continuous seals on a permanent basis, within recognized limitations of wear and aging for each application. Failures of installed sealers to comply with this requirement will be recognized as failures of materials and workmanship.

### 1.03 SUBMITTALS

A. Submit manufacturer's product specifications, handling/installation/curing instructions, and performance tested data sheets for each product required.

# 1.04 **JOB CONDITIONS**

A. Do not proceed with installation of sealants under unfavorable weather conditions. Install elastomeric sealants when temperature is in lower third of temperature range recommended by manufacturer for installation.

# **PART 2 - PRODUCTS**

#### 2.01 MATERIALS

- A. Miscellaneous sealant: Single-component, moisture-cured urethane sealant suitable for exterior applications meeting the following criteria: ASTM C 920, Type S, Grade NS, Class 25, Use T, NT, M, A, G and O.
  - 1. Sonneborn NP-1
  - 2. Approved equivalent.
- B. Security Sealant: Single-component, pick-resistant, moisture-curing, aliphatic, non-sag, polyurethane sealant for security, ASTM C920 Type S, Grade NS, Class 25, Use NT, T, M, A, G and O.
  - 1. Acceptable Product: MasterSeal CR 195 (Formally Sonolastic Ultra) by BASF.
  - 2. Approved equivalent.

JOINT SEALANTS 079000-1

ROOF IMPROVEMENTS-2016 December 1, 2016

- C. Provide type of joint primer/sealer recommended by sealant manufacturer for joint surfaces to be primed or sealed.
- D. Provide polyethylene bond breaker tape or other plastic tape as recommended by sealant manufacturer, to be applied to sealant-contact surfaces where bond to substrate or joint filler must be avoided for proper performance of sealant. Provide self-adhesive tape where applicable.
- E. Provide compressible backer rod stock of polyethylene foam, polyurethane foam polyethylene jacketed polyurethane foam, butyl rubber foam, neoprene foam or other flexible, permanent, durable non-absorptive material as recommended by sealant manufacturer for back-up of and compatibility with sealant. Where used with hot-applied sealant, provide heat-resistant type that will not be deteriorated by sealant application temperature as indicated.

# **PART 3 - EXECUTION**

# 3.01 INSPECTION

A. Installer must examine substrates, (joint surfaces) and conditions under which joint sealer work is to be performed, and must notify Contractor in writing of unsatisfactory conditions.
 Do not proceed with joint sealer work until unsatisfactory conditions have been corrected in a manner acceptable to Installer.

### 3.02 **JOINT PREPARATION**

- A. Clean joint surfaces immediately before installation of gaskets, sealants or caulking compounds. Remove all dirt, all old sealants, insecure coatings, moisture and other substrates that could interfere with seal of gasket or bond of sealant or caulking compound. Etch joint bonding surfaces as recommended by sealant manufacturer. Roughen vitreous and glazed joint surfaces as recommended by sealant manufacturer.
- B. Prime or seal joint surfaces where indicated, and where recommended by sealant manufacturer. Confine primer/sealer to areas of sealant bond; do not allow spillage or migration onto adjoining surfaces.

#### 3.03 INSTALLATION

- A. Comply with manufacturer's printed instruction except where more stringent requirements are shown or specified, and except where manufacturer's technical representative directs otherwise.
- B. Set joint filler units at depth or position in joint as indicated to coordinate with other work, including installation of bond breakers, backer rods and sealants. Do not leave voids or gaps between ends of joint filler units.
- C. Install sealant backer rod for liquid-applied sealants, except where shown to be omitted or recommended to be omitted by sealant manufacturer for application indicated.

JOINT SEALANTS 079000-2

ROOF IMPROVEMENTS-2016 December 1, 2016

- D. Install bond breaker tape where required by manufacturer's recommendations to ensure that liquid-applied sealants will perform as intended.
- E. Employ only proven installation techniques, which will ensure that sealants are deposited in uniform, continuous ribbons without gaps or air pockets, with complete "wetting" of joint bond surfaces equally on opposite sides. Except as otherwise indicated, fill sealant rabbet to a slightly concave surface, slightly below adjoining surfaces. Where horizontal joints are between a horizontal surface and vertical surface, fill joint to form a slight cove, so that joint will not trap moisture and dirt.
- F. Install liquid-applied sealant to depths as shown or, if not shown, as recommended by sealant manufacturer but within the following general limitations, measured at center (thin) section of beads; (not applicable to sealants in lapped joints):
  - 1. For normal moving joints sealed with elastomeric sealants but not subject to traffic, fill joints to a depth equal to 50% of joint width, but neither more than 1/2" deep nor less than 1/4" deep.
  - 2. For joints sealed with non-elastomeric sealants and caulking compounds, fill joints to a depth in range of 75% to 125% of joint width.
- G. Do not allow sealants or compounds to overflow from confines of joints, or to spill onto adjoining work, or to migrate into voids of exposed finishes. Clean adjoining surfaces by whatever means may be necessary to eliminate evidence of spillage.

# 3.04 CURE AND PROTECTION

A. Cure sealants and caulking compounds in compliance with manufacturer's instructions and recommendations, to obtain high early bond strength, internal cohesive strength and surface durability. Cure and protect sealants in a manner that will minimize increases in modulus of elasticity and other accelerated aging effects. Replace or restore sealants that are damaged or deteriorated during construction period.

#### 3.05 TESTING

- A. Contractor shall notify A/E when joint sealants have cured sufficiently to allow A/E to perform a minimum of three (3) pull tests, at locations selected by A/E.
- B. In the event that pull test results are not satisfactory, Contractor shall remove and replace failed sealants as directed by A/E, at no additional cost to Owner.

# **END OF SECTION**

JOINT SEALANTS 079000-3

ROOF IMPROVEMENTS-2016 December 1, 2016

#### SECTION 15000 INCIDENTAL MECHANICAL WORK

#### PART 1 - GENERAL

# 1.01 DESCRIPTION

For those Projects requiring incidental Mechanical Work; includes installation of temporary mechanical work, disconnects, reconnects, and other incidental mechanical, and plumbing work, not specified herein but necessary for the successful execution of the Work as set forth in the Contract Documents.

# PART 2 - PRODUCTS

#### 2.1 MATERIAL AND WORKMANSHIP

- A. All materials and equipment required shall be:
  - 4. Installed by mechanics skilled in their trades, working under the direct supervision of competent experienced foremen or superintendents.
  - 5. Installed in compliance with all applicable Occupational Safety and Health Administration Rules and Regulations.
  - 6. Installed in compliance with all applicable local, Ventilating, Air Conditioning, and Plumbing Codes.
- B. Prior to conducting any mechanical work, perform a complete survey of all roof top mechanical equipment with the Owner's representative to verify the functional condition of the equipment. Document the survey in writing, signed by the Owner's representative and the Contractor. Provide a copy to the Roof Consultant.

# 2.2 TIMELY PLACEMENT OF MATERIALS AND EQUIPMENT

A. Install items specified in Paragraph 2.1 of this Section at the proper time during progress of construction. Coordinate work operations with other trades as necessary.

#### PART 3 - EXECUTION

#### 3.01 GENERAL

- A. Install temporary mechanical work necessary to comply with the work of other Sections.
- B. Remove temporary mechanical work necessary to comply with other Sections at completion of Project and correct any damage to property.
- C. At the end of the Project, any non-functional mechanical equipment (not noted on the survey list) will be the responsibility of the Contractor to restore to functional working order.

  END OF SECTION

INCIDENTAL MECHANICAL WORK

16010-1

JIM WHITTEN ROOF CONSULTANTS, LLC
WILLIAMSON COUNTY JAIL AND SHERIFF'S OFFICE

ROOF IMPROVEMENTS-2016 December 1, 2016

### SECTION 16010 INCIDENTAL ELECTRICAL WORK

### PART 1 - GENERAL

### 1.01 DESCRIPTION

A. For those Projects requiring incidental Electrical Work: Included installation of temporary power, disconnects, reconnects, lightning arrestor systems, and other incidental electrical work necessary to perform the Work of the Contract Documents.

### PART 2 - PRODUCTS

### 2.1 MATERIALS AND WORKMANSHIP

- A. All materials and equipment required shall be:
  - 5. Approved by Underwriters Laboratories and solabeled.
  - 6. For wire and cable, marked as required by Article 310-1- National Electrical Code.
  - 7. Installed by mechanics skilled in their trades, working under the direct supervision of competent experience foremen or superintendents.
  - 8. Installed in compliance with all applicable Occupational Safety and Health Administration and applicable local electrical codes.
- B. Prior to conducting any electrical work, perform a complete survey of all roof top electrical lines and service with the Owner's representative to verify the functional condition of the electrical service. Document the survey in writing, signed by the Owner's representative and the Contractor. Provide a copy to the Roof Consultant.

### 2.2 TIMELY PLACEMENT OF MATERIALS AND EQUIPMENT

A. Install items specified in Paragraph 2.01 of this Section at the proper time during progress of construction. Coordinate work operations with other trades as necessary.

### **PART 3 - EXECUTION**

### 3.01 GENERAL

- A. Provide temporary electrical power as required to perform the Work of the Contract Documents.
- B. Remove all temporary electrical items at completion of Project and correct any damage to property.

INCIDENTAL ELECTRICAL WORK

JIM WHITTEN ROOF CONSULTANTS, LLC WILLIAMSON COUNTY JAIL AND SHERIFF'S OFFICE

ROOF IMPROVEMENTS-2016 December 1, 2016

C. At the end of the Project, any non-functional electrical service (not noted on the survey list) will be the responsibility of the Contractor to restore to functional working order.

**END OF SECTION** 

INCIDENTAL ELECTRICAL WORK

16010-2

JIM WHITTEN ROOF CONSULTANTS, LLC
WILLIAMSON COUNTY JAIL AND SHERIFF'S OFFICE

ROOF IMPROVEMENTS-2016 December 1, 2016

### SECTION 16670 LIGHTNING PROTECTION SYSTEM FOR REROOFING STRUCTURES

### PART I. GENERAL

- **1.01 Objective:** To provide safety for the building and occupants by preventing damage to building structure caused by lightning.
- **1.02 Standards**: The following specifications and standards of the latest issue form a part of this specification:
  - (1) Lightning Protection Institute Installation Standard, LPI 175
  - (2) National Fire Protection Association Lightning Protection Standard, NFPA 780
  - (3) Underwriters Laboratories, Inc. Installation Requirements, UL96A
- **1.03 System Design:** The work covered by this section of the specifications consists of furnishing all labor, materials, and items of service required for the completion of a functional and unobtrusive lightning protection system as approved by the architect, engineer, and in strict accordance with this section of the specifications and the applicable contract drawings.

If any departure from the contract drawings or submittal drawings covered below are deemed necessary by the Contractor, details of such departures and reasons therefore shall be submitted as soon as practical to the architect/engineer for approval.

**Submittals:** Complete catalog cut sheets showing the type, and size of all conductors, through roof/through wall

assemblies, roof conductors, and air terminals shall be submitted to the architect and engineer for approval.

1.05 Quality Assurance: The lightning protection system shall conform to the requirements and standards for lightning protection systems of the LPI, UL, and NFPA. Upon completion, a certification letter and warranty by the installation company will be delivered to the owner. The certification letter and warranty ensures the system has been installed by a company who employs LPI certified Master Designers and Installers and the building structure is protected by a lightning protection system meeting current standards. The lightning protection contractor is required to provide a LPI Master Certification, LPI Re-conditioned Certification or LPI Limited Scope Report from Lightning Protection Institute – Inspection Program (LPI-IP), depending on the lightning protection scope of work.

### PART II. PRODUCTS

- **2.01 Standard:** The system to be furnished under this specification shall be the standard product of manufacturers regularly engaged in the production of lightning protection equipment and shall be the manufacturer's latest approved design. The equipment shall be UL listed and properly UL labeled.
- 2.02 The lightning protection contractor will be required to remove the existing lightning protection system and will reinstall any salvageable and new lightning protection components. During the lightning protection removal, the removed equipment must be deemed acceptable to suit the application where it is used in accordance with accepted industry standards and LPI, UL, and NFPA standard requirements, in order for the equipment to be utilized for the reinstallation process.

QUALIFIED MANUFACTURERS:

(1) Advanced Lightning Technology

INCIDENTAL ELECTRICAL WORK

16010-1

JIM WHITTEN ROOF CONSULTANTS, LLC
WILLIAMSON COUNTY JAIL AND SHERIFF'S OFFICE

ROOF IMPROVEMENTS-2016 December 1, 2016

(2) East Coast Lightning Equipment

- 2.03 Lightning Protection Equipment: All materials shall be copper and bronze and of the size, weight, and construction to suit the application and used in accordance with LPI, UL, and NFPA code requirements. Class I sized components may be utilized on roof levels 75 feet and below in height. Class II sized components are required for roof levels over 75 feet in height. Bolt type connectors and splicers shall be utilized on Class I and Class II structures. Pressure squeeze clamps are not acceptable. All mounting hardware shall be stainless steel to prevent corrosion.
- **2.04 Aluminum Components:** Aluminum materials may not be used except on roofs that utilize aluminum, galvalume or galvanized metal roofing components. On aluminum, galvalume or galvanized metal roofs or where aluminum, galvalume or galvanized metal parapet caps exist, the entire roof lightning protection equipment shall utilize aluminum components to insure compatibility. However, the down leads and grounding are to utilize copper with the bimetal transition occurring at the through roof assembly with an approved bimetal through roof assembly.
- **2.05 Surge Protection Devices:** A surge protection device at the main electrical service entrance is required by lightning protection standards. The surge protection device must comply with UL Standard 1449 as a Type 1 or Type 2 lightning rated unit of 20kA or more. It shall be the responsibility of the Electrical Contractor to install or verify that a surge protection device is installed on the main electrical service.

### PART III. EXECUTION

3.01.1 Installation: The installation shall be accomplished by an experienced installation company that is UL listed,

A member of the Lightning Protection Institute (LPI) and an employer of LPI Certified Master Installers of lightning protection systems and UL listed. A Certified Master Installer shall supervise the work. All equipment shall be installed in a neat, workmanlike manner. The system shall consist of a complete conductor network at the roof and include air terminals, connectors, splicers, bonds, copper down leads, and proper ground terminals. Copper down lead conductors shall be utilized even when aluminum is required on the roof. Down lead conductors in conduit shall not be brought directly through the roof. Through roof assemblies with solid brass or stainless steel rods shall be utilized for this purpose. Structural steel may be utilized in the installation as outlined by UL, NFPA, and LPI.

**3.01.2 Coordination**: The lightning protection installer will work with other trades to insure a correct, neat and Unobtrusive installation. The roofing contractor will be responsible for sealing and flashing all lightning protection roof penetrations as per the roof manufacturer's recommendations. However, the lightning protection contractor will be required to coordinate locations of through roofs as required. The lightning protection contractor will be required to remove the existing lightning protection system and will reinstall any salvageable and new lightning protection components.

The lightning protection contractor shall use a compatible adhesive to adhere lightning protection components to the roof when required. The lightning protection contractor shall furnish and install the adhesive and obtain an approval of the compatible adhesive from the roof manufacturer/contractor prior to the installation. Should the roofing contractor/manufacturer require any special walk pads, membrane patches, pavers, etc. under the components of the lightning protection system, it shall be the responsibility of the roofing contractor to furnish and install such items. The lightning protection installer shall be responsible for marking the roof with all conductor and/or pad locations.

It shall be the responsibility of the lightning protection installer to assure a sound bond to the main water service and to assure interconnection with other ground systems.

**3.02 Completion:** Upon completion of the installation, the lightning protection installer shall conform to the Requirements and standards for lightning protection systems of the LPI, UL, and NFPA. Upon completion the following certifications shall be delivered to the owner; a certification letter and warranty by the installation company, and a LPI

INCIDENTAL ELECTRICAL WORK

16010-2

JIM WHITTEN ROOF CONSULTANTS, LLC
WILLIAMSON COUNTY JAIL AND SHERIFF'S OFFICE

ROOF IMPROVEMENTS-2016 December 1, 2016

Master Certification, LPI Re-conditioned Certification or LPI Limited Scope Report from Lightning Protection Institute – Inspection Program (LPI-IP), depending on the lightning protection scope of work.

NOTE: FOR PROJECT CLARIFICATION, USE ONE PARAGRAPH OF PART IV IF PROJECT CONNECTS TO AN EXISTING STRUCTURE.

### PART IV. CLARIFICATION

**4.01 Clarification:** This specification recognizes that additions that are attached to a structure which does not fully comply with current lightning protection standards. Therefore, all attached structures shall be reviewed for compliance. The attached structure(s) not fully complying because of damaged systems, missing systems or improperly installed systems shall be fully protected and/or repaired in order to obtain all completion certifications and warranties for the owner.

**4.02** Clarification: This specification recognizes additions that are attached to a structure may not fully comply with current lightning protection standards. Therefore, lightning protection shall be provided for new buildings only. Upon completion of the installation, the installer shall furnish a completion certificate and warranty for the new addition only. In addition, a written report of findings and change request will be given on attached structure(s) in order for the facility to comply with current lightning protection standards. If no work is necessary, the completion certifications and warranties shall be provided for the entire structure.

NOTE: SPECIFYING PERSONNEL SHOULD USE ONLY ONE PARAGRAPH 4.01 IN ORDER TO CLARIFY PROJECT REQUIREMENTS AT BID TIME. IF, THE PROJECT IS NOT ATTACHED TO EXISTING STRUCTURE (S), DELETE PART IV.

NOTE: LIGHTNING PROTECTION PENETRATIONS AND/OR ATTACHMENT PROCEDURES SHOULD BE ADDRESSED IN THE ROOFING SECTION OF THE SPECIFICATIONS.

### PROPOSAL COST BREAKDOWN

# ROOF IMPROVEMENTS for WILLIAMSON COUNTY JUSTICE CENTER COURTHOUSE ANNEX, 405 MARTIN LUTHER KING STREET and WICO JAIL/SHERIFF'S OFFICE, 508 ROCK ST GEORGETOWN, TEXAS

Please complete all section below:

	complete all section below:		
NO.	ITEM	DESCRIPTION	Total Costs
1.0	JUSTICE CENTER		
	Total costs for roof improvements, per	Per all specifications provided by Jim	
1.1	specifications for Justice Center	Whitten Roof Consultants	\$
	Contingency Fee for Justice Center		<b>A.O.</b> O.O.O.
1.2	Sub-Total for all costs for Justice Center	Cost to include any and all labor, materials,	\$ 2,000
	roof reconstruction per specifications	equipment, insurance, bonds administration,	
1.3	por opcomouncing	overhead, and other expenditures.	\$
	SHERIFF'S OFFICE/JAIL		
2.0	SHERIFF S OFFICE/JAIL		
2.0	Total Costs for roof improvements per	Per all specifications provided by Jim	
	specifications for Sheriff's Office/Jail	Whitten Roof Consultants	
	Facility (See 2.3 and 2.4 for separate pricing		
2.1	element)		\$
2.2	Contingency Fee for Sheriff's Office/Jail		\$ 5,000
2.2	Additional costs for Sheriff's Office roof		φ 5,000
	improvements: Lightning Arrestor System		
2.3			\$
	Additional costs for Sheriff's Office roof		
2.4	improvements: Joint sealants, exterior walls	Ocatta Saahada aasa aad allilahaa aasatas sala	\$
	Sub-Total for all costs for Sheriff's Office roof improvements, per specifications	Cost to include any and all labor, materials, equipment, insurance, bonds administration,	
2.5	roof improvements, per specifications	overhead and other expenditures.	\$
	TOTAL COST FOR LINE 1.3 AND 2.5	[	
	TOTAL PROPOSAL COSTS FOR ALL ROOF	TOTAL PROPOSAL COSTS	
	IMPROVEMENTS BOTH FACILITIES	101/1211131 30/12 33313	
3.0			\$
	Optional/Alternative Costs: joint Sealants,	Reference Summary of Work, Specifications	
	interior walls, recreational center	Section 1.2D (10) for alternative bid items to	
		be priced out separately (Sheriff's Office	
4.0		roofing improvements )	
5.0	Payment and Performance Bonds	Cos t as a percentage of Contract Cost	%

**6.0. Unit Prices**: A unit price is a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if estimated quantities of Work required by the Contract Documents are increased or decreased. Unit prices include all necessary material, plus cost for delivery, installation, insurance, overhead, and profit. Bidder to round off Unit Prices to the nearest dollar (<u>no cents</u>).

(a)	Pressure treated lumber, nominal 2x6, per linear foot:	\$
(b)	Metal decking, 22 ga. per square foot:	\$
(c)	Lightweight insulation Fill, 2" depth, per sq. ft.	\$
(d)	Wall Joint Backer Rod and Sealant, per linear foot	\$
(e)	Misc. Work on a Time/Material Basis:	
	(1.) Lead man and Helper, per hour:	\$
	(2.) Mark-up for material, percentage:	%
(f)	Base Bids include 10 If of manufacturer's walk tread for each roof top  HVAC Unit. Additional walk tread per If.	\$



### **Agreement for Construction Services**

This Agreement ("Agreement") between Williamson County, Texas, a political subdivision of the State of Texas ("Owner") and \_\_\_\_\_\_ ("Contractor") is entered into in accordance with the following terms and conditions:

ARTICLE 1 SCOPE OF WORK: The Owner desires to retain Contractor to provide the construction services for the roof improvements to the Justice Center, Court House Annex, located at 405 Martin Luther King Street, and the Jail/Sheriff's Office, located at 508 Rock Street, Georgetown, Texas, per the specification, provided by Jim Whitten Roof Consultants, as defined and incorporated by reference herein. The Contractor shall have the overall responsibility for and shall provide complete construction services and furnish all materials, equipment, tools and labor as necessary or reasonably inferable to complete the following described construction services, or any phase of such services, in accordance with the Owner's requirements and the terms of this Agreement (hereinafter collectively referred to as the "Work"):

As described in the Request for Proposals, RFP 1701-135, including the specifications set forth therein, which are incorporated herein as if copied in full.

ARTICLE 2 C	ONTRACT	PRICE:	Owner	agrees	to	pay	to	the	Contractor,	for	the	satisfactory
performance of	the Work,	the not-t	o-excee	damou	ınt	o f						
<u>(\$</u>	<mark>_)</mark> in accorda	nce with th	ne terms	and con	diti	ons o	f th	is Ag	reement.			

**ARTICLE 3 PLANS AND SPECIFICATIONS:** The Work shall be performed pursuant to and in accordance with the following described plans and specifications, as well as any revisions made thereto as provided by Jim Whitten Roof Consultants, and the County of Williamson.

**Additional Work:** Should Owner choose to add additional work, such additional work shall be described in a separate written amendment to this Agreement wherein the additional work shall be described and the parties shall set forth the amount of compensation to be paid by Owner for the additional work. Contractor shall not begin any additional work and Owner shall not be obligated to pay for any additional work unless a written amendment to this Agreement has been signed by both parties.

### ARTICLE 4 SUBSTANTIAL AND FINAL COMPLETION:

- **4.1 Commencement of Work.** Contractor shall commence the Work upon instruction to do so from the Owner and Construction shall be deemed to have commenced on the date of such instruction.
- **4.2 Substantial Completion.** "Substantial Completion" means the stage in the progress of the Work when the Work, or designated portions thereof, may still require minor modifications or adjustments but, in the Owner's opinion, the Work has progressed to the point such that all parts of the Work under consideration are fully operational and usable for intended purposes, as evidenced by a Certificate of Substantial Completion approved by the Owner. If a Certificate of Occupancy is required by public authorities having jurisdiction over the Work, said certificate shall be issued before the Work or any

Page 1 of 15

portion thereof is considered substantially complete. When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall notify Owner's Designated Representative (sometimes referred to as the "ODR") and request a determination as to whether the Work or designated portion thereof is substantially complete. If the ODR does not consider the Work substantially complete, the ODR will notify the Contractor giving reasons therefore. Failure on the Owner's part to list a reason does not alter the responsibility of the Contractor to complete all Work in accordance with the terms of this Agreement. After satisfactorily completing items identified by Owner's Designated Representative, the Contractor shall then submit another request for the ODR to determine Substantial Completion. If The ODR considers the Work substantially complete, The ODR will prepare and deliver a certificate of Substantial Completion which shall establish the date of Substantial Completion, shall include a punch list of items to be completed or corrected before final completion and final payment, shall establish the time within which the Contractor shall finish the punch list, and shall establish responsibilities of the Owner and the Contractor for security, maintenance, heat, utilities, damage to the Work, warranty and insurance. Failure to include an item on the punch list does not alter the responsibility of the Contractor to complete all Work in accordance with the terms and conditions of this Agreement. The certificate of Substantial Completion shall be signed by the Owner and the Contractor to evidence acceptance of the responsibilities assigned to them in such certificate.

Substantial Completion (as defined in this agreement) for all stages of the Work shall be achieved on or before the following Substantial Completion date:

#### DATE FOR SUBSTANTIAL COMPLETION: TBD

Under no circumstances will the time for Substantial Completion exceed this date without a written amendment to this Agreement. THE TIMES SET FORTH IN THE CONSTRUCTION DOCUMENTS ARE AN ESSENTIAL ELEMENT OF THE AGREEMENT. TIME LIMITS STATED IN THE CONTRACT DOCUMENTS ARE OF THE ESSENCE OF THIS AGREEMENT.

- **4.3 Final Completion.** The Work shall be fully and finally completed **on or before TBD**; provided, however, Owner may extend said time period in the event bad weather affects the progress of the Work. Owner shall, at its sole discretion, determine when the Work has been fully and finally completed to its satisfaction.
- **4.4 Liquidated Damages.** For each consecutive calendar day after the date of Substantial Completion that the Work is not Substantially Complete, the Owner may deduct the amount of **Two Hundred Dollars per day** (\$200/day) from any money due or that becomes due the Contractor, not as a penalty but as liquidated damages representing the parties' estimate at the time of contract execution of the damages that the Owner will sustain for late completion. The parties stipulate and agree that calculating Owner's actual damages for late completion of the Work would be impractical, unduly burdensome, and cause unnecessary delay and that the amount of daily liquidated damages set forth is reasonable.

### **ARTICLE 5 PAYMENT:**

Contractor shall have a duty to submit to the ODR by the end of each month a statement showing the total value of the Work performed during such month. The statement shall also include the value of all sound materials delivered on the Work site and to be included in the Work and all partially completed Work, whether bid as a lump sum or a unit item, which in the opinion of the ODR is acceptable. The ODR shall examine and approve or modify and approve such statement. The Owner shall then pay the Contractor pursuant to Chapter 2251 of the Texas Government

Code ("Texas Prompt Payment Act"), as set forth in Article 11.1 of this Agreement, the total amount of the approved statement less all previous payments and all further sums that may by retained by the Owner under the terms of this Agreement or under the law. **Statements are not considered "received" until reviewed by the ODR and an approved statement is submitted to the Williamson County Auditor's Office; therefore, Contractor must ensure timely delivery of statements for review and processing.** 

At any time following the completion of all Work, including all punch list items, cleanup, and the delivery of record documents, the Contractor shall submit a certified application for final payment, including all sums held as retainage if any, to the ODR for its review and approval. Contractor shall submit, prior to or with the application for final payment, final copies of all close out documents, including maintenance and operating instructions, guarantees and warranties, certificates, and all other items required by this Agreement. Contractor shall also submit consent of surety to final payment, an affidavit that all payrolls, bills for materials and equipment, subcontracted work and other indebtedness connected with the Work, except as specifically noted, have been paid or will be paid or otherwise satisfied within the period of time required by Chapter 2251, Texas Government Code. Contractor shall furnish documentation establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of claims arising out of the Agreement. Owner is entitled to rely upon this affidavit and the Contractor may not submit a claim on behalf of a subcontractor or vendor if that claim has not been noted as an exception in the affidavit.

Owner may deduct from the final payment all sums due from Contractor for any reason, Liquidated Damages and all other deductions authorized by this Agreement.

Final payment shall constitute a waiver of all claims by the Contractor except those specifically identified in writing and submitted to the ODR prior to the application for final payment. Provided, however, that the Work shall not be deemed fully performed by the Contractor and closed until the expiration of all warranty periods.

### ARTICLE 6 CONTRACTOR'S GENERAL RESPONSIBILITIES AND COVENANTS:

- 6.1 Contractor shall perform all services specifically allocated to it hereunder, as well as those services reasonably inferable and necessary for completion of the Work. The Contractor shall keep the Owner informed of the progress and quality of the Work. Contractor agrees and acknowledges that Owner is entering into this Agreement in reliance on Contractor's represented expertise and ability to provide the Work described in this Agreement. Contractor agrees to use its best efforts, skill, judgment, and abilities to perform its obligations in accordance with the highest standards used in the profession and to further the interests of Owner in accordance with Owner's requirements and procedures. Contractor's duties as set forth herein shall at no time be in any way diminished by reason of any approval by the Owner nor shall the Contractor be released from any liability by reason of such approval by the Owner, it being understood that the Owner at all times is ultimately relying upon the Contractor's skill and knowledge in performing the services required hereunder.
- **6.2** Contractor is responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. The safety program shall comply with all applicable requirements of the current federal Occupational Safety and Health Act and all other applicable federal, state and local laws and regulations.

- 6.3 Contractor shall be an independent contractor under this Agreement and shall assume all of the rights, obligations, liabilities, applicable to it as such independent contractor hereunder and any provisions in this agreement which may appear to give Owner the right to direct Contractor as to details of doing the Work herein covered or to exercise a measure of control over the Work shall be deemed to mean that Contractor shall follow the desires of Owner in the results of the Work only. Owner shall not retain or have the right to control the Contractor's means, methods or details pertaining to the Contractor's performance of the Work described herein, nor shall Owner have the power to direct the order in which Contractor's Work is performed under this agreement. Owner and Contractor hereby agree and declare that Contractor is an Independent Contractor and as such meets the qualifications of an Independent Contractor under Texas Worker's Compensation Act, Texas Labor Code, Section 406.141, that the Contractor is not an employee of Owner for purposes of this Agreement, and that the Contractor and its employees, agents and sub-subcontractors shall not be entitled to worker's compensation coverage or any other type of insurance coverage held by Owner.
- **6.4** As part of Contractor obligation to coordinate the Work, Contract shall:
  - a. cooperate with the ODR and endeavor to further the interests of the Owner and the Work;
  - b. provide an on-site, full-time superintendent for the duration of the Work;
  - c. visit the Work site and inspect the existing facilities, systems and conditions to insure an accurate understanding of the existing conditions as required;
  - d. at Owner's request, attend public meetings and hearings concerning the development of the Work;
  - e. review all drawings, specifications, and other plans as they are developed by the Owner and/or its architect and advise Owner of any error, inconsistency or omission discovered in the drawings, specifications, and other plans;
  - f. review the drawings, specifications, and other plans for compliance with all applicable laws and code requirements;
  - g. advise Owner of any tests that should be performed;
  - h. organize and maintain a competent, full-time staff at the Work site with clearly defined lines of authority and communication as necessary to coordinate construction activities, monitor and direct progress of the Work;
  - i. attend Owner's regularly scheduled Work progress meetings and fully advise the ODR of the Work status including schedule, costs, quality and changes;
  - j. assist Owner in obtaining building permits and obtain special permits for permanent improvements as required by law; and
  - k. shall coordinate, monitor and inspect the Work of subcontractors to ensure conformance with the drawings, specifications, other plans and with the terms of this Agreement.
- 6.5 Contractor shall identify every subcontractor it intends to use for the Work to the Owner in writing at least ten (10) days before entering into any subcontract. Contractor shall not use any subcontractor to which Owner has a reasonable objection. If Owner does not object to a particular subcontractor with said ten (10) days, such subcontract may be considered acceptable to Owner. Following Owner's acceptance of a subcontractor, that subcontractor shall not be changed without Owner's written consent, which shall not be unreasonably withheld.
- 6.6 Contractor's designated representative, which is set forth below Contractor's signature herein below, shall be responsible for the day-to-day management of the Work on behalf of Contractor. The designated representative shall be the Owner's primary contact during the Work and shall be available as required for the benefit of the Work and the Owner. The contractor's designated representative shall be authorized to act on behalf of and bind the Contractor in all matters related to the Work including, but not limited to, execution of Change Orders.

### 6.7 NO ALTERATIONS OR CHANGES SHALL BE MADE, HOWEVER, EXCEPT UPON THE WRITTEN ORDER OF THE OWNER, OR THE ODR.

- **6.8** Contractor shall promptly correct any defective Work at Contractor's sole expense, unless the Owner specifically agrees, in writing, to accept the Work.
- **6.9** Contractor shall maintain and deliver the close out documents that describe changes or deviations from the original drawings, specifications and plans that occurred during construction and that reflect the actual "As Built" conditions of the completed Work.

### COMMISSIONING AND WARRANTY RESPONSIBILITIES

- **6.10** Contractor shall provide commissioning, starting and check-out services for the systems installed as a part of the Work prior to completion and acceptance. Operation manuals and instructions will be provided to the Owner, the systems will be demonstrated and training provided to Williamson County's operators upon completion and prior to acceptance.
- **6.11** Contractor hereby warrants that the materials and equipment provided for the Work will be of good quality and new unless otherwise required or permitted by the Owner; that the construction will be free from faults and defects; and that the construction will conform with the requirements of the plans, specifications, drawings and the terms of this Agreement.
- **6.12** Contractor shall provide warranty services for the Work for a full **18 months** (30 months for Work involving mechanical services, if any) following Final Completion and final payment. Just before the warranty period expires, Contractor shall attend an on-site meeting with the Owner to ensure that all warranty issues have been identified and properly remedied.

### ARTICLE 7 OWNER'S RESPONSIBILITIES

### **7.1** The Owner shall:

- a. provide the general schedule for the Work provided Owner is of the opinion such schedule is necessary. The general schedule will set forth the Owner's plan for milestone dates and completion of the Work;
- b. identify a person as its ODR who is authorized to act in the Owner's behalf with respect to the Work. The ODR shall examine the documents submitted by the Contractor and shall render decisions on behalf of the Owner to the extent allowed by Texas law;
- c. Will assist Contractor in securing the services of surveyors, soils engineers, existing facility surveys, testing and balancing, environmental surveys or other special consultants to develop such additional information as may be necessary for the design or construction of the Work;
- d. furnish required information and services and shall render approvals and decisions as expeditiously as is consistent with reasonable skill and care and the orderly progress of the Contractor's services and of the Work;
- e. shall have the right to reject any defective Work. Should Contractor refuse or neglect to correct any such Work within a reasonable time after notice, Owner may have the Work corrected and recover all expenses incurred from Contractor on demand; and
- f. Owner shall furnish to the Contractor a sufficient number of plans, drawings and specifications sets.

### ARTICLE 8 INSURANCE AND INDEMNITY

- **8.1 Insurance.** The Contractor shall carry insurance in the types and amounts indicated below for the duration of the Agreement, which shall include items owned by Owner in the care, custody and control of Contractor prior to and during construction. Contractor must also complete and file the declaration pages from the insurance policies with Owner whenever a previously identified policy period expires during the term of the Agreement, as proof of continuing coverage. Contractor shall update all expired policies prior to submission of any payment requests hereunder. Failure to update policies shall be reason for payment to be withheld until evidence for renewal is provided to the Owner.
- **8.1.1** The Contractor shall provide and maintain, until the Work covered in this Agreement is completed and accepted by the Owner, the minimum insurance coverage in the minimum amounts as described below. Coverage shall be written on an occurrence basis by companies authorized and admitted to do business in the State of Texas and rated A-or better by A.M. Best Company or otherwise acceptable to Owner.

Type of Coverage	Limits of Liability		
a. Worker's Compensation	Statutory		
b. Employer's Liability			
Bodily Injury by Accident	\$500,000 Ea. Accident		
Bodily Injury by Disease	\$500,000 Ea. Employee		
Bodily Injury by Disease	\$500,000 Policy Limit		

c. Comprehensive general liability including completed operations and contractual liability insurance for bodily injury, death, or property damages in the following amounts:

COVERAGE	PER PERSON	PER OCCURRENCE
Comprehensive General Liability (including premises, completed	\$1,000,000	\$1,000,000
operations and contractual)		
Aggregate policy limits:		\$1,000,000

d. Comprehensive automobile and auto liability insurance (covering owned, hired, leased and non-owned vehicles):

Aggregate policy limits	ts No aggregate limit		
Property damage	\$1,000,000	\$1,000,000	
Bodily injury (including death)	\$1,000,000	\$1,000,000	
COVERAGE	PER PERSON	PER OCCURRENCE	

e. Builder's Risk Insurance (all risks)

An all risks policy shall be in the amount equal at all times to 100% of the Contract Sum. The policy shall include coverage for loss or damage caused by certified acts of terrorism as defined in the Terrorism Risk Insurance Act. The policy shall be issued in the name of the Contractor and shall name his Subcontractors as additional insureds. The Owner shall be named as a loss payee on the policy. The builders risk policy shall have endorsements as follow:

- This insurance shall be specific as to coverage and not considered as contributing insurance with any permanent insurance maintained on the present premises. If off-site storage is permitted, coverage shall include transit and storage in an amount sufficient to protect property being transported or stored.
- 2. For renovation projects and or portions of work contained within an existing structure, the Owner waives subrogation for damage by fire to existing building structure(s), if the Builder's Risk Policy has been endorsed to include coverage for existing building structure(s) in the amount described in the Special Conditions. However, Contractor shall not be required to obtain such an endorsement unless specifically required by the Special Conditions., in this Agreement. The aforementioned waiver of subrogation shall not be effective unless such endorsement is obtained.
- f. Umbrella coverage in the amount of not less than \$1,000,000.
- **8.1.2** The above insurance requirements are not intended to be compounded with the Contractor's standing insurance policies. If the Contractor already has in force insurance policies which provide the required coverage, there is no need to purchase duplicate coverage for this Work.
- 8.1.3 <u>Policies must include the following clauses, as applicable.</u>
  - a. "This insurance shall not be canceled, limited in scope or coverage, or non-renewed until after thirty (30) days prior written notice, or ten (10) days for non-payment of premium, has been given to Williamson County."
  - b. "It is agreed that the Contractor's insurance shall be deemed primary with respect to any insurance or self-insurance carried by Williamson County for liability arising out of operations under the Agreement with Williamson County."
  - c. "Williamson County, it officials, directors, employees, representatives, and volunteers are added as additional insured as respects operations and activities of, or on behalf of the named insured performed under Agreement with the Owner." This is not applicable to the workers' compensation policy.
  - d. "The workers' compensation and employers' liability policy will provide a waiver of subrogation in favor of Williamson County."
- **8.1.4** Workers' Compensation Insurance Coverage:

In the event that Contractor employs any individual to perform any portion of the Work, Contractor shall comply with Texas Labor Code, §406.096, which requires workers' compensation insurance coverage for all employees providing services on a building or construction project for a governmental entity.

### a. Definitions:

- (1) Certificate of Coverage ("certificate") A copy of a certificate of insurance, a certificate of authority to self-insure issued by the Texas Workers' Compensation Commission, or a coverage agreement (TWCC-81, TWCC-82, TWCC-83, or TWCC-84), showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the Duration of the Work.
- (2) Duration of the Work includes the time from the beginning of the Work until the Work has been completed and accepted by the Owner.
- (3) Coverage Workers' compensation insurance meeting the statutory requirements of the Texas Labor Code, §401.011(44).
- (4) Persons providing services relating to the Work ("subcontractor") includes all persons or entities performing all or part of the services the Contractor has undertaken to perform the Work, regardless of whether that person contracted directly with the Contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services in relation to the Work. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the Work, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.
- b. The Contractor shall provide Coverage, based on proper reporting of classification codes and payroll amounts and filing of any Coverage agreements, which meets the statutory requirements of Texas labor Code, §401.011(44) for all employees of the Contractor providing services in relation to the Work, for the Duration of the Work.
- c. The Contractor must provide a Certificate of Coverage to the Owner prior to or contemporaneously with the execution of this Agreement.
- d. If the Coverage period shown on the Contractor's current Certificate of Coverage ends during the Duration of the Work, the Contractor must, prior to the end of the Coverage period, file a new Certificate of Coverage with the Owner showing that Coverage has been extended.
- e. The Contractor shall obtain from each person providing services in relation to the Work, and provide to the Owner:
  - (1) a Certificate of Coverage, prior to that person beginning any of the Work, so the Owner will have on file Certificates of Coverage showing Coverage for all persons providing services in relation to the Work; and
  - (2) no later than seven days after receipt by the Contractor, a new Certificate of Coverage showing extension of Coverage, if the Coverage period shown on the current Certificate of Coverage ends during the Duration of the Work.
- f. The Contractor shall retain all required Certificates of Coverage for the Duration of the Work and for one year thereafter.
- g. The Contractor shall notify the Owner in writing by certified mail or personal delivery, within 10 days after the Contractor knew or should have known, of any change that materially affects the provision of Coverage of any person providing services in relation to the Work.
- h. The Contractor shall post on the Work site a notice, in the text, form and manner prescribed by the Texas Workers' Compensation Commission, informing all persons providing

- services in relation to the Work that they are required to be covered, and stating how a person may verify Coverage and report lack of Coverage.
- i. By signing this Agreement or providing or causing to be provided a Certificate of Coverage, the Contractor is representing to the Owner that all employees of the Contractor who will provide services in relation to the Work and all persons providing services in relation to the Work will be covered by workers' compensation coverage for the Duration of the Work, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self- insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the Contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.
- j. The Contractor's failure to comply with any of these provisions is a breach of Agreement by the Contractor which entitles the Owner to declare the Agreement void if the Contractor does not remedy the breach within ten (10) days after receipt of notice of breach from the Owner.
- **8.1.5** The furnishing of the above listed insurance coverage must be tendered prior to execution of the Agreement, and in no event later than ten (10) calendar days from Notice of Award. Failure to provide the insurance in a timely fashion may result in loss of Contractor's bid bond.
- **8.1.6** The Contractor shall not cause or allow any of its required insurance to be canceled, nor permit any insurance to lapse during the term of the Agreement or as required in the Agreement. If the Contractor fails to obtain, maintain or renew any insurance required by this Agreement, the Owner may, among other remedies available hereunder or at law, obtain insurance coverage directly and recover the cost of that insurance from the Contractor or declare this Agreement void if the Contractor does not remedy the breach within ten (10) days after receipt of notice of breach from the Owner.
- **8.1.7** The Owner reserves the right to review the insurance requirements set forth in this Article during the effective period of the Agreement and to make reasonable adjustments to the insurance coverage and their limits when deemed necessary and prudent by the Owner based upon changes in statutory law, court decisions, or the claims history of the industry as well as the Contractor.
- **8.1.8** The Owner shall be entitled, upon request, and without expense, to receive complete copies of the policies with all endorsements and may make any reasonable requests for deletion, or revision or modification of particular policy terms, conditions, limitations, or exclusions, except where policy provisions are established by law or regulation binding upon the Parties or the underwriter of any of such polices. Damages caused by the Contractor and not covered by insurance shall be paid by the Contractor.
- 8.1.9 Contractor shall be responsible for payment of premiums for all of the insurance coverages required under this Agreement. Contractor further agrees that for each claim, suit or action made against insurance provided hereunder, with respect to all matters for which the Contractor is responsible hereunder, Contractor shall be solely responsible for all deductibles and self-insured retentions. Any deductibles or self-insured retentions over \$50,000 in the Contractor's insurance must be declared and approved in writing by Owner in advance.
- 8.1.10 The Contractor shall contractually require each person or entity with whom it contracts to provide services in relation to the Work, to comply with each and every insurance

requirement that Contractor must comply with hereunder. More specifically, each person or entity with whom Contractor contracts to provide services on the in relation to the Work must comply with each insurance requirement under this Article 8 just as if such person or entity was the Contractor. Thus, every reference to Contractor under each insurance requirement of this Article 8 shall mean and include each person or entity with whom Contractor contracts to provide services in relation to the Work. If any such person or entity with whom Contractor contracts to provide services in relation to the Work fails to obtain, maintain or renew any insurance required by this Agreement, the Owner may, among other remedies available hereunder or at law, obtain insurance coverage directly and recover the cost of that insurance from the Contractor or declare this Agreement void if the Contractor does not remedy the breach within ten (10) days after receipt of notice of breach from the Owner.

### 8.2 INDEMNITY.

- 8.2.1 INDEMNIFICATION - EMPLOYEE PERSONAL INJURY CLAIMS. TO THE FULLEST EXTENT PERMITTED BY LAW, THE CONTRACTOR SHALL INDEMNIFY, DEFEND (WITH COUNSEL OF OWNER'S CHOOSING), AND HOLD HARMLESS OWNER, AND OWNER'S EMPLOYEES, AGENTS, REPRESENTATIVES, PARTNERS, OFFICERS, AND DIRECTORS (COLLECTIVELY, THE "INDEMNITEES") AND SHALL ASSUME ENTIRE RESPONSIBILITY AND LIABILITY (OTHER THAN AS A RESULT OF INDEMNITEES' GROSS NEGLIGENCE) FOR ANY CLAIM OR ACTION BASED ON OR ARISING OUT OF THE PERSONAL INJURY, OR DEATH, OF ANY EMPLOYEE OF THE CONTRACTOR, OR OF ANY SUBCONTRACTOR, OR OF ANY OTHER ENTITY FOR WHOSE ACTS THEY MAY BE LIABLE, WHICH OCCURRED OR WAS ALLEGED TO HAVE OCCURRED ON THE WORK SITE OR IN CONNECTION WITH THE PERFORMANCE OF THE WORK. CONTRACTOR HEREBY INDEMNIFIES THE INDEMNITEES EVEN TO THE EXTENT THAT SUCH PERSONAL INJURY WAS CAUSED OR ALLEGED TO HAVE BEEN CAUSED BY THE SOLE, COMPARATIVE OR CONCURRENT NEGLIGENCE OF THE STRICT LIABILITY OF ANY INDEMNIFIED PARTY. THIS INDEMNIFICATION SHALL NOT BE LIMITED TO DAMAGES, COMPENSATION, OR BENEFITS PAYABLE UNDER INSURANCE POLICIES, WORKERS COMPENSATION ACTS, DISABILITY BENEFITS ACTS, OR OTHER EMPLOYEES BENEFIT ACTS.
- 8.2.2 INDEMNIFICATION OTHER THAN EMPLOYEE PERSONAL INJURY CLAIMS. TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR SHALL INDEMNIFY, DEFEND (WITH COUNSEL OF OWNER'S CHOOSING), AND HOLD HARMLESS OWNER, AND OWNER'S EMPLOYEES, AGENTS, REPRESENTATIVES, PARTNERS, OFFICERS, AND DIRECTORS (COLLECTIVELY, THE "INDEMNITEES") FROM AND AGAINST CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING BUT NOT LIMITED TO ATTORNEYS' FEES, ARISING OUT OF OR ALLEGED TO BE RESULTING FROM THE PERFORMANCE OF THIS AGREEMENT OR THE WORK DESCRIBED HEREIN, TO THE EXTENT CAUSED BY THE NEGLIGENCE, ACTS, ERRORS, OR OMISSIONS OF CONTRACTOR OR ITS SUBCONTRACTORS, ANYONE EMPLOYED BY THEM OR ANYONE FOR WHOSE ACTS THEY MAY BE LIABLE, REGARDLESS OF WHETHER OR NOT SUCH CLAIM, DAMAGE, LOSS OR EXPENSE IS CAUSED IN WHOLE OR IN PART BY A PARTY INDEMNIFIED HEREUNDER.
- **8.3** Except for the obligation of Owner to pay Contractor the Contract Price pursuant to the terms of this Agreement, and to perform certain other obligations pursuant to the terms and conditions explicitly set forth herein, Owner shall have no liability to Contractor or to anyone claiming through or under Contractor by reason of the execution or performance of this Agreement. Notwithstanding any obligation or liability of Owner to Contractor, no present or future partner or affiliate of Owner or any agent, officer, director, or employee of Owner, Williamson County, or of the various departments comprising

Williamson County, or anyone claiming under Owner has or shall have any personal liability to Contractor or to anyone claiming through or under Contractor by reason of the execution or performance of this Agreement.

### ARTICLE 9 BONDS

- **9.1 Performance Bond.** Upon execution of this Agreement, Contractor shall provide a Performance Bond in the amount of 100% of the Contract Price. The surety for a Performance Bond shall meet the requirements of Texas law.
- **9.2 Payment Bond.** Upon execution of this Agreement, Contractor shall provide a Payment Bond in the amount of 100% of the Contract Price, as security for the true and faithful payment in full of all subcontractors and persons performing labor, services, materials, machinery, and fixtures in connection with the Work. The surety for a Payment Bond shall meet the requirements of Texas law.
- **9.3 Warranty Bond.** Upon execution of this Agreement, Contractor shall provide a Warranty Bond in the amount of 20% of the Contract Price, as security for the true and faithful performance of all warranties set forth in Bid Documents and this Agreement.

### **ARTICLE 10 TERMINATION**

- 10.1 Termination for Cause. If either party commits an Event of Breach (a breach of any of the covenants, terms and/or conditions of this Agreement), the non-breaching party shall deliver written notice of such Event of Breach to the breaching party. Such notice must specify the nature of the Event of Breach and inform the breaching party that unless the Event of Breach is cured within three (3) business days of receipt of the notice, additional steps may be taken to terminate this Agreement. If the breaching party begins a good faith attempt to cure the Event of Breach within three (3) business days, then and in that instance, the three (3) business day period may be extended by the non-breaching party, so long as the breaching party continues to prosecute a cure diligently to completion and continues to make a good faith attempt to cure the Event of Breach. If, in the opinion of the non-breaching party, the breaching party does not cure the breach within three (3) business days or otherwise fails to make any diligent attempt to correct the Event of Breach, the breaching party shall be deemed to be in breach and the non-breaching party may, in addition to seeking the remedies available hereunder and under the law, terminate this Agreement.
- **10.2 Termination for Convenience.** The Owner may terminate this Agreement for convenience and without cause or further liability upon thirty (30) days written notice to Contractor. In the event of such termination, it is understood and agreed that only the amounts due to Contractor for goods, commodities and/or services provided and expenses incurred to and including the date of termination, will be due and payable. No penalty will be assessed for Owner's termination of this Agreement for convenience.

#### ARTICLE 11 ADDITIONAL GENERAL PROVISIONS

11.1 Interest and Late Payments. Except as otherwise specifically set forth herein, Owner's payment for goods and services shall be governed by Chapter 2251 of the Texas Government Code. Interest charges for any overdue payments shall be paid by Owner in accordance with Texas Government Code Section 2251.025. More specifically, the rate of interest that shall accrue on a late payment is the rate in effect on September 1 of Owner's fiscal year in which the payment becomes due. The said rate in effect on September 1 shall be equal to the sum of one percent (1%); and (2) the prime rate published in the Wall Street Journal on the first day of July of the preceding fiscal year that does not fall on a Saturday or Sunday.

In the event that an error appears in an invoice/application for payment submitted by Contractor, Owner shall notify Contractor of the error not later than the twenty first (21st) day after the date Owner receives the invoice/application for payment. If the error is resolved in favor of Contractor, Contractor shall be entitled to receive interest on the unpaid balance of the invoice/application for payment submitted by Contractor beginning on the date that the payment for the invoice/application for payment became overdue. If the error is resolved in favor of the Owner, Contractor shall submit a corrected invoice/application for payment that must be paid in accordance within the time set forth above. The unpaid balance accrues interest as provided by Chapter 2251 of the Texas Government Code if the corrected invoice/application for payment is not paid by the appropriate date.

- **11.2 Assignment; Successors and Assigns.** This Agreement is a personal service contract for the services of Contractor, and Contractor's interest in this Agreement, duties hereunder and/or fees due hereunder may not be assigned or delegated to a third party. This Agreement shall be binding upon and inure to the benefit of parties hereto and their respective successors and assigns.
- **11.3 Captions.** The captions of paragraphs in this Agreement are for convenience only and shall not be considered or referred to in resolving questions of interpretation or construction.
- 11.4 Governing Law and Venue. This Agreement and all of the rights and obligations of the parties and all of the terms and conditions shall be construed, interpreted and applied in accordance with and governed by and enforced under the laws of the State of Texas without reference to its conflicts of law provisions. Williamson County where the Work site is located shall be the sole place of venue for any legal action arising from or related to this Agreement or the project in which the Owner is a party.
- 11.5 Waivers. No delay or omission by either party in exercising any right or power arising from non-compliance or failure of performance by the other party with any of the provisions of this Agreement shall impair or constitute a waiver of any such right or power. A waiver by either party of any covenant or condition of this Agreement shall not be construed as a waiver of any subsequent breach of that or of any other covenant or condition of the Agreement.
- **11.6 Interpretation.** In the event of any dispute over the meaning or application of any provision of the Contract Documents, the Contract Documents shall be interpreted fairly and reasonably, and neither more strongly for or against any party, regardless of the actual drafter of the Contract Documents.
- **11.7 Binding Effect.** This Agreement shall be binding upon and inure to the benefit of the parties and their respective permitted assigns and successors.
- **11.8 Appointment.** Owner hereby expressly reserves the right from time to time to designate by notice to Contractor a representative(s) to act partially or wholly for Owner in connection with the performance of Owner's obligations. Contractor shall act only upon instructions from the designated representative(s) unless otherwise specifically notified to the contrary.
- 11.9 Audits. Contractor agrees that Owner or its duly authorized representatives shall, until the expiration of three (3) years after final payment under this Agreement, have access to and the right to examine and photocopy any and all books, documents, papers and records of Contractor which are directly pertinent to the services to be performed under this Agreement for the purposes of making audits, examinations, excerpts, and transcriptions. Contractor agrees that Owner shall have access during normal working hours to all necessary Contractor facilities and shall be provided adequate and appropriate work space in order to conduct audits in compliance with the provisions of this section. Owner shall give Contractor reasonable advance notice of intended audits.

- **11.10 Severability.** Should any term or provision of this Agreement be held invalid or unenforceable in any respect, the remaining terms and provisions shall not be affected and this Agreement shall be construed as if the invalid or unenforceable term or provision had never been included.
- **11.11** No Waiver of Immunities. Nothing in this Agreement shall be deemed to waive, modify or amend any legal defense available at law or in equity to Owner, its past or present officers, employees, or agents, nor to create any legal rights or claim on behalf of any third party. Owner does not waive, modify, or alter to any extent whatsoever the availability of the defense of governmental immunity under the laws of the State of Texas and of the United States.
- **11.12 Current Revenues.** Under Texas law, a contract with a governmental entity that contains a claim against future revenues is void; therefore, each party paying for the performance of governmental functions or services must make those payments from current revenues available to the paying party.
- 11.13 Compliance with Laws. Contractor shall comply with all federal, state, and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts or administrative bodies or tribunals in any matter affecting the performance of this Agreement, including, without limitation, Worker's Compensation laws, minimum and maximum salary and wage statutes and regulations, licensing laws and regulations. When required, Contractor shall furnish the County with certification of compliance with said laws, statutes, ordinances, rules, regulations, orders, and decrees above specified.
- **11.14** Sales and Use Tax Exemption. Owner is a body corporate and politic under the laws of the State of Texas and claims exemption from sales and use taxes under Texas Tax Code Ann. § 151.309, as amended.
- 11.15 Texas Public Information Act. To the extent, if any, that any provision in this Agreement is in conflict with Tex. Gov't Code 552.001 *et seq.*, as amended (the "Public Information Act"), the same shall be of no force or effect. Furthermore, it is expressly understood and agreed that Owner, its officers and employees may request advice, decisions and opinions of the Attorney General of the State of Texas in regard to the application of the Public Information Act to any information or data furnished to Owner whether or not the same are available to the public. It is further understood that Owner, its officers and employees shall have the right to rely on the advice, decisions and opinions of the Attorney General, and that Owner, its officers and employees shall have no liability or obligation to Contractor for the disclosure to the public, or to any person or persons, of any software or a part thereof, or other items or data furnished to Owner by Contractor in reliance of any advice, decision or opinion of the Attorney General of the State of Texas.
- **11.16 Force Majeure.** If the party obligated to perform is prevented from performance by an act of war, order of legal authority, act of God, or other unavoidable cause not attributable to the fault or negligence of said party, the other party shall grant such party relief from the performance of this Agreement. The burden of proof for the need of such relief shall rest upon the party obligated to perform. To obtain release based on force majeure, the party obligated to perform shall file a written request with the other party.
- 11.17 Equal Opportunity in Employment. The parties to this Agreement agree that during the performance of the services under this Agreement they will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The parties to this Agreement will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer;

13

termination; rates of pay or other forms of compensation, and selection for training, including apprenticeship.

- 11.18 Reports of Accidents. Within 24 hours after Contractor becomes aware of the occurrence of any accident or other event which results in, or might result in, injury to the person or property of any third person (other than an employee of the Contractor), whether or not it results from or involves any action or failure to act by the Contractor or any employee or agent of the Contractor and which arises in any manner from the performance of this Agreement, the Contractor shall send a written report of such accident or other event to the County, setting forth a full and concise statement of the facts pertaining thereto. The Contractor shall also immediately send the County a copy of any summons, subpoena, notice, or other documents served upon the Contractor, its agents, employees, or representatives, or received by it or them, in connection with any matter before any court arising in any manner from the Contractor's performance of work under this Agreement.
- **11.19 Relationship of the Parties.** Each party to this Agreement, in the performance of this Agreement, shall act in an individual capacity and not as agents, employees, partners, joint ventures or associates of one another. The employees or agents of one party shall not be deemed or construed to be the employees or agents of the other party for any purposes whatsoever.
- **11.20 Appropriation of Funds by Owner.** Owner believes it has sufficient funds currently available and authorized for expenditure to finance the costs of this Agreement. Contractor understands and agrees that the Owner's payment of amounts under this Agreement is contingent on the Owner receiving appropriations or other expenditure authority sufficient to allow the Owner, in the exercise of reasonable administrative discretion, to continue to make payments under this Agreement.
- **11.21 Execution in Counterparts.** This Agreement may be executed in counterparts, each of which, when executed and delivered, shall be deemed to be an original and all of which together shall constitute one and the same document.
- 11.22 Entire Agreement. This Agreement represents the entire and integrated agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either oral or written. This Agreement may be amended only by written instrument signed by each party to this Agreement. NO OFFICIAL, EMPLOYEE, AGENT, OR REPRESENTATIVE OF THE OWNER HAS ANY AUTHORITY, EITHER EXPRESS OR IMPLIED, TO AMEND THIS AGREEMENT, EXCEPT PURSUANT TO SUCH EXPRESS AUTHORITY AS MAY BE GRANTED BY THE WILLIAMSON COUNTY COMMISSIONERS COURT.

BY SIGNING BELOW, the Parties have executed and bound themselves to this Agreement to be effective as of the date of the last party's execution hereof (Effective Date).

CONTRACTOR:
By:
Printed Name:
Title:

Date:	Date:
Party Representatives	
Owner's Designated Representative ("ODR"):	Contractor's Designated Representative:
Phone	Phone
Fav	Fax

CONFLICT OF INTEREST QUESTIONNAIRE  For vendor or other person doing business with local governmental entity						
		onnaire is being filed in accordance with chapter 176 of the Local at Code by a person doing business with the governmental entity.	OFFICE USE	ONLY		
lo	cal govern becomes a	questionnaire must be filed with the records administrator of the ment not later than the 7th business day after the date the person ware of facts that require the statement to be filed. See Section 176.006, Local Government Code.	Date Rece	eived		
		t Code. An offense under this section is a Class C misdemeanor.				
1	Na	me of person doing business with local governmental entity.				
2		Check this box if you are filing an update to a previously of the law requires that you file an updated completed questionnaire with the a than September 1 of the year for which an activity described in Section 176.0 pending and not later than the 7th business day after the date the originall incomplete or inaccurate.)	ppropriate filing autho 06(a), Local Governn	ority not later nent Code, is		
3						
				6		
4		each affiliation or business relationship with a person who is a local or employs a local government officer of the local governmental en questionnaire.				
				5		

### **CONFLICT OF INTEREST QUESTIONNAIRE**

## For vendor or other person doing business with local governmental entity

Form CIQ Page 2

	Citaty	i age 2					
5	Name of local government officer with whom filer has affiliation or business relationship.  (Complete this section only if the answer to A, B, or C is YES.)						
	This section, item 5 including subparts A, B, C & D, must be completed for each officer with whom the filer has affiliation or other relationship. Attach additional pages to this Form CIQ as necessary.						
	A. Is the local government officer named in this section receiving or likely to receive taxal the filer of the questionnaire?	ole income from					
	☐ Yes ☐ No						
	B. Is the filer of the questionnaire receiving or likely to receive taxable income from or at th local government officer named in this section AND the taxable income is not fro governmental entity?						
	☐ Yes ☐ No						
	C. Is the filer of this questionnaire affiliated with a corporation or other business entity government officer serves as an officer or director, or holds an ownership of 10 per						
	D. Describe each affiliation or business relationship.						
	5. Describe dadi alimiation di basilicce relationomp.						
	6						
	6. Describe any other affiliation or business relationship that might cause conflict						
		5					
7							
	Signature of person doing business with the governmental entity	Date					
	Signature not required if completing in BIDSYNC electronically.						

### **DEBARMENT AND LICENSING CERTIFICATION**

STATE OF TEXAS	§			
COUNTY OF WILLIAMSON	§ §	§ §		
I, the undersigned, being duly sworn of State of Texas, certifies that Firm name		e laws of the United States and the		
excluded from covered transact (b) Have not within a three-year perendered against them for contact attempting to obtain, or perform transaction; violation of federal	uspended, proposed for debarmen ions by any federal department or ageriod preceding this proposal been ommission of fraud or a criminal offeing a public (federal, state or local) tror state antitrust statutes or commission of records, making false statemen	ency: convicted of or had a civil judgment ense in connection with obtaining, cansaction or contract under a public sion of embezzlement, theft, forgery,		
(c) Are not presently indicted for	or otherwise criminally or civilly chemission of any of the offenses enur	narged by a federal, state or local		
<ul><li>(d) Have not within a three-year per state or local) transactions term</li></ul>	iod preceding this application/proposi ninated for cause or default; ne State of Texas to perform the profe			
	ued a formal reprimand by any State ee years.	agency for professional		
Name of Firm		_		
Signature of Certifying Official	Title of Certifying Official	_		
Printed Name of Certifying Official	Date			

Where the Firm is unable to certify to any of the statements in this certification, such Firm shall attach an explanation to this certification.

SUBSCRIBED and sworn to before me the undersigned authority by

on this the day of , 20 , on behalf of said Firm.

Notary Public in and for the State of Texas

My commission expires:

SIGNATURE AND NOTARY NOT REQUIRED IF COMPLETING IN BIDSYNC ELECTRONICALLY.

### Proposal References

Reference 1

List the last three (3) companies or governmental agencies, where the same or similar goods and/or services as contained in this RFP package, were recently provided by Respondent.

Client Name:		Location:
Contact Name:		Title:
Phone:		E-mail
Contract Date To:	Contract Date From:	Contract Value: \$
Scope of Work:		
		5
Reference 2		
Client Name:		Location:
Contact Name:		Title:
Phone:		E-mail
Contract Date To:	Contract Date From:	Contract Value: \$
Scope of Work:		
		<u>5</u>

### Reference 3

Client Name:		Location:
Contact Name:		Title:
Phone:		E-mail
Contract Date To:	Contract Date From:	Contract Value: \$
Scope of Work:		
		<u>5</u>

# Question and Answers for Bid #1701-135 - Roof reconstruction/improvements for Justice Center and Sheriff's Office

### **Overall Bid Questions**

There are no questions associated with this bid.