



# TEXAS

## Health and Human Services

**Dr. Courtney N. Phillips, Executive Commissioner**

### **REQUEST FOR COMPETITIVE SEALED PROPOSALS FOR A CONTRACTOR**

**Roof Repair and Replacement Project (Project No. 18-002-BSH)**

**RFP No. HHS0003789**

**Date of Release: Thursday, February 14, 2019**

**Pre-Proposal Conference: Wednesday, February 27, 2019 at 10:00 AM CT**

**Proposals Due: Monday, March 18, 2019 at 2:00 PM CT**

**NIGP Class/Item Codes:**

**910-66 (Roofing, Gutters, and Downspouts Maintenance and Repair Services)**

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# REQUEST FOR COMPETITIVE SEALED PROPOSALS

## SECTION 1 – GENERAL INFORMATION AND REQUIREMENTS

### 1.1 General Information

The Health and Human Services Commission, for and on behalf of its Maintenance and Construction Department (“**HHSC M&C**”), is soliciting Competitive Sealed Proposals (“**Proposals**”) for selection of a General Contractor to provide general construction and general construction subcontracting services to the Owner for **Project No. 18-002-BSH, Roof Repair and Replacement Project** (“**Project**”), in accordance with the terms, conditions, and requirements set forth in this Request for Competitive Sealed Proposals.

- 1.1.1 This Request for Competitive Sealed Proposals is being issued to select a Contractor for the Project as provided by *Texas Government Code* Chapter 2269.
- 1.1.2 The Owner will select the Proposal that offers the “best value” for the agency based on the published selection criteria and on its ranking evaluation. The Owner will first attempt to negotiate a contract with the selected Respondent. The Owner may discuss with the selected Respondent options for a scope or time modification and any price change associated with the modification. If the Owner is unable to reach a contract with the selected Respondent, the Owner will formally end negotiations with that Respondent and proceed to the next “best value” Respondent in the order of the selection ranking until a contract is reached or all Proposals are rejected and the solicitation is canceled.

### 1.2 Definitions

Refer to **Exhibit C**, Draft General Construction Services Contract and its attachments, for additional definitions. Additionally, as used in this RFP, unless the context clearly indicates otherwise, the following terms and conditions have the meanings assigned below:

“**Addendum**” means a written clarification or revision to this RFP issued by the Owner.

“**Contract**” means the agreement entered into by the Owner and selected Respondent, which may incorporate the contents of this RFP and the selected Respondent’s Proposal, except as specifically provided to the contrary in the Contract and any amendments to the Contract.

“**ESBD**” means the Electronic State Business Daily, the electronic marketplace where State of Texas bid opportunities over \$25,000.00 are posted. The ESBD may currently be accessed at <http://www.txsmartbuy.com/sp>.

“**HHSC**” or “**Owner**” means the Health and Human Services Commission established under *Texas Government Code* Chapter 531, its officers, employees and authorized agents.

“**HUB**” means Historically Underutilized Business, as defined by *Texas Government Code* Chapter 2161.

**“HUB subcontracting plan”** or **“HSP”** means written documentation regarding the use of subcontractors, which is required to be submitted with all responses to state agency contracts with an expected value of \$100,000 or more where subcontracting opportunities have been determined by the state agency to be probable. The HUB subcontracting plan subsequently becomes a provision of the awarded Contract, and shall be monitored for compliance by the state agency during the term of the Contract.

**“Proposal”** means all information and materials submitted by a Respondent in response to this RFP.

**“Respondent”** means the entity responding to this RFP.

**“RFP”** means this Request for Competitive Sealed Proposals including any Exhibits and Addenda, if any.

**“State”** means the State of Texas and its instrumentalities, including HHSC and any other state agency, its officers, employees, or authorized agents.

### **1.3 Public Information**

1.3.1 Proposals are subject to the Texas Public Information Act (**“PIA”**), *Texas Government Code* Chapter 552, and may be disclosed to the public upon request. Subject to the PIA, certain information may be protected from public release. Respondents who wish to protect portions of the Proposal from public disclosure should familiarize themselves with the law. Information pertaining to the Proposal will be withheld or released only in accordance with the PIA.

1.3.2 In accordance with *Texas Government Code* Section 2252.907, Respondent shall be required to make any information created or exchanged with the State pursuant to the Contract, and not otherwise excepted from disclosure under the PIA, available in a Microsoft Word or Excel or a .pdf format that is accessible by the public at no additional charge to the State.

### **1.4 Type of Contract**

The Contract will be in the form of the Owner’s General Construction Services Contract in **Exhibit C**, which incorporates by reference all attachments referenced therein, and awarded under this RFP as a fixed price contract.

### **1.5 Changes, Addenda, or Modification to RFP**

The Owner reserves the right to change or modify any provision of this RFP by addenda, or to withdraw this RFP at any time prior to award if it is in the best interest of the Owner. Any such revisions will be posted on the ESD. It is the responsibility of Respondent to periodically check the ESD to ensure full compliance with the requirements of this RFP.

## 1.6 Informalities

The Owner reserves the right to waive minor informalities in a Proposal if it is in the best interest of the Owner. A “minor informality” is an omission or error that, in the Owner’s determination if waived or modified when evaluating Proposals, would not give a Respondent an unfair advantage over other Respondents or result in a material change in the Proposal or RFP requirements.

## 1.7 Questions

The Owner will allow written questions and requests for clarification of this RFP. Questions must be submitted in writing and sent by U.S. First class mail or email to the Owner’s Point of Contact listed in **Section 1.12**. Respondents’ names will be removed from questions in any responses released. Questions shall be submitted in the following format. Submissions that deviate from this format may not be accepted:

- a) Identifying RFP number
- b) Section Number
- c) Paragraph Number
- d) Page Number
- e) Text of Passage being questioned
- f) Questions

**Note: Questions or other written requests for clarification must be received by the Point of Contact by the deadline in the Schedule of Events. However, the Owner, at its sole discretion, may respond to questions or other written requests received after the deadline. Please provide company name, address, phone number, fax number, e-mail address and name of contact person when submitting questions.**

## 1.8 Clarifications

Respondents must notify the Owner’s Point of Contact of any ambiguity, conflict, discrepancy, exclusionary specifications, omission or other error in the RFP in the manner and by the deadline for submitting questions. If a Respondent fails to properly and timely notify the Owner’s Point of Contact of such issues, the Respondent submits its Proposal at its own risk, and if awarded a Contract: (1) shall have waived any claim of error or ambiguity in the RFP and any resulting Contract, (2) shall not contest the interpretation by Owner of such provision(s), and (3) shall not be entitled to additional compensation, relief, or time by reason of ambiguity, error, or later correction. Responses to questions or other written requests for clarification may be posted as addenda on the ESBD. The Owner reserves the right to modify addenda prior to the deadline for submission of Proposals. It is Respondent’s responsibility to check the ESBD. The Owner also reserves the right to decline to answer any question or questions or to provide a single consolidated response of all questions it chooses to answer in any manner at the Owner’s sole discretion.

1.8.1 Requests for clarification regarding Drawings and Specifications shall be communicated through the Owner’s Point-of-Contact, identified in **Section 1.12** below, in writing to the Project Architect/Engineer. Any response from the Project Architect/Engineer will be in the form of an Addendum, which will be posted to

the ESBD and shall be acknowledged by the Respondent on the Respondent's Pricing and Delivery Proposal Form (**Exhibit F**).

- 1.8.2 Respondents shall consider only those clarifications and interpretations to the Drawings and Specifications that the Project Architect/Engineer issues through the Point-of-Contact, identified in **Section 1.12** below, by Addendum which will be posted seven (7) business days prior to the submittal deadline. Interpretations or clarifications in any other form, including oral statements, will not be binding on the Owner and should not be relied on in preparing Proposals.

## 1.9 **Exceptions**

The Owner will more favorably evaluate Proposals that offer no or few exceptions, reservations, or limitations to the terms and conditions of this RFP.

- 1.9.1 Respondent shall carefully review the Owner's draft Contract (**Exhibit C**) and all attachments. Respondent must expressly state in its Proposal all terms and conditions of the Owner's draft Contract (including any contract attachments) that Respondent will require to be changed before Respondent will sign the Contract. However, Respondent must be willing to accept Owner's draft Contract without change or modification or, if Respondent will require changes, Respondent must provide all draft language it proposes for each change requested. In addition to proposed edits, Respondent must provide a reasonable and articulable explanation of why the Respondent requests each change. Redlining Owner's draft Contract or its attachments or providing a statement with the intent or an implication that the Contract will require further discussion is insufficient.
- 1.9.2 If a Respondent includes exceptions in its Proposal, Respondent is required to use the Exceptions Form included as **Exhibit D** to this RFP and provide all information requested on the form. Any exception for which the Respondent does not provide all required information without qualification in the format set forth in **Exhibit D** may be rejected without consideration.
- 1.9.3 Respondents are highly encouraged, in lieu of including exceptions in their Proposals, to address all issues that might be advanced by way of exception by submitting such issues to the Owner as questions or requests for clarification. Any exception included in a Proposal may result in a Respondent not being awarded a Contract.
- 1.9.4 No exception, nor any other term, condition, or provision in a Proposal that differs, varies from or contradicts the terms and conditions in this RFP will be considered to be part of any Contract resulting from this RFP unless expressly made a part of the Contract in writing by the Owner.
- 1.9.5 A Proposal should be responsive to the RFP as worded, not with any assumption that any or all terms, conditions, or provisions of the RFP will be negotiated. Furthermore, all Proposals constitute binding offers. **Any Proposal submitted in response to this RFP that includes any type of disclaimer or other statement indicating that the Proposal does not constitute a binding offer may be disqualified.**

1.9.6

## **1.10 Assumptions**

Respondent must identify on the Exceptions Form any business, economic, legal, programmatic, or practical assumptions that underlie the Respondent's response to the RFP. The Owner reserves the right to accept or reject any assumptions. All assumptions not expressly identified and incorporated into any Contract resulting from this RFP are deemed rejected by the Owner.

## **1.11 Submission of Proposals**

- 1.11.1 **Proposal and HUB Subcontracting Plan (“HSP”) Deadline and Location:** The Owner will receive Proposals, and HSP in accordance with 34 *Texas Administrative Code* §20.285(b)(2), at the times and location described below.

**Proposal: Monday, March 18, 2019 by 2:00 P.M. central time**

**HSP: Tuesday, March 19, 2019 by 2:00 P.M. central time**

**Health and Human Services Commission  
Procurement and Contracting Services  
Attn: Bid Room Coordinator  
1100 West 49th Street, Mail Code 2020  
Austin, Texas 78756**

- 1.11.1.1 Submit 1 original and 1 identical hard copies of the Proposal.
- 1.11.1.2 Submit one (1) original of the HSP in a separate sealed envelope with the Proposal, labeled: HUB Subcontracting Plan and Solicitation Number, as described in **Section 1.24**.
- 1.11.1.3 Submit 1 electronic copy of the Proposal on flash drive.
- 1.11.1.4 Submit 1 electronic copy of the Respondent's Pricing and Delivery Proposal on flash drive.
- 1.11.1.5 Submit 1 electronic copy of the HSP on flash drive.
- 1.11.2 Proposals and/or HSP that are received late will be returned to the Respondent unopened. The Owner will not be held responsible for any Proposal that is mishandled prior to receipt by Owner. It is Respondent's responsibility to mark appropriately and deliver the Proposal to the Owner by the specified date and time. The Bid Room Coordinator identified in **Section 1.11.1** will identify the official time clock at the Proposal submittal location identified above.
- 1.11.3 The Owner will not acknowledge or receive Proposals and/or HSP that are delivered by telephone, facsimile (fax), or electronic mail (e-mail).
- 1.11.4 Properly submitted Proposals and/or HSP will not be returned to the Respondents.

- 1.11.5 Proposals and/or HSP materials must be enclosed in a sealed envelopes (box or container) addressed to the Bid Room Coordinator identified in **Section 1.11.1**; the package must clearly identify the submittal deadline, the RFP Number, Point-of-Contact, and the name and return address of the Respondent in accordance with **Section 4**.
- 1.11.6 Properly submitted Proposals will be opened publicly and the names and any monetary proposals made will be read aloud after the HSP's, if applicable to the RFP, are received and confirmed by the Owner.
- 1.11.7 Prior to the RFP submission deadline, a Respondent may: (1) withdraw its Proposal by submitting a written request to the Owner's Point of Contact; or (2) modify its Proposal by submitting a written amendment to Owner's Point of Contact. The Owner may request Proposal modifications at any time.

## **1.12 Point-of-Contact**

All requests, questions or other communication about this RFP shall be made in writing to the following person, as the Owner's representative and Point-of-Contact for this RFP. All communications between Respondents and other Owner staff members concerning the RFP are strictly prohibited. **Failure to comply with these requirements may result in disqualification of Respondent's Proposal.**

**Colette Norman, CTCD, CTCM**  
Health and Human Services Commission  
Procurement and Contracting Services  
1100 West 49th Street; Mail Code 2020  
Austin, Texas 78756  
512-406-2508  
[Colette.Norman@hhsc.state.tx.us](mailto:Colette.Norman@hhsc.state.tx.us)

- 1.12.1 The only exception to the Point-of-Contact is the HUB Coordinator. Any questions relating to the HUB Subcontracting Plan must be directed to the HUB coordinator at [Linda.Rogers@hhsc.state.tx.us](mailto:Linda.Rogers@hhsc.state.tx.us) with a copy to the Point-of-Contact person listed above.

## **1.13 Prohibited Communication**

On issuance of this RFP, except for the written inquiries for questions and clarifications, the Owner, its representative(s), or partners will not answer any questions or otherwise discuss the contents of this RFP with any potential Respondent or their representative(s). Attempts to ask questions by phone or in person will not be allowed or recognized as valid. Respondent shall rely only on written statements issued by or through the Owner's Point-of-Contact. This restriction does not preclude discussions between affected parties for the purposes of conducting business unrelated to this RFP. Failure to comply with these requirements may result in disqualification of Respondent's Proposal.



#### **1.14 Evaluation of Proposals**

Responses shall be evaluated in accordance with Texas Government Code *Chapter 2269*. The Owner shall not be obligated to accept the lowest priced Response, but shall make an award to the Respondent that provides the “**best value**” to the State of Texas. Responses shall be consistently evaluated and scored in accordance with the requirements described in this RFP and in **Exhibit G** - Evaluation tool. **Forty percent (40%)** of the evaluation will be based on the Respondent’s Pricing and Delivery Proposal; the remaining evaluation will be based on the Respondent’s qualifications. All responsive Proposals will be reviewed, evaluated, and ranked by the Owner.

#### **1.15 Other Information**

The Owner may contact references provided in response to this RFP, contact Respondent’s clients, or solicit information from any available source, including the Comptroller’s Vendor Performance Tracking System.

#### **1.16 Initial Compliance Screening**

The Owner will perform an initial screening of all Responses received. Unsigned Responses and Responses that do not meet minimum qualifications or do not include all required forms and information may be subject to rejection without further evaluation.

#### **1.17 Owner’s Reservation of Rights**

The Owner may evaluate the Proposals based on the anticipated completion of all or any portion of the Project. The Owner reserves the right to divide the Project into multiple parts, to reject any and all Proposals and re-solicit for new Proposals, or to reject any and all Proposals and temporarily or permanently abandon the Project. Owner makes no representations, written or oral, that it will enter into any form of agreement with any Respondent to this RFP for any project and no such representation is intended or should be construed by the issuance of this RFP.

#### **1.18 Acceptance of Evaluation Methodology**

By submitting Proposals in response to this RFP, the Respondent accepts the evaluation process and acknowledges and accepts that determination of the “**best value**” Respondent will require subjective judgments by the Owner.

- 1.18.1 The Owner reserves the right to consider any Proposal “non-responsive” if the Proposal Cost is determined to be unreasonable or irresponsible in relation to the other submitted Proposals and/or the Owner’s estimate of the construction cost.

### **1.19 No Reimbursement for Costs**

Respondents understand that issuance of this RFP in no way constitutes a commitment by Owner to award a Contract or to pay any costs incurred by a Respondent in the preparation of a response to this RFP. The Owner is not liable for any costs incurred by a Respondent prior to issuance of or entering into a formal agreement, Contract, or purchase order. Costs of developing Responses, preparing for or participating in oral presentations and site visits, or any other similar expenses incurred by a Respondent are entirely the responsibility of the Respondent, and will not be reimbursed in any manner by the State of Texas.

**1.20 Pre-Proposal Conference** A pre-proposal conference will be held at the time and location described below.

**February 27, 2019 at 10:00 A.M central time**

**Health and Human Services Commission  
Big Spring State Hospital  
Building 502, Room 259  
1901 N US Highway 87  
Big Spring, TX 79720**

1.20.1 If possible, a guided tour of the Project will be included as a part of the conference agenda. This may be the only opportunity for potential Respondents to view the Project site(s) before the submittal of Proposals. **Attendance at the pre-proposal conference is strongly encouraged.**

### **1.21 Oral Presentations**

The Owner may require an oral presentation from any or all Respondents. Respondents will be provided with advance notice of any such oral presentation and are responsible for their own presentation equipment. Failure to permit or participate in the oral presentation may eliminate a Respondent from further consideration. The Owner is not responsible for any costs incurred by the Respondent in preparation for any oral presentation.

### **1.22 Questions or Requests for Clarification by Owner**

The Owner reserves the right to ask questions or request clarification from any Respondent at any time during the RFP process, including during oral presentations or site visits.

### **1.23 Eligible Respondents**

Only companies or lawfully formed business organizations may apply. This does not preclude a Respondent from using subcontractors. The Owner will contract only with the individual company or formal organization that submits a Proposal.

### **1.24 HUB Subcontracting Plan**

It is the policy of the Owner, and all Texas Health and Human Services agencies (“**HHS Agencies**”), to promote and encourage contracting and subcontracting opportunities for Historically Underutilized Businesses in all contracts. Accordingly, HHSC includes a HSP

when subcontracting opportunities are probable and a contract has an expected value of \$100,000.00 or more. The HSP is applicable for the life of the contract, including any subsequent amendments and renewals after award of the contract as related to the original HSP. If HHSC determines that subcontracting opportunities are probable, then a Respondents are required to submit a completed HSP. Failure to submit a required HSP will result in rejection of the Proposals.

Additional information regarding the optional applicability of the HSP requirement is set forth in **Exhibit B**.

## **SECTION 2 – EXECUTIVE SUMMARY**

### **2.1 Historical Background**

The Owner is established in accordance with *Texas Government Code* Chapter 531 and is responsible for oversight of all HHS Agencies, which includes overseeing and coordinating the planning and delivery of health and human services programs throughout the State of Texas, including state hospitals and state supported living centers. For more information about the Owner, its programs, or its facilities, please visit <https://hhs.texas.gov>.

The mission of the Owner and any Texas Health and Human Services agency is improving the health, safety, and well-being of Texans with good stewardship of public resources.

As part of its responsibilities, the Owner owns and operates 13 state supported living centers (SSLCs) and 10 state hospitals (SHs) across the State of Texas. The 23 individual SH/SSLC entities operate programs 24/7, 365 days a year on 24 separate and unique facility campuses across Texas in both urban and rural settings. Facility programs and operations fall under the direction of the Health and Specialty Care System (HSCS) division of the Texas Health and Human Services Commission. The 24 campuses contain a total of 1490 buildings encompassing approximately 9 million square feet of space. The buildings' original construction dates range from 1857 to 2000. The buildings are serviced and connected by aging utility, roadway, walkway, cabling, mechanical, electrical and plumbing systems and other such infrastructure. Many buildings have been renovated, modified and added to over time with many now serving different purposes than when originally designed and built. In addition to Life Safety Codes, State Fire Marshal and other such requirements, the facility buildings (depending on program) may be subject to Centers for Medicare and Medicaid Services and/or The Joint Commission standards and inspections.

### **2.2 Project Description, Scope, and Budget**

**Project Location:** Big Springs State Hospital  
1901 North Highway 87  
Big Spring, TX 79720

**Project Summary:** The scope of work includes, but is not limited to, the following:

Replace composition shingle and Built-up Roof (BUR) system on Building 528 with new Standing Seam Metal Roof (SSMR) and/or pitched roof system. Repair existing SSMRs and metal roof at Buildings 502, 503, and 508 and resolve/mitigate all leak issues. Repairs

to Buildings 542 and 557 existing BURs shall include blister repairs, rubberized coatings, and flashing/sheet metal repairs and replacements as required.

**Project Estimate:** The approximate cost for construction of the Project is \$515,248.00

### 2.3 Schedule of Events.

Event	Date/Time
Issuance of the RFP	February 14, 2019
Pre-Proposal Conference	Refer to <b>Section 1.20</b>
Deadline for submitting Questions	March 5, 2019 by 12:00 P.M. Central Time
<b>Deadline for submission of Proposals</b> <i>(NOTE: Proposals MUST be RECEIVED by Owner by the deadline.)</i>	Refer to <b>Section 1.11.1</b>
<b>Deadline for submission of HSP</b> <i>(NOTE: HSPs MUST be RECEIVED by Owner by the deadline.)</i>	Refer to <b>Section 1.11.1</b>
Opening of Proposals	<b>March 19, 2019 by 2:00 P.M. Central Time</b>
Evaluation Period	Up to a maximum 45 days from opening of proposals
Anticipated Notice of Award	May 10, 2019
Anticipated Contract Start Date	May 28, 2019

**Note: These dates are a tentative schedule of events. The Owner reserves the right to modify these dates at any time upon notice posted to the ESBD. Any dates listed after the Proposal submission deadline will occur at the discretion of the Owner and may occur earlier or later than scheduled without notification on the ESBD.** Owner anticipates evaluation of Proposals, selection of the winning Respondent, and award of the Contract will be completed within approximately 60 days of the Proposal submission deadline.

## SECTION 3 – REQUIREMENTS FOR COMPETITIVE SEALED PROPOSALS

### 3.1 Minimum Qualifications (Pass or Fail)

Respondents must meet the minimum qualifications listed below. The Owner, in its sole discretion, may reject Proposals that appear unrealistic in terms of technical commitment, that show a lack of technical competence, or that indicate a failure to comprehend the risk and complexity of a potential Contract.

#### 3.1.1 Respondent must:

- a) Submit a completed Proposal in accordance with **Section 4**;
- b) Certify that Respondent’s personnel, including subcontractors, who will be assigned to the Project have all licenses and permits required to perform the work described;
- c) Certify that it has been in business for a minimum of five (5) years, or the principals/owners must have a minimum of five (5) years recent

- ownership/executive management experience in a previous company that provided construction services of similar scope and complexity;
- d) Be financially solvent and adequately capitalized;
  - e) Be authorized to do business in the State of Texas;
  - f) Submit a compliant HUB Plan (HSP) (if required for this project) - as set forth in **Section 1.24**; and
  - g) Attach a letter of intent from a surety company indicating Respondent's ability to obtain performance and payment bonds for the entire construction cost of the proposed project. The information submitted must indicate Respondent's total bonding capacity, available bonding capacity and current backlog.

### **3.2 Selection Criteria**

Responses shall be consistently evaluated and scored in accordance with the following steps:

#### **3.2.1 Level 1 Evaluation (Pass or Fail)**

Level 1 evaluation begins with determining whether a Proposal meets the minimum qualifications listed in **Section 3.1.1**.

#### **3.2.2 Level 2 Evaluation**

Level 2 continues with further review of the responsive Proposals submitted based on the evaluation criteria in **Exhibit G**. The categories are:

- a) **Respondent's Ability to Provide Construction Services** (15% Value)
- b) **Availability** (5% Value)
- c) **Financial Stability and Risk** (25% Value)
- d) **Respondent's Project Planning and Scheduling for this Project** (15% Value)
- e) **Respondent's Pricing and Delivery Proposal** (40% Value)

## **SECTION 4 – FORMAT OF PROPOSALS**

### **4.1 General Instructions**

4.1.1 Proposals shall be prepared **SIMPLY AND ECONOMICALLY**, providing a straightforward, **CONCISE** description of the Respondent's ability to meet the requirements of this RFP. Emphasis shall be on the quality, completeness, clarity of content, responsiveness to the requirements, and an understanding of the Owner's needs. Expensive bindings, colored displays, promotional materials, etc., are not necessary or desired. Respondent should focus on the instructions and requirements of the RFP.

4.1.2 Proposals shall include the following elements:

- Proposal and Respondent's Information addressing the evaluation criteria in **Exhibit G**.
- HSP, if applicable.

- Respondent's Pricing and Delivery Proposal and Execution of Offer - submitted in a separate, sealed envelope as set forth below (**Exhibit F**).
- Respondent's Proposed Alternates - a separate document describing technical aspects of any alternate means, methods or materials that Respondent proposes to use in executing the Project, as defined in the **Exhibit C**. This document shall be submitted with the same number of copies as the Respondent's Proposal and shall not include any pricing information. Any price impact that the proposed alternate will have shall be clearly identified in an attachment to the Respondent's Pricing and Delivery Proposal.
- References for 3 listed projects of comparable scope and complexity. References shall be considered relevant based on specific project participation and experience with the Respondent. The Owner may contact references during any part of this RFP process. The Owner reserves the right to contact any other references at any time during the RFP process.

4.1.3 Proposals shall be a **MAXIMUM OF FIFTY (50) PRINTED PAGES**. The cover, table of contents, divider sheets, HUB Subcontracting Plan, Pricing and Delivery Proposal, and Execution of Offer **do not** count as printed pages. Each bound copy **must** be in the following order:

- Cover;
- Cover Letter;
- Table of Contents;
- **Criterion One:** Respondent's Ability to Provide Construction Services;
- **Criterion Two:** Availability;
- **Criterion Three:** Financial Stability and Risk
- **Criterion Four:** Respondent's Project Planning and Scheduling for this Project;
- **Criterion Five:** Respondent's Pricing and Delivery Proposal and Execution of Offer. Respondent's Pricing and Delivery Proposal and Execution of Offer **must** be submitted at the same time the sealed Proposal is submitted. The envelope containing these documents must clearly be labeled as "Respondent's Pricing and Delivery Proposal and Execution of Offer" and marked with the Owner's RFP Number and the Owner's Project Number and Project Name.
- Affirmations and solicitation acceptance for State Architectural/Engineering and Construction Projects (**Exhibit A**); and
- References; and
- **HUB Subcontracting Plan** - The HUB Subcontracting Plan should be submitted in accordance with **Section 1.11.1**.

4.1.4 Respondent shall carefully read the information contained in this RFP and submit a complete response to all requirements and questions as directed. Incomplete Proposals will be considered non-responsive and subject to rejection.

4.1.5 Proposals and any other information submitted by Respondent in response to this RFP shall become the property of the Owner.

4.1.6 Proposals that are qualified with conditional clauses, alterations, items not called for in the RFP documents, or irregularities of any kind are subject to rejection by the Owner, at its option.

- 4.1.7 The Owner makes no guarantee of volume, usage, or total compensation to be paid to any Respondent under any awarded Contract, if any, resulting from this RFP. Any awarded Contract is subject to appropriations and the continuing availability of funds. The Owner reserves the right to cancel, make partial award, or decline to award a Contract under this RFP at any time in its sole discretion. Further, the Owner reserves the right to accept or reject any or all Proposals, waive any formalities or minor technical inconsistencies, or delete any item/requirements from this RFP when deemed to be in Owner's best interest.
- 4.1.8 Proposals shall consist of answers to questions referenced in **Exhibit G** of the RFP. It is not necessary to repeat the question in the Proposals; however, **it is essential to reference the question number with the corresponding answer.**
- 4.1.9 Failure to comply with all requirements contained in this RFP may result in the rejection of the Proposal.

#### **4.2 Page Size, Binding, Dividers, and Tabs**

- 4.2.1 Proposals shall be printed on letter-size (8-1/2" x 11") paper and assembled with spiral-type or plastic comb bindings or staples. DO NOT USE METAL-RING HARD COVER BINDERS.
- 4.2.2 Additional attachments shall NOT be included with the Proposals. RFP
- 4.2.3 Separate and identify each evaluation criteria response to **Section 3** of this RFP by use of a divider sheet with an integral tab for ready reference.

#### **4.3 Table of Contents**

- 4.3.1 Submittals shall include a "Table of Contents" and give page numbers for each part of the Proposal.

#### **4.4 Pagination**

- 4.4.1 Number all pages of the Proposal sequentially using Arabic numerals (1, 2, 3, etc.); the Respondent is not required to number the pages of the HUB Subcontracting Plan.

### **SECTION 5 - DRAWINGS AND SPECIFICATIONS**

#### **5.1 Definitions**

The RFP solicitation documents include the bidding requirements and the proposed Contract documents. The bidding requirements consist of the solicitation advertisement, the RFP, the Respondent's Pricing and Delivery Proposal Form, and other sample bidding and contract forms. The proposed Contract documents consist of the General Construction Services Contract, performance and payment bonds, Texas Uniform General Conditions for Construction Contracts with HHSC Supplementary General Conditions, Prevailing Wage Rate Determination, HUB Utilization Policy (**Exhibit B**), other forms and documents

identified in the Contract, drawings, specifications, and all Addenda issued prior to receipt of Proposals.

## **5.2 Construction Documents and Distribution**

Documents are available from the ESBD posting, regional plans rooms and applicable offices of minority affairs and development in cities, which are likely to be home locations of Respondents listed in **Exhibit H** or the Project Architect/Engineer who can provide two sets of drawings and specifications (Construction Documents) to a Respondent who is a prime contractor and one set to a Respondent who is a major subcontractor (mechanical and electrical trades) who propose to submit a Proposal. Documents will not be issued free to suppliers, material companies, or lower tier subcontractors.

ARMKO Industries, Inc.  
6310 Genoa, Suite G  
Lubbock, TX 79424  
Phone: 806/833-6953  
[bdraper@armko.com](mailto:bdraper@armko.com)

## **5.3 Deposits**

Each Respondent who is a prime contractor will be furnished two sets of documents, and each Respondent who is a major subcontractor one set of documents, upon the receipt of a deposit of \$100.00 made payable to the Architect listed in **Section 5.2** per set of documents of the work upon which it proposes to submit a Proposal. All mailing/delivery costs shall be borne by the Respondent.

5.3.1 Deposits shall be by corporate check, cashier's check, or money order; no cash or personal checks will be accepted.

5.3.2 Additional sets may be requested, and will be provided upon receipt of the full deposit identified above.

## **5.4 Deposit Return and Reproduction Costs**

Deposits will be returned upon return of all documents in good condition, as determined by the Project Architect/Engineer, within ten (10) work days after opening of Proposals; except that, should the Respondent fail to submit a Proposal or return documents, the cost of reproduction and mailing will be deducted from the amount of the deposit and the balance will be refunded to the Respondent.



## **5.5 Additional Sets of Documents**

Additional sets of RFP solicitation documents, if available, may be obtained from the Project Architect/Engineer, at the Respondent's expense, upon receipt of a check covering the cost of reproduction and mailing. The extra sets do not become the Respondent's property, but are and shall be the Project Architect's/Engineer's exclusive property and shall be returned to the Project Architect/Engineer after Proposals have been received.

## **5.6 Documents on File**

Complete sets of drawings and specifications are on file in the Regional Plan Rooms located within the Project region, where contractors and subcontractors may examine them there. The Owner has provided a sample list of regional plan rooms in **Exhibit H**, but this list is not exhaustive of all regional plan rooms or offices of minority affairs and development that may be available. If Respondent is unable to locate a set of drawings and specifications at a regional plan room, it is their responsibility to contact the Owner's Point-of-Contract for a list of the applicable regional plan rooms.

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**TEXAS**  
Health and Human Services

# **Attachment A**

**Contract Affirmations for State  
Architectural/Engineering and Construction Projects**

## Attachment A

### **Contract Affirmations for State Architectural/Engineering and Construction Projects**

By entering into this Contract, the Architect/Engineer, General Contractor, Construction Manager-Agent, Construction Manager-at-Risk, or Design-Build Firm (the "Contractor"), as applicable, affirms, without exception, as follows:

1. **Parties to the Affirmations.** Contractor represents and warrants that these Contract Affirmations apply to Contractor and all of Contractor's principals, officers, directors, shareholders, partners, owners, agents, employees, subcontractors, independent contractors, and any other representatives who may provide services under, who have a financial interest in, or otherwise are interested in this Contract and any related solicitation.
2. **Standard of Care.** Pursuant to Section 2254.0031 of the Texas Government Code, which incorporates by reference Section 271.904(d) of the Texas Local Government Code, Contractor shall perform services (1) with professional skill and care ordinarily provided by competent engineers or architects practicing under the same or similar circumstances and professional license, and (2) as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer or architect.
3. **Public Information Act.** Contractor understands that the Owner will comply with the Texas Public Information Act (Chapter 552 of the Texas Government Code) as interpreted by judicial rulings and opinions of the Attorney General of the State of Texas. Information, documentation, and other material prepared and submitted in connection with this Contract or any related Solicitation may be subject to public disclosure pursuant to the Texas Public Information Act. In accordance with Section 2252.907 of the Texas Government Code, Contractor is required to make any information created or exchanged with the State pursuant to the Contract, and not otherwise excepted from disclosure under the Texas Public Information Act, available in a format that is accessible by the public at no additional charge to the State.
4. **Solicitation Terms and Conditions.** Contractor accepts the Solicitation terms and conditions unless specifically noted by exceptions advanced in the form and manner directed in the Solicitation, if any, under which this Contract was awarded. Contractor agrees that all exceptions to the Solicitation, if any, are rejected unless expressly accepted by the Owner in writing.
5. **Distribution and Disclosure of Contract.** Contractor agrees that the Owner has the right to use, produce, and distribute copies of and to disclose to the Owner's employees, agents, and contractors and other governmental entities all or part of this Contract or any related Proposal as the Owner deems necessary to complete the procurement process or comply with state or federal laws.
6. **Disclosure of Interested Parties.** Contractor certifies that, if the value of this Contract exceeds \$1 Million, it has complied with Section 2252.908 of the Texas Government Code and 1 Texas Administrative Code, Part 2, Chapter 46, Sections 46.1-46.5 as implemented by

the Texas Ethics Commission (TEC), if applicable, and has provided the Owner with a fully executed TEC Form 1295, certified by the TEC and signed and notarized by the Contractor.

7. **Third-Party Information.** Contractor generally releases from liability and waives all claims against any party providing information about the Contractor at the request of the Owner.
8. **Dealings with Public Servants.** Contractor has not given, has not offered to give, and does not intend to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with this Contract or any related Solicitation, or related Solicitation Proposal.
9. **Financial Participation Prohibited.** Under Section 2155.004, Texas Government Code (relating to financial participation in preparing solicitations), Contractor certifies that the individual or business entity named in this Contract and any related Proposal is not ineligible to receive this Contract and acknowledges that this Contract may be terminated and payment withheld if this certification is inaccurate.
10. **Prior Disaster Relief.** Under Sections 2155.006 and 2261.053 of the Texas Government Code (relating to convictions and penalties regarding Hurricane Rita, Hurricane Katrina, and other disasters), the Contractor certifies that the individual or business entity named in this Contract and any related Proposal is not ineligible to receive this Contract and acknowledges that this Contract may be terminated and payment withheld if this certification is inaccurate.
11. **Child Support Obligation.** Under Section 231.006(d) of the Texas Family Code regarding child support, Contractor certifies that the individual or business entity named in this Contract and any related Proposal is not ineligible to receive the specified payment and acknowledges that the Contract may be terminated and payment may be withheld if this certification is inaccurate.
12. **Suspension and Debarment.** Contractor certifies that it and its principals are not suspended or debarred from doing business with the state or federal government as listed on the State of Texas Debarred Vendor List maintained by the Texas Comptroller of Public Accounts and the System for Award Management (SAM) maintained by the General Services Administration. This certification is made pursuant to the regulations implementing Executive Order 12549 and Executive Order 12689, Debarment and Suspension, 2 C.F.R. Part 376, and any relevant regulations promulgated by the Department or Agency funding this project. This provision shall be included in its entirety in Contractor's subcontracts, if any, if payment in whole or in part is from federal funds.
13. **Excluded Parties.** Contractor certifies that it is not listed on the federal government's terrorism watch list as described in Executive Order 13224.
14. **Foreign Terrorist Organizations.** Contractor represents and warrants that it is not engaged in business with Iran, Sudan, or a foreign terrorist organization, as prohibited by Section 2252.152 of the Texas Government Code.
15. **Executive Head of a State Agency.** In accordance with Section 669.003 of the Texas Government Code, relating to contracting with the executive head of a state agency, Contractor certifies that it is not (1) the executive head of a Texas Health and Human Services

agency, (2) a person who at any time during the four years before the date of this Contract was the executive head of a Texas Health and Human Services agency, or (3) a person who employs a current or former executive head of a Texas Health and Human Services agency.

16. **Franchise Tax Certification.** Contractor represents and warrants that it is not currently delinquent in the payment of any franchise taxes owed the State of Texas under Chapter 171 of the Texas Tax Code.
17. **Tax Exemption Certificates.** Purchases made for State of Texas use are exempt from the State Sales Tax and Federal Excise Tax. The Owner will furnish Tax Exemption Certificates upon request. Contractor represents and warrants that it shall pay all taxes or similar amounts resulting from the contract, including, but not limited to, any federal, State, or local income, sales or excise taxes of Contractor or its employees. The Owner shall not be liable for any taxes resulting from the contract.
18. **Debts and Delinquencies.** Contractor agrees that any payments due under this Contract shall be applied towards any debt or delinquency that is owed to the State of Texas.
19. **Excess Obligations Prohibited.** This Contract is subject to termination or cancellation, without penalty to the Owner, either in whole or in part, subject to the availability of state funds. Owner is a state agency whose authority and appropriations are subject to actions of the Texas Legislature. If the Owner becomes subject to a legislative change, revocation of statutory authority, or lack of appropriated funds that would render either the Owner's or Contractor's delivery or performance under the Contract impossible or unnecessary, this Contract will be terminated or cancelled and be deemed null and void. In the event of a termination or cancellation under this Section, the Owner will not be liable to Contractor for any damages, that are caused or associated with such termination, or cancellation, and the Owner will not be required to give prior notice.
20. **Lobbying Prohibition.** Contractor represents and warrants that payments to Contractor and Contractor's receipt of appropriated or other funds under this Contract or any related Solicitation are not prohibited by Sections 556.005, 556.0055, or 556.008 of the Texas Government Code (relating to use of appropriated money or state funds to employ or pay lobbyists, lobbying expenses, or influence legislation).
21. **Buy Texas.** Contractor agrees to comply with Section 2155.4441 of the Texas Government Code, requiring the purchase of products and materials produced in the State of Texas in performing service contracts.
22. **Disaster Recovery Plan.** Contractor agrees that upon request of the Owner, Contractor shall provide copies of its most recent business continuity and disaster recovery plans.
23. **Former Agency Employees.** Contractor represents and warrants, during the twelve (12) month period immediately prior to the date of the execution of this Contract, none of its employees including, but not limited to, those who will provide services under the Contract, was an employee of a Texas Health and Human Services agency. Pursuant to Section 2252.901, Texas Government Code (relating to prohibitions regarding contracts with and involving former and retired state agency employees), Contractor will not allow any former

employee of the Owner to perform services under this Contract during the twelve (12) month period immediately following the employee's last date of employment by the Owner.

24. **Nepotism Prohibitions.** Contractor knows of no officer or employee of the Owner, nor any relative within the second degree of consanguinity or affinity of an officer or employee of the Owner, that has a financial interest in the Contractor's firm or corporation. Contractor further certifies that no partner, corporation, or unincorporated association that employs, retains or contracts with, or which may employ, retain, or contract with any of the above, has a financial interest in any entity with which Contractor will be dealing on behalf of the Owner pursuant to Chapter 573 of the Texas Government Code and Section 2254.032 of the Texas Government Code.
25. **Restricted Employment for Certain State Personnel.** Contractor acknowledges that, pursuant to Section 572.069 of the Texas Government Code, a former state officer or employee of a state agency who during the period of state service or employment participated on behalf of a state agency in a procurement or contract negotiation involving Contractor may not accept employment from Contractor before the second anniversary of the date the Contract is signed or the procurement is terminated or withdrawn.
26. **Restriction on Former Employees of a State Agency.** If this Contract is for consulting services under Chapter 2254 of the Texas Government Code, in accordance with Section 2254.033 of the Texas Government Code, Contractor certifies that it does not employ an individual who was employed by System Agency or another agency at any time during the two years preceding the submission of any related Solicitation Response related to this Contract or, in the alternative, Contractor has disclosed in any related Solicitation Response the following: (i) the nature of the previous employment with System Agency or the other agency; (ii) the date the employment was terminated; and (iii) the annual rate of compensation at the time of the employment was terminated.
27. **No Felony Criminal Convictions.** Contractor represents that neither Contractor nor any of its employees, agents, or representatives, including any subcontractors and employees, agents, or representative of such subcontractors, has been convicted of a felony criminal offense or that if such a conviction has occurred Contractor has fully advised the Owner of the facts and circumstances surrounding the convictions.
28. **No Conflicts of Interest.** Contractor represents and warrants that it has no actual or potential conflicts of interest in providing the requested goods or services to the Owner under this Contract or any related Solicitation and that Contractor's provision of the requested goods and/or services under this Contract and any related Solicitation will not constitute an actual or potential conflict of interest or reasonably create an appearance of impropriety.
29. **Fraud and Reporting.** Contractor understands that the Owner does not tolerate any type of fraud. The Owner's policy is to promote consistent, legal, and ethical organizational behavior by assigning responsibilities and providing guidelines to enforce controls. Violations of law, agency policies, or standards of ethical conduct will be investigated, and appropriate actions will be taken. All employees or contractors who suspect fraud, waste or abuse (including employee misconduct that would constitute fraud, waste, or abuse) are required to immediately report the questionable activity to both the Health and Human Services

Commission's Office of the Inspector General at 1-800-436-6184 and the State Auditor's Office. Contractor agrees to comply with all applicable laws, rules, regulations, and Owner policies regarding fraud.

30. **Antitrust.** The undersigned affirms under penalty of perjury of the laws of the State of Texas that (a) in connection with this Contract and any related Solicitation Proposal, neither I nor any representative of the Contractor has violated any provision of the Texas Free Enterprise and Antitrust Act, Tex. Bus. & Comm. Code Chapter 15; (b) in connection with this Contract and any related Solicitation Proposal, neither I nor any representative of the Contractor has violated any federal antitrust law; and (c) neither I nor any representative of the Contractor has directly or indirectly communicated any of the contents of this Contract and any related Solicitation Proposal to a competitor of the Contractor or any other company, corporation, firm, partnership or individual engaged in the same line of business as the Contractor.
31. **Legal and Regulatory Actions.** Contractor represents and warrants that it is not aware of and has received no notice of any court or governmental agency proceeding, investigation, or other action pending or threatened against Contractor or any of the individuals or entities included in numbered **paragraph 1** of these Contract Affirmations within the five (5) calendar years immediately preceding execution of this Contract or the submission of any related Proposal that would or could impair Contractor's performance under this Contract, relate to the contracted or similar goods or services, or otherwise be relevant to the Owner's consideration of entering into this Contract. If Contractor is unable to make the preceding representation and warranty, then Contractor instead represents and warrants that it has provided to the Owner a complete, detailed disclosure of any such court or governmental agency proceeding, investigation, or other action that would or could impair Contractor's performance under this Contract, relate to the contracted or similar goods or services, or otherwise be relevant to the Owner's consideration of entering into this Contract. In addition, Contractor acknowledges this is a continuing disclosure requirement. Contractor represents and warrants that Contractor shall notify the Owner in writing within five (5) business days of any changes to the representations or warranties in this clause and understands that failure to so timely update the Owner shall constitute breach of contract and may result in immediate contract termination.
32. **Certification Regarding Boycotting Israel.** Contractor represents and warrants that, pursuant to Section 2270.002 of the Texas Government Code, Contractor does not boycott Israel and will not boycott Israel during the term of this Contract.
33. **Equal Employment Opportunity.** Contractor represents and warrants its compliance with all applicable duly enacted state and federal laws governing equal employment opportunities.
34. **E-Verify.** Contractor certifies that for contracts for services, Contractor shall utilize the U.S. Department of Homeland Security's E-Verify system during the term of this Contract to determine the eligibility of:
  - (a) all persons employed by Contractor to perform duties within Texas; and
  - (b) all persons, including subcontractors, assigned by Contractor to perform work pursuant to this Contract within the United States of America.

35. **Drug-Free Workplace.** Contractor represents and warrants that it shall comply with the applicable provisions of the Drug-Free Work Place Act of 1988 (41 U.S.C. § 701 *et seq.*) and maintain a drug-free work environment.
36. **False Representations.** Contractor understands, acknowledges, and agrees that any false representation or any failure to comply with a representation, warranty, or certification made by Contractor is subject to all civil and criminal consequences provided at law or in equity including, but not limited to, immediate termination of this Contract.
37. **All Applicable Laws.** Contractor represents and warrants that it will comply with all applicable laws and maintain all permits and licenses required by applicable city, county, state, and federal rules, regulations, statutes, codes, and other laws that pertain to this Contract.
38. **False Statements.** Contractor represents and warrants that all statements and information prepared and submitted by Contractor in this Contract and any related Solicitation Proposal are current, complete, true, and accurate. Contractor acknowledges any false statement or material misrepresentation made by Contractor during the performance of this Contract or any related Solicitation is a material breach of contract and may void this Contract. Further, Contractor understands, acknowledges, and agrees that any false representation or any failure to comply with a representation, warranty, or certification made by Contractor is subject to all civil and criminal consequences provided at law or in equity including, but not limited to, immediate termination of this Contract.
39. **Signature Authority.** Contractor represents and warrants that the individual signing this Contract is authorized to sign on behalf of Contractor and to bind the Contractor.

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**TEXAS**  
Health and Human Services

# **Attachment B**

**Texas Uniform Terms and Conditions for  
Construction Contracts with HHSC Supplementary  
General Conditions**

## Attachment B

Health and Human Services Commission  
Published and Effective: November 15, 2018  
Responsible Office: Chief Counsel



# **Texas Uniform General Conditions for Construction Contracts**

with  
**HHSC Supplementary General Conditions**

Version 2.2

*(2015 Texas Facilities Commission Uniform General Conditions with 2015 and 2018 Supplements)  
(HHSC Supplementary General Conditions are denoted by bold blue italics)*

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## Article 1. Definitions

Unless the context clearly requires another meaning, the following terms have the meaning assigned herein.

- 1.1 *Addendum/Addenda* means formally issued written or graphic modifications and/or interpretations of the Construction Documents that may add to, delete from, clarify or correct the description and/or scope of the Work. Addenda are issued during the bidding phase of the project.
- 1.2 *Application for Payment* means Contractor's monthly partial invoice for payment that includes any portion of the Work that has been completed for which an invoice has not been submitted and performed in accordance with the requirements of the Contract Documents. The Application for Payment accurately reflects the progress of the Work, is itemized based on the Schedule of Values, bears the notarized signature of Contractor, and shall not include subcontracted items for which Contractor does not intend to pay.
- 1.3 *Amendment means any change to the Contract agreed to by the Parties other than those made by a Change Order.*
- 1.4 *Application for Final Payment* means Contractor's final invoice for payment that includes any portion of the Work that has been completed for which an invoice has not been submitted, amounts owing to adjustments to the final Contract Sum resulting from approved change orders, and release of remaining Contractor's retainage.
- 1.5 *Architect/Engineer (A/E)* means a person registered as an architect pursuant to Tex. Occ. Code Ann., Ch. 1051, as a landscape architect pursuant to Tex. Occ. Code Ann., Ch. 1052, a person licensed as a professional engineer pursuant Tex. Occ. Code Ann., Ch. 1001, and/or a firm employed by Owner or Design-Build Contractor to provide professional architectural or engineering services and to exercise overall responsibility for the design of a Project or a significant portion thereof, and to perform the contract administration responsibilities set forth in the Contract.
- 1.6 *Architect/Engineer's Supplemental Instructions (ASI) means the written response by the A/E to the Contractor's RFI, or other written or telephonic communication from the Contractor to the A/E, clarifying an issue (or issues) with regard to the Work deemed unclear by the Contractor.*
- 1.7 *Authority Having Jurisdiction* means a federal, state, local, or other regional department, or an individual such as a fire marshal, building official, electrical inspector, utility provider or other individual having statutory authority.
- 1.8 *Baseline Schedule* means the initial time schedule prepared by Contractor for Owner's information and acceptance that conveys Contractor's and Subcontractors' activities (including coordination and review activities required in the Contract Documents to be performed by A/E and ODR), durations, and sequence of work related to the entire Project to the extent required by the Contract Documents. The schedule clearly demonstrates the critical path of activities, durations and necessary predecessor

conditions that drive the end date of the schedule. The Baseline Schedule shall not exceed the time limit current under the Contract Documents.

- 1.9 *Certificate of Final Completion* means the certificate issued by A/E that documents, to the best of A/E's knowledge and understanding, Contractor's completion of all Contractor's Punchlist items and pre-final Punchlist items, final cleanup and Contractor's provision of Record Documents, operations and maintenance manuals, and all other closeout documents required by the Contract Documents.
- 1.10 *Certificate of Substantial Completion* means the certificate executed by the A/E, ODR and Contractor that documents to the best of A/E's and ODR's knowledge and understanding, Contractor's sufficient completion of the work in accordance with the Contract, so as to be operational and fit for the use intended.
- 1.11 *Change Order* means a written modification of the Contract between Owner and Contractor, signed by Owner, Contractor, and A/E.
  - 1.11.1 *An Owner-initiated Change Order (CO) consists of four parts, which are identified in Subsection 11.7.2.*
  - 1.11.2 *The Contractor's receipt of the fully executed Change Order constitutes the authorization to proceed with the changed Work described in the CO.*
- 1.12 *Change Order Proposal Evaluation (CPE) includes the adjustment necessary to the Contract Sum and Time, if any.*
- 1.13 *Change Order Justification (COJ) identifies the reason and justification for the change in the Work, and indicates the review and approval by the Architect/Engineer of the adjustments necessary to the Contract Sum and Time described in the CPE.*
- 1.14 *Change Authorization (CA) indicates Owner's agreement to the adjusted cost and time for the change in the work.*
- 1.15 *Close-out Documents* mean the product brochures, submittals, product/equipment maintenance and operations instructions, manuals, and other documents/warranties, record documents, affidavit of payment, release of lien and claim, and as may be further defined, identified, and required by the Contract Documents.
- 1.16 *Contract* means the entire agreement between Owner and Contractor, including all of the Contract Documents.
- 1.17 *Contract Date* is the date when the agreement between Owner and Contractor becomes effective.
- 1.18 *Contract Documents* mean those documents identified as a component of the agreement (Contract) between Owner and Contractor. These may include, but are not limited to, Drawings; Specifications; General, Supplementary General, and Special Conditions; and all pre-bid and/or pre-proposal addenda.

- 1.19 *Contract Sum* means the total compensation payable to Contractor for completion of the Work in accordance with the terms of the Contract.
- 1.20 *Contract Time* means the period between the start date identified in the Notice to Proceed with construction and the Substantial Completion date identified in the Notice to Proceed or as subsequently amended by a Change Order.
- 1.21 *Contractor* means the individual, corporation, limited liability company, partnership, firm, or other entity contracted to perform the Work, regardless of the type of construction contract used, so that the term as used herein includes a Construction Manager-at-Risk or a Design-Build firm as well as a general or prime Contractor. The Contract Documents refer to Contractor as if singular in number.
- 1.22 *Construction Documents* mean the Drawings, Specifications, and other documents issued to build the Project. Construction Documents become part of the Contract Documents when listed in the Contract or any Change Order.
- 1.23 *Construction Manager-at-Risk*, in accordance with Tex. Gov't Code, Ch. 2166, means a sole proprietorship, partnership, corporation, or other legal entity that assumes the risk for construction, rehabilitation, alteration, or repair of a facility at the contracted price as a general contractor and provides consultation to Owner regarding construction during and after the design of the facility.<sup>1</sup>
- 1.24 *Date of Commencement* means the date designated in the Notice to Proceed for Contractor to commence the Work.
- 1.25 *Day* means a calendar day unless otherwise specifically stipulated.
- 1.26 *Design-Build* means a project delivery method in which the detailed design and subsequent construction is provided through a single contract with a Design-Build firm; a team, partnership, or legal entity that includes design professionals and a builder. The Design-Build Project delivery shall be implemented in accordance with Tex. Gov't Code § 2166.2531.<sup>2</sup>
- 1.27 *Drawings* mean that product of A/E which graphically depicts the Work.
- 1.28 *Final Completion* means the date determination certified by A/E and Owner that the Work is fully and satisfactorily complete in accordance with the Contract.
- 1.29 *Final Payment* means the last and final monetary compensation made to Contractor

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<sup>1</sup> *Tex. Gov't Code § 2166.2532 has been repealed (Repealed by Acts 2011, 82nd Leg., ch. 1129 (H.B. 628) § 5.01(2), eff. Sept. 1, 2011) and replaced by Tex. Gov't Code Chapter 2269, Subchapter F (Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. 628), Sec. 2.08, eff. September 1, 2011. Redesignated from Government Code, Chapter 2267 by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. 1093), Sec. 22.001(23), eff. September 1, 2013.).*

<sup>2</sup> *Tex. Gov't Code § 2166.2531 has been repealed (Repealed by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. 628), Sec. 5.01(2), eff. September 1, 2011) and replaced by Tex. Gov't Code Chapter 2269, Subchapter G (Added by Acts 2011, 82nd Leg., R.S., Ch. 1129 (H.B. 628), Sec. 2.08, eff. September 1, 2011. Redesignated from Government Code, Chapter 2267 by Acts 2013, 83rd Leg., R.S., Ch. 161 (S.B. 1093), Sec. 22.001(23), eff. September 1, 2013.).*

for any portion of the Work that has been completed and accepted for which payment has not been made, amounts owing to adjustments to the final Contract Sum resulting from approved change orders, and release of Contractor's retainage.

- 1.30 *Historically Underutilized Business (HUB)* pursuant to Tex. Gov't Code, Ch. 2161, means a business that is at least 51% owned by an Asian Pacific American, a Black American, a Hispanic American, a Native American and/or an American Woman; is an entity with its principal place of business in Texas; and has an owner residing in Texas with proportionate interest that actively participates in the control, operations, and management of the entity's affairs.
- 1.31 *Interim Change Authorization (ICA)* means an Owner-generated document which authorizes the Contractor to proceed with changed work before submitting a CPE, when work must proceed in order to prevent damage to Work in place, to prevent significant delay in the Project Schedule or to maintain safety.
- 1.32 *Notice to Proceed* means a written document informing Contractor of the dates begin Work and the dates anticipated for Substantial Completion.
- 1.33 *Open Item List* means a list of work activities, Punchlist items, changes or other issues that are not expected by Owner and Contractor to be complete prior to Substantial Completion.
- 1.34 *Owner* means the State of Texas, and any agency of the State of Texas, acting through the responsible entity of the State of Texas identified in the Contract as Owner.
- 1.35 *Owner's Designated Representative (ODR)* means the individual assigned by Owner to act on its behalf and to undertake certain activities as specifically outlined in the Contract. ODR is the only party authorized to direct changes to the scope, cost, or time of the Contract.
- 1.36 *Project* means all activities necessary for realization of the Work. This includes design, contract award(s), execution of the Work itself, and fulfillment of all Contract and warranty obligations.
- 1.37 *Progress Assessment Report (PAR)* means the monthly compliance report to Owner verifying compliance with the HUB subcontracting plan (HSP).
- 1.38 *Proposed Change Order (PCO)* means a document that informs Contractor of a proposed change in the Work and appropriately describes or otherwise documents such change including Contractor's response of pricing for the proposed change.
- 1.39 *Punchlist* means a list of items of Work to be completed or corrected by Contractor after Substantial Completion. Punchlists indicate items to be finished, remaining Work to be performed, or Work that does not meet quality or quantity requirements as required in the Contract Documents.
- 1.40 *Record Documents* mean the drawing set, Specifications, and other materials

maintained by Contractor that documents all addenda, Architect's Supplemental Instructions, Change Orders and postings and markings that record the as-constructed conditions of the Work and all changes made during construction.

- 1.41 *Request for Information (RFI)* means a written request by Contractor directed to A/E or ODR for a clarification of the information provided in the Contract Documents or for direction concerning information necessary to perform the Work that may be omitted from the Contract Documents.
- 1.42 *Samples* mean representative physical examples of materials, equipment, or workmanship used to confirm compliance with requirements and/or to establish standards for use in execution of the Work.
- 1.43 *Schedule of Values* means the detailed breakdown of the cost of the materials, labor, and equipment necessary to accomplish the Work as described in the Contract Documents, submitted by Contractor for approval by Owner and A/E.
- 1.44 *Shop Drawings* mean the drawings, diagrams, illustrations, schedules, performance charts, brochures, and other data prepared by Contractor or its agents which detail a portion of the Work.
- 1.45 *Site* means the geographical area of the location of the Work.
- 1.46 *Special Conditions* mean the documents containing terms and conditions which may be unique to the Project. Special Conditions are a part of the Contract Documents and have precedence over the Uniform General Conditions and Supplementary General Conditions.
- 1.47 *Specifications* mean the written product of A/E that establishes the quality and/or performance of products utilized in the Work and processes to be used, including testing and verification for producing the Work.
- 1.48 *Subcontractor* means a business entity that enters into an agreement with Contractor to perform part of the Work or to provide services, materials, or equipment for use in the Work.
- 1.49 *Submittal Register* means a list provided by Contractor of all items to be furnished for review and approval by A/E and Owner and as identified in the Contract Documents including anticipated sequence and submittal dates.
- 1.50 *Substantial Completion* means the date determined and certified by Contractor, A/E, and Owner when the Work, or a designated portion thereof, is sufficiently complete, in accordance with the Contract, so as to be operational and fit for the use intended.
- 1.51 *Supplementary General Conditions* mean procedures and requirements that modify the Uniform General Conditions. Supplementary General Conditions, when used, have precedence over the Uniform General Conditions.
- 1.52 *Survey means a land survey document produced by a licensed surveyor. The survey*



*contains information about a particular parcel of property including but not limited to boundaries, natural land features, constructed improvements and legal descriptions.*

- 1.53 *Unit Price Work* means the Work, or a portion of the Work, paid for based on incremental units of measurement.
- 1.54 *Unilateral Change Order (ULCO)* means a Change Order issued by Owner without the complete agreement of Contractor, as to cost and/or time.
- 1.55 *Work* means the administration, procurement, materials, equipment, construction and all services necessary for Contractor, and/or its agents, to fulfill Contractor's obligations under the Contract.
- 1.56 *Work Progress Schedule* means the continually updated time schedule prepared and monitored by Contractor that accurately indicates all necessary appropriate revisions as required by the conditions of the Work and the Project while maintaining a concise comparison to the Baseline Schedule.

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## **Article 2. Wage Rates and Other Laws Governing Construction**

- 2.1 Environmental Regulations. Contractor shall conduct activities in compliance with applicable laws and regulations and other requirements of the Contract relating to the environment and its protection at all times. Unless otherwise specifically determined, Owner is responsible for obtaining and maintaining permits related to stormwater run-off. Contractor shall conduct operations consistent with stormwater run-off permit conditions. Contractor is responsible for all items it brings to the Site, including hazardous materials, and all such items brought to the Site by its Subcontractors and suppliers, or by other entities subject to direction of Contractor. Contractor shall not incorporate hazardous materials into the Work without prior approval of Owner and shall provide an affidavit attesting to such in association with request for Substantial Completion inspection.
- 2.2 Wage Rates. Contractor shall not pay less than the wage scale of the various classes of labor as shown on the prevailing wage schedule provided by Owner in the bid or proposal specifications. The specified wage rates are minimum rates only. Owner is not bound to pay 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. The prevailing wage schedule is not a representation that qualified labor adequate to perform the Work is available locally at the prevailing wage rates.
- 2.2.1 Notification to Workers. Contractor shall post the prevailing wage schedule in a place conspicuous to all workers on the Project Site. When requested by Owner, Contractor shall furnish evidence of compliance with the Texas Prevailing Wage Law and the addresses of all workers.
- 2.2.1.1 Pursuant to Tex. Gov't Code § 2258.024, Contractor shall keep, on site, true and accurate records showing the name and occupation of each worker employed by the Contractor or subcontractors and the actual per diem wages paid to each worker. The record shall be open to inspection by the ODR and their agents at all reasonable hours for the duration of the contract.
- 2.2.1.2 With each application for progress payment, Contractor shall make available upon request certified payroll records, including from subcontractors of any tier level, on Form WH-347 as promulgated by the U.S. Department of Labor, as may be revised from time to time and in unlocked and unprotected Excel format, along with copies of any and all Contract Documents between Contractor and any Subcontractors. Pursuant to Tex. Penal Code §§ 37.02 and 37.10, Employees of Contractor and subcontractors, including all tier levels, shall be subject to prosecution for submitting certified payroll records that contain materially false information.
- 2.2.1.3 The prevailing wage schedule is determined by Owner in compliance with Tex. Gov't Code, Ch. 2258. Should Contractor at any time become aware that a particular skill or trade not reflected on Owner's

prevailing wage schedule will be or is being employed in the Work, whether by Contractor or by Subcontractor, Contractor shall promptly inform ODR of the proposed wage to be paid for the skill along with a justification for same and ODR shall promptly concur with or reject the proposed wage and classification.

- 2.2.1.4 Contractor is responsible for determining the most appropriate wage for a particular skill in relation to similar skills or trades identified on the prevailing wage schedule. In no case, shall any worker be paid less than the wage indicated for laborers.
- 2.2.1.5 Pursuant to Tex. Labor Code § 214.008, Misclassification of Workers; Penalty. The Owner requires Contractor and all subcontractors properly classify individuals as Employees or Independent Contractors.
- 2.2.2 Penalty for Violation. Contractor, and any Subcontractor, will pay to the State a penalty of sixty dollars (\$60) for each worker employed for each day, or portion thereof, that the worker is paid less than the wage rates stipulated in the prevailing wage schedule
- 2.2.3 Complaints of Violations.
  - 2.2.3.1 Owner's Determination of Good Cause. Upon receipt of information concerning a violation, Owner will conduct an investigation in accordance with Tex. Gov't Code, Ch. 2258 and make an initial determination as to whether good cause exists that a violation occurred. Upon making a good cause finding, Owner will 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 in accordance with Tex. Gov't Code § 2258.023, such amounts being subtracted from successive progress payments pending a final decision on the violation.
  - 2.2.3.2 No Extension of Time. If Owner's determination proves valid that good cause existed to believe a violation had occurred, Contractor is not entitled to an extension of time for any delay arising directly or indirectly from the arbitration procedures.
  - 2.2.3.3 Cooperation with Owner's Investigation. Contractor shall cooperate with Owner during any investigations hereunder. Such cooperation shall include, but not necessarily be limited to, timely providing the information and/or documentation requested by Owner, which may include certified payroll records on Form WH-347 as promulgated by the U.S. Department of Labor, as may be revised from time to time and in unlocked and unprotected Excel format; and copies of any and all Contract Documents between Contractor and any Subcontractors.

- 2.2.3.4 Notification to Owner. In the event Contractor or Subcontractor elect to appeal an initial determination made pursuant to Paragraph 2.2.3.1, the Contractor and/or Subcontractor, as applicable, shall deliver notice thereof to Owner.
- 2.2.3.4.1 *If the Contractor and the claimant worker reach an agreement concerning the claim, the Contractor shall promptly provide the Owner with a copy of the written agreement, countersigned by the claimant.*
- 2.2.3.4.2 Arbitration Required. *If the violation is not resolved within fourteen (14) days following initial determination by the Owner, the Contractor and the claimant worker must participate in binding arbitration in accordance with the “Texas General Arbitration Act,” Texas Civil Practice & Remedies Code Chapter 171. If the Contractor and the claimant worker are unable to reach an agreement for selection of an arbitrator within ten (10) business days, either party may petition the district court to appoint an arbitrator whose decision will be binding on all parties.*
- 2.2.3.4.3 Arbitration Award. *If an arbitrator assesses an award against the Contractor, the Contractor shall promptly furnish a copy of said award to the Owner. The Owner may use any amounts retained under Section 2.2.3.1 to pay the worker. If the retained funds are insufficient to pay the arbitration award, the worker has a right of action against the Contractor and/or the surety to receive the amount owed, plus attorneys’ fees and court costs. The Owner has no duty to release any funds to either the claimant or the Contractor until the Owner has received the notices of agreement or the arbitration award.*
- 2.3 Venue for Suits. The venue for any suit arising from the Contract will be in a court of competent jurisdiction in Travis County, Texas, or as may otherwise be designated in the Supplementary General Conditions.
- 2.3.1 *Notwithstanding Section 2.3 above, venue for any suit asserting a payment or performance bond claim will be in a court of competent jurisdiction in the county in which all or part of the Project is located.*
- 2.4 Licensing of Trades. Contractor shall comply with all applicable provisions of State law related to license requirements for skilled tradesmen, contractors, suppliers and or laborers, as necessary to accomplish the Work. In the event Contractor, or one of its Subcontractors, loses its license during the term of performance of the Contract, Contractor shall promptly hire or contract with a licensed provider of the service at no additional cost to Owner.

- 2.5 Royalties, Patents, and Copyrights. Contractor shall pay all royalties and license fees, defend suits or claims for infringement of copyrights and patent rights, and shall hold Owner harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications or other documents prepared by Owner or A/E. However, if Contractor has reason to believe that the required design, process, or product is an infringement of a copyright or a patent, Contractor shall be responsible for such loss unless such information is promptly furnished to A/E.
- 2.6 State Sales and Use Taxes. Owner qualifies for exemption from certain State and local sales and use taxes pursuant to the provisions of Tex. Tax Code, Ch. 151. Upon request from Contractor, Owner shall furnish evidence of tax exempt status. Contractor may claim exemption from payment of certain applicable State taxes by complying with such procedures as prescribed by the State Comptroller of Public Accounts. Owner acknowledges not all items qualify for exemption. Owner is not obligated to reimburse Contractor for taxes paid on items that qualify for tax exemption.
- 2.7 **Buy America Requirements for Iron and Steel Used in Construction.** In accordance with Texas Government Code 2252, Section 2252.202, all iron or steel products (i.e., rolled structural shapes including wide flange beams and columns, angles, bars, plates, sheets, hollow structural sections, pipe, etc.) shall be produced, manufactured and fabricated in the United States.<sup>3</sup>
- 2.7.1 *Notwithstanding anything to the contrary herein, Contractor must satisfy the requirements of Section 2.7 above, unless one of the exemptions in Texas Government Code Section 2252.203 is applicable.*

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<sup>3</sup> Added by TFC 2018 Supplementary General Conditions to the state of Texas 2015 edition of the Uniform General Conditions for Contracts.

### **Article 3. General Responsibilities of Owner and Contractor**

- 3.1 Owner's General Responsibilities. Owner is the entity identified as such in the Contract and referred to throughout the Contract Documents as if singular in number.
- 3.1.1 Preconstruction Conference. Prior to, or concurrent with, the issuance of Notice to Proceed with construction, a conference will be convened for attendance by Owner, Contractor, A/E and appropriate Subcontractors. The purpose of the conference is to establish a working understanding among the parties as to the Work, the operational conditions at the Project Site, and general administration of the Project. Topics include communications, schedules, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, maintaining required records and all other matters of importance to the administration of the Project and effective communications between the Project team members.
- 3.1.2 Owner's Designated Representative. Prior to the start of construction, Owner will identify Owner's Designated Representative (ODR), who has the express authority to act and bind Owner to the extent and for the purposes described in the various Articles of the Contract, including responsibilities for general administration of the Contract.
- 3.1.2.1 Unless otherwise specifically defined elsewhere in the Contract Documents, ODR is the single point of contact between Owner and Contractor. Notice to ODR, unless otherwise noted, constitutes notice to Owner under the Contract.
- 3.1.2.2 All directives on behalf of Owner will be conveyed to Contractor and A/E by ODR in writing.
- 3.1.2.3 Owner will furnish or cause to be furnished, free of charge, the number of complete sets of the Drawings, Specifications, and addenda as provided in the Supplementary General Conditions or Special Conditions.
- 3.1.2.4 The ODR will establish the protocol for planning, scheduling and documenting progress meetings with provisions for absence of various project team members that have a key role in these duties.
- 3.1.3 Owner Supplied Materials and Information.
- 3.1.3.1 Owner will furnish to Contractor those surveys describing the physical characteristics, legal description, limitations of the Site, Site utility locations, and other information used in the preparation of the Contract Documents.
- 3.1.3.2 Owner will provide information, equipment, or services under Owner's control to Contractor with reasonable promptness.

- 3.1.4 Availability of Lands. Owner will furnish, as indicated in the Contract, all required rights to use the lands upon which the Work occurs. This includes rights-of-way and easements for access and such other lands that are designated for use by Contractor. Contractor shall comply with all Owner identified encumbrances or restrictions specifically related to use of lands so furnished. Owner will obtain and pay for easements for permanent structures or permanent changes in existing facilities,
- 3.1.5 Limitation on Owner's Duties.
- 3.1.5.1 Owner will not supervise, direct, control or have authority over or be responsible for Contractor's means, methods, technologies, sequences or procedures of construction or the safety precautions and programs incident thereto. Owner is not responsible for any failure of Contractor to comply with laws and regulations applicable to the Work. Owner is not responsible for the failure of Contractor to perform or furnish the Work in accordance with the Contract Documents. Except as provided in Section 2.5, Owner is not responsible for the acts or omissions of Contractor, or any of its Subcontractors, suppliers or of any other person or organization performing or furnishing any of the Work on behalf of Contractor.
- 3.1.5.2 Owner will not take any action in contravention of a design decision made by A/E in preparation of the Contract Documents, when such actions are in conflict with statutes under which A/E is licensed for the protection of the public health and safety.
- 3.2 Role of Architect/Engineer. Unless specified otherwise in the Contract between Owner and Contractor, A/E shall provide general administration services for Owner during the construction phase of the project. Written correspondence, requests for information, and Shop Drawings/submittals shall be directed to A/E for action. A/E has the authority to act on behalf of Owner to the extent provided in the Contract Documents, unless otherwise modified by written instrument, which will be furnished to Contractor by ODR, upon request.
- 3.2.1 Site Visits.
- 3.2.1.1 A/E will make visits to the Site at intervals as provided in the A/E's Contract with Owner, to observe the progress and the quality of the various aspects of Contractor's executed Work and report findings to Owner.
- 3.2.1.2 A/E has the authority to interpret Contract Documents and inspect the Work for compliance and conformance with the Contract. Except as referenced in Paragraph 3.1.5.2, Owner retains the sole authority to accept or reject Work and issue direction for correction, removal, or replacement of Work.

- 3.2.2 Clarifications and Interpretations. It may be determined that clarifications or interpretations of the Contract Documents are necessary. Upon direction by ODR, such clarifications or interpretations will be provided by A/E consistent with the intent of the Contract Documents. A/E will issue these clarifications with reasonable promptness to Contractor as A/E's supplemental instruction ("ASI") or similar instrument. If Contractor believes that such clarification or interpretation justifies an adjustment in the Contract Sum or the Contract Time, Contractor shall so notify Owner in accordance with the provisions of Article 11.
- 3.2.3 Limitations on Architect/Engineer Authority. A/E is not responsible for:
- 3.2.3.1 Contractor's means, methods, techniques, sequences, procedures, safety, or programs incident to the Project, nor will A/E supervise, direct, control or have authority over the same;
  - 3.2.3.2 The failure of Contractor to comply with laws and regulations applicable to the furnishing or performing the Work;
  - 3.2.3.3 Contractor's failure to perform or furnish the Work in accordance with the Contract Documents; or
  - 3.2.3.4 Acts or omissions of Contractor, or of any other person or organization performing or furnishing any of the Work.
- 3.3 Contractor's General Responsibilities. Contractor is solely responsible for implementing the Work in full compliance with all applicable laws and the Contract Documents and shall supervise and direct the Work using the best skill and attention to assure that each element of the Work conforms to the Contract requirements. Contractor is solely responsible for all construction means, methods, techniques, safety, sequences, coordination, procedures and protection of the installed work as part of the contract until substantial completion of the project. Contractor remains responsible for the care and protection of materials and Work in the areas where punch list items are completed until Final Completion.
- 3.3.1 Project Administration. Contractor shall provide Project administration for all Subcontractors, vendors, suppliers, and others involved in implementing the Work and shall coordinate administration efforts with those of A/E and ODR in accordance with these general conditions and other provisions of the Contract, and as outlined in the preconstruction conference. Contractor's Project Administration includes periodic daily reporting on weather, work progress, labor, materials, equipment, obstructions to prosecution of the work, accidents and injuries in accordance with the Contract and transmitted no less frequently than on a weekly basis.
- 3.3.2 Contractor's Management Personnel. Contractor shall employ a competent person or persons who will be present at the Project Site during the progress of the Work to supervise or oversee the work. The competent persons are subject to the approval of ODR. Contractor shall not change approved staff



during the course of the project without the written approval of ODR unless the staff member leaves the employment of Contractor. Contractor shall provide additional quality control, safety and other staff as stated in the Supplementary General Conditions.

- 3.3.3 Labor. Contractor shall provide competent, suitably qualified personnel to survey, lay-out, and construct the Work as required by the Contract Documents and maintain good discipline and order at the Site at all times.
- 3.3.4 Services, Materials, and Equipment. Unless otherwise specified, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities, incidentals, and services necessary for the construction, performance, testing, start-up, inspection and completion of the Work.
- 3.3.5 Contractor General Responsibility. For Owner furnished equipment or material that will be in the care, custody, and control of Contractor, Contractor is responsible for damage or loss. Owner shall deliver to Contractor a complete list and respective values of such materials or equipment and make an equitable adjustment to the contract amount for any increase in cost of Builder's Risk insurance.
- 3.3.6 Non-Compliant Work. Should A/E and/or ODR identify Work as non-compliant with the Contract Documents, A/E and/or ODR shall communicate the finding to Contractor, and Contractor shall correct such Work at no additional cost to the Owner. The approval of Work by either A/E or ODR does not relieve Contractor from the obligation to comply with all requirements of the Contract Documents.
- 3.3.7 Subcontractors. Contractor shall not employ any Subcontractor, supplier or other person or organization, whether initially or as a substitute, against whom Owner shall have reasonable objection. Owner will communicate such objections in writing within ten (10) days of receipt of Contractor's intent to use such Subcontractor, supplier, or other person or organization. Contractor is not required to employ any Subcontractor, supplier or other person or organization to furnish any of the work to whom Contractor has reasonable objection. Contractor shall not substitute Subcontractors without the acceptance of Owner. Pursuant to Tex. Gov't Code § 2269.256(b), if the Contractor reviews, evaluates and recommends that the Owner accept a bid or proposal from a Subcontractor but the Owner requires another bid or proposal to be accepted, Owner shall compensate the Contractor by a change in price, time or guaranteed maximum cost for any additional cost or risk the Contractor will incur because of Owner's requirement to select another bid or proposal rather than the one recommended.
  - 3.3.7.1 All Subcontracts and supply contracts shall be consistent with and bind the Subcontractors and suppliers to the terms and conditions of

the Contract Documents including provisions of the Contract between Contractor and Owner.

- 3.3.7.2 Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with Contractor. Require all Subcontractors, suppliers and such other persons and organizations performing or furnishing any of the Work to communicate with Owner only through Contractor. Contractor shall furnish to Owner a copy, at Owner's request, of each first-tier subcontract promptly after its execution. Contractor agrees that Owner has no obligation to review or approve the content of such contracts and that providing Owner such copies in no way relieves Contractor of any of the terms and conditions of the Contract, including, without limitation, any provisions of the Contract which require the Subcontractor to be bound to Contractor in the same manner in which Contractor is bound to Owner.
- 3.3.8 Continuing the Work. Contractor shall carry on the Work and adhere to the progress schedule during all disputes, disagreements, or alternative resolution processes with Owner. Contractor shall not delay or postpone any Work because of pending unresolved disputes, disagreements or alternative resolution processes, except as Owner and Contractor may agree in writing.
- 3.3.9 Cleaning. Contractor shall at all times, keep the Site and the Work clean and free from accumulation of waste materials or rubbish caused by the construction activities under the Contract. Contractor shall ensure that the entire Project is thoroughly cleaned prior to requesting Substantial Completion inspection and, again, upon completion of the Project prior to the final inspection.
- 3.3.9.1 *The Contractor shall ensure that it and all of its Subcontractors and assigns prevent illegal dumping of litter in accordance with Texas Health and Safety Code Section 365.012.*
- 3.3.10 Acts and Omissions of Contractor, its Subcontractors, and Employees. Contractor shall be responsible for acts and omissions of his employees and all its Subcontractors, their agents and employees. Owner may, in writing, require Contractor to remove from the Project any of Contractor's or its Subcontractor's employees whom ODR finds to be careless, incompetent, unsafe, uncooperative, disruptive, or otherwise objectionable.
- 3.3.11 Acts or Omissions. Contractor shall indemnify and hold harmless the State of Texas and Customers, AND/OR THEIR OFFICERS, AGENTS, EMPLOYEES, REPRESENTATIVES, CONTRACTORS, ASSIGNEES, AND/OR DESIGNEES FROM ANY AND ALL LIABILITY, ACTIONS, CLAIMS, DEMANDS, OR SUITS, AND ALL RELATED COSTS, ATTORNEY FEES, AND EXPENSES arising out of, or resulting from any

acts or omissions of Contractor or its agents, employees, subcontractors, Order Fulfillers, or suppliers of subcontractors in the execution or performance of the Contract and any Purchase Orders issued under the Contract. THE DEFENSE SHALL BE COORDINATED BY CONTRACTOR WITH THE OFFICE OF THE ATTORNEY GENERAL WHEN TEXAS STATE AGENCIES ARE NAMED DEFENDANTS IN ANY LAWSUIT AND CONTRACTOR MAY NOT AGREE TO ANY SETTLEMENT WITHOUT FIRST OBTAINING THE CONCURRENCE FROM THE OFFICE OF THE ATTORNEY GENERAL. CONTRACTOR AND OWNER AGREE TO FURNISH TIMELY WRITTEN NOTICE TO EACH OTHER OF ANY SUCH CLAIM.

3.3.12 *Violation of Law. To the extent allowed by law, Contractor shall defend, indemnify, and hold harmless the State of Texas, the Owner, and their officers and employees, from and against all claims, actions, suits, demands, proceedings, costs, damages, and liabilities, including attorneys' fees and court costs arising out of, or connected with, or resulting from any breach or violation of a statute, ordinance, governmental regulation, standard, rule, or breach of contract by Contractor, any agent, employee, subcontractor, or supplier of Contractor, or any third party under the control or supervision of Contractor, in the execution or performance of this Contract. THE DEFENSE SHALL BE COORDINATED BY CONTRACTOR WITH THE OFFICE OF THE ATTORNEY GENERAL WHEN TEXAS STATE AGENCIES ARE NAMED DEFENDANTS IN ANY LAWSUIT AND CONTRACTOR MAY NOT AGREE TO ANY SETTLEMENT WITHOUT FIRST OBTAINING THE CONCURRENCE FROM THE OFFICE OF THE ATTORNEY GENERAL. CONTRACTOR AND OWNER AGREE TO FURNISH TIMELY WRITTEN NOTICE TO EACH OTHER OF ANY SUCH CLAIM.*

3.3.13 Infringements.

3.3.13.1 Contractor shall indemnify and hold harmless the State of Texas and Customers, AND/OR THEIR EMPLOYEES, AGENTS, REPRESENTATIVES, CONTRACTORS, ASSIGNEES, AND/OR DESIGNEES from any and all third party claims involving infringement of United States patents, copyrights, trade and service marks, and any other intellectual or intangible property rights in connection with the PERFORMANCES OR ACTIONS OF CONTRACTOR PURSUANT TO THIS CONTRACT. CONTRACTOR AND THE CUSTOMER AGREE TO FURNISH TIMELY WRITTEN NOTICE TO EACH OTHER OF ANY SUCH CLAIM. CONTRACTOR SHALL BE LIABLE TO PAY ALL COSTS OF DEFENSE INCLUDING ATTORNEYS' FEES. THE DEFENSE SHALL BE COORDINATED BY CONTRACTOR WITH THE OFFICE OF THE ATTORNEY GENERAL WHEN TEXAS STATE AGENCIES ARE NAMED DEFENDANTS IN ANY LAWSUIT AND CONTRACTOR MAY NOT AGREE TO ANY SETTLEMENT WITHOUT FIRST OBTAINING THE

CONCURRENCE FROM THE OFFICE OF THE ATTORNEY GENERAL.

3.3.13.1.1 *As used in this subsection, “the State of Texas” is understood to include the Owner and its employees, agents, representatives, contractors, assignees and designees.*

3.3.13.2 Contractor shall have no liability under this section if the alleged infringement is caused in whole or in part by: (i) use of the product or service for a purpose or in a manner for which the product or service was not designed, (ii) any modification made to the product without Contractor’s written approval, (iii) any modifications made to the product by Contractor pursuant to Customer’s specific instructions, (iv) any intellectual property right owned by or licensed to Customer, or (v) any use of the product or service by Customer that is not in conformity with the terms of any applicable license agreement.

3.3.13.3 If Contractor becomes aware of an actual or potential claim, or Customer provides Contractor with notice of an actual or potential claim, Contractor may (or in the case of an injunction against Customer, shall), at Contractor’s sole option and expense; (i) procure for the Customer the right to continue to use the affected portion of the product or service, or (ii) modify or replace the affected portion of the product or service with functionally equivalent or superior product or service so that Customer’s use is non-infringing.

3.3.13.4 Taxes/Workers’ Compensation/Unemployment Insurance–Including Indemnity.

3.3.13.4.1 CONTRACTOR AGREES AND ACKNOWLEDGES THAT DURING THE EXISTENCE OF THIS CONTRACT, CONTRACTOR SHALL BE ENTIRELY RESPONSIBLE FOR THE LIABILITY AND PAYMENT OF CONTRACTOR’S AND CONTRACTOR’S EMPLOYEES’ TAXES OF WHATEVER KIND, ARISING OUT OF THE PERFORMANCES IN THIS CONTRACT. CONTRACTOR AGREES TO COMPLY WITH ALL STATE AND FEDERAL LAWS APPLICABLE TO ANY SUCH PERSONS, INCLUDING LAWS REGARDING WAGES, TAXES, INSURANCE, AND WORKERS’ COMPENSATION. THE CUSTOMER AND/OR THE STATE SHALL NOT BE LIABLE TO CONTRACTOR, ITS EMPLOYEES, AGENTS, OR OTHERS FOR THE PAYMENT OF TAXES OR THE PROVISION OF UNEMPLOYMENT INSURANCE AND/OR WORKERS’ COMPENSATION OR ANY

BENEFIT AVAILABLE TO A STATE EMPLOYEE OR EMPLOYEE OF ANOTHER GOVERNMENTAL ENTITY CUSTOMER.

3.3.13.4.2 CONTRACTOR AGREES TO INDEMNIFY AND HOLD HARMLESS OWNER, THE STATE OF TEXAS AND/OR THEIR EMPLOYEES, AGENTS, REPRESENTATIVES, CONTRACTORS, AND/OR ASSIGNEES FROM ANY AND ALL LIABILITY, ACTIONS, CLAIMS, DEMANDS, OR SUITS, AND ALL RELATED COSTS, ATTORNEYS' FEES, AND EXPENSES, RELATING TO TAX LIABILITY, UNEMPLOYMENT INSURANCE AND/OR WORKERS' COMPENSATION IN ITS PERFORMANCE UNDER THIS CONTRACT. CONTRACTOR SHALL BE LIABLE TO PAY ALL COSTS OF DEFENSE INCLUDING ATTORNEYS' FEES. THE DEFENSE SHALL BE COORDINATED BY CONTRACTOR WITH THE OFFICE OF THE ATTORNEY GENERAL WHEN TEXAS STATE AGENCIES ARE NAMED DEFENDANTS IN ANY LAWSUIT AND VENDOR MAY NOT AGREE TO ANY SETTLEMENT WITHOUT FIRST OBTAINING THE CONCURRENCE FROM THE OFFICE OF THE ATTORNEY GENERAL. CONTRACTOR AND OWNER AGREE TO FURNISH TIMELY WRITTEN NOTICE TO EACH OTHER OF ANY SUCH CLAIM.

3.3.13.5 The provisions of this indemnification are solely for the benefit of the parties hereto and not intended to create or grant any rights, contractual or otherwise, to any other person or entity.

3.3.13.6 Contractor shall promptly advise Owner in writing of any claim or demand against Owner or against Contractor which involves Owner and known to Contractor and related to or arising out of Contractor's activities under this Contract.

3.3.14 Ancillary Areas. Operate and maintain operations and associated storage areas at the site of the Work in accordance with the following:

3.3.14.1 Confine all Contractor operations, including storage of materials and employee parking upon the Site of Work, to areas designated by Owner.

3.3.14.2 Contractor may erect, at its own expense, temporary buildings that will remain its property. Remove such buildings and associated utility service lines upon completion of the Work, unless Contractor requests and Owner provides written consent that it may abandon such buildings and utilities in place.

- 3.3.14.3 Use only established roadways or construct and use such temporary roadways as may be authorized by Owner. Do not allow load limits of vehicles to exceed the limits prescribed by appropriate regulations or law. Provide protection to road surfaces, curbs, sidewalks, trees, shrubbery, sprinkler systems, drainage structures and other like existing improvements to prevent damage and repair any damage thereto at the expense of Contractor.
- 3.3.14.4 Owner may restrict Contractor's entry to the Site to specifically assigned entrances and routes.
- 3.3.14.5 *Damages to Owner's or Third Parties' Property Caused by Contractor and/or Subcontractors. The Contractor shall, at Contractor's sole cost and at no expense to the Owner or any third parties, repair and/or replace Owner's property and adjacent property, buildings and equipment owned by third parties, damaged by the Contractor and/or the Subcontractors. Contractor shall return the damaged property, buildings and equipment to the same or better quality type or condition that existed prior to the damage. This contractual duty to repair damages shall survive any termination of Contractor under this Contract or any subsequent contract and, thereafter, become the obligation of the Surety.*
- 3.3.15 Separate Contracts. Owner reserves the right to award other contracts in connection with other portions of the Project under these same or substantially similar contract conditions, including those portions related to insurance and waiver of subrogation. Owner reserves the right to perform operations related to the Project with Owner's own forces.
- 3.3.16 Under a system of separate contracts, the conditions described herein continue to apply except as may be amended by change order.
- 3.3.17 Contractor shall cooperate with other contractors or forces employed on the Project by Owner, including providing access to Site and Project information as requested.
- 3.3.18 Owner shall be reimbursed by Contractor for costs incurred by Owner which are payable to a separate contractor because of delays, improperly timed activities, or defective construction by Contractor. Owner will equitably adjust the Contract by Change Order for costs incurred by Contractor because of delays, improperly timed activities, damage to the Work or defective construction by a separate contractor.
- 3.3.18.1 *If separate contracts are awarded for different portions of the Project, all Parties (the Contractors and Owner) shall cooperate and work together to complete the Project. Each Contractor shall inspect and promptly report in writing to the ODR any visually apparent discrepancies or defects found that may interfere with proper*

*execution or proper results of the contracted work. Failure to inspect and report visually apparent discrepancies or defects shall constitute an acknowledgment by Contractor there are no impediments to proper execution or proper results of the contracted work, except as to defects which may develop after the execution of the Contract.*

- 3.3.18.2 *Should any Contractor damage the Work or property of any other Contractor on the Project, the Contractor responsible for the damage shall, upon written notice from the Owner, endeavor to settle with the other contractor. If the contractors are unable to settle their dispute, the Owner may initiate a Dispute Resolution process and each Contractor shall be financially accountable for any damages or loss based on its proportionate fault determined by the Dispute Resolution process.*
- 3.3.18.3 *Each Contractor shall afford the Owner, the Architect/Engineer, and the other contractors, as necessary, with the reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work.*
- 3.3.18.4 *The Owner and the Contractors shall coordinate their activities, including, but not limited to, reviewing and revising construction schedules, when directed to do so.*
- 3.3.18.5 *The Contractor shall be responsible for its conduct, including Subcontractors conduct, resulting in delays, improperly timed activities or defective construction and shall reimburse the Owner for costs incurred by Owner as a result of Contractor caused delays or defective construction, including costs payable to another contractor. The Owner shall be responsible to the Contractor for Owner caused delays, improperly timed activities, or damage to the Work. Contractor may make claim to Owner for such amounts as outlined in the Contract or any other supplemental agreements.*

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## Article 4. Historically Underutilized Business (HUB) Subcontracting Plan

- 4.1 General Description. The purpose of the Historically Underutilized Business (HUB) program is to promote equal business opportunities for economically disadvantaged persons (as defined by Tex. Gov't Code, Ch. 2161) to contract with the State of Texas in accordance with the goals specified in the State of Texas Disparity Study. The HUB program annual procurement utilization goals are defined in 34 T.A.C. § 20.13(b).<sup>4</sup>
- 4.1.1 State agencies are required by statute to make a good faith effort to assist HUBs in participating in contract awards issued by the State. 34 T.A.C. § 20.13(b) outlines the State's policy to encourage the utilization of HUBs in State contracting opportunities through race, ethnic and gender neutral means.<sup>5</sup>
- 4.1.2 A Contractor who contracts with the State in an amount of \$100,000 or greater is required to make a good faith effort to award subcontracts to HUBs in accordance with 34 T.A.C. § 20.14(a)(2)(A) by submitting a HUB subcontracting plan within twenty-four (24) hours after the bid or response is due and complying with the HUB subcontracting plan after it is accepted by Owner and during the term of the Contract.<sup>6</sup>
- 4.2 Compliance with Approved HUB Subcontracting Plan. Contractor, having been awarded this Contract in part by complying with the HUB program statute and rules, hereby covenants to continue to comply with the HUB program as follows:
- 4.2.1 Prior to adding or substituting a Subcontractor, promptly notify Owner in the event a change is required for any reason to the accepted HUB subcontracting plan.
- 4.2.2 Conduct the good-faith effort activities required and provide Owner with necessary documentation to justify approval of a change to the approved HUB subcontracting plan.
- 4.2.3 Cooperate in the execution of a Change Order or such other approval of the change in the HUB subcontracting plans as Contractor and Owner may agree to.
- 4.2.4 Maintain and make available to Owner upon request business records documenting compliance with the accepted HUB subcontracting plan.
- 4.2.5 Upon receipt of payment for performance of Work, submit to Owner a compliance report, in the format required by Owner that demonstrates

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<sup>4</sup> [34 T.A.C. §20.13\(b\) has been repealed \(§§ 20.10 to 20.24. Repealed eff. January 24, 2017\) and replaced by 34 T.A.C. § 20.284.](#)

<sup>5</sup> [34 T.A.C. § 20.13\(b\) has been repealed \(§§ 20.10 to 20.24. Repealed eff. January 24, 2017\) and replaced by 34 T.A.C. § 20.281.](#)

<sup>6</sup> [34 T.A.C. § 20.14\(a\)\(2\)\(A\) has been repealed \(§§ 20.10 to 20.24. Repealed eff. January 24, 2017\) and replaced by 34 T.A.C. § 20.285.](#)



Contractor's performance of the HUB subcontracting plan.

4.2.5.1 Progress Assessment Report (PAR): monthly compliance reports to Owner (contracting agency), verifying their compliance with the HUB subcontracting plan, including the use/expenditures they have made to Subcontractors. (The PAR is available in the Index Forms Library on the Facilities Design & Construction page of the Texas Facilities Commission website.

4.2.6 Promptly and accurately explain and provide supplemental information to Owner to assist in Owner's investigation of Contractor's good-faith effort to fulfill the HUB subcontracting plan and the requirements under 34 T.A.C. § 20.14(a)(1).<sup>7</sup>

4.3 Failure to Demonstrate Good-Faith Effort. Upon a determination by Owner that Contractor has failed to demonstrate a good-faith effort to fulfill the HUB subcontracting plan or any Contract covenant detailed above, Owner may, in addition to all other remedies available to it, report the failure to perform to the Comptroller of Public Accounts, Texas Procurement and Support Services Division, Historically Underutilized Business Program and may bar Contractor from future contracting opportunities with Owner.

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<sup>7</sup> [34 T.A.C. 20.14\(a\)\(1\)](#) has been repealed (§§ 20.10 to 20.24. Repealed eff. January 24, 2017) and replaced by [34 T.A.C. § 20.285](#).

## Article 5. Bonds and Insurance

5.1 Construction Bonds. Contractor is required to tender to Owner, prior to commencing the Work, performance and payment bonds, as required by Tex. Gov't Code, Ch. 2253. On Construction Manager-at-Risk and Design-Build Projects the Owner shall require a security bond, as described in Subsection 5.1.2 below.

5.1.1 Bond Requirements. Each bond shall be executed by a corporate surety or sureties authorized to do business in the State of Texas and acceptable to Owner, on Owner's form, and in compliance with the relevant provisions of the Texas Insurance Code. If any bond is for more than ten (10) percent of the surety's capital and surplus, Owner may require certification that the company has reinsured the excess portion with one or more reinsurers authorized to do business in the State. A reinsurer may not reinsure for more than ten (10) percent of its capital and surplus. If a surety upon a bond loses its authority to do business in the State, Contractor shall, within thirty (30) days after such loss, furnish a replacement bond at no added cost to Owner.

5.1.1.1 **A Performance bond is required if the Contract Sum is in excess of \$100,000. The performance bond is solely for the protection of Owner. The performance bond is to be for the Contract Sum to guarantee the faithful performance of the Work in accordance with the Contract Documents. The form of the bond shall be approved by the Office of the Attorney General of Texas. The performance bond shall be effective through Contractor's warranty period.<sup>8</sup>**

5.1.1.2 **A Payment bond is required if the Contract price is in excess of \$25,000. The payment bond is to be for the Contract Sum and is payable to Owner solely for the protection and use of payment bond beneficiaries. The form of the bond shall be approved by the Office of the Attorney General of Texas.<sup>9</sup>**

5.1.2 Security Bond. The security bond provides protection to Owner if Contractor presents an acceptable guaranteed maximum price ("GMP") to Owner and 1) fails to execute the GMP; or 2) fails to deliver the required payment and performance bonds within the time period stated below.

5.1.3 When Bonds Are Due.

5.1.3.1 Security bonds are due within ten (10) days of signing a Construction Manager-at-Risk or Design-Build Contract.

5.1.3.2 Payment and performance bonds are due within ten (10) days of

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<sup>8</sup> Revised by TFC 2018 Supplementary General Conditions to the state of Texas 2015 edition of the Uniform General Conditions for Contracts.

<sup>9</sup> Revised by TFC 2018 Supplementary General Conditions to the state of Texas 2015 edition of the Uniform General Conditions for Contracts.

Contractor's receipt of a fully executed GMP on a Construction Manager-at-Risk project or the Contract Sum for a Design-Build project, or within ten (10) days of Contractor's receipt of a fully executed Contract on competitively bid or competitive sealed proposal projects.

- 5.1.4 Power of Attorney. Each bond shall be accompanied by a valid power of attorney (issued by the surety company and attached, signed and sealed with the corporate embossed seal, to the bond) authorizing the attorney-in-fact who signs the bond to commit the company to the terms of the bond, and stating any limit in the amount for which the attorney can issue a single bond.
- 5.1.5 Bond Indemnification. The process of requiring and accepting bonds and making claims there under shall be conducted in compliance with Tex. Gov't Code, Ch. 2253. IF FOR ANY REASON A STATUTORY PAYMENT OR PERFORMANCE BOND IS NOT HONORED BY THE SURETY, CONTRACTOR SHALL FULLY INDEMNIFY AND HOLD OWNER HARMLESS OF AND FROM ANY COSTS, LOSSES, OBLIGATIONS OR LIABILITIES IT INCURS AS A RESULT.
- 5.1.6 Furnishing Bond Information. Owner shall furnish certified copies of the payment bond and the related Contract to any qualified person seeking copies who complies with Tex. Gov't Code § 2253.026.
- 5.1.7 Claims on Payment Bonds. Claims on payment bonds must be sent directly to Contractor and his surety in accordance with Tex. Gov't Code § 2253.041. All payment bond claimants are cautioned that no lien exists on the funds unpaid to Contractor on such Contract, and that reliance on notices sent to Owner may result in loss of their rights against Contractor and/or his surety. Owner is not responsible in any manner to a claimant for collection of unpaid bills, and accepts no such responsibility because of any representation by any agent or employee.
- 5.1.8 Payment Claims when Payment Bond not Required. The rights of Subcontractors regarding payment are governed by Tex. Prop. Code §§ 53.231 – 53.239 when the value of the Contract between Owner and Contractor is less than \$25,000.00. These provisions set out the requirements for filing a valid lien on funds unpaid to Contractor as of the time of filing the claim, actions necessary to release the lien and satisfaction of such claim.
- 5.1.9 Sureties. A surety shall be listed on the US Department of the Treasury's Listing of Approved Sureties maintained by the Bureau of Financial Management Service (FMS), [www.fms.tres.gov/c570](http://www.fms.tres.gov/c570), stating companies holding Certificates of Authority as acceptable sureties on Federal bonds and acceptable reinsuring companies (FMS Circular 570).
  - 5.1.9.1 *The surety list can currently be accessed at: <https://www.fiscal.treasury.gov/fsreports/ref/suretyBnd/c570.htm>.*

- 5.2 Insurance Requirements. Contractor shall carry insurance in the types and amounts indicated in this Article for the duration of the Contract. The insurance shall be evidenced by delivery to Owner of certificates of insurance executed by the insurer or its authorized agent stating coverages, limits, expiration dates and compliance with all applicable required provisions. Upon request, Owner, and/or its agents, shall be entitled to receive without expense, copies of the policies and all endorsements. Contractor shall update all expired policies prior to submission for monthly payment. Failure to update policies shall be reason for withholding of payment until renewal is provided to Owner.
- 5.2.1 Contractor shall provide and maintain all insurance coverage with the minimum amounts described below until the end of the warranty period unless otherwise stated in Supplementary General Conditions or Special Conditions. Failure to maintain insurance coverage, as required, is grounds for suspension of Work for cause pursuant to Article 14.
- 5.2.2 Contractor shall deliver to Owner true and complete copies of certificates and corresponding policy endorsements prior to the issuance of any Notice to Proceed.
- 5.2.3 Failure of Owner to demand such certificates or other evidence of Contractor's full compliance with these insurance requirements or failure of Owner to identify a deficiency in compliance from the evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- 5.2.4 The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner in the Contract Documents.
- 5.2.4.1 **Contractor shall deliver to Owner true and complete copies of the General Contractor's certificates prior to the issuance of any Notice to Proceed.<sup>10</sup>**
- 5.2.4.2 **Failure of Owner to demand such certificates or other evidence of Contractor's full compliance with these insurance requirements or failure of Owner to identify a deficiency in compliance from the evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.<sup>11</sup>**
- 5.2.4.3 **The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the**

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<sup>10</sup> Revised by TFC 2018 Supplementary General Conditions to the state of Texas 2015 edition of the Uniform General Conditions for Contracts.

<sup>11</sup> Revised by TFC 2018 Supplementary General Conditions to the state of Texas 2015 edition of the Uniform General Conditions for Contracts.

**indemnities granted to Owner in the Contract Documents.<sup>12</sup>**

**5.2.4.4 The insurance coverage and limits established in the Uniform General Conditions, Supplementary General Conditions, or Special Conditions shall not be interpreted as any representation or warranty that the insurance coverage and limits necessarily will be adequate to protect Contractor.<sup>13</sup>**

5.2.5 The insurance coverage and limits established herein shall not be interpreted as any representation or warranty that the insurance coverage and limits necessarily will be adequate to protect Contractor.

5.2.6 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 similar rating company or otherwise acceptable to Owner.

**5.2.6.1 Insurance Coverage Required.**

5.2.6.1.1 **Workers' Compensation.** Insurance with limits as required by the Texas Workers' Compensation Act, with the policy endorsed to provide a waiver of subrogation in favor of Owner, employer's liability insurance of not less than:

\$1,000,000 each accident;  
\$1,000,000 disease each employee; and  
\$1,000,000 disease policy limit.

5.2.6.1.2 **Commercial General Liability Insurance.** Including premises, operations, independent contractor's liability, products and completed operations and contractual liability, covering, but not limited to, the liability assumed under the indemnification provisions of this Contract, fully insuring Contractor's liability for bodily injury (including death) and property damage with a minimum limit of:

\$1,000,000 per occurrence;  
\$2,000,000 general aggregate;  
\$5,000 Medical Expense each person;  
\$1,000,000 Personal Injury and Advertising Liability;  
\$2,000,000 products and completed operations aggregate;  
\$50,000 Damage to Premises Rented to You; and  
Coverage shall be on an "occurrence" basis.

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<sup>12</sup> Revised by TFC 2018 Supplementary General Conditions to the state of Texas 2015 edition of the Uniform General Conditions for Contracts.

<sup>13</sup> Revised by TFC 2018 Supplementary General Conditions to the state of Texas 2015 edition of the Uniform General Conditions for Contracts.

The policy shall include coverage extended to apply to completed operations and explosion, collapse, and underground hazards. The policy shall include endorsement CG2503 Amendment of Aggregate Limits of Insurance (per Project) or its equivalent.

If the Work involves any activities within fifty (50) feet of any railroad, railroad protective insurance as may be required by the affected railroad, written for not less than the limits required by such railroad.

5.2.6.1.2.1 *The term “You” as reference in Subsection 5.2.6.1.2 above, means the Contractor.*

5.2.6.1.3 Asbestos Abatement Liability Insurance, including coverage for liability arising from the encapsulation, removal, handling, storage, transportation, and disposal of asbestos containing materials. \*This requirement applies if the Work or the Project includes asbestos containing materials.

The combined single limit for bodily injury and property damage will be a minimum of \$1,000,000 per occurrence.

\*Specific requirement for claims-made form: Required period of coverage will be determined by the following formula: continuous coverage for life of the Contract, plus one (1) year (to provide coverage for the warranty period), and an extended discovery period for a minimum of five (5) years which shall begin at the end of the warranty period.

Employer’s liability limits for asbestos abatement will be:

\$500,000 each accident;  
\$500,000 disease each employee; and  
\$500,000 disease policy limit.

**If this Contract is for asbestos abatement only, the Special Form builder’s risk or Special Form installation floater (e) is not required.**

5.2.6.1.4 Comprehensive Automobile Liability Insurance, covering owned, hired, and non-owned vehicles, with a minimum combined single limit for bodily injury (including death) and property damage of \$1,000,000 per accident. No aggregate shall be permitted for this type of coverage.

Such insurance is to include coverage for loading and unloading hazards.

5.2.6.1.5 Special Form Builder's Risk Insurance, if applicable (or Special Form installation floater for instances in which the project involves solely the installation of material and/or equipment). Coverage shall be Special Form, including, but not limited to, fire, extended coverage, vandalism and malicious mischief, theft and, if applicable, flood, earth movement and named storm. Builder's risk and installation floater limits shall be equal to 100 percent of the Contract Sum plus, if any, existing property and Owner-furnished equipment specified by Owner. The policy shall be written jointly in the names of Owner and Contractor. Subcontractors shall be named as additional insureds. The policy shall have endorsements as follows:

5.2.6.1.5.1 This insurance shall be specific as to coverage and not contributing insurance with any permanent insurance maintained on the property.

5.2.6.1.5.2 This insurance shall not contain an occupancy clause suspending or reducing coverage should Owner partially occupy the Site and before the parties have determined Substantial Completion.

5.2.6.1.5.3 Loss, if any, shall be adjusted with and made payable to Owner as trustee for the insureds as their interests may appear. Owner shall be named as loss payee.

5.2.6.1.5.4 For renovation projects or projects that involve portions of Work contained within an existing structure, refer to Supplementary General and Special Conditions for possible additional builder's risk insurance requirements.

5.2.6.1.5.5 For Owner furnished equipment or materials that will be in care, custody or control of Contractor, Contractor will be responsible for damage and loss.

5.2.6.1.5.6 For those properties located within a Tier 1 or 2 windstorm area, named storm coverage must be provided with limits specified by Owner.

5.2.6.1.5.7 For those properties located in flood prone areas, flood insurance coverage must be provided with limits specified by Owner.

5.2.6.1.5.8 Builder's risk insurance policy shall remain in effect until Substantial Completion.

5.2.6.1.6 "Umbrella" Liability Insurance. Contractor shall obtain, pay for and maintain umbrella liability insurance during the Contract term, insuring Contractor for an amount of not less than amount specified in the Supplementary General Conditions or Special Conditions that provides coverage at least as broad as and applies in excess and follows form of the primary liability coverages required hereinabove. The policy shall provide "drop down" coverage where underlying primary insurance coverage limits are insufficient or exhausted.

5.2.7 Policies must include the following clauses, as applicable:

5.2.7.1 This insurance shall not be canceled, materially changed, or non-renewed except after thirty (30) days written notice has been given to Owner.

5.2.7.2 It is agreed that Contractor's insurance shall be deemed primary with respect to any insurance or self-insurance carried by Owner for liability arising out of operations under the Contract with Owner.

5.2.7.3 Owner, its officials, directors, employees, representatives, and volunteers are added as additional insureds as respects operations and activities of, or on behalf of the named insured performed under Contract with Owner. The additional insured status must cover completed operations as well. This is not applicable to workers' compensation policies.

5.2.7.4 A waiver of subrogation in favor of Owner shall be provided in all policies.

5.2.8 Without limiting any of the other obligations or liabilities of Contractor, Contractor shall require each Subcontractor performing work under the Contract, at Subcontractor's own expense, to maintain during the term of the Contract, the same stipulated minimum insurance including the required provisions and additional policy conditions as shown above. As an alternative, Contractor may include its Subcontractors as additional insureds on its own coverage as prescribed under these requirements. Contractor's certificate of insurance shall note in such event that Subcontractors are included as additional insureds and that Contractor agrees to provide workers' compensation for Subcontractors and their employees. Contractor shall obtain and monitor the certificates of insurance from each Subcontractor in order to assure compliance with the insurance requirements. Contractor must retain the certificates of insurance for the duration of the Contract plus five (5) years and shall have the responsibility of enforcing these insurance requirements among



its Subcontractors. Owner shall be entitled, upon request and without expense, to receive copies of these certificates.

5.2.9 Workers' compensation insurance coverage must be provided for all workers at all tier levels and meet the statutory requirements of Tex. Lab. Code § 401.011(44) and specific to construction projects for public entities as required by Tex. Lab. Code § 406.096.

5.2.10 *Owner shall be entitled, upon request and without expense, to receive copies of the policies and all endorsements as they apply to the limits set out herein.*

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## **Article 6. Construction Documents, Coordination Documents, and Record Documents**

### 6.1 Drawings and Specifications.

- 6.1.1 Copies Furnished. Contractor will be furnished, free of charge, the number of complete sets of the Drawings, Specifications, and Addenda as provided in the Supplementary General Conditions or Special Conditions. Additional complete sets of Drawings and Specifications, if requested, will be furnished at reproduction cost to the entity requesting such additional sets. Electronic copies of such documents will be provided to Contractor without charge.
- 6.1.2 Ownership of Drawings and Specifications. All Drawings, Specifications and copies thereof furnished by A/E are to remain A/E's property. These documents are not to be used on any other project, and with the exception of the Contract record set and electronic versions needed for warranty operations, are to be returned to the A/E, upon request, following completion of the Work.
- 6.1.3 Interrelation of Documents. The Contract Documents as referenced in the Contract between Owner and Contractor are complimentary, and what is required by one shall be as binding as if required by all.
- 6.1.4 Resolution of Conflicts in Documents. Where conflicts may exist within the Contract Documents, the documents shall govern in the following order: (a) Change Orders, addenda, and written amendments to the Contract; (b) the Contract; (c) Drawings; (d) Specifications (but Specifications shall control over Drawings as to quality of materials and workmanship); and (e) other Contract Documents. Among categories of documents having the same order of precedence, the term or provision that includes the latest date shall control and more specific requirements shall govern over general requirements. Contractor shall notify A/E and ODR for resolution of the issue prior to executing the Work in question.
- 6.1.5 Contractor's Duty to Review Contract Documents. In order to facilitate its responsibilities for completion of the Work in accordance with and as reasonably inferable from the Contract Documents, prior to commencing the Work, Contractor shall examine and compare the Contract Documents, information furnished by Owner, relevant field measurements made by Contractor and any visible or reasonably anticipated conditions at the Site affecting the Work. This duty extends throughout the construction phase prior to commencing each particular work activity and/or system installation.
- 6.1.6 Discrepancies and Omissions in Drawings and Specifications.
- 6.1.6.1 Promptly report to ODR and to A/E the discovery of any apparent error, omission or inconsistency in the Contract Documents prior to execution of the Work.

- 6.1.6.2 It is recognized that Contractor is not acting in the capacity of a licensed design professional, unless it is performing as a Design-Build firm.
- 6.1.6.3 *In the event of conflict among the drawings, Contractor is required to submit a Request for Information (RFI) to the A/E for clarification.*
- 6.1.6.3.1 *The Contractor shall submit the RFI to the Architect/Engineer, with copy to the ODR, in sufficient time to allow a reasonable response time by the A/E to avoid delays in the Work. The RFI shall contain sufficient information to clearly identify the issue and requested information.*
- 6.1.6.3.2 *The A/E's Supplemental Instructions (ASI) shall be issued by the A/E to the Contractor, with copy to the ODR, in a prompt manner, and in accordance with the Contract Documents without change in Contract Sum or Contract Time. Proceeding with the work in accordance with these instructions indicates the Contractor's Acknowledgement that there will be no change in the Contract Sum or Contract Time. If the clarification results in a change in the scope of the Work and causes a change in the Contract Sum and/or Contract Time, then Contractor shall submit a Change Order Proposal Evaluation (CPE) to the A/E with a copy to the ODR.*
- 6.1.6.4 It is further recognized that Contractor's examination of Contract Documents is to facilitate construction and does not create an affirmative responsibility to detect errors, omissions or inconsistencies or to ascertain compliance with applicable laws, building codes or regulations, unless it is performing as a Design-Build firm or a Construction Manager-at-Risk.
- 6.1.6.5 When performing as a Design-Build firm, Contractor has sole responsibility for discrepancies, errors, and omissions in the Drawings and Specifications.
- 6.1.6.6 When performing as a Construction Manager-at-Risk, Contractor has a shared responsibility with A/E for discovery and resolution of discrepancies, errors, and omissions in the Contract Documents. In such case, Contractor's responsibility pertains to review, coordination, and recommendation of resolution strategies within budget constraints.
- 6.1.6.7 Contractor has no liability for errors, omissions, or inconsistencies unless Contractor knowingly failed to report a recognized problem to Owner or the Work is executed under a Design-Build or Construction

Manager-at-Risk Contract as outlined above. Should Contractor fail to perform the examination and reporting obligations of these provisions, Contractor is responsible for avoidable costs and direct and/or consequential damages.

6.2 Requirements for Record Documents. Contractor shall:

- 6.2.1 Maintain at the Site one copy of all Drawings, Specifications, addenda, approved submittals, Contract modifications, and all Project correspondence. Keep current and maintain Drawings and Specifications in good order with postings and markings to record actual conditions of Work and show and reference all changes made during construction. Provide Owner and A/E access to these documents.
- 6.2.2 Maintain the Record Documents including Drawings, Specifications and other materials which reflect the actual field conditions and representations of the Work performed, whether it be directed by addendum, Change Order or otherwise. Make available all records prescribed herein for reference and examination by Owner and its representatives and agents.
- 6.2.3 Update the Record Documents at least monthly prior to submission of periodic partial pay estimates. Failure to maintain current Record Documents constitutes cause for denial of a progress payment otherwise due.
- 6.2.4 Prior to requesting Substantial Completion inspection Contractor shall furnish a copy of its marked-up Record Documents and a preliminary copy of each instructional manual, maintenance and operating manual, parts catalog, wiring diagrams, spare parts, specified written warranties and like publications, or parts for all installed equipment, systems, and like items and as described in the Contract Documents. (Unexecuted samples of the aforementioned documentation may be reviewed by ODR when the absence of substantial completion transactions preclude execution; however, Contractor remains obligated to provide fully executed copies of such materials prior to final payment.)
- 6.2.5 Once determined acceptable by ODR with input from A/E, provide one (1) reproducible copy and one (1) electronic media copy of all Record Documents, unless otherwise required by the Supplementary General Conditions or Special Conditions.
- 6.2.6 Contractor shall be responsible for updating the Record Documents for all Contractor initiated documents and changes to the Contract Documents due to coordination and actual field conditions, including RFIs.
- 6.2.7 A/E shall be responsible for updating the Record Documents for any addenda, Change Orders, A/E supplemental instructions and any other alterations to the Contract Documents generated by A/E or Owner.

## Article 7. Construction Safety

- 7.1 General. It is the duty and responsibility of Contractor and all of its Subcontractors to be familiar with, enforce and comply with all requirements of Public Law No. 91-596, 29 U.S.C. § 651 et. seq., the Occupational Safety and Health Act of 1970, (OSHA) and all amendments thereto. Contractor shall prepare a safety plan specific to the Project and submit it to ODR and A/E prior to commencing Work. In addition, Contractor and all of its Subcontractors shall comply with all applicable laws and regulations of any public body having jurisdiction for safety of persons or property to protect them from damage, injury or loss and erect and maintain all necessary safeguards for such safety and protection.
- 7.2 Notices. Contractor shall provide notices as follows:
- 7.2.1 Notify owners of adjacent property including those that own or operate utility services and/or underground facilities, and utility owners, when prosecution of the Work may affect them or their facilities, and cooperate with them in the protection, removal, relocation and replacement, and access to their facilities and/or utilities.
- 7.2.2 Coordinate the exchange of material safety data sheets (MSDSs) or other hazard communication information required to be made available to or exchanged between or among employers at the site in connection with laws and regulations. Maintain a complete file of MSDSs for all materials in use on site throughout the construction phase and make such file available to Owner and its agents as requested.
- 7.3 Emergencies. In any emergency affecting the safety of persons or property, Contractor shall act to minimize, mitigate, and prevent threatened damage, injury or loss.
- 7.3.1 Have authorized agents of Contractor respond immediately upon call at any time of day or night when circumstances warrant the presence of Contractor to protect the Work or adjacent property from damage or to take such action pertaining to the Work as may be necessary to provide for the safety of the public.
- 7.3.2 Give ODR and A/E prompt notice of all such events.
- 7.3.3 If Contractor believes that any changes in the Work or variations from Contract Documents have been caused by its emergency response, promptly notify Owner within seventy-two (72) hours of the emergency response event.
- 7.3.4 Should Contractor fail to respond, Owner is authorized to direct other forces to take action as necessary and Owner may deduct any cost of remedial action from funds otherwise due Contractor.
- 7.4 Injuries. In the event of an incident or accident involving outside medical care for an

individual on or near the Work, Contractor shall notify ODR and other parties as may be directed promptly, but no later than twenty-four (24) hours after Contractor learns that an event required medical care.

7.4.1 Record the location of the event and the circumstances surrounding it, by using photography or other means, and gather witness statements and other documentation which describes the event.

7.4.2 Supply ODR and A/E with an incident report no later than thirty-six (36) hours after the occurrence of the event. In the event of a catastrophic incident (one (1) fatality or three (3) workers hospitalized), barricade and leave intact the scene of the incident until all investigations are complete. A full set of incident investigation documents, including facts, finding of cause, and remedial plans shall be provided within one (1) week after occurrence, unless otherwise directed by legal counsel. Contractor shall provide ODR with written notification within one week of such catastrophic event if legal counsel delays submission of full report.

7.5 Environmental Safety. Upon encountering any previously unknown potentially hazardous material, or other materials potentially contaminated by hazardous material, Contractor shall immediately stop work activities impacted by the discovery, secure the affected area, and notify ODR immediately.

7.5.1 Bind all Subcontractors to the same duty.

7.5.2 Upon receiving such notice, ODR will promptly engage qualified experts to make such investigations and conduct such tests as may be reasonably necessary to determine the existence or extent of any environmental hazard. Upon completion of this investigation, ODR will issue a written report to Contractor identifying the material(s) found and indicate any necessary steps to be taken to treat, handle, transport or dispose of the material.

7.5.3 Owner may hire third-party Contractors to perform any or all such steps.

7.5.4 Should compliance with ODR's instructions result in an increase in Contractor's cost of performance, or delay the Work, Owner will make an equitable adjustment to the Contract Sum and/or the time of completion, and modify the Contract in writing accordingly.

7.6 Trenching Plan. When the project requires excavation which either exceeds a depth of four (4) feet, or results in any worker's upper body being positioned below grade level, Contractor is required to submit a trenching plan to ODR prior to commencing trenching operations unless an engineered plan is part of the Contract Documents. The plan is required to be prepared and sealed by a professional engineer registered in the State of Texas and hired or employed by Contractor or Subcontractor to perform the work. Said engineer cannot be anyone who is otherwise either directly or indirectly engaged on this project.

7.6.1 *In addition, the Contractor and all of its subcontractors shall comply with all requirements of 29 C.F.R. 1926.652, OSHA Safety and Health Standards,*

*and shall require a pay item classification for the particular safety system to be utilized by the Contractor.*

7.7 *Construction Site Security*

7.7.1 *Construction Site Fencing:*

7.7.1.1 *Contractor shall provide a fence to completely enclose the immediate work area, including, but not limited to, all areas undergoing demolition or construction as well as all staging areas or as shown on the plans. The Contractor will maintain this fence throughout project construction until released by the Owner following Substantial Completion. In no event will barbed wire be used in connection with a fence.*

7.7.1.2 *Contractor will construct a fence of weather-resistant steel posts and chain link fabric with No. 9 gauge 2" mesh. Posts will be securely anchored in the ground such that they remain upright at all times and spaced no more than 8'-0" on center. Contractor will stretch and secure Chain link fabric to the steel posts at the top and bottom and on 2'-0" centers between. Minimum height of fence will be 6'-0".*

7.7.1.3 *Contractor will construct a fence with gates capable of being padlocked. Gates and gateposts will be constructed with materials as described previously with a minimum height of 6'-0". Gates will be secured with a padlock at all times when not in use or directly supervised by designated personnel. Gateposts will be set solidly in concrete.*

7.8 *Infection Control. The Contractor is required to apply Infection Control principles as designated and outlined within the Infection Control Plan documents for construction at state hospitals and other Owner facilities when otherwise required by Owner, and set forth within the specifications attachment to the Contract. The ODR may incorporate mandatory adherence agreements for infection control into Construction Documents with penalties for noncompliance and mechanisms to ensure timely correction of problems.*

7.81. *Infection Control Construction Permit. The Contractor is required to submit an Infection Control Construction Permit to the ODR.*

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## Article 8. Quality Control

8.1 Materials & Workmanship. Contractor shall execute Work in a good and workmanlike matter in accordance with the Contract Documents. Contractor shall develop and provide a quality control plan specific to this Project and acceptable to Owner. Where Contract Documents do not specify quality standards, complete and construct all Work in compliance with generally accepted construction industry standards. Unless otherwise specified, incorporate all new materials and equipment into the Work under the Contract.

8.1.1 *Intent of Contract Documents. Unless otherwise stated, the Specifications and Contract Documents are not limited to materials, equipment, or fixtures produced by any particular manufacturer. Where materials, equipment and/or fixtures have been specified by name, manufacturer or catalog number, it has been done to set a definite standard and a reference for comparison as to quality, application, physical conformity, and other characteristics. Any dealer, jobber or manufacturer may furnish materials, equipment, or fixtures which meet or exceed the characteristics of the specified items. Substitution of materials will not be made without prior written approval from the Architect/Engineer and Owner, in conformance with Subsections 8.3.6 and 8.3.7.*

8.2 Testing.

8.2.1 Owner is responsible for coordinating and paying for routine and special tests required to confirm compliance with quality and performance requirements, except as stated below or otherwise required by the Contract Documents. Contractor shall provide the following testing:

8.2.1.1 Any test of basic material or fabricated equipment included as part of a submittal for a required item in order to establish compliance with the Contract Documents.

8.2.1.2 Any test of basic material or fabricated equipment offered as a substitute for a specified item on which a test may be required in order to establish compliance with the Contract Documents.

8.2.1.3 Preliminary, start-up, pre-functional and operational testing of building equipment and systems as necessary to confirm operational compliance with requirements of the Contract Documents.

8.2.1.4 All subsequent tests on original or replaced materials conducted as a result of prior testing failure.

8.2.2 All testing shall be performed in accordance with standard test procedures by an accredited laboratory, or special consultant as appropriate, acceptable to Owner. Results of all tests shall be provided promptly to ODR, A/E, and Contractor.



8.2.3 Non-Compliance (Test Results). Should any of the tests indicate that a material and/or system does not comply with the Contract requirements, the burden of proof remains with Contractor, subject to:

8.2.3.1 Contractor selection and submission of the laboratory for Owner acceptance.

8.2.3.2 Acceptance by Owner of the quality and nature of tests.

8.2.3.3 All tests taken in the presence of A/E and/or ODR, or their representatives.

8.2.3.4 If tests confirm that the material/systems comply with Contract Documents, Owner will pay the cost of the test.

8.2.3.5 If tests reveal noncompliance, Contractor will pay those laboratory fees and costs of that particular test and all future tests, of that failing Work, necessary to eventually confirm compliance with Contract Documents.

8.2.3.6 Proof of noncompliance with the Contract Documents will make Contractor liable for any corrective action which ODR determines appropriate, including complete removal and replacement of non-compliant work or material.

8.2.4 Notice of Testing. Contractor shall give ODR and A/E timely notice of its readiness and the date arranged so ODR and A/E may observe such inspection, testing, or approval.

8.2.5 Test Samples. Contractor is responsible for providing Samples of sufficient size for test purposes and for coordinating such tests with their Work Progress Schedule to avoid delay.

8.2.6 Covering Up Work. If Contractor covers up any Work without providing Owner an opportunity to inspect, Contractor shall, if requested by ODR, uncover and recover the work at Contractor's expense.

### 8.3 Submittals.

8.3.1 Contractor's Submittals. Contractor shall submit with reasonable promptness consistent with the Project schedule and in orderly sequence all Shop Drawings, Samples, or other information required by the Contract Documents, or subsequently required by Change Order. Prior to submitting, Contractor shall review each submittal for general compliance with Contract Documents and approve submittals for review by A/E and Owner by an approval stamp affixed to each copy. Submittal data presented without Contractor's stamp will be returned without review or comment, and any delay resulting from failure is Contractor's responsibility.

- 8.3.1.1 Contractor shall within twenty-one (21) days of the effective date of the Notice To Proceed with construction, submit to ODR and A/E, a submittal schedule/register, organized by specification section, listing all items to be furnished for review and approval by A/E and Owner. The list shall include Shop Drawings, manufacturer's literature, certificates of compliance, materials Samples, materials colors, guarantees, and all other items identified throughout the Specifications.
- 8.3.1.2 Contractor shall indicate the type of item, Contract requirements reference, and Contractor's scheduled dates for submitting the item along with the requested dates for approval answers from A/E and Owner. The submittal register shall indicate the projected dates for procurement of all included items and shall be updated at least monthly with actual approval and procurement dates. Contractor's Submittal Register must be reasonable in terms of the review time for complex submittals. Contractor's submittal schedule must be consistent with the Work Progress Schedule and identify critical submittals. Show and allow a minimum of fifteen (15) calendar days duration after receipt by A/E and ODR for review and approval. If resubmittal required, allow a minimum of an additional fifteen (15) calendar days for review. Submit the updated Submittal Register with each request for progress payment. Owner may establish routine review procedures and schedules for submittals at the preconstruction conference and/or elsewhere in the Contract Documents. If Contractor fails to update and provide the Submittal Register as required, Owner may, after seven (7) days notice to Contractor withhold a reasonable sum of money that would otherwise be due Contractor.
- 8.3.1.3 Contractor shall coordinate the Submittal Register with the Work Progress Schedule. Do not schedule Work requiring a submittal to begin prior to scheduling review and approval of the related submittal. Revise and/or update both schedules monthly to ensure consistency and current project data. Provide to ODR the updated Submittal Register and schedule with each application for progress payment. Refer to requirements for the Work Progress Schedule for inclusion of procurement activities therein. Regardless, the Submittal Register shall identify dates submitted and returned and shall be used to confirm status and disposition of particular items submitted, including approval or other action taken and other information not conveniently tracked through the Work Progress Schedule.
- 8.3.1.4 By submitting Shop Drawings, Samples or other required information, Contractor represents that it has determined and verified all applicable field measurements, field construction criteria, materials, catalog numbers and similar data to the extent possible from existing conditions and design information provided by A/E prior to fabrication; and has checked and coordinated each Shop

Drawing and Sample with the requirements of the Work and the Contract Documents.

- 8.3.2 Review of Submittals. A/E and ODR review is only for conformance with the design concept and the information provided in the Contract Documents. Responses to submittals will be in writing. The approval of a separate item does not indicate approval of an assembly in which the item functions. The approval of a submittal does not relieve Contractor of responsibility for any deviation from the requirements of the Contract unless Contractor informs A/E and ODR of such deviation in a clear, conspicuous, and written manner on the submittal transmittal and at the time of submission, and obtains Owner's written specific approval of the particular deviation.
- 8.3.3 Correction and Resubmission. Contractor shall make any corrections required to a submittal and resubmit the required number of corrected copies promptly so as to avoid delay, until submittal approval. Direct attention in writing to A/E and ODR, when applicable, to any new revisions other than the corrections requested on previous submissions.
- 8.3.4 Limits on Shop Drawing Review. Contractor shall not commence any Work requiring a submittal until review of the submittal under Subsection 8.3.2. Construct all such work in accordance with reviewed submittals. Comments incorporated as part of the review in Subsection 8.3.2 of Shop Drawings and Samples is not authorization to Contractor to perform extra work or changed work unless authorized through a Change Order. A/E's and ODR's review, if any, does not relieve Contractor from responsibility for defects in the Work resulting from errors or omissions of any kind on the submittal, regardless of any approval action. A/E or ODR shall not make formal changes to the Contract Documents via the submittal process. Changes to the Construction Documents shall be accomplished via Section 3.2.2 and Article 11 Changes.
- 8.3.5 *Contractor will not provide any construction materials that contain potentially hazardous substances (asbestos, asbestos products, PCB, lead-based paint, etc.). Contractor will provide documentation (material safety data sheets (MSDS), laboratory test results, manufacturer's statements, etc.) from the manufacturer confirming the construction materials do not contain hazardous substances. Shop Drawings, Samples, or other required information prepared by Contractor for construction materials that do not contain the supporting documentation described above may be rejected by the Owner, and any delay resulting therefrom will be the Contractor's sole responsibility.*
- 8.3.6 No Substitutions Without Approval. ODR and A/E may receive and consider Contractor's request for substitution when Contractor agrees to reimburse Owner for review costs and satisfies the requirements of this section. If Contractor does not satisfy these conditions, ODR and A/E will return the request without action except to record noncompliance with these requirements. Owner will not consider the request if Contractor cannot

provide the product or method because of failure to pursue the Work promptly or coordinate activities properly. Contractor's request for a substitution may be considered by ODR and A/E when:

- 8.3.6.1 The Contract Documents do not require extensive revisions; and
- 8.3.6.2 Proposed changes are in keeping with the general intent of the Contract Documents and the design intent of A/E and do not result in an increase in cost to Owner; and
- 8.3.6.3 The request is timely, fully documented, properly submitted and one or more of the following apply:
  - 8.3.6.3.1 Contractor cannot provide the specified product, assembly or method of construction within the Contract Time;
  - 8.3.6.3.2 The request directly relates to an "or-equal" clause or similar language in the Contract Documents;
  - 8.3.6.3.3 The request directly relates to a "product design standard" or "performance standard" clause in the Contract Documents;
  - 8.3.6.3.4 The requested substitution offers Owner a substantial advantage in cost, time, energy conservation or other considerations, after deducting additional responsibilities Owner must assume;
  - 8.3.6.3.5 The specified product or method of construction cannot receive necessary approval by an authority having jurisdiction, and ODR can approve the requested substitution;
  - 8.3.6.3.6 Contractor cannot provide the specified product, assembly or method of construction in a manner that is compatible with other materials and where Contractor certifies that the substitution will overcome the incompatibility
  - 8.3.6.3.7 Contractor cannot coordinate the specified product, assembly or method of construction with other materials and where Contractor certifies they can coordinate the proposed substitution; or
  - 8.3.6.3.8 The specified product, assembly or method of construction cannot provide a warranty required by the Contract Documents and where Contractor certifies that the proposed substitution provides the required warranty.

8.3.6.3.9 The manufacture of the specified product has been removed from production due to cancellation or obsolescence.

8.3.7 Unauthorized Substitutions at Contractor's Risk. Contractor is financially responsible for any additional costs or delays resulting from unauthorized substitution of materials, equipment or fixtures other than those specified. Contractor shall reimburse Owner for any increased design or contract administration costs resulting from such unauthorized substitutions.

#### 8.4 Field Mock-up.

8.4.6 Mock-ups shall be constructed prior to commencement of a specified scope of work to confirm acceptable workmanship.

8.4.6.1 As a minimum, field mock-ups shall be constructed for roofing systems, exterior veneer / finish systems, glazing systems, and any other Work requiring a mock-up as identified throughout the Contract Documents. Mock-ups for systems not part of the Project scope shall not be required.

8.4.6.2 Mock-ups may be incorporated into the Work if allowed by the Contract Documents and if acceptable to ODR. If mock-ups are freestanding, they shall remain in place until otherwise directed by Owner.

8.4.6.3 Contractor shall include field mock-ups in their Work Progress Schedule and shall notify ODR and A/E of readiness for review sufficiently in advance to coordinate review without delay.

#### 8.5 Inspection During Construction.

8.5.1 Contractor shall provide sufficient, safe, and proper facilities, including equipment as necessary for safe access, at all reasonable times for observation and/or inspection of the Work by Owner and its agents. "Reasonable times" of inspection allow for sufficient monitoring of the quality of materials and installation without substantially impeding the progress of the Work.

8.5.2 Contractor shall not cover up any Work with finishing materials or other building components prior to providing Owner and its agents an opportunity to perform an inspection of the Work.

8.5.2.1 Should corrections of the Work be required for approval, Contractor shall not cover-up corrected Work until Owner indicates approval.

8.5.2.2 Contractor shall provide notification of at least five (5) working days or otherwise as mutually agreed, to ODR of the anticipated need for a cover-up inspection. Should ODR fail to make the necessary inspection within the agreed period, Contractor may proceed with

cover-up Work, but is not relieved of responsibility for Work to comply with requirements of the Contract Documents.

8.6 *Condemnation and removal of defective work.*

- 8.6.1 *The ODR may reject and condemn Work which does not meet the requirements of the Contract. The Contractor will remove and replace defective work in accordance with written directions provided by ODR. The approval of a work item by the ODR does not relieve the Contractor from compliance with the Contract Documents.*
- 8.6.2 *If any materials or Work furnished under the Contract is condemned by the Owner, the Contractor will, after notice from the Owner, promptly remove the materials, whether worked or unworked, and take down all portions of the Work condemned. Contractor will make good all work damaged or destroyed during the removal and replacement process.*
- 8.6.3 *Upon notice of condemnation, the Contractor may request to prove to the Owner, at Contractor's sole cost, that the Work should be accepted because it meets performance and other relevant standards. Owner will respond to Contractor showing of proof in writing.*

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## Article 9. Construction Schedules

- 9.1 Contract Time. **TIME IS AN ESSENTIAL ELEMENT OF THE CONTRACT.** The Contract Time is the time between the dates indicated in the Notice to Proceed for commencement of the Work and for achieving Substantial Completion. The Contract Time can be modified only by Change Order. Failure to achieve Substantial Completion within the Contract Time as otherwise agreed to in writing will cause damage to Owner and may subject Contractor to liquidated damages as provided in the Contract Documents. If Contractor fails to achieve Final Completion within thirty (30) calendar days after Substantial Completion or a mutually agreed upon longer period of time between Contractor and Owner, Contractor shall be responsible for Owner's additional inspection, project management, and maintenance cost to the extent caused by Contractor's failure to achieve Final Completion.
- 9.2 Notice to Proceed. Owner will issue a Notice to Proceed which shall state the dates for beginning Work and for achieving Substantial Completion of the Work.
- 9.3 Work Progress Schedule. Refer to Supplementary General Conditions or Special Conditions for additional schedule requirements. Unless indicated otherwise in those documents, Contractor shall submit their initial Work Progress Schedule for the Work in relation to the entire Project not later than twenty-one (21) days after the effective date of the Notice to Proceed to ODR and A/E. Unless otherwise indicated in the Contract Documents, the Work Progress Schedule shall be computerized Critical Path Method (CPM) with fully editable logic. This initial schedule shall indicate the dates for starting and completing the various aspects required to complete the Work, including mobilization, procurement, installation, testing, inspection, delivery of Close-out Documents and acceptance of all the Work of the Contract. When acceptable to Owner, the initially accepted schedule shall be the Baseline Schedule for comparison to actual conditions throughout the Contract duration.
- 9.3.1 Schedule Requirements. Contractor shall submit electronic and paper copy of the initial Work Progress Schedule reflecting accurate and reliable representations of the planned progress of the Work, the Work to date if any, and of Contractor's actual plans for its completion. Contractor shall organize and provide adequate detail so the schedule is capable of measuring and forecasting the effect of delaying events on completed and uncompleted activities.
- 9.3.1.1 Contractor shall resubmit initial schedule as required to address review comments from A/E and ODR until such schedule is accepted as the Baseline Schedule.
- 9.3.1.2 Submittal of a schedule, schedule revision or schedule update constitutes Contractor's representation to Owner of the accurate depiction of all progress to date and that Contractor will follow the schedule as submitted in performing the Work.
- 9.3.2 Schedule Updates. Contractor shall update the Work Progress Schedule and the Submittal Register monthly, as a minimum, to reflect progress to date and

current plans for completing the Work, while maintaining original schedule as Baseline Schedule and submit paper and electronic copies of the update to A/E and ODR as directed, but as a minimum with each request for payment. Owner has no duty to make progress payments unless accompanied by the updated Work Progress Schedule. Show the anticipated date of completion reflecting all extensions of time granted through Change Order as of the date of the update. Contractor may revise the Work Progress Schedule when in Contractor's judgment it becomes necessary for the management of the Work. Contractor shall identify all proposed changes to schedule logic to Owner and to A/E via an executive summary accompanying the updated schedule for review prior to final implementation of revisions into a revised Baseline Schedule. Schedule changes that materially impact Owner's operations shall be communicated promptly to ODR and shall not be incorporated into the revised Baseline Schedule without ODR's consent.

9.3.3 The Work Progress Schedule is for Contractor's use in managing the Work and submittal of the schedule, and successive updates or revisions, is for the information of Owner and to demonstrate that Contractor has complied with requirements for planning the Work. Owner's acceptance of a schedule, schedule update or revision constitutes Owner's agreement to coordinate its own activities with Contractor's activities as shown on the schedule.

9.3.3.1 Acceptance of the Work Progress Schedule, or update and/or revision thereto does not indicate any approval of Contractor's proposed sequences and duration.

9.3.3.2 Acceptance of a Work Progress Schedule update or revision indicating early or late completion does not constitute Owner's consent, alter the terms of the Contract, or waive either Contractor's responsibility for timely completion or Owner's right to damages for Contractor's failure to do so.

9.3.3.3 Contractor's scheduled dates for completion of any activity or the entire Work do not constitute a change in terms of the Contract. Change Orders are the only method of modifying the Substantial Completion Date(s) and Contract Time.

9.4 Ownership of Float. Unless indicated otherwise in the Contract Documents, Contractor shall develop its schedule, pricing, and execution plan to provide a minimum of ten (10) percent total float at acceptance of the Baseline Schedule. Float time contained in the Work Progress Schedule is not for the exclusive benefit of Contractor or Owner but belongs to the Project and may be consumed by either party as needed on a first-used basis.

9.5 Completion of Work. Contractor is accountable for completing the Work within the Contract Time stated in the Contract, or as otherwise amended by Change Order.

9.5.1 If, in the judgment of Owner, the work is behind schedule and the rate of placement of work is inadequate to regain scheduled progress to insure timely



completion of the entire work or a separable portion thereof, Contractor, when so informed by Owner, shall immediately take action to increase the rate of work placement by:

9.5.1.1 An increase in working forces.

9.5.1.2 An increase in equipment or tools.

9.5.1.3 An increase in hours of work or number of shifts.

9.5.1.4 Expedite delivery of materials.

9.5.1.5 Other action proposed if acceptable to Owner.

9.5.2 Within ten (10) days after such notice from ODR, Contractor shall notify ODR in writing of the specific measures taken and/or planned to increase the rate of progress. Contractor shall include an estimate as to the date of scheduled progress recovery and an updated Work Progress Schedule illustrating Contractor's plan for achieving timely completion of the Project. Should ODR deem the plan of action inadequate, Contractor shall take additional steps or make adjustments as necessary to its plan of action until it meets with ODR's approval.

## 9.6 Modification of the Contract Time.

9.6.1 Delays and extension of time as hereinafter described are valid only if executed in accordance with provisions set forth in Article 11.

9.6.2 When a delay defined herein as excusable prevents Contractor from completing the Work within the Contract Time, Contractor is entitled to an extension of time. Owner will make an equitable adjustment and extend the number of days lost because of excusable delay or Weather Days, as measured by Contractor's progress schedule. All extensions of time will be granted in calendar days. In no event, however, will an extension of time be granted for delays that merely extend the duration of non-critical activities, or which only consume float without delaying the project Substantial Completion date(s).

9.6.2.1 A "Weather Day" is a day on which Contractor's current schedule indicates Work is to be done, and on which inclement weather and/or related site conditions prevent Contractor from performing seven (7) continuous hours of Work on the critical path between the hours of 7:00 a.m. and 6:00 p.m. Weather days are excusable delays. When weather conditions at the site prevent work from proceeding, Contractor shall immediately notify ODR for confirmation of the conditions. At the end of each calendar month, submit to ODR and A/E a list of Weather Days occurring in that month along with documentation of the impact on critical activities. Based on confirmation by ODR, any time extension granted will be issued by Change Order. If Contractor and Owner

cannot agree on the time extension, Owner may issue a ULCO for fair and reasonable time extension.

9.6.2.2 Excusable Delay. Contractor is entitled to an equitable adjustment of the Contract Time, issued via change order, for delays caused by the following:

9.6.2.2.1 Errors, omissions and imperfections in design, which A/E corrects by means of changes in the Drawings and Specifications.

9.6.2.2.2 Unanticipated physical conditions at the Site, which A/E corrects by means of changes to the Drawings and Specifications or for which ODR directs changes in the Work identified in the Contract Documents.

9.6.2.2.3 Failure of Owner to have secured property, right-of-way or easements necessary for Work to begin or progress.

9.6.2.2.4 Changes in the Work that effect activities identified in Contractor's schedule as "critical" to completion of the entire Work, if such changes are ordered by ODR or recommended by A/E and ordered by ODR.

9.6.2.2.5 Suspension of Work for unexpected natural events, Force Majeure (sometimes called "acts of God"), civil unrest, strikes or other events which are not within the reasonable control of Contractor.

9.6.2.2.6 Suspension of Work for convenience of ODR, which prevents Contractor from completing the Work within the Contract Time.

9.6.2.2.7 Administrative delays caused by activities or approval requirements related to an Authority Having Jurisdiction.

9.6.3 Contractor's relief in the event of such delays is the time impact to the critical path as determined by analysis of Contractor's schedule. In the event that Contractor incurs additional direct costs because of the excusable delays other than described in Subparagraph 9.6.2.2.4 and within the reasonable control of Owner, the Contract price and Contract Time are to be equitably adjusted by Owner pursuant to the provisions of Article 11.

9.7 No Damages for Delay. Contractor has no claim for monetary damages for delay or hindrances to the work from any cause, including without limitation any act or omission of Owner.

9.8 Concurrent Delay. When the completion of the Work is simultaneously delayed by an excusable delay and a delay arising from a cause not designated as excusable,

Contractor may not be entitled to a time extension for the period of concurrent delay.

9.9 Other Time Extension Requests. Time extensions requested in association with changes to the Work directed or requested by Owner shall be included with Contractor's proposed costs for such change. Time extensions requested for inclement weather are covered by Paragraph 9.6.2.1 above. If Contractor believes that the completion of the Work is delayed by a circumstance other than for changes directed to the Work or weather, they shall give ODR written notice, stating the nature of the delay and the activities potentially affected, within five (5) days after the onset of the event or circumstance giving rise to the excusable delay. Contractor shall provide sufficient written evidence to document the delay. In the case of a continuing cause of delay, only one claim is necessary. State claims for extensions of time in numbers of whole or half days.

9.9.1 Within ten (10) days after the cessation of the delay, Contractor shall formalize its request for extension of time in writing to include a full analysis of the schedule impact of the delay and substantiation of the excusable nature of the delay. All changes to the Contract Time or made as a result of such claims is by Change Order, as set forth in Article 11.

9.9.2 No extension of time releases Contractor or the Surety furnishing a performance or payment bond from any obligations under the Contract or such a bond. Those obligations remain in full force until the discharge of the Contract.

9.9.3 Contents of Time Extension Requests. Contractor shall provide with each Time Extension Request a quantitative demonstration of the impact of the delay on project completion time, based on the Work Progress Schedule. Contractor shall include with Time Extension Requests a reasonably detailed narrative setting forth:

9.9.3.1 The nature of the delay and its cause; the basis of Contractor's claim of entitlement to a time extension.

9.9.3.2 Documentation of the actual impacts of the claimed delay on the critical path indicated in Contractor's Work Progress Schedule, and any concurrent delays.

9.9.3.3 Description and documentation of steps taken by Contractor to mitigate the effect of the claimed delay, including, when appropriate, the modification of the Work Progress Schedule.

9.9.4 Owner's Response. Owner will respond to the Time Extension Request by providing to Contractor written notice of the number of days granted, if any, and giving its reason if this number differs from the number of days requested by Contractor.

9.9.4.1 Owner will not grant time extensions for delays that do not affect the Contract Substantial Completion date.

9.9.4.2 Owner will respond to each properly submitted Time Extension Request within fifteen (15) days following receipt. If Owner cannot reasonably make a determination about Contractor's entitlement to a time extension within that time, Owner will notify Contractor in writing. Unless otherwise agreed by Contractor, Owner has no more than fifteen (15) additional days to prepare a final response. If Owner fails to respond within forty-five (45) days from the date the Time Extension Request is received, Contractor is entitled to a time extension in the amount requested.

9.10 Failure to Complete Work Within the Contract Time. **TIME IS AN ESSENTIAL ELEMENT OF THE CONTRACT.** Contractor's failure to substantially complete the Work within the Contract Time or to achieve Substantial Completion as required will cause damage to Owner. These damages shall be liquidated by agreement of Contractor and Owner, in the amount per day as set forth in the Contract Documents.

9.11 Liquidated Damages. Owner may collect liquidated damages due from Contractor directly or indirectly by reducing the Contract Sum in the amount of liquidated damages stated in the Supplementary General Conditions or Special Conditions.

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## Article 10. Payments

10.1 Schedule of Values. Contractor shall submit to ODR and A/E for acceptance a Schedule of Values accurately itemizing material and labor for the various classifications of the Work based on the organization of the specification sections and of sufficient detail acceptable to ODR. The accepted Schedule of Values will be the basis for the progress payments under the Contract.

10.1.1 No progress payments will be made prior to receipt and acceptance of the Schedule of Values, provided in such detail as required by ODR, and submitted not less than twenty-one (21) days prior to the first request for payment. The Schedule of Values shall follow the order of trade divisions of the Specifications and include itemized costs for general conditions, costs for preparing close out documents, fees, contingencies, and Owner cash allowances, if applicable, so that the sum of the items will equal the Contract price. As appropriate, assign each item labor and/or material values, the subtotal thereof equaling the value of the work in place when complete.

10.1.1.1 Owner requires that the Work items be inclusive of the cost of the Work items only. Any contract markups for overhead and profit, general conditions, etc., shall be contained within separate line items for those specific purposes which shall be divided into at least two (2) lines, one (1) for labor and one (1) for materials.

10.1.2 Contractor shall retain a copy of all worksheets used in preparation of its bid or proposal, supported by a notarized statement that the worksheets are true and complete copies of the documents used to prepare the bid or proposal. Make the worksheets available to ODR at the time of Contract execution. Thereafter Contractor shall grant Owner during normal business hours access to said copy of worksheets at any time during the period commencing upon execution of the Contract and ending one year after final payment.

10.2. Progress Payments. Contractor will receive periodic progress payments for Work performed, materials in place, suitably stored on Site, or as otherwise agreed to by Owner and Contractor. Payment is not due until receipt by ODR or his designee of a correct and complete Pay Application in electronic and/or hard copy format as set forth in Supplementary General Conditions, Special Conditions, and certified by A/E. Progress payments are made provisionally and do not constitute acceptance of work not in accordance with the Contract Documents. Owner will not process progress payment applications for Change Order Work until all parties execute the Change Order.

10.2.1 Preliminary Pay Worksheet. Once each month that a progress payment is to be requested, the Contractor shall submit to A/E and ODR a complete, clean copy of a preliminary pay worksheet or preliminary pay application, to include the following:

10.2.1.1 Contractor's estimate of the amount of Work performed, labor furnished and materials incorporated into the Work, using the

established Schedule of Values;

10.2.1.2 An updated Work Progress Schedule including the executive summary and all required schedule reports;

10.2.1.3 HUB subcontracting plan Progress Assessment Report as required in Paragraph 4.2.5.1;

10.2.1.4 Such additional documentation as Owner may require as set forth in the Supplementary General Conditions or elsewhere in the Contract Documents; and

10.2.1.5 Construction payment affidavit.

10.2.2 *The Contractor shall submit the Preliminary Pay Worksheet at least ten (10) days before the Application for Payment meeting.*

10.2.3 Contractor's Application for Payment. As soon as practicable, but in no event later than seven (7) days after receipt of the preliminary pay worksheet, A/E and ODR will meet with Contractor to review the preliminary pay worksheet and to observe the condition of the Work. Based on this review, ODR and A/E may require modifications to the preliminary pay worksheet prior to the submittal of an Application for Payment, and will promptly notify Contractor of revisions necessary for approval. As soon as practicable, Contractor shall submit its Application for Payment on the appropriate and completed form, reflecting the required modifications to the Schedule of Values required by A/E and/or ODR. Attach all additional documentation required by ODR and/or A/E, as well as an affidavit affirming that all payrolls, bills for labor, materials, equipment, subcontracted work and other indebtedness connected with Contractor's Application for Payment are paid or will be paid within the time specified in Tex. Gov't Code, Ch. 2251. No Application for Payment is complete unless it fully reflects all required modifications, and attaches all required documentation including Contractor's affidavit.

10.2.4 *Periodic Application for Payment Meeting. At the Preconstruction Conference, periodic Application for Payment Meetings (monthly, unless agreed to in writing by the Contractor, A/E, and ODR) will be scheduled by the ODR for the duration of the project.*

10.2.5 Certification by Architect/Engineer. Within five (5) days or earlier following A/E's receipt of Contractor's formal Application for Payment, A/E will review the Application for Payment for completeness, and forward it to ODR. A/E will certify that the application is complete and payable, or that it is incomplete, stating in particular what is missing. If the Application for Payment is incomplete, Contractor shall make the required corrections and resubmit the Application for Payment for processing.

10.3 Owner's Duty to Pay. Owner has no duty to pay the Contractor except on receipt by ODR of: 1) a complete Application for Payment certified by A/E; 2) Contractor's

updated Work Progress Schedule; and 3) confirmation that Contractor's record documentation at the Site is kept current.

10.3.1 Payment for stored materials and/or equipment confirmed by Owner and A/E to be on-site or otherwise properly stored is limited to eighty-five (85) percent of the invoice price or eighty-five (85) percent of the scheduled value for the materials or equipment, whichever is less.

10.3.2 Retainage. Owner will withhold from each progress payment, as retainage, five (5) percent of the total earned amount, the amount authorized by law, or as otherwise set forth in the Supplementary General Conditions or Special Conditions. Retainage is managed in conformance with Tex. Gov't Code, Ch. 2252, Subch. B.

10.3.2.1 *Notwithstanding Section 10.3.2 above, Owner will withhold from each progress payment, as retainage, ten (10) percent if the Contract Sum is at or below \$400,000.00 or four and ninety-nine one hundredth (4.99) percent if the Contract Sum is above \$400,000.00 of the total earned amount, or the amount set forth in Special Conditions or authorized by law.*

10.3.2.2 Contractor shall provide written consent of its surety for any request for reduction or release of retainage.

10.3.2.3 At least sixty-five (65) percent of the Contract, or such other discrete Work phase as set forth in Subsection 12.1.6 or Work package delineated in the Contract Documents, must be completed before Owner can consider a retainage reduction or release.

10.3.2.4 Contractor shall not withhold retainage from their Subcontractors and suppliers in amounts that are any percentage greater than that withheld in its Contract with Owner under this subsection, unless otherwise acceptable to Owner.

10.3.3 Price Reduction to Cover Loss. Owner may reduce any Application for Payment, prior to payment to the extent necessary to protect Owner from loss on account of actions of Contractor including, but not limited to, the following:

10.3.3.1 Defective or incomplete Work not remedied;

10.3.3.2 Damage to Work of a separate Contractor;

10.3.3.3 Failure to maintain scheduled progress or reasonable evidence that the Work will not be completed within the Contract Time;

10.3.3.4 Persistent failure to carry out the Work in accordance with the Contract Documents;

- 10.3.3.5 Reasonable evidence that the Work cannot be completed for the unpaid portion of the Contract Sum;
  - 10.3.3.6 Assessment of fines for violations of prevailing wage rate law; or
  - 10.3.3.7 Failure to include the appropriate amount of retainage for that periodic progress payment.
- 10.3.4 Title to all material and Work covered by progress payments transfers to Owner upon payment.
- 10.3.4.1 Transfer of title to Owner does not relieve Contractor and its Subcontractors of the sole responsibility for the care and protection of materials and Work upon which payments have been made until substantial completion, responsibility for the care and protection of materials and Work in areas where punch list items are completed until final completion or the restoration of any damaged Work, or waive the right of Owner to require the fulfillment of all the terms of the Contract.
- 10.4 Progress Payments. Progress payments to Contractor do not release Contractor or its surety from any obligations under the Contract.
- 10.4.1 Upon Owner's request, Contractor shall furnish manifest proof of the status of Subcontractor's accounts in a form acceptable to Owner.
  - 10.4.2 Pay estimate certificates must be signed by a corporate officer or a representative duly authorized by Contractor.
  - 10.4.3 Provide copies of bills of lading, invoices, delivery receipts or other evidence of the location and value of such materials in requesting payment for materials.
  - 10.4.4 For purposes of Tex. Gov't Code § 2251.021(a)(2), the date the performance of service is complete is the date when ODR approves the Application for Payment.
- 10.5 Off-Site Storage. With prior approval by Owner and in the event Contractor elects to store materials at an off-site location, abide by the following conditions, unless otherwise agreed to in writing by Owner.
- 10.5.1 Store materials in a commercial warehouse meeting the criteria stated below.
  - 10.5.2 Provide insurance coverage adequate not only to cover materials while in storage, but also in transit from the off-site storage areas to the Project Site. Copies of duly authenticated certificates of insurance, made out to insure the State agency which is signatory to the Contract, must be filed with Owner's representative.



- 10.5.3 Inspection by Owner's representative is allowed at any time. Owner's inspectors must be satisfied with the security, control, maintenance, and preservation measures.
- 10.5.4 Materials for this Project are physically separated and marked for the Project in a sectioned-off area. Only materials which have been approved through the submittal process are to be considered for payment.
- 10.5.5 Owner reserves the right to reject materials at any time prior to final acceptance of the complete Contract if they do not meet Contract requirements regardless of any previous progress payment made.
- 10.5.6 With each monthly payment estimate, submit a report to ODR and A/E listing the quantities of materials already paid for and still stored in the off-site location.
- 10.5.7 Make warehouse records, receipts and invoices available to Owner's representatives, upon request, to verify the quantities and their disposition.
- 10.5.8 In the event of Contract termination or default by Contractor, the items in storage off-site, upon which payment has been made, will be promptly turned over to Owner or Owner's agents at a location near the jobsite as directed by ODR. The full provisions of performance and payment bonds on this Project cover the materials off-site in every respect as though they were stored on the Project Site.
- 10.6 Time for Payment by Contractor Pursuant to Tex. Gov't Code § 2255.022.<sup>14</sup>
- 10.6.1 Contractor who receives a payment from a governmental entity shall pay Subcontractor the appropriate share of the payment not later than the tenth (10<sup>th</sup>) day after the date Contractor receives the payment.
- 10.6.2 The appropriate share is overdue on the eleventh (11<sup>th</sup>) day after the date Contractor receives the payment.

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<sup>14</sup> Tex. Gov't Code § 2255.022 is an inaccurate reference with the correct reference being Tex. Gov't Code § 2251.022 (Added by Acts 1993, 73rd Leg., ch. 268, Sec. 1, eff. Sept. 1, 1993).

## Article 11. Changes

11.1 Change Orders. A Change Order issued after execution of the Contract is a written order to Contractor, signed by ODR, Contractor, and A/E, authorizing a change in the Work or an adjustment in the Contract Sum or the Contract Time. The Contract Sum and the Contract Time can only be changed by Change Order. A Change Order signed by Contractor indicates his agreement therewith, including the adjustment in the Contract Sum and/or the Contract Time. ODR may issue a written authorization for Contractor to proceed with Work of a Change Order in advance of final execution by all parties in accordance with Section 11.9.

11.1.1 *Notwithstanding anything to the contrary provided herein, any Change Orders to be valid must be executed by the Owner's Executive Commissioner or an authorized designee of the Executive Commissioner.*

11.1.2 Owner, without invalidating the Contract, may order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, and the Contract Sum and the Contract Time will be adjusted accordingly. All such changes in the Work shall be authorized by Change Order or ULCO, and shall be performed under the applicable conditions of the Contract Documents. If such changes cause an increase or decrease in Contractor's cost of, or time required for, performance of the Contract, an equitable adjustment shall be made and confirmed in writing in a Change Order or a ULCO.

11.1.3 It is recognized by the parties hereto and agreed by them that the Specifications and Drawings may not be complete or free from errors, omissions and imperfections or that they may require changes or additions in order for the Work to be completed to the satisfaction of Owner and that, accordingly, it is the express intention of the parties, notwithstanding any other provisions in this Contract, that any errors, omissions or imperfections in such Specifications and Drawings, or any changes in or additions to same or to the Work ordered by Owner and any resulting delays in the Work or increases in Contractor's costs and expenses arising out of such errors, shall not constitute or give rise to any claim, demand or cause of action of any nature whatsoever in favor of Contractor, whether for breach of Contract, or otherwise; provided, however, that Owner shall be liable to Contractor for the sum stated to be due Contractor in any Change Order approved and signed by both parties, it being agreed hereby that such sum, together with any extension of time contained in said Change Order, shall constitute full compensation to Contractor for all costs, expenses and damages to Contractor, as permitted under Tex. Gov't Code, Ch. 2260.

11.1.4 Procedures for administration of Change Orders shall be established by Owner and stated in Supplementary General Conditions, Special Conditions, or elsewhere in the Contract Documents.

11.1.5 No verbal order, verbal statement, or verbal direction of Owner or his duly

appointed representative shall be treated as a change under this article or entitle Contractor to an adjustment.

11.1.6 Contractor agrees that Owner or any of its duly authorized representatives shall have access and the right to examine any directly pertinent books, documents, papers, and records of Contractor. Further, Contractor agrees to include in all its subcontracts a provision to the effect that Subcontractor agrees that Owner or any of its duly authorized representatives shall have access to and the right to examine any directly pertinent books, documents, papers and records of such Subcontractor relating to any claim arising from the Contract, whether or not the Subcontractor is a party to the claim. The period of access and examination described herein which relates to appeals under the Disputes article of the Contract, litigation, or the settlement of claims arising out of the performance of the Contract shall continue until final disposition of such claims, appeals or litigation.

11.2 Unit Prices. If unit prices are stated in the Contract Documents or subsequently agreed upon, and if the quantities originally contemplated are so changed in a Proposed Change Order that application of the agreed unit prices to the quantities of work proposed will cause substantial inequity to Owner or Contractor, the applicable unit prices shall be equitably adjusted as provided in the Supplementary General Conditions or Special Conditions or as agreed to by the parties and incorporated into a Change Order.

11.2.1 *If unit prices are stated in the Contract Documents or subsequently agreed upon, each unit price will include all costs applicable to the Work, including but not limited to mobilization, labor, materials, equipment, supervision, overhead at any level and profit.*

11.3 Claims for Additional Costs.

11.3.1 If Contractor wishes to make a claim for an increase in the Contract Sum not related to a requested change, they shall give Owner and A/E written notice thereof within twenty-one (21) days after the occurrence of the event giving rise to such claim, but, in any case before proceeding to execute the Work considered to be additional cost or time, except in an emergency endangering life or property in which case Contractor shall act in accordance with Subsection 7.3. No such claim shall be valid unless so made. If Owner and Contractor cannot agree on the amount of the adjustment in the Contract Sum, it shall be determined as set forth under Article 15. Any change in the Contract Sum resulting from such claim shall be authorized by a Change Order or a ULCO.

11.3.2 If Contractor claims that additional cost is involved because of, but not limited to, 1) any written interpretation of the Contract Documents, 2) any order by Owner to stop the Work pursuant to Article 14 where Contractor was not at fault, or 3) any written order for a minor change in the Work issued pursuant to Section 11.4, Contractor shall make such claim as provided in Subsection 11.3.1.

- 11.3.3 Should Contractor or his Subcontractors fail to call attention of A/E to discrepancies or omissions in the Contract Documents, but claim additional costs for corrective Work after Contract award, Owner may assume intent to circumvent competitive bidding for necessary corrective Work. In such case, Owner may choose to let a separate Contract for the corrective Work, or issue a ULCO to require performance by Contractor. Claims for time extensions or for extra cost resulting from delayed notice of patent Contract Document discrepancies or omissions will not be considered by Owner.
- 11.4 Minor Changes. A/E, with concurrence of ODR, will have authority to order minor changes in the Work not involving an adjustment in the Contract Sum or an extension of the Contract Time. Such changes shall be effected by written order which Contractor shall carry out promptly and record on as-built record documents.
- 11.5 Concealed Site Conditions. Contractor is responsible for visiting the Site and being familiar with local conditions such as the location, accessibility, and general character of the Site and/or building. If, in the performance of the Contract, subsurface, latent, or concealed conditions at the Site are found to be materially different from the information included in the Contract Documents, or if unknown conditions of an unusual nature are disclosed differing materially from the conditions usually inherent in Work of the character shown and specified, ODR and A/E shall be notified in writing of such conditions before they are further disturbed or subsequent related work proceeds. Upon such notice, or upon its own observation of such conditions, A/E, with the approval of ODR, will promptly make such changes in the Drawings and Specifications as they deem necessary to conform to the different conditions, and any increase or decrease in the cost of the Work, or in the time within which the Work is to be completed, resulting from such changes will be adjusted by Change Order, subject to the prior approval of ODR.
- 11.5.1 *The Contractor is responsible for having visited the Site and having ascertained pertinent local conditions such as location, accessibility, and general character of the Site or building, the character and extent of existing Work within and adjacent to the Site, and any other Work being performed thereon at the time of the submission of its proposal. No failure to do so will relieve Contractor from responsibility for successfully performing the Work without additional expense to the Owner.*
- 11.6 Extension of Time. All changes to the Contract Time shall be made as a consequence of requests as required under Section 9.6, and as documented by Change Order as provided under Section 11.1.
- 11.7 Administration of Change Order Requests. All changes in the Contract shall be administered in accordance with procedures approved by Owner, and when required, make use of such electronic information management system(s) as Owner may employ.
- 11.7.1 Routine changes in the construction Contract shall be formally initiated by A/E by means of a PCO form detailing requirements of the proposed change for pricing by Contractor. This action may be preceded by communications between Contractor, A/E and ODR concerning the need and nature of the

change, but such communications shall not constitute a basis for beginning the proposed Work by Contractor. Except for emergency conditions described below, approval of Contractor's cost proposal by A/E and ODR will be required for authorization to proceed with the Work being changed. Owner will not be responsible for the cost of Work changed without prior approval and Contractor may be required to remove Work so installed.

11.7.2 *Owner-initiated Changes. When the Owner wishes to order changes in the Work, the A/E, on behalf of the Owner, will submit to the Contractor a PCO (Part A of the Change Order Form), consisting of a description of the request, including such Drawings and Specifications as are reasonably necessary to inform the Contractor of the nature of the change. Within 20 days of receipt of the Owner's PCO, the Contractor will submit a CPE (Part B) to the A/E, with a copy to the ODR, stating either: 1) that the proposed change will be at no-cost, or proposing an adjustment in the Contract Sum and/or Time. The A/E will then prepare, sign, and submit a COJ (Part C) to the ODR, either confirming: 1) that the proposed change will be at no cost; or 2) that the change will result in a change in the Contract Sum. If the Owner agrees with the A/E findings, as presented in the COJ, then the Owner will sign a CA (Part D) authorizing the CO.*

11.7.3 All proposed costs for change order Work must be supported by itemized accounting of material, equipment and associated itemized installation costs in sufficient detail, following the outline and organization of the establish Schedule of Values, to permit analysis by A/E and ODR using current estimating guides and/or practices. Photocopies of Subcontractor and vendor proposals shall be furnished unless specifically waived by ODR. Contractor shall provide written response to a change request within twenty-one (21) days of receipt.

11.7.4 Any unexpected circumstance which necessitates an immediate change in order to avoid a delay in progress of the Work may be expedited by verbal communication and authorization between Contractor and Owner, with written confirmation following within twenty-four (24) hours. A limited scope not-to-exceed estimate of cost and time will be requested prior to authorizing Work to proceed. Should the estimate be impractical for any reason, ODR may authorize the use of detailed cost records of such work to establish and confirm the actual costs and time for documentation in a formal Change Order.

11.7.5 *Interim Change Authorizations. The ODR may issue an Interim Change Authorization (ICA) directing the Contractor to proceed with changed work before submitting a CPE. The ICA will authorize the Contractor to bill work as completed on the basis of either (1) time and materials, (2) cost not to exceed a specified amount, or (3) a combination thereof. The Work will be included in and become part of the change order, and billing will not be made until the change order is approved and the work is satisfactorily completed. Upon receipt of an ICA, the Contractor will proceed immediately to document all increased costs actually incurred as a result of the Work required under*

*the ICA. At any time prior to the completion of the changed Work, the Contractor may submit a CPE containing a lump sum proposal for the cost of the changed Work; provided, however, that if the Work is completed prior to acceptance by the ODR of the Contractor's CPE, the Contractor's adjustment of the cost will be limited to the actual cost of the Work, or the not-to-exceed amount, whichever is less. If the ODR determines that a Contractor initiated change is without merit, the ODR will notify the Contractor to proceed according to the subject written interpretation or instruction. Such a notice to proceed will have the same effect as a Unilateral Change Order.*

- 11.7.6 *Contractor-Initiated Changes.* *When the Contractor considers that any written instruction or interpretation of the Contract Documents issued by the Architect/Engineer constitutes a change in the Work affecting the Contract Sum and/or Time, the Contractor will so notify the A/E and ODR as soon as possible, but not later than fifteen (15) days after receipt of the instruction or interpretation, and will submit a CPE to the A/E and a copy to the ODR as soon as possible thereafter, but not later than thirty (30) days after issuance of the Contractor's notice. This CPE will contain a proposal for an adjustment in the Contract Sum, and/or Time, as provided under Article 11. The Contractor will include with the CPE a copy of the written instruction or interpretation from the A/E or ODR, evidence of the date Contractor received the writing, and an explanation of why the Contractor believes the instruction or interpretation changes the Work and requires an adjustment to the Contract Sum.*
- 11.7.7 *Response to CPE.* *As soon as possible, but not more than twenty-one (21) days after receipt of any CPE submitted by the Contractor, the A/E will consult with the ODR and respond in writing to the Contractor by either (1) accepting the CPE, (2) rejecting the CPE, (3) initiating negotiations with the Contractor concerning the proposed cost adjustment, or (4) requesting additional information. If approved, the A/E will submit the CPE and COJ to the ODR. If the A/E fails to respond to the Contractor within the required 21 days, the Contractor will notify the ODR in writing; and the ODR will have thirty (30) days to respond in writing. If, however, the A/E ultimately rejects the CPE, the Contractor may submit supporting information to both the A/E and ODR, and request a review by the ODR. The ODR will again have thirty (30) days to respond in writing.*
- 11.7.8 *Change Authorization.* *If the A/E or ODR have approved the CPE for adjustments to the Contract Sum and/or Time, the Owner will accept the Contractor's CPE, or any subsequently revised CPE issued pursuant to negotiation by executing the Change Authorization (CA - Part D), and returning the completed Change Order (CO) to the Contractor. A CO is effective upon receipt by the Contractor and authorizes the Contractor to proceed with the changed work and submit the adjusted cost, if any, on succeeding Pay Applications as Work is completed.*
- 11.7.9 *Execution of Change Order.* *Not more than fourteen (14) days following the*

*date of acceptance noted on the CA, the ODR will issue the executed Change Order to the Contractor and the A/E. The Contractor will proceed with the changed work within ten (10) days of receipt of the executed Change Order.*

- 11.7.11 Emergency changes to save life or property may be initiated by Contractor alone (see Section 7.3) with the claimed cost and/or time of such work to be fully documented as to necessity and detail of the reported costs and/or time.
- 11.7.12 The method of incorporating approved Change Orders into the parameters of the accepted Schedule of Values must be coordinated and administered in a manner acceptable to ODR.
- 11.8 Pricing Change Order Work. The amounts that Contractor and/or its Subcontractor adds to a Change Order for profit and overhead will also be considered by Owner before approval is given. The amounts established hereinafter are the maximums that are acceptable to Owner.
  - 11.8.1 For Work performed by its forces, Contractor will be allowed their actual costs for materials, the total amount of wages (including benefits) paid for labor, plus the total cost of State and Federal payroll taxes and of worker's compensation and comprehensive general liability insurance, plus additional bond and builders risk insurance cost if the change results in an increase in the premium paid by Contractor. To the total of the above costs, Contractor will be allowed to add a percentage as noted below to cover overhead and profit combined. Allowable percentages for overhead and profit on any specific change shall not exceed fifteen (15) percent for the first \$10,000 of value for self-performed work or portion thereof, ten (10) percent for the second \$10,000 of value for self-performed work or portion thereof and seven and a half (7.5) percent for any value of the self-performed work that exceeds \$20,000.
    - 11.8.1.1 *The comprehensive general liability insurance referenced in the preceding section is intended to refer to the Commercial General Liability insurance required under Article 5.*
    - 11.8.1.2 *For purposes of this Contract, the percentage totals references in Subsection 11.8.1 above, are to be calculated by applying the appropriate total to the aggregate amount of the Change Order.*
  - 11.8.2 *In addition to the costs for materials and labor, the Contractor and/or its Subcontractor will be allowed their costs for the rental equipment used in performing the changed Work, based on hours of use, and multiplied by the actual cost per hour when reasonably available. Otherwise, the equipment rental cost per hour will not be more than the rate included in the most recent version of the Rental Rate Blue Book for Construction Equipment (published by PRIMEDIA Information, Inc.) to yield total cost. Mobilization costs will not be allowed except when the Contractor demonstrates that the need to mobilize a piece of equipment arose solely because of the changed Work.*

- 11.8.3 For subcontracted Work each affected Subcontractor shall figure its costs, overhead and profit as described above for Contractor's Work, all Subcontractor costs shall be combined, and to that total Subcontractor cost Contractor will be allowed to add a maximum mark-up of ten (10) percent for the first \$10,000 of subcontracted Work value or portion thereof, seven and half (7.5) percent for the second \$10,000 of subcontracted Work value or portion thereof, and five (5) percent for any value of the subcontracted Work exceeding \$20,000.
- 11.8.3.1** *For purposes of this Contract, the percentage totals references in Subsection 11.8.3 above, are to be calculated by applying the appropriate total to the aggregate amount of the Change Order.*
- 11.8.4 *On changes involving deleted items, the Owner will receive credit for overhead and profit on each deleted item.*
- 11.8.5 On changes involving both additions and deletions, percentages for overhead and profit will be allowed only on the net addition. Owner does not accept and will not pay for additional Contract cost identified as indirect or consequential damages.
- 11.8.6 For Contracts based on a Guaranteed Maximum Price (GMP), the Construction Manager-at-Risk or Design Builder shall NOT be entitled to a percentage mark-up on any Change Order Work unless the Change Order increases the Guaranteed Maximum Price.
- 11.9 Unilateral Change Order (ULCO). Owner may issue a written ULCO directing a change in the Work prior to reaching agreement with Contractor on the adjustment, if any, in the Contract price and/or the Contract Time.
- 11.9.1 Owner and Contractor shall negotiate for appropriate adjustments, as applicable, to the Contract Sum or the Contract Time arising out of a ULCO. As the changed Work is performed, Contractor shall submit its costs for such Work with its Application for Payment beginning with the next Application for Payment within thirty (30) days of the issuance of the ULCO. The Parties reserve their rights as to the disputed amount, subject to Article 15.
- 11.10 Final Resolution of Changes. Upon execution of a Change Order and /or a ULCO by Owner, Contractor and A/E, all costs and time issues regarding that change are final and not subject to additive adjustments.

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## Article 12. Project Completion and Acceptance

### 12.1 Closing Inspections.

12.1.1 Substantial Completion Inspection. When Contractor considers the entire Work or part thereof Substantially Complete, it shall notify ODR in writing that the Work will be ready for Substantial Completion inspection on a specific date. Contractor shall include with this notice Contractor's Punchlist to indicate that it has previously inspected all the Work associated with the request for inspection, noting items it has corrected and included all remaining work items with date scheduled for completion or correction prior to final inspection. The failure to include any items on this list does not alter the responsibility of Contractor to complete all Work in accordance with the Contract Documents. If any of the items on this list prevents the Project from being used as intended, Contractor shall not request a Substantial Completion Inspection. Owner and its representatives will review the list of items and schedule the requested inspection, or inform Contractor in writing that such an inspection is premature because the Work is not sufficiently advanced or conditions are not as represented on Contractor's list.

12.1.1.1 Prior to the Substantial Completion inspection, Contractor shall furnish a copy of its marked-up Record Documents and a preliminary copy of each instructional manual, maintenance and operating manual, parts catalog, wiring diagrams, spare parts, specified written warranties, and like publications or parts for all installed equipment, systems, and like items as described in the Contract Documents. Delivery of these items is a prerequisite for requesting the Substantial Completion inspection.

12.1.1.2 On the date requested by Contractor, or as mutually agreed upon pending the status of the Open Items List, A/E, ODR, Contractor, and other Owner representatives as determined by Owner will jointly attend the Substantial Completion inspection, which shall be conducted by ODR or their delegate. If ODR determines that the Work is Substantially Complete, ODR will issue a Certificate of Substantial Completion to be signed by A/E, Owner, and Contractor establishing the date of Substantial Completion and identifying responsibilities for security, maintenance, insurance and utilities. A/E will provide with this certificate a consolidated list of Punchlist items (the pre-final Punchlist including all items noted by the various inspecting parties) for completion prior to final inspection. This list may include items in addition to those on Contractor's Punchlist, which the inspection team deems necessary to correct or complete prior to final inspection. The failure to include any items on this list does not alter the responsibility of Contractor to complete all Work in accordance with the Contract Documents. If Owner occupies the Project upon determination of Substantial Completion, Contractor shall complete all corrective Work at the convenience of Owner, without disruption to Owner's use of the Project for its

intended purposes.

12.1.2 Final Inspection. Contractor shall complete the list of items identified on the pre-final Punchlist prior to requesting a final inspection. Unless otherwise specified, or otherwise agreed in writing by the parties as documented on the Certificate of Substantial Completion, Contractor shall complete and/or correct all Work within thirty (30) days of the Substantial Completion date. Upon completion of the pre-final Punchlist work, Contractor shall give written notice to ODR and A/E that the Work will be ready for final inspection on a specific date. Contractor shall accompany this notice with a copy of the updated pre-final Punchlist indicating resolution of all items. On the date specified or as soon thereafter as is practicable, ODR, A/E and Contractor will inspect the Work. A/E will submit to Contractor a final Punchlist of open items that the inspection team requires corrected or completed before final acceptance of the Work.

12.1.2.1 Correct or complete all items on the final Punchlist before requesting Final Payment. Unless otherwise agreed to in writing by the parties, complete this work within seven (7) days of receiving the final Punchlist. Upon completion of the final Punchlist, notify A/E and ODR in writing stating the disposition of each final Punchlist item. A/E, Owner, and Contractor shall promptly inspect the completed items. When the final Punchlist is complete, and the Contract is fully satisfied according to the Contract Documents ODR will issue a certificate establishing the date of Final Completion. Completion of all Work is a condition precedent to Contractor's right to receive Final Payment.

12.1.3 Annotation. Any Certificate issued under this Article may be annotated to indicate that it is not applicable to specified portions of the Work, or that it is subject to any limitation as determined by Owner.

12.1.4 Purpose of Inspection. Inspection is for determining the completion of the Work, and does not relieve Contractor of its overall responsibility for completing the Work in a good and competent fashion, in compliance with the Contract. Work accepted with incomplete Punchlist items or failure of Owner or other parties to identify Work that does not comply with the Contract Documents or is defective in operation or workmanship does not constitute a waiver of Owner's rights under the Contract or relieve Contractor of its responsibility for performance or warranties.

12.1.5 Additional Inspections.

12.1.5.1 If Owner's inspection team determines that the Work is not substantially complete at the Substantial Completion inspection, ODR or A/E will give Contractor written notice listing cause(s) of the rejection. Contractor will set a time for completion of incomplete or defective work acceptable to ODR. Contractor shall complete or correct all work so designated prior to requesting a second

Substantial Completion inspection.

12.1.5.2 If Owner's inspection team determines that the Work is not complete at the final inspection, ODR or A/E will give Contractor written notice listing the cause(s) of the rejection. Contractor will set a time for completion of incomplete or defective work acceptable to ODR. Contractor shall complete or correct all Work so designated prior to again requesting a final inspection.

12.1.5.3 The Contract contemplates three (3) comprehensive inspections: the Substantial Completion inspection, the Final Completion inspection, and the inspection of completed final Punchlist items. The cost to Owner of additional inspections resulting from the Work not being ready for one or more of these inspections is the responsibility of Contractor. Owner may issue a ULCO deducting these costs from Final Payment. Upon Contractor's written request, Owner will furnish documentation of any costs so deducted. Work added to the Contract by Change Order after Substantial Completion inspection is not corrective Work for purposes of determining timely completion, or assessing the cost of additional inspections.

12.1.6 Phased Completion. The Contract may provide, or Project conditions may warrant, as determined by ODR, that designated elements or parts of the Work be completed in phases. Where phased completion is required or specifically agreed to by the parties, the provisions of the Contract related to closing inspections, occupancy, and acceptance apply independently to each designated element or part of the Work. For all other purposes, unless otherwise agreed by the parties in writing, Substantial Completion of the Work as a whole is the date on which the last element or part of the Work completed receives a Substantial Completion certificate.

Final Completion of the Work as a whole is the date on which the last element or part of the Work completed receives a Final Completion certificate.

12.2 Owner's Right of Occupancy. Owner may occupy or use all or any portion of the Work following Substantial Completion, or at any earlier stage of completion. Should Owner wish to use or occupy the Work, or part thereof, prior to Substantial Completion, ODR will notify Contractor in writing and identify responsibilities for security, maintenance, insurance and utilities. Work performed on the premises by third parties on Owner's behalf does not constitute occupation or use of the Work by Owner for purposes of this Article. All Work performed by Contractor after occupancy, whether in part or in whole, shall be at the convenience of Owner so as to not disrupt Owner's use of, or access to occupied areas of the Project.

12.2.1 *Notice and Early Occupancy Proposal*. *If the Owner determines that hardship will result if it is unable to occupy some portion of the Work prior to substantial completion, Owner will inform the Architect/Engineer and the Contractor no less than 30 days before the date the Owner wishes to occupy*

*the Work, and designate those portions of the Work to be occupied and the uses to be made of the occupied premises. Contractor will make the designated portions of the Work available to the Architect/Engineer and the ODR for observation. The Architect/Engineer and the ODR will observe the Work jointly with the Contractor. As soon as practicable, but not later than the third day after the inspection, the Architect/Engineer, in conjunction with the ODR, will prepare and submit to the Contractor an Early Occupancy Proposal, specifying any work that must be completed or corrected as well as any operation or maintenance manuals or other documentation necessary for the Work to be occupied by the Owner and used for the purposes designated by the Owner in its notice, and setting out the division of responsibility between the Owner and the Contractor for utilities, security, maintenance, insurance and liability for damage to the Work or damage arising from the condition of the Work. The Early Occupancy Proposal will also specify whether the area to be occupied must be Substantially Complete before occupation, and will specify the date for Substantial Completion if other than the date previously specified by the Contract Documents.*

### 12.3 Acceptance and Payment

12.3.1 Request for Final Payment. Following the certified completion of all work, including all final Punchlist items, cleanup, and the delivery of record documents, Contractor shall submit a certified Application for Final Payment and include all sums held as retainage and forward to A/E and ODR for review and approval.

12.3.2 Final Payment Documentation. Contractor shall submit, prior to or with the Application for Final Payment, final copies of all close out documents, maintenance and operating instructions, guarantees and warranties, certificates, Record Documents and all other items required by the Contract. Contractor shall submit evidence of return of access keys and cards, evidence of delivery to Owner of attic stock, spare parts, and other specified materials. Contractor shall submit consent of surety to Final Payment form and an affidavit that all payrolls, bills for materials and equipment, subcontracted work and other indebtedness connected with the Work, except as specifically noted, are paid, will be paid, after payment from Owner or otherwise satisfied within the period of time required by Tex. Gov't Code, Ch. 2251. Contractor shall furnish documentation establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of claims and liens arising out of the Contract. Contractor may not subsequently submit a claim on behalf of Subcontractor or vendor unless Contractor's affidavit notes that claim as an exception.

12.3.3 Architect/Engineer Approval. A/E will review a submitted Application for Final Payment promptly but in no event later than ten (10) days after its receipt. Prior to the expiration of this deadline, A/E will either: 1) return the Application for Final Payment to Contractor with corrections for action and resubmission; or 2) accept it, note their approval, and send to Owner.

12.3.4 Offsets and Deductions. Owner may deduct from the Final Payment all

sums due from Contractor. If the Certificate of Final Completion notes any Work remaining, incomplete, or defects not remedied, Owner may deduct the cost of remedying such deficiencies from the Final Payment. On such deductions, Owner will identify each deduction, the amount, and the explanation of the deduction on or by the twenty-first (21<sup>st</sup>) day after Owner's receipt of an approved Application for Final Payment. Such offsets and deductions shall be incorporated via a final Change Order, including a ULCO as may be applicable.

12.3.5 Final Payment Due. Final Payment is due and payable by Owner, subject to all allowable offsets and deductions, on the thirtieth (30<sup>th</sup>) day following Owner's approval of the Application for Payment. If Contractor disputes any amount deducted by Owner, Contractor shall give notice of the dispute on or before the thirtieth (30<sup>th</sup>) day following receipt of Final Payment. Failure to do so will bar any subsequent claim for payment of amounts deducted.

12.3.6 Effect of Final Payment. Final Payment constitutes a waiver of all claims by Owner, relating to the condition of the Work except those arising from:

12.3.6.1 Faulty or defective Work appearing after Substantial Completion (latent defects);

12.3.6.2 Failure of the Work to comply with the requirements of the Contract Documents;

12.3.6.3 Terms of any warranties required by the Contract, or implied by law; or

12.3.6.4 Claims arising from personal injury or property damage to third parties.

12.3.7 Waiver of Claims. Final payment constitutes a waiver of all claims and liens by Contractor except those specifically identified in writing and submitted to ODR prior to the application for Final Payment.

12.3.8 Effect on Warranty. Regardless of approval and issuance of Final Payment, the Contract is not deemed fully performed by Contractor and closed until the expiration of all warranty periods. Issuance of Final Payment does not alter Contractor's contractual obligations during the warranty period.

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## Article 13. Warranty and Guarantee

- 13.1 Contractor's General Warranty and Guarantee. Contractor warrants to Owner that all Work is executed in accordance with the Contract, complete in all parts and in accordance with approved practices and customs, and of the required finish and workmanship. Contractor further warrants that unless otherwise specified, all materials and equipment incorporated in the Work under the Contract are new. Owner may, at its option, agree in writing to waive any failure of the Work to conform to the Contract, and to accept a reduction in the Contract price for the cost of repair or diminution in value of the Work by reason of such defect. Absent such a written agreement, Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute and is not waived by any inspection or observation by Owner, A/E or others, by making any progress payment or final payment, by the use or occupancy of the Work or any portion thereof by Owner, at any time, or by any repair or correction of such defect made by Owner.
- 13.2 Warranty Period. Except as may be otherwise specified or agreed, Contractor shall repair all defects in materials, equipment, or workmanship appearing within one year from the date of Substantial Completion of the Work. If Substantial Completion occurs by phase, then the warranty period for that particular Work begins on the date of such occurrence, or as otherwise stipulated on the Certificate of Substantial Completion for the particular Work.
- 13.3 Limits on Warranty. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
- 13.3.1 Modification or improper maintenance or operation by persons other than Contractor, Subcontractors, or any other individual or entity for whom Contractor is not responsible, unless Owner is compelled to undertake maintenance or operation due to the neglect of Contractor.
  - 13.3.2 Normal wear and tear under normal usage after acceptance of the Work by Owner.
- 13.4 Events Not Affecting Warranty. Contractor's obligation to perform and complete the Work in a good and workmanlike manner in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of defective Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
- 13.4.1 Observations by Owner and/or A/E;
  - 13.4.2 Recommendation to pay any progress or final payment by A/E;
  - 13.4.3 The issuance of a certificate of Substantial Completion or any payment by Owner to Contractor under the Contract Documents;
  - 13.4.4 Use or occupancy of the Work or any part thereof by Owner;

- 13.4.5 Any acceptance by Owner or any failure to do so;
- 13.4.6 Any review of a Shop Drawing or sample submittal; or
- 13.4.7 Any inspection, test or approval by others.
- 13.5 Separate Warranties. If a particular piece of equipment or component of the Work for which the Contract requires a separate warranty is placed in continuous service before Substantial Completion, the warranty period for that equipment or component will not begin until Substantial Completion, regardless of any warranty agreements in place between suppliers and/or Subcontractors and Contractor. ODR will certify the date of service commencement in the Substantial Completion certificate.
- 13.5.1 In addition to Contractor's warranty and duty to repair, Contractor expressly assumes all warranty obligations required under the Contract for specific building components, systems and equipment.
- 13.5.2 Contractor may satisfy any such obligation by obtaining and assigning to Owner a complying warranty from a manufacturer, supplier, or Subcontractor. Where an assigned warranty is tendered and accepted by Owner which does not fully comply with the requirements of the Contract, Contractor remains liable to Owner on all elements of the required warranty not provided by the assigned warranty.
- 13.6 Correction of Defects. Upon receipt of written notice from Owner, or any agent of Owner designated as responsible for management of the warranty period, of the discovery of a defect, Contractor shall promptly remedy the defect(s), and provide written notice to Owner and designated agent indicating action taken. In case of emergency where delay would cause serious risk of loss or damage to Owner, or if Contractor fails to remedy within thirty (30) days, or within another period agreed to in writing, Owner may correct the defect and be reimbursed the cost of remedying the defect from Contractor or its surety.
- 13.7 Certification of No Asbestos Containing Materials or Work. Contractor shall ensure compliance with the Asbestos Hazard Emergency Response Act (AHERA– 40 C.F.R § 763-99(7)) from all Subcontractors and materials suppliers, and shall provide a notarized certification to Owner that all equipment and materials used in fulfillment of their Contract responsibilities are non-Asbestos Containing Building Materials (ACBM). This certification must be provided no later than Contractor's application for Final Payment.

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## Article 14. Suspension and Termination

14.1 Suspension of Work for Cause. Owner may, at any time without prior notice, suspend all or any part of the Work, if after reasonable observation and/or investigation, Owner determines it is necessary to do so to prevent or correct any condition of the Work, which constitutes an immediate safety hazard, or which may reasonably be expected to impair the integrity, usefulness or longevity of the Work when completed.

14.1.1 Owner will give Contractor a written notice of suspension for cause, setting forth the reason for the suspension and identifying the Work suspended. Upon receipt of such notice, Contractor shall immediately stop the Work so identified. As soon as practicable following the issuance of such a notice, Owner will initiate and complete a further investigation of the circumstances giving rise to the suspension, and issue a written determination of the findings.

14.1.2 If it is confirmed that the cause was within the control of Contractor, Contractor will not be entitled to an extension of time or any compensation for delay resulting from the suspension. If the cause is determined not to have been within the control of Contractor, and the suspension has prevented Contractor from completing the Work within the Contract Time, the suspension is an excusable delay and a time extension will be granted through a Change Order.

14.1.3 Suspension of Work under this provision will be no longer than is reasonably necessary to remedy the conditions giving rise to the suspension.

14.2 Suspension of Work for Owner's Convenience. Upon seven (7) days written notice to Contractor, Owner may at any time without breach of the Contract suspend all or any portion of the Work for a period of up to thirty (30) days for its own convenience. Owner will give Contractor a written notice of suspension for convenience, which sets forth the number of suspension days for which the Work, or any portion of it, and the date on which the suspension of Work will cease. When such a suspension prevents Contractor from completing the Work within the Contract Time, it is an excusable delay. A notice of suspension for convenience may be modified by Owner at any time on seven (7) days written notice to Contractor. If Owner suspends the Work for its convenience for more than sixty (60) consecutive days, Contractor may elect to terminate the Contract pursuant to the provisions of the Contract.

14.3 Termination by Owner for Cause.

14.3.1 Upon written notice to Contractor and its surety, Owner may, without prejudice to any right or remedy, terminate the Contract and take possession of the Site and of all materials, equipment, tools, construction equipment, and machinery thereon owned by Contractor under any of the following circumstances:

14.3.1.1 Persistent or repeated failure or refusal, except during complete or partial suspensions of work authorized under the Contract, to supply



enough properly skilled workmen or proper materials;

- 14.3.1.2 Persistent disregard of laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, including ODR;
  - 14.3.1.3 Persistent failure to prosecute the Work in accordance with the Contract, and to ensure its completion within the time, or any approved extension thereof, specified in the Contract;
  - 14.3.1.4 Failure to remedy defective work condemned by ODR;
  - 14.3.1.5 Failure to pay Subcontractors, laborers, and material suppliers pursuant to Tex. Gov't Code, Ch. 2251;
  - 14.3.1.6 Persistent endangerment to the safety of labor or of the Work;
  - 14.3.1.7 Failure to supply or maintain statutory bonds or to maintain required insurance, pursuant to the Contract;
  - 14.3.1.8 Any material breach of the Contract; or
  - 14.3.1.9 Contractor's insolvency, bankruptcy, or demonstrated financial inability to perform the Work.
- 14.3.2 Failure by Owner to exercise the right to terminate in any instance is not a waiver of the right to do so in any other instance.
- 14.3.3 Should Owner decide to terminate the Contract under the provisions of Section 14.3, it will provide to Contractor and its surety thirty (30) days prior written notice.
- 14.3.4 Should Contractor or its surety, after having received notice of termination, demonstrate to the satisfaction of Owner that Contractor or its surety are proceeding to correct such default with diligence and promptness, upon which the notice of termination was based, the notice of termination may be rescinded in writing by Owner. If so rescinded, the Work may continue without an extension of time.
- 14.3.5 If Contractor or its surety fails, after written notice from Owner to commence and continue correction of such default with diligence and promptness to the satisfaction of Owner within thirty (30) days following receipt of notice, Owner may arrange for completion of the Work and deduct the cost of completion from the unpaid Contract Sum.
- 14.3.5.1 This amount includes the cost of additional Owner costs such as A/E services, other consultants, and contract administration.
  - 14.3.5.2 Owner will make no further payment to Contractor or its surety unless the costs to complete the Work are less than the Contract

balance, then the difference shall be paid to Contractor or its surety. If such costs exceed the unpaid balance, Contractor or its surety will pay the difference to Owner.

14.3.5.3 This obligation for payment survives the termination of the Contract.

14.3.5.4 Owner reserves the right in termination for cause to take assignment of all the Contracts between Contractor and its Subcontractors, vendors, and suppliers. ODR will promptly notify Contractor of the contracts Owner elects to assume. Upon receipt of such notice, Contractor shall promptly take all steps necessary to effect such assignment.

14.4 Conversion to Termination for Convenience. In the event that any termination of Contractor for cause under Section 14.3 is later determined to have been improper, the termination shall automatically convert to a termination for convenience under Section 14.5 and Contractor's recovery for termination shall be strictly limited to the payments allowable under Section 14.5.

14.5 Termination for Convenience of Owner. Owner reserves the right, without breach, to terminate the Contract prior to, or during the performance of the Work, for any reason. Upon such an occurrence, the following shall apply:

14.5.1 Owner will immediately notify Contractor and A/E in writing, specifying the reason for and the effective date of the Contract termination. Such notice may also contain instructions necessary for the protection, storage or decommissioning of incomplete work or systems, and for safety.

14.5.2 Upon receipt of the notice of termination, Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due at that point in the Contract:

14.5.2.1 Stop all work.

14.5.2.2 Place no further subcontracts or orders for materials or services.

14.5.2.3 Terminate all subcontracts for convenience.

14.5.2.4 Cancel all materials and equipment orders as applicable.

14.5.2.5 Take action that is necessary to protect and preserve all property related to the Contract which is in the possession of Contractor.

14.5.3 When the Contract is terminated for Owner's convenience, Contractor may recover from Owner payment for all Work executed. Contractor may not claim lost profits on other work or lost business opportunities.

14.6 Termination By Contractor. If the Work is stopped for a period of ninety (90) days under an order of any court or other public authority having jurisdiction, or as a result of an act of government, such as a declaration of a national emergency making

materials unavailable, through no act or fault of Contractor or Subcontractor or their agents or employees or any other persons performing any of the Work under a contract with Contractor, then Contractor may, upon thirty (30) additional days written notice to ODR, terminate the Contract and recover from Owner payment for all Work executed, but not lost profits on other work or lost business opportunities. If the cause of the Work stoppage is removed prior to the end of the thirty (30) day notice period, Contractor may not terminate the Contract.

- 14.7 Settlement on Termination. When the Contract is terminated for any reason, at any time prior to one hundred eighty (180) days after the effective date of termination, Contractor shall submit a final termination settlement proposal to Owner based upon recoverable costs as provided under the Contract. If Contractor fails to submit the proposal within the time allowed, Owner may determine the amount due to Contractor because of the termination and pay the determined amount to Contractor.

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## Article 15. Dispute Resolution

- 15.1 Unresolved Contractor Disputes. The dispute resolution process provided for in Tex. Gov't Code, Ch. 2260 or Tex. Civ. Prac. & Rem. Code, Ch. 114, shall be used by Contractor to attempt to resolve any claim for breach of Contract made by Contractor that is not resolved under procedures described throughout the Uniform General Conditions, Supplementary Conditions, or Special Conditions of the Contract.
- 15.2 Alternative Dispute Resolution Process. Owner will establish a dispute resolution process to be utilized in advance of that outlined in Tex. Gov't Code, Ch. 2260 or Tex. Civ. Prac. & Rem. Code, Ch. 114.
- 15.3 Nothing herein shall hinder, prevent, or be construed as a waiver of Owner's right to seek redress on any disputed matter in a court of competent jurisdiction.
- 15.4 Nothing herein shall waive or be construed as a waiver of the State's sovereign immunity.
- 15.4.1 *Notwithstanding anything to the contrary provided herein, nothing herein will not constitute nor is it intended to constitute the Owner's or the State of Texas' right to claim exemptions, privileges, and immunities as may be provided under the doctrines of sovereign and official immunity.*

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## Article 16. Miscellaneous

- 16.1 Supplementary General and Special Conditions. When the Work contemplated by Owner is of such a character that the foregoing Uniform General Conditions of the Contract cannot adequately cover necessary and additional contractual relationships, the Contract may include Supplementary General and Special Conditions as described below:
- 16.1.1 Supplementary General Conditions may describe the standard procedures and requirements of contract administration followed by a contracting agency of the State. Supplementary General Conditions may expand upon matters covered by the Uniform General Conditions, where necessary, provided the expansion does not weaken the character or intent of the Uniform General Conditions. Supplementary General Conditions are of such a character that it is to be anticipated that a contracting agency of the State will normally use the same, or similar, conditions to supplement each of its several projects.
- 16.1.2 Special Conditions shall relate to a particular Project and be unique to that Project but shall not weaken the character or intent of the Uniform General Conditions.
- 16.2 Federally Funded Projects. On Federally funded projects, Owner may waive, suspend or modify any Article in these Uniform General Conditions which conflicts with any Federal statute, rule, regulation or procedure, where such waiver, suspension or modification is essential to receipt by Owner of such Federal funds for the Project. In the case of any Project wholly financed by Federal funds, any standards required by the enabling Federal statute, or any Federal rules, regulations or procedures adopted pursuant thereto, shall be controlling.
- 16.3 Internet-based Project Management Systems. At its option, Owner may administer its design and construction management through an Internet-based management system. In such cases, Contractor shall conduct communication through this media and perform all Project related functions utilizing this database system. This includes correspondence, submittals, Requests for Information, applications for payment and processing, amendment, Change Orders and other administrative activities.
- 16.3.1 Accessibility and Administration.
- 16.3.1.1 When used, Owner will make the software accessible via the Internet to all Project team members.
- 16.3.1.2 Owner shall administer the software.
- 16.3.2 Training. When used, Owner shall provide training to the Project team members.
- 16.4 Administrative Inspections and Audits. Contractor agrees that all relevant records related to this Contract or any work product under this Contract, including practices of its Subcontractors, shall be subject, at any reasonable time, to inspection, examination,

review, audit, and copying at any office or location of Contractor where such records may be found, with or without notice by the Texas State Auditor's Office ("SAO"), the contracting agency or its contracted examiners, or the Office of the Texas Attorney General, and with regard to any federal funding, the relevant federal agency, the Comptroller General, the General Accounting Office, the Office of the Inspector General, or any of their authorized representatives. All Subcontracts shall reflect the requirements of this section. In addition, pursuant to Tex. Gov't Code § 2262.003 the SAO may conduct an audit or investigation of any entity receiving funds under this Contract, including direct payments to Contractor and indirect payments under a Subcontract to this Contract; acceptance of such monies acts as acceptance of SAO authority, under legislative audit committee direction, to audit and investigate related to those funds and the entity subject to the audit or investigation must provide SAO with access to any information SAO considers relevant to the scope of the audit or investigation.<sup>15</sup>

## **End of Uniform General Conditions**

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<sup>15</sup> *Tex. Gov't Code § 2262.003 was transferred and redesignated as Tex. Gov't Code § 2262.154 (Added by Acts 2003, 78th Leg., ch. 785, Sec. 44, eff. Sept. 1, 2003. Amended by: Acts 2005, 79th Leg., Ch. 1012 (H.B. 905), Sec. 2, eff. June 18, 2005. Transferred, redesignated and amended from Government Code, Section 2262.003 by Acts 2013, 83rd Leg., R.S., Ch. 1227 (S.B. 1681), Sec. 8, eff. November 1, 2013.)*



**TEXAS**  
Health and Human Services

# **Attachment C**

## **Facility Specific Policies and Procedures**

## Attachment C

### BIG SPRING STATE HOSPITAL CAMPUS REQUIREMENTS / CONTRACTOR ORIENTATION

#### I. PURPOSE:

Big Spring State Hospital is required to notify all Contractors performing work on Facility buildings and/or utility systems, of Facility regulations, hazards, and required actions. This notification is required by various State and Federal regulations.

#### II. APPLICATION:

This procedure is applicable to all mechanical, construction and environmental vendors and contractors who have been contracted or hired to perform services on Big Spring State Hospital campus.

#### III. REFERENCES:

TJC 20187, CAMH, Standard HR.01.04.01

National Fire Protection Association (NFPA) Chapter 101, *Life Safety Code*

Texas Administrative Code – 417-A: *Standing Operating Procedure*, Division 3 – 417.9  
Environmental Issues

Superintendent's Memo #37-A: Traffic Violation Enforcement

BSSH OPM EC.29: Hot Work Policy (Welding Brazing Flame Cutting)

BSSH OPM MA.15: Determining Contracts Requiring Worker's Compensation Insurance

#### IV. CONTENTS:

N/A

#### V. DEFINITIONS:

Contractor: A commercial vendor, general contractor, subcontractor, and their employees hired or awarded bid to conduct services for BSSH.

#### VI. RESPONSIBILITIES:

The Projects Manager, Plant Manager and Safety Officer are responsible for the management and implementation of this procedure.

##### Primary Points of Contact:

George Oteiza, **Assistant Superintendent/ Project Manager**  
1901 N. Highway 87  
Big Spring, Texas, 79720  
Office: (432) 268-**7300**  
Cell: (432) 230-1608

**Maranda Moore**, Safety Officer  
1901 N. Highway 87



Big Spring, Texas, 79720  
Office: (432) 268-7687  
Cell: (432) 935-5768

VII. PROCEDURE:

A. General Requirements

The Contractor is subject to rules and regulations of the Big Spring State Hospital and will complete Contractor Orientation Forms provided at the Pre-Construction Conference prior to beginning work at BSSH.

1. Contractor will report to Plant Management Office (Building 543) prior to initiation of services.
2. Contractor will work as professionally as possible so as not to aggravate patients, staff and visitors; use courtesy, avoid loud and vulgar language.
3. Contractor will not physically or verbally interact with hospital patients. Contractor is subject to federal and state law regarding allegations of physical or verbal abuse of patients. Additionally, Contractor is subject to federal and state patient confidentiality laws.
4. Contractor will not provide gifts to patients nor receive gifts from patients despite how small the monetary value (gum, cigarettes, money, etc.).
5. Alcohol, drugs, and firearms are strictly prohibited on campus. Persons suspected to be under the influence will not be permitted on the hospital grounds.
6. Contractor will adhere to BSSH policy concerning tobacco-free campus.
7. Contractor will adhere to BSSH policy related to prohibition of aluminum cans, e.g., soda cans
8. If special parking or storage of materials is required, permission will be granted and coordinated through Plant Management Department.
9. Contractor will maintain their work area as clean as possible while working and clean up thoroughly at the end of each day and during interim periods as needed.
10. Contractor will notify Facilities Director designee of any utilities or systems to be interrupted. Advanced notification must be provided to allow the Safety Officer opportunity to assess the need for any Interim Life Safety Measure (ILSM).
11. BSSH reserves the right to prohibit Contractor, Subcontractor and/or personnel associated with Contractor from working on facility grounds. A list of individuals employed or contracted by Contractor for work at BSSH will be submitted to the Project Manager and the Security Office.
12. Contractor experiencing problems with patients or in the event of an accident (vehicle or personal) will immediately contact Security by dialing our emergency number of X7211 (432 268-7211) followed by the Plant Management Office (Extension # 7441 or X7267) for assistance.
13. If using a ladder outside of the Contractor's secured fenced work area, Contractor will either position personnel at bottom of ladder to prevent unauthorized access or pull ladder onto roof to prevent unauthorized access.
14. If Contractor is permitted entry into the gated Neighborhood area, Contractor personnel must ensure walk or service gate is locked after each pass through.
15. Contractor is responsible for briefing this Contractor Orientation policy to their sub-contractors.

B. Emergency Procedures

In the event that a Contractor needs emergency care, the Contractor should directly call EMS 9-1-1. If using a facility phone:

1. Access EMS by dialing 9, wait for a dial tone, then dial 9-1-1.
2. Once 9-1-1 has been notified, contact the Switchboard immediately at 7211.
3. If using a cell phone, contact the switchboard by calling 268-7211.

C. Safety/Security

All Contractors are required to use competent subcontractors on hospital projects. Poor or unsafe work practices will not be tolerated. Once a project bid is awarded, a pre-construction meeting is scheduled with the agency Project Manager, BSSH Project Manager, Plant Manager, relevant Plant Management staff, Facilities Director, and the Safety Officer in attendance. The Safety Officer provides Safety/Security orientation. Key components of the orientation include:

1. Posted traffic regulations will be observed. Pedestrians have right of way.
2. Unattended vehicles will be secured (windows closed, doors locked and keys removed). Additionally, Contractor will not maintain equipment in unattended vehicles. Vehicles will be parked only in designated parking areas.
3. Work area must be fenced and equipment secured within the construction fence. Working fire extinguishers must be on site.
4. Contractor and subs must adhere to BSSH policies related to tobacco, alcohol and firearms.
5. Contractor will be accompanied/escorted by a Plant Management staff when in a patient occupied building.
6. No video/audio taping allowed except as approved by the Project or Plant Manager, Safety Officer or Facilities Director.
7. BSSH Hot work permit procedures must be followed.

D. Life Safety

1. Contractor will ensure exits provide free and unobstructed egress. The BSSH Safety Officer must be contacted if alternative exits must be designated. Contractors must provide assurance not to block corridors and fire exits. Building/areas under construction must maintain escape facilities for construction workers at all times. Means of egress in construction areas must be inspected daily. Security staff provide the daily inspection as documented on the Security Daily Report.
2. Contractor will ensure free and unobstructed access to emergency departments/services and for emergency responders.
3. Contractor will ensure fire alarm, detection, and suppression systems are not impaired. A temporary, but equivalent, system will be provided when any fire system is impaired. Temporary systems must be inspected and tested daily. The Safety Officer must be notified and an interim life safety measure (ILSM) implemented for any occupied building when the fire alarm, detection or suppression system is non-functional for greater than 4 hours. The Safety Officer will determine need for a Fire Watch.
4. Contractor will ensure temporary construction partitions are smoke tight and built of noncombustible or limited combustible materials that will not contribute to the development or spread of fire.
5. Contractor will develop and enforce storage, housekeeping, and debris removal practices that reduce the flammable and combustible fire load of the building to the lowest level necessary for daily operations.

6. Contractor will perform hazard surveillance of buildings, grounds, and equipment with special attention to excavations, construction areas, construction storage, and field offices.
7. All Contractors working above the ceiling are required to replace all disturbed or damaged ceiling tile. No piping, cords, wires, etc. may be attached to any portion of the fire alarm, detection or suppression systems above the ceiling.
8. Any life safety code violations incurred during construction or renovation will result in suspension of work until the Contractor has corrected the violation.
9. All penetrations in smoke partitions are to be sealed with UL approved agents before final payment is made.
10. During Fire Drills, Contractor will participate in the drill by following BSSH staff instructions for exiting the building. Contractor will maintain possession of hand tools and/or place items in a secure location. The Safety Officer/designee may authorize exemption from participation in planned fire or disaster drills.

E. Hazardous Materials

The Facility is required by various State and Federal regulations to notify persons who enter as Contractors, of the presence of hazardous materials. The intent of this section is to inform Contractors of the hazardous materials to which they may be exposed while on the job. Existing BSSH SDS (Safety Data Sheets) / MSDS (Material Safety Data Sheets) may be reviewed by dialing x7211 in emergency or X7204 to contact the receptionist at the Hospital Switchboard, Building 504.

Hazardous Materials present at Facility include:

- Asbestos: BSHS has asbestos in the form of Asbestos Containing Building Materials. The Asbestos file is located in Plant Management, Building 543, Extension 7443.
- Gasoline: Gasoline is stored in bulk (up to 2000 gallons) at Plant Management, Building 543, Extension 7443.
- Diesel: Diesel is stored in bulk (up to 5000 gallons) at the Steam Plant, Building 508, Extension 7443.

This section provides information concerning the Contractor's use of hazardous materials.

1. Contractor will submit SDS/MSDS for all hazardous chemicals used for the project site. Copies of SDS/MSDS for contractor chemicals must be provided to the Facilities Director when the chemical is brought to BSSH campus.
2. Contractors will not use hazardous materials at BSSH without consent from the Plant Manager and will provide SDS/MSDS for any hazardous chemicals used during construction or renovation that are not currently part of the BSSH SDS/MSDS listing.
3. Texas Administrative Code – 417-A: *Standing Operating Procedure*, Division 3 – 417.9 Environmental Issues states that *"The Plant Maintenance Manager or designee must ensure that a Contractor obtains a material safety data sheet before installing any material or replacement part at the facility. If according to the material safety data sheet the material or replacement part contains more than one percent asbestos and there is an alternative material or part available, the Contractor is prohibited from installing the material or replacement part."*
4. Contractor will use or apply hazardous chemicals in accordance with manufacturer's recommendation.

- F. Miscellaneous  
BSSH Canteen, located at ATD Building 557, is a hot-grill restaurant that provides short-order food at reasonable prices. Contractor may utilize the Canteen and atrium area.

\*\*\*End of Section\*\*\*



**TEXAS**  
Health and Human Services

# **Attachment D**

## **Prevailing Wage Rates**

General Decision Number: TX190156 02/08/2019 TX156

Superseded General Decision Number: TX20180188

State: Texas

Construction Type: Building

County: Howard County in Texas.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.60 for calendar year 2019 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor

must pay all workers in any classification listed on this wage determination at least \$10.60 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2019. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the

wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate

will be adjusted annually. Please note that this EO applies to

the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available

at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/04/2019
1	02/08/2019

ASBE0066-004 03/01/2014

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR.....	\$ 20.79	11.12

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BOIL0531-001 01/01/2017

	Rates	Fringes
Boilermaker.....	\$ 28.00	22.35

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IRON0263-019 06/01/2017

	Rates	Fringes
Ironworker, reinforcing and structural.....	\$ 23.25	7.32

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LABO0154-010 05/01/2008

	Rates	Fringes
Laborers: (Mason Tender - Cement/Concrete).....	\$ 12.73	3.20

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\* PLUM0404-001 09/01/2018

	Rates	Fringes
PLUMBER.....	\$ 25.05	8.71

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SUTX2009-043 04/20/2009

	Rates	Fringes
ACOUSTICAL CEILING MECHANIC.....	\$ 14.50	0.00
BRICKLAYER.....	\$ 17.76	0.00
CARPENTER, Includes Drywall Hanging (Excludes Acoustical Ceiling Installation).....	\$ 12.42	0.00
CEMENT MASON/CONCRETE FINISHER...\$	13.27	0.00
ELECTRICIAN.....	\$ 15.50	2.71
LABORER: Common or General.....	\$ 8.03	0.00
LABORER: Landscape & Irrigation.....	\$ 8.50	0.22
LABORER: Mason Tender - Brick...\$	12.02	0.00
LABORER: Mortar Mixer.....	\$ 9.50	0.00
LATHER.....	\$ 12.00	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 13.75	0.00
OPERATOR: Bulldozer.....	\$ 12.80	0.43
OPERATOR: Crane.....	\$ 21.33	0.00
OPERATOR: Forklift.....	\$ 14.58	0.00



OPERATOR: Loader (Front End)....\$ 10.54	0.00
PAINTER: Brush, Roller and Spray.....\$ 15.80	0.00
PLASTERER.....\$ 15.00	0.00
ROOFER.....\$ 15.10	1.29
SHEET METAL WORKER, Includes HVAC Duct Installation.....\$ 18.00	0.00
TILE SETTER.....\$ 15.00	0.00
TRUCK DRIVER.....\$ 11.24	0.35

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1,

2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and

the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007

in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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END OF GENERAL DECISION



**TEXAS**  
Health and Human Services

# **Attachment E**

**Respondent's Signed Pricing  
and Delivery Proposal**

Attachment E

<Insert Signed Pricing and Delivery Proposal>



**TEXAS**  
Health and Human Services

# **Attachment F**

## **Respondent's Historically Underutilized Businesses Subcontracting Plan**

Attachment F

<Insert HSP Plan>





**TEXAS**  
Health and Human Services

# **Attachment G1**

## **Project Specifications**

Project Manual for  
**BIG SPRING STATE HOSPITAL**  
**ROOF REPAIR & REPLACEMENT PROJECT**  
**PROJECT NO. 18-002-BSH**

AUGUST 15, 2018



6310 Genoa Ave., Suite G  
Lubbock, TX 79424  
Tel 806.833.6953  
Fax 806.833.8539

**Armko Project Number 18-1104-48**

Set Number \_\_\_\_\_

## **PROJECT DIRECTORY**

---

HHSC Maintenance and Construction:  
Texas Health and Human Services Commission  
P. O. Box 12668 Mail Code 2064  
Austin, Texas 78711-2668  
(909 W. 45th Street, Bldg. 633, Austin, TX 78751)  
FAX (512) 206-5930

<u>Austin</u>	<u>Phone No.</u>
John Robert – Director	(512) 206-5888
Muhammad Ally - Assistant Director	(512) 206-4649
Tony Hackney - Manager, Construction Services	(512) 206-5888

<u>Project Manager</u>	<u>Phone No.</u>
Mike Schultz, P.E.	(325) 795-5596
West Texas Office - Facilities Maintenance and Construction Texas Health and Human Services Commission (4601 South 1st Street (Room G-123), Abilene, TX 79605) – Physical Address (PO Box 521, Abilene, TX 79604-0521 (Mail Code 0011)) - Mailing Address	

<u>Assistant Superintendent</u>	<u>Phone No.</u>
George Oteiza	(432) 268-7493
1901 N. Highway 87, Big Spring, TX 79720	

<u>Project Maintenance Manager</u>	<u>Phone No.</u>
Fernando Rodriquez	(432) 268-7493
1901 N. Highway 87, Big Spring, TX 79720	

<u>Engineer</u>	<u>Phone No.</u>
Armko Industries, Inc.	(972) 874-1388
Brad Draper, RRO – Senior Building Envelope Consultant (972) 874-1391 Fax (1320 Spinks Rd., Flower Mound, TX 75028) <a href="http://www.armko.com">www.armko.com</a>	

BIG SPRING STATE HOSPITAL  
 ROOF REPAIR & REPLACEMENT PROJECT  
**TEXAS HEALTH & HUMAN SERVICES COMMISSION**  
 BIG SPRING, TEXAS

ARMKO INDUSTRIES, INC.  
 LUBBOCK, TEXAS

August 15, 2018

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**SECTION 01 00 00  
SPECIAL CONDITIONS**

1. SCOPE:

The work covered by this project consists of the Contractor furnishing all planning, labor, supervision, quality control, materials, equipment, machines, tools, appliances, services, supplies, and incidentals and of performing all operations in connection with Repairs / Replacement of Roofing Systems at the Big Spring State Hospital in Big Spring, Texas, complete and in strict accordance with the plans and specifications.

The scope of work for the Base Bid of the aforementioned project includes but is not limited to:

**SCOPE OF WORK – BUILDING NO. 502 ADMINISTRATION**

It is the intent of these drawings that the new work will provide a watertight facility. The attached specifications describe the minimum acceptable standards of construction and finish.

Masonry Rise Wall Adjacent to Roof Area “B”: Work shall include removal of existing sealant and mortar at various elevations in the stone façade as described in the project specifications. Contractor shall repair masonry wall system as needed to mitigate leaks to the interior of the building. Contractor shall install all specified sealant and required accessories as per the project specifications. Contractor shall provide Owner with a two (2) year labor and materials warranty.

Metal Copula on Roof Area “C”: Work shall include removal of existing sealant at various elevations in the metal copula as described in the project specifications. Contractor shall repair metal copula as needed to mitigate leaks to the interior of the building. Contractor shall Perform a wet seal on all glass to metal joints and reseal all metal to metal joints as specified. Contractor shall provide Owner with a two (2) year labor and materials warranty.

Repairs to Roof Area “C”: Work shall include repair to the existing valley area as necessary to mitigate leaks to the interior of the building. Contractor shall provide owner with a two (2) year labor and materials warranty.

Repairs to Roof Area “D”: Work shall include removal of existing base flashing system and install new base flashings system as specified. Contractor shall repair the modified bitumen system as needed to mitigate leaks to the interior of the building. Contractor shall provide Owner with a two (2) year labor and materials warranty.

Repair to Roof Area “E”: Work shall include repair of existing base flashing as necessary to mitigate leaks to the interior of the building. Contractor shall provide owner with a two (2) year labor and materials warranty. Contractor shall provide Owner with a two (2) year labor and materials warranty.

### **SCOPE OF WORK – BUILDING NO. 503 ENVIRONMENTAL SERVICES/NURSING**

It is the intent of these drawings that the new work will provide a watertight facility. The attached specifications describe the minimum acceptable standards of construction and finish.

Low-Sloped Roofing on Open Air Plaza Decks Under Areas “B & G”: Work shall include tear off of the existing roof system and pavers down to the existing substrate, fully adhere a two-ply vapor barrier and fully adhere specified insulation in addition to a substrate board, fully adhere one ply of SBS modified bitumen base ply, and fully adhere one ply of SBS modified bitumen smooth cap sheet. Contractor shall finish roofing system with an application of deck coating as specified. Provide a ten (10) year manufacturer's warranty and a two (2) year contractor's warranty. Work shall also include all HVAC and electrical, piping disconnect and re-connection. Installation shall be as per NRCA, SMACNA, ANSI/SPRI, specifications, details and manufacturer's guidelines.

Sloped Metal Roofing Areas “B & G”: Work shall include performing remedial repairs to the existing metal roof assembly as specified. All work shall be performed per these specifications as follows:

- Install new metal counterflashing system at masonry rise wall.

Relocate and install new downspouts on Roof Areas “A & E” in order to clear the pipe penetrations at the base of the wall by approximately 20’ Feet.

### **SCOPE OF WORK – BUILDING NO. 508 STEAM PLANT**

It is the intent of these drawings that the new work will provide a watertight facility. The attached specifications describe the minimum acceptable standards of construction and finish.

Repairs at Metal Roofing Area “A”: Work shall include replace existing metal edge and fascia trim. Match existing fascia and trim detail.

Repairs at Metal Roofing Area “C”: Work shall include repair of metal roofing system as needed to stop water migration into the interior of the building.

Low-Sloped Roofing Areas “A, B, C, D, E, F, & G”: Work shall include performing remedial repairs to the existing urethane and metal roof assembly as specified. Work shall include proper preparation of the existing roofing system to receive new elastomeric roof coating system. Substrate preparation shall include, but not be limited to, all flashing details at horizontal and vertical seams, penetrations, curbs, and fasteners. All work shall be performed per these specifications. Provide a ten (10) year manufacturer's warranty and a two (2) year contractor's warranty. Work shall also include all HVAC and electrical, piping disconnect and re-connection. Installation shall be as per NRCA, SMACNA, ANSI/SPRI, specifications, details and manufacturer's guidelines.

### **SCOPE OF WORK – BUILDING NO. 528 RESIDENCE**

It is the intent of these drawings that the new work will provide a watertight facility. The attached specifications describe the minimum acceptable standards of construction and finish.

Low-Sloped Roofing Area “A”: Work shall include the installation of a new rafter and decking system with 4”/12” slope as specified. Raise all vent stacks and mechanical equipment to penetrate the new roofing system with eight-inch height clearance from finished roof surface. Install new thermal insulation as specified to meet an R-25 with the new metal roofing system. Install a 24-gauge kynar finish (Owner to select from standard manufacturer’s colors) standing seam metal roof system. The roof shall be installed in accordance with the project specifications and in strict accordance with the manufacturer’s recommended procedures. Contractor shall provide a twenty (20) year manufacturer's warranty and a two (2) year contractor's warranty. Work shall also include all HVAC and electrical, piping disconnection and re-connection. Installation shall be as per NRCA, SMACNA, ANSI/SPRI, specifications, details and manufacturer's guidelines.

Steep-Sloped Roofing Area “B”: Work shall include tear off of the existing metal roof system. Install new thermal insulation as specified to meet an R-25 with the new metal roofing system. Install a 24-gauge kynar finish (Owner to select from standard manufacturer’s colors) standing seam metal roof system. The underlayment shall be a self-adhered membrane. The roof shall be installed in accordance with the project specifications and in strict accordance with the manufacturer’s recommended procedures. Contractor shall provide a twenty (20) year manufacturer's warranty and a two (2) year contractor's warranty. Work shall also include all HVAC and electrical, piping disconnection and re-connection. Installation shall be as per NRCA, SMACNA, ANSI/SPRI, specifications, details and manufacturer's guidelines.

### **SCOPE OF WORK – BUILDING NO. 542 CHAPEL**

It is the intent of these drawings that the new work will provide a watertight facility. The attached specifications describe the minimum acceptable standards of construction and finish.

Low-Sloped Roofing Areas “A & C”: Work shall include performing remedial repairs to the existing modified bitumen roof assembly as specified. Work shall include proper preparation of the existing modified bitumen roofing system to receive new elastomeric roof coating system. Substrate preparation shall include, but not be limited to, all flashing details at horizontal and vertical seams, penetrations, curbs, and fasteners. All work shall be performed per these specifications. Provide a ten (10) year manufacturer's warranty and a two (2) year contractor's warranty. Work shall also include all HVAC and electrical, piping disconnection and re-connection. Installation shall be as per NRCA, SMACNA, ANSI/SPRI, specifications, details and manufacturer's guidelines.

Sign located in front of the building: Remove existing wood shake shingles and replace with R-Panel pre-finished metal panels as specified.

## **SCOPE OF WORK – BUILDING NO. 557 ACTIVITY THERAPY**

It is the intent of these drawings that the new work will provide a watertight facility. The attached specifications describe the minimum acceptable standards of construction and finish.

Low-Sloped Roofing Areas “A, B, C, D, E, F, G, & H”: Work shall include performing remedial repairs to the existing modified bitumen roof assembly as specified. Work shall include proper preparation of the existing modified bitumen roofing system to receive new elastomeric roof coating system. Substrate preparation shall include, but not be limited to, all flashing details at horizontal and vertical seams, penetrations, curbs, and fasteners. All work shall be performed per these specifications. Provide a ten (10) year manufacturer's warranty and a two (2) year contractor's warranty. Work shall also include all HVAC and electrical, piping disconnection and re-connection. Installation shall be as per NRCA, SMACNA, ANSI/SPRI, specifications, details and manufacturer's guidelines.

Low Sloped Roofing Area G: Install new pre-engineered ladder as specified.

All Roofing Areas: Replace all existing pipe supports with new pipe supports as specified.

Wet Seal at Widow Wall & Clerestory Window Systems: Work shall include removal of existing sealant at various elevations in the window wall and clerestory systems as described in the project specifications. Contractor shall install all specified sealant and required accessories as per the project specifications. Contractor shall provide Owner with a five (5) year labor and materials warranty.

The (2005) edition of the Uniform General Conditions & Supplementary General Conditions (herein with referred to simply as the UGCs/SGCs) form a part of and are basic to these project specifications. Where ever in this specification the words “Owner” or “ODR” is used this shall be understood to be the State’s Owner’s Designated Representative, the word “Facility” is the Big Spring State Hospital Plant Maintenance Manager, and the word “Architect/Engineer” or “A/E” is the firm/individuals employed by and acting on behalf of the State to provide professional design services and contract administration of all technical aspects of this project.

## **2. WORKING CONDITIONS:**

- A. Contractor Qualifications: The Prime Contractor shall be an roofing contractor experienced in work associated with low and steep sloped roofing systems. The Prime Contractor shall be able to demonstrate a 5-year successful track record with regards to project completion, and experience working as a Prime Contractor.
  - 1) A qualified full-time superintendent whose primary responsibility is quality control and detailed coordination with the Facility shall be on site at all times that work is being performed by any Contractor or sub-contractor of any tier level.
- B. The first sixty (60) days of this project’s contract performance period are specifically set aside for site evaluation, mobilization, shop drawings, coordination study and technical submittals, routing, and approvals, and ordering/receipt of materials. All



mobilization and technical submittals shall be approved within this time frame and shall all be submitted together, at one time, as much as practicable. The Contractor's access is limited to site survey, erection of storage and lay down area, staging of materials, and field measurements only during this time frame.

- C. Phasing Plan: The Facility will be fully occupied and in operation for the duration of the contract performance period. The Contractor shall submit a detailed phasing plan to minimize the frequency and duration of operations.
- D. Contractor shall not commence work until sufficient approved materials are on site such that he may commence and work continuously and proceed with due diligence throughout the entire contract period per the approved phasing plan.
- E. It shall be understood as hereby clarified and defined that wherever in these contract documents (plans and specifications) the words "furnish", "install", "provide", and the like are used, unless specifically stated otherwise, the furnishing, installing, providing includes all items of material, labor, equipment, services, and the like to ensure a complete and useable end product.
- F. Contractor shall secure all construction areas from residents. Secure work and storage areas with 6' chain link panel fence, anchored to ground, with gateposts and padlocked gates (where indicated on drawings).
- G. Laydown areas near the maintenance building (northeast area of campus) may be utilized for long term storage of materials and equipment. The laydown area near the building is intended for staging.
- H. The safety of residents is of utmost importance and the contractor shall be on constant vigil to prevent residents from entering construction areas.
- I. If a resident will not leave the work area, contact Facility security, direct care staff, or Plant Maintenance Manager.
- J. All vehicles, stored material and trash receptacles shall be located within barricaded / fenced areas to prevent residents from addressing the vehicles, stored materials or trash receptacles.
- K. Contractor storage and laydown area and access route is shown on plans.
- L. Written Owner's Rules and Regulations must be posted at job-site and obeyed. The Contractor is responsible for enforcing the rules and regulations, not only with their own workers, but with all their vendors and subcontractors that come on the campus.
- M. Contractor must maintain a clean construction site, monitor adjacent areas for debris, and remove construction debris and other waste daily.
- N. The Contractor shall comply with all applicable safety requirements, including OSHA.

2.1 FACILITY SPECIFIC WORKING CONDITIONS: Reference UGC/SGC Article 7.9.  
See Overview of Campus Rules for Contractors under Section 015000.

### 3. WORK SCHEDULE:

Working hours for the Contractor shall be between the hours of 8:00 a.m. and 5:00 p.m. excluding Saturdays, Sundays, and State holidays. Coordinate with the Plant Maintenance Manager for different working hours requests.

### 4. UTILITIES:

4.1 IDENTIFICATION: The Facility does not know the exact location of all utilities in the work area. The Contractor shall take reasonable precautions in determining the exact location of all existing utilities within the contract work area prior to any excavating, trenching, backfilling or disturbance. Upon request by the Contractor, the Facility will furnish all available information in its possession concerning utilities in the contract work area and assist the Contractor with location. However, the accuracy of the information provided by the Facility is not guaranteed and is only intended to provide some measure of assistance to the Contractor. In the event the Contractor identifies and/or uncovers unknown, un-shown utilities in the contract work area, which interfere with the newly proposed construction, the A/E and ODR shall be immediately notified for disposition. The Contractor shall furnish to the A/E red-lined as-built drawings clearly identifying the exact location of all utilities identified in the work area prior to project substantial completion inspection.

4.1.1 Any removal/relocation/reconnection of any communication or Cable TV device shall be coordinated in advance with the Facility. Communications and Cable TV devices to remain shall be protected as required when work proximity dictates. Contractor must exercise extreme caution and perform thorough coordination with the Facility when working around fiber and fiber networks to prevent damage as local resources are not available to make repairs.

4.2 INTERRUPTIONS: Planned Utility Outages: The Contractor shall coordinate all requests for utility outages with the Facility seven (7) calendar days prior to date of requested outage. Water, gas, sewer and electrical outages shall be held to a maximum duration of 2 hours unless otherwise approved in writing. Refer to phasing plan in paragraph 3 of this specification section.

4.2.1 Unplanned Utility Outages (Accidental Disruption of Utilities): In the event of accidental disruption of any utility, the Contractor shall immediately notify the Facility of the unplanned outage. The Contractor shall immediately take every reasonable step to repair the damage in a manner acceptable to the Owner and shall restore the utility to full use as soon as practicable.

4.2.2 For all drinking water disruptions, the Contractor shall adhere to 30 TAC 290 Subchapter D paragraph 290.46(g). Submit a “Drinking Water Customer Service Inspection Checklist” prior to restoring drinking water service.

4.3 USE AND AVAILABILITY: All reasonable quantities of existing utilities will be made available to the Contractor without charge. Proposed temporary connections must be coordinated with the Facility in advance of any connection. Any temporary connections or lines required shall be installed, maintained, and removed at the Contractor’s expense. Any damage

associated with the use of these utilities shall be repaired and/or replaced in a manner satisfactory to the Owner at the Contractor's expense. Contractor shall always strive to conserve the electric, natural gas and water utilities at the Facility.

4.3.1 Prior to using any fire hydrant on the Facility, the Contractor must first request and coordinate, then furnish and install an approved Class III Back Flow Preventer (reduced pressure principle device) and screw type globe valve to be attached to the hydrant. The backflow device and valve shall be properly supported to prevent damage to fire hydrant threads.

5. SAFETY AND HEALTH: See Article 7 of the UGCs/SGCs.

5.1 All Contractor operations shall be conducted and performed in accordance with Department of Labor, OSHA requirements found in 29 CFR 1910 and 29 CFR 1926. The Contractor shall comply with all mandatory requirements for lockout/tag out, hazard communication, fall protection, personnel protection equipment, scaffolding, powered construction equipment, and all project related safety and health requirements.

5.2 All companies who conduct business within the State of Texas must, in accordance with Texas Worker's Compensation laws (Texas House Bill 62), have an approved company safety policy and an Accident Prevention Plan. The plan, approved by the Texas Worker's Compensation Commission (TWCC), shall be submitted with the mobilization submittal (see Section 01300 of these specifications).

5.3 Welding, Cutting and Brazing: The Contractor shall provide the appropriate operable fire extinguisher. Fire extinguishers shall comply with NFPA 10. Contractor shall comply with OSHA STD29 CFR 1910.252 Welding, Cutting and Brazing (General Requirements).

5.4 Infection Control: Refer to the UGCs/SGCs Article 7.8. The Contractor shall complete the Infection Control Permit for this project and submit with his mobilization submittal. A risk assessment for this project has determined that it is a type C construction affecting of low risk group requiring Class II construction precautions.

6. DISPOSITION OF WASTE, SALVAGE AND EXCESS MATERIALS:

6.1 The Contractor shall make waste determinations for all wastes generated in the performance of this contract, in accordance with the provisions set out in 40 Code of Federal Regulations (CFR) Part 261, at the time and point of generation. The Contractor shall properly sample, analyze, or by use of process knowledge classify all wastes in accordance with Title 30 Texas Administrative Code (TAC), Chapter 335, Subchapter R at no additional cost to the Owner. All non-hazardous wastes, special wastes, and hazardous wastes (including but not limited to construction debris, material containers, material residues and unwanted excess materials) resulting from the performance of work under this contract shall be removed from and disposed of off State property by the Contractor at no additional cost to the Owner and in

accordance with all applicable Federal, State, and local laws, rules and regulations. Under no circumstances shall the Contractor dispose of wastes or excess material in trash dumpsters, storm sewers, sanitary sewers, creeks, streams or other property of the State.

6.2 Dumping/cleaning out of concrete trucks on State property is prohibited. Concrete truck chutes only may be rinsed at the construction site. Wastewater and concrete from this rinse shall be collected in a high-density polyethylene (HDPE) plastic-lined box or pit provided by the Contractor at the site. At the end of pouring operations, the Contractor shall excavate all the waste and liner and properly dispose of same. The pit shall be completely backfilled and the site restored to original conditions.

6.3 Recycling is highly encouraged and shall be employed to the maximum extent practicable.

6.4 All equipment and materials to be removed from the project site not specifically identified for turn-in to the Owner shall become the property of the Contractor upon issuance of the NTP. There are no items identified as salvage back to the Facility under this project.

7. TESTING:

7.1 Costs of all tests, both those as listed and those as required by referenced Codes, shall be provided by and at the Contractor's expense, unless specifically indicated as being performed by the Owner elsewhere in the contract documents. The Contractor shall schedule all tests and notify the ODR, the A/E, and the Facility in advance in a timely manner prior to any required testing. At times, Code Compliance Officers from within the ODR's organization; but located in other areas of the State, are required to witness such tests and timely notices and coordination are paramount to their schedules. All test results shall be submitted with the closeout documents.

8. FINAL INSPECTIONS:

The Contractor's attention is directed to Article 12 of the UGCs/SGCs for a comprehensive discussion of the requirements for scheduling, performing and completing the "Substantial", "Final", and "Inspection of Completed Final" punch list items.

END OF SECTION 01 00 00

**SECTION 01 30 00**  
**SUBMITTALS, SHOP DRAWINGS/SAMPLES & SCHEDULES**

1. REFERENCES: Refer to Article 9 of the UGCs/SGCs for detailed requirements on the Construction Progress Schedule. Refer to Article 8.3 Submittals of the UGCs/SGCs for detailed requirements for the Shop Drawing Log/Submittal Schedule & Register and technical shop drawings submittals. Refer to Article 10.1 of the UGCs/SGCs for detailed requirements on the preparation of the Schedule of Values.

2. MOBILIZATION SUBMITTAL REQUIREMENTS: The following items are required to be submitted and approved before the Contractor can commence actual on-site work (except for minor field measurements and survey):

1) A company organization chart fully outlining employees' title, duties and responsibilities, and contact information including a 24/7 cell phone number for the designated overall on-site construction superintendent. Persons with full signature authority to act upon the Contractor's behalf shall be identified.

2) A list of major sub contractors and suppliers complete with point of contact information and full addresses.

3) Equal Employment Opportunity letters.

4) Copy of any certifications required by these specifications.

5) A brief mobilization plan outlining exactly when Contractor proposes to commence actual on site work, how large an area in the storage area he proposes for his and sub-contractors use, and any other required Facility coordination items.

6) A phasing/sequencing plan briefly outlining the order/times the Contractor proposes to accomplish the work in.

7) A Safety Plan (See UGC/SGC Article 7.1 and Section 01000-5.2 of these specifications).

8) Infection Control Permit (Ref UGC/SGC Article 8). See also 010000 – 5.4.

3. SUBMITTALS REQUIRED TO BE APPROVED PRIOR TO INITIAL PAY VOUCHER MEETING: Ideally, the following three submittals should also be included with the Mobilization Submittal. In any event, they must be approved prior to the first voucher meeting being scheduled.

1) A Progress Schedule. NOTE: The requirement for a Critical Path method work progress schedule outlined in Article 9.3 of the UGCs/SGCs is **not** required for this project. Utilize a progress schedule in the format contained in the adjoining pages of this Section. Contractor's attention is directed to Article 9.4 and the requirement to utilize 10 percent float in the schedule, which equates to twenty-seven (27) calendar days. This progress schedule shall be updated monthly by the Contractor and submitted with each of the Contractor's pay vouchers.

2) A Schedule of Values (SOV). Use exactly the format provided up front in these specifications Bidding Requirements and as also to be provided on disc at the pre-construction conference. The approved SOV shall be submitted monthly by the Contractor with each of his pay vouchers.

3) A Shop Drawing Log/Submittal Register in the format contained in the adjoining pages of this Section.

4. TECHNICAL SUBMITTALS & SHOP DRAWINGS / SAMPLES: See attached log.

4.1 a. To the maximum extent practicable, all technical submittals shall be submitted concurrently or as close together as possible and shall be provided as soon as possible, early on in the project. Submittals involving colors and interior design shall all be transmitted concurrently.

b. Items such as mill certificates or other test data that are usually unavailable until the equipment/material is actually manufactured/fabricated shall still be identified on the log. An explanation stating this data shall be submitted later by Submittal Number (fill in Submission Number) after materials are manufactured/fabricated (or other explanations as appropriate) shall be included with this identification. A separate submittal for long lead-time equipment or material may be made if sufficient

data is furnished to show contract compliance. (An explanation shall be provided on a separate sheet, if necessary, explaining why a partial submittal is being made. Explanation shall include the estimated delivery date of the equipment/ material and the Submission Number of the submittal that shall contain data required by the particular specification section for the remaining equipment/materials.) Samples of materials, where required, must be submitted along with technical data, not under separate transmittals.

- c. Any submittal annotated by a supplier/vendor with “Field Verify,” “Select Color,” and the like must be accompanied by the Contractor’s written response to the supplier’s query.

5. CONTRACTOR REPORTS: The Contractor shall provide **daily** progress reports on all construction activities including every sub-contractor tier level. These reports shall include as a minimum weather conditions with precipitation levels and temperature high and lows, numbers and type of personnel on sight, activities worked on and completed, instructions received from the A/E or ODR or Facility, service disruptions, test results, system start-ups, accidents, and other pertinent information as directed by the A/E. These reports shall be transmitted weekly to the A/E, ODR, and Facility electronically via email (.pdf) files. Format for Contractor Reports shall be provided by A/E.

END OF SECTION 01 30 00



## **INSTRUCTIONS TO CONTRACTORS**

1. Prepare Contract Progress Schedule in accordance with these instructions and submit to the Project Manager at the time stated in the Contract or as established by the Project Manager.
2. Block 1 – Enter the Project Number, Title, and Location as shown on the Contract.
3. Blocks 2 & 3 – Enter the Work Order Date and Completion Date as specified by the Project Manager in the Work Order letter executing the time period specified in the Contract.
4. Blocks 4 & 5 – Enter the Calendar Days of Time Extensions and amended Completion Date when applicable as specified in Change Orders.
5. Blocks 6 & 7 – Enter the Name and Address of your Firm. The Schedule must be dated and signed by the Contractor or an authorized representative of the Firm.
6. Block 8 – Schedule should be approved by the Commissioned Architect or Engineer supervising the project.
7. Block 9 – Schedule should receive final approval by signature of the Project Manager for final authorized acceptance.
8. Each major work element is to be sequentially numbered and continued on additional pages if needed. Major elements of work, such as excavation, concrete work, carpentry, masonry, paint, mechanical, electrical, Alternate 1, Alternate 2, etc., will be shown in the Work Element Column in logical sequence and in sufficient detail to identify each element.
9. The percentage of each listed work element to the complete job will be shown opposite each element in the % column. For example, if three work elements are shown: excavation, concrete work, and backfill, and it is estimated that excavation is 50% of the total job, concrete 30%, and backfill 20%, these percentages will be shown opposite each element. The total must be 100%. Indicate the percentage graphically by means of a bar graph, within the second horizontal line under months.



**SHOP DRAWING LOG:** PROJECT NO.: 18-002-BSH PROJECT NAME: Roof Repair / Replacement

FACILITY: 18-002-BSH Big Spring State Hospital

SUBMITTAL NUMBER	DESCRIPTION	RECEIVED FROM A/E	DIIST. TO CONTRACTOR	ACTION		
				APPROVED	APP. AS NOTED	REJECTED BY M&C
1	Progress Schedule (See Section 01 30 00)					
2	Schedule of Values (xls format)					
3	Shop Drawing Log / Submittal Register					
4	01 32 33 Photographic Documentation					
5	06 16 50 Retrofit Roof Framing System					
6	06 10 00 Rough Carpentry					
7	07 01 55 Roofing Repairs					
8	07 01 50.19 Membrane Reroofing Preparation					
9	07 41 13 Standing Seam Metal Roof System					
10	07 21 50 Roof & Deck Insulation					
11	07 56 00 Fluid Applied Coating Over Granulated Modified Bitumen Roofing					
12	07 52 16 SBS Asphalt Modified Bitumen Roof System					
13	07 62 00 Sheet Metal & Miscellaneous Accessories					
14	07 72 00 Roof Accessories					
15	07 92 00 Joint Sealants					
16	22 13 19 Sanitary Waste and Vent Specialties					
17						
18						
19						
20						

**SECTION 01 32 20**  
**PHOTOGRAPHIC DOCUMENTATION**

**PART 1 - GENERAL**

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. This Section includes administrative and procedural requirements for the following:
  - 1. Preconstruction photographs.

1.03 SUBMITTALS

- A. Qualification Data: For photographer.
- B. Key Plan: Submit key plan of Project site and building with notation of vantage points marked for location and direction of each photograph or videotape. Indicate elevation or story of construction. Include same label information as corresponding set of photographs or videotape.

**PART 2 - PRODUCTS**

2.01 PHOTOGRAPHIC MEDIA

- A. Digital Images: Provide images in uncompressed TIFF format, produced by a digital camera with minimum sensor size of 4.0 megapixels.

**PART 3 - EXECUTION**

3.01 CONSTRUCTION PHOTOGRAPHS

- A. General: Take photographs using the maximum range of depth of field, and that are in focus, to clearly show the Work. Photographs with blurry or out-of-focus areas will not be accepted.
  - 1. Maintain key plan with each set of construction photographs that identifies each photographic location.
- B. Digital Images: Submit digital images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.
  - 1. Date and Time: Include date and time in filename for each image.
  - 2. Field Office Images: Maintain one set of images on CD-ROM in the field office at Project site, available at all times for reference. Identify images same as for those submitted to Architect and Owner.

- C. Preconstruction Photographs: Before starting construction, take digital photographs of Project site and surrounding properties, including existing items to remain during construction, from different vantage points, as directed by Architect and Construction Manager.
1. Take eight (8) photographs to show existing conditions adjacent to property before starting the Work.
  2. Take eight (8) photographs of existing buildings either on or adjoining property to accurately record physical conditions at start of construction.
  3. Take additional photographs as required to record settlement or cracking of adjacent structures, pavements, and improvements.

END OF SECTION 013220

## SECTION 014000

### REFERENCE STANDARDS AND CODES

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Drawings, Uniform General Conditions and Supplementary General Conditions, Supplementary Conditions and Division 1 - General Requirements apply to Work of this Section.

##### 1.2 SECTION INCLUDES

- A. Quality assurance.
- B. Schedule of references.

##### 1.3 QUALITY ASSURANCE

- A. For products or workmanship specified by association, trade, or other consensus standards; comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date for receiving bids.
- C. Should specified reference standards conflict with Contract Documents, request clarification from the Architect/Engineer and Owner before proceeding.
- D. The contractual relationship duties and responsibilities of the parties in Contract nor those of the Architect/Engineer shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

##### 1.4 SCHEDULE OF REFERENCES

AA	Aluminum Association 900 19th St., NW Washington, DC 20006 <a href="http://www.aluminum.org">www.aluminum.org</a>	(202) 862-5100
AABC	Associated Air Balance Council (202) 737-0202 1518 K St., NW Washington, DC 20005 <a href="http://www.aabchq.com">www.aabchq.com</a>	
AAMA	American Architectural Manufacturers Association 1827 Walden Office Sq., Suite 104 Schaumburg, IL 60173-4268 <a href="http://www.aamanet.org">www.aamanet.org</a>	(847) 303-5664

AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol Street, N.W., Suite 249 Washington, DC 20001 <a href="http://www.ashto.org">www.ashto.org</a>	
AATCC	American Association of Textile Chemists and Colorists 1 Davis Dr, Research Triangle Park Durham, N.C. 27709 <a href="http://www.aatcc.org">www.aatcc.org</a>	919-549-8141
ABMA	American Boiler Manufacturers Association 950 N. Glebe Rd., Suite 160 Arlington, VA 22203-1824	
ACI	American Concrete Institute P.O. Box 9094 Farmington Hills, MI 48333-9094 <a href="http://www.aci-int.org">www.aci-int.org</a>	
ACI	ACI International P.O. Box 9094 Farmington Hills, MI 48333-9094	
ADA	Americans with Disabilities Act of 2010 (Fed P.L. 101-336)	
ADC	Air Diffusion Council 104 So. Michigan Ave., No. 1500 Chicago, IL 60603	
ADSC	The International Association of Foundation Drilling 9696 Skillman Street, Suite 280 Dallas, TX 75243 <a href="http://www.adsc-iafd.com">www.adsc-iafd.com</a>	(214) 681-5994
AF&PA	American Forest & Paper Association 1111 Nineteenth St. NW, Suite 800 Washington, DC 20036 <a href="http://www.afandpa.org">www.afandpa.org</a>	(202) 463-2700
AGA	American Gas Association P.O. Box 79230. Baltimore, MD 21279-0230	
AGC	Associated General Contractors of America 1957 E Street, N.W. Washington, DC 20006	

AHA	American Hardboard Association 1210 W. Northwest Hwy Palatine, IL 60067 <a href="http://www.hardboard.org">www.hardboard.org</a>	(847) 934-8800
AI	Asphalt Institute Research Park Drive P.O. Box 14052 Lexington, KY 40512-4052 <a href="http://www.asphaltinstitute.org">www.asphaltinstitute.org</a>	(606) 288-4960
AIA	American Institute of Architects 1735 New York Avenue, N.W. Washington, DC 20006	
AISC	American Institute of Steel Construction One East Wacker Dr., Suite 3100 Chicago, IL 60601-2001 <a href="http://www.aisc.org">www.aisc.org</a>	(312) 670-2400
AISI	American Iron and Steel Institute 1101 17th St., NW, Suite 1300 Washington, DC 20036 <a href="http://www.steel.org">www.steel.org</a>	(202) 452-7100 (800) 277-3850
AITC	American Institute of Timber Construction 7012 S. Revere Pkwy, Suite 140 Englewood, CO 80112 <a href="http://www.aitc-glulam.org">www.aitc-glulam.org</a>	(303) 792-9559
AMCA	Air Movement and Control Association International, Inc. 30 W. University Dr. Arlington Heights, IL 60004-1893 <a href="http://www.amca.org">www.amca.org</a>	(847) 394-0150
ANSI	American National Standards Institute 1819 L. Street, N.W. Washington, DC 20036 <a href="http://www.ansi.org">www.ansi.org</a>	(202) 293-8020
APA/EWA	APA-The Engineered Wood Association P.O. Box 11700 Tacoma, WA 98411-0700 <a href="http://www.apawood.org">www.apawood.org</a>	(253) 565-6600
API	American Petroleum Institute 1220 L St., NW Washington, DC 20005-4070 <a href="http://www.api.org">www.api.org</a>	(202) 682-8000

ARI	Air-Conditioning and Refrigeration Institute 4301 North Fairfax Dr., Suite 425 Arlington, VA 22203 <a href="http://www.ari.org">www.ari.org</a>	(703) 524-8800
ARRA	Asphalt Recycling and Reclaiming Association #3 Church Circle, PMB 250 Annapolis, MD 21401 <a href="http://www.arra.org">www.arra.org</a>	(410) 267-0023
ASCE	American Society of Civil Engineers World Headquarters 1801 Alexander Graham Bell Dr. Reston, VA 20191-4400 <a href="http://www.asce.org">www.asce.org</a>	(703) 295-6300 (800) 548-2723
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers 1791 Tullie Circle, N.E. Atlanta, GA 30329 <a href="http://www.ashrae.org">www.ashrae.org</a>	(800) 527-4723 (404) 636-8400
ASME	American Society of Mechanical Engineers 3 Park Avenue New York, NY 10016-5990 <a href="http://www.asme.org">www.asme.org</a>	(800) 843-2763
ASPA	American Sod Producers Association 4415 West Harrison Street Hillside, IL 60162	
ASPE	American Society of Plumbing Engineers 15233 Ventura Blvd., Suite 811 Sherman Oaks, CA 91403	
ASTM	American Society for Testing and Materials 100 Barr Harbor Dr. West Conshohocken, PA 19428-2959 <a href="http://www.astm.org">www.astm.org</a>	(601) 832-9585
AWI	Architectural Woodwork Institute 1952 Isaac Newton Sq. West Reston, VA 20190 <a href="http://www.awinet.org">www.awinet.org</a>	(703) 733-0600
AWPA	American Wood-Preservers' Association P.O. Box 5690 Grandbury, TX 76049-7979 <a href="http://www.awpa.com">www.awpa.com</a>	(817) 326-6300

AWS	American Welding Society 550 LeJeune Road, N.W. Miami, FL 33126 <a href="http://www.amweld.org">www.amweld.org</a>	(800) 443-9353 (305) 443-9353
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235 <a href="http://www.awwa.org">www.awwa.org</a>	(303) 794-7711
BHMA	Builders' Hardware Manufacturer Association 355 Lexington Avenue, 17 <sup>th</sup> floor New York, NY 10017 <a href="http://www.buildershardware.com">www.buildershardware.com</a>	(212) 297-2122
BOCA	Building Officials and Code Administrators International, Inc	
BIA	The Brick Industry Association 11490 Commerce Park Drive Reston, VA 28191-1525 <a href="http://www.bia.org">www.bia.org</a>	(703) 620-0010
CABO	Council of American Building Officials; One & Two Family Dwelling Code and the Model Energy Code	
CDA	Copper Development Association 57th Floor, Chrysler Building 405 Lexington Avenue New York, NY 10174	
CFR	Code of Federal Regulations North Capitol Street between G & H Streets, NW Washington, DC 20402	
CLFMI	Chain Link Fence Manufacturers Institute 1101 Connecticut Avenue, N.W. Washington, DC 20036	
CPSC	Consumer Product Safety Commission 1111 Eighteenth Street, NW Washington, DC 20207	
CRSI	Concrete Reinforcing Steel Institute 933 Plum Grove Road Schaumburg, IL 60195	
DHI	Door and Hardware Institute 7711 Old Springhouse Road McLean, VA 22102	



DOT	Department of Transportation 400 Seventh Street, SW Washington, DC 20590	
EJCDC	Engineers' Joint Contract Documents Committee American Consulting Engineers Council 1015 15th Street, N.W. Washington, DC 20005	
EJMA	Expansion Joint Manufacturers Association 25 North Broadway Tarrytown, NY 10591	
EPA	Environmental Protection Agency 401 M Street, SW Washington, DC 20460	
FCC	Federal Communications Commission 1919 M Street, NW Washington, DC 20554	
FM	Factory Mutual System 1151 Boston-Providence Turnpike P.O. Box 688 Norwood, MA 02062	
FS	Federal Specification General Services Administration Specifications and Consumer Information Distribution Section (WFSIS) Washington Navy Yard, Bldg. 197 Washington, DC 20407	
GA	Gypsum Association 810 First St. NE, Suite 510 Washington, DC 20002	
GANA	Glass Association of North America 2945 SW Wanamaker Drive, Suite A Topeka, KS	(785) 271-0208
HPMA	Hardwood Plywood Manufacturers Association 1825 Michael Faraday Drive P.O. Box 2789	

HPW	H.P. White Laboratory 3114 Scarboro Road Street, MD 21154 Reston, VA 22090-2789	
ICBO	International Conference of Building Officials 5360 S. Workman Mill Road Whittier, CA 90601	
ICF ID/RC	Intermediate Care Facilities for Individuals with Intellectual Disability or Related Conditions Texas Administrative Code, Title 40, Part 1, Chapter 90, Subchapter D, General requirements for Facility Construction, applicable to facilities certified by the Department of Aging and Disability Services (DADS) Regulatory Services	
IEEE	Institute of Electrical and Electronics Engineers 345 East 47th Street New York, NY 10017	
IES	Illumination Engineering Society of North America 345 East 47th Street New York, NY 10017	
IMIAC	International Masonry Industry All-Weather Council International Masonry Institute 815 15th Street, N.W. Washington, DC 20005	
IMSA	International Municipal Signal Association 165 East Union Street P.O. Box 539 Newark, NY 14513	
ISWA	Insect Screen Weavers Association P.O. Box 1018 Ossining NY 10562	
JCAHO	Joint Commission on Accreditation of Health Care Organizations	
MBMA	Metal Building Manufacturer's Association 1300 Sumner Avenue Cleveland, OH 44115-2851	
MFMA	Maple Flooring Manufacturers Association 60 Rivere Drive, Suite 500 Northbrook, IL 60062 <a href="mailto:mfma@maplefloor.com">mfma@maplefloor.com</a>	(847) 480-9138

MIL	Military Specification Naval Publications and Forms Center 5801 Tabor Avenue Philadelphia, PA 19120
ML/SFA	Metal Lath/Steel Framing Association 221 North LaSalle Street Chicago, IL 60601
NAAMM	National Association of Architectural Metal Manufacturers 221 North LaSalle Street Chicago, IL 60601
NBS	National Bureau of Standards (U.S. Department of Commerce) Gaithersburg, MD 20234
NCMA	National Concrete Masonry Association P.O. Box 781 Herndon, VA 22070
NCRP	National Council on Radiation Protection and Measurement 7910 Woodmont Ave, Suite 800 Bethesda, MD 20814
NCSBCS	National Conference of States on Building Codes and Standards
NEBB	National Environmental Balancing Bureau 8224 Old Courthouse Road Vienna, VA 22180
NEC	National Electrical Code (by NFPA)
NECA	National Electrical Contractors Association 7315 Wisconsin Avenue Bethesda, MD 20814
NEMA	National Electrical Manufacturers' Association 2101 'L' Street, N.W. Washington, DC 20037

NFPA National Fire Protection Association  
Battery March Park  
Quincy, MA 02269

The chart below outlines the commonly referenced applicable National Fire Codes. Other specific National Fire Codes may be applicable.

Code	Title of NFPA Standard
1	Fire Code
10	Portable Fire Extinguishers
13	Installation of Sprinkler Systems
13D	Installation of Sprinkler Systems in one- and Two-Family Dwellings
13R	Installation of Sprinkler Systems in Residential Occupancies up to and including (4) Four Stories in Height
14	Installation of Standpipe and Hose Systems
17	Dry Chemical Extinguishing Systems
17A	Wet Chemical Extinguishing Systems
25	Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems
30	Flammable and Combustible Liquids Code
54	National Fuel Gas Code
58	Liquefied Petroleum Gas Code
70	National Electrical Code
72	Fire Doors and Other Opening Protectives
80	Installation of Air Conditioning and Ventilating Systems
90A	Installation of Warm Air Heating and Air Conditioning Systems
90B	Exhaust Systems for Air Conveying of Vapors, Gases, Mists and Noncombustible Particulate Solids
91	Ventilation Control and Fire Protection of Commercial Cooking Operations
96	Health Care Facilities
99	Life Safety Code
101	Guide on Alternative Approaches to Life Safety
101A	Smoke Door Assemblies and Other Opening Protectives
105	Emergency and Standby Power Systems
110	Types of Building Construction
220	Safeguarding Construction, Alteration and Demolition Operations
241	

NFoPA National Forest Products Association  
1619 Massachusetts Avenue, N.W.  
Washington, DC 20036

NHLA	National Hardwood Lumber Association P.O. Box 34518 Memphis, TN 38135
NPCA	National Paint and Coating Association 1500 Rhode Island Avenue N.W. Washington, D.C. 20005
NRCA	National Roofing Contractors Association 8600 Bryn Mawr Avenue Chicago, IL 60631
NSF	National Sanitation Foundation 3475 Plymouth Road P.O. Box 1468 Ann Arbor, MI 47106
NSWMA	National Solid Wastes Management Association 1730 Rhode Island Ave., N.W. Washington, DC 20036
NTMA	National Terrazzo and Mosaic Association 3166 Des Plaines Avenue Des Plaines, IL 60018
NWWDA	National Wood Window & Door Manufacturers Association 205 W. Touhy Avenue Park Ridge, IL 60068
OSHA	Occupational Safety and Health Administration (U.S. Department of Labor) Government Printing Office Washington, D.C. 20402 29 CFR 1910
PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077
PCI	Prestressed Concrete Institute 201 North Wells Street Chicago, IL 60606
PS	Product Standard U. S. Department of Commerce Washington, DC 20203

RILEM	International Union of Testing and Research Laboratories for Materials and Structures RILEM Secretariat General ENS-Pavillon des Jardins, 61 avenue du President Wilson F-94235 Cachan Cedex, France	
RIS	Redwood Inspection Service One Lombard Street San Francisco, CA 94111	
RCSHSB	Red Cedar Shingle and Handsplit Shake Bureau 515 116th Avenue Bellevue, WA 98004	
RMA	Rubber Manufacturer's Association 1400 K Street, N.W. Washington, D.C. 20005	
SDI	Steel Deck Institute P.O. Box 9506 Canton, OH 44711	
S.D.I.	Steel Door Institute 712 Lakewood Center North 14600 Detroit Avenue Cleveland, OH 44107	
SGCC	Safety Glazing Certification Council Route 11, Industrial Park Cortland, NY 13045	
SIGMA	Sealed Insulating Glass Manufacturers Association 401 North Michigan Avenue Chicago, IL 60611	(312) 644-6610
SJI	Steel Joist Institute 1205 48th Avenue North, Suite A Myrtle Beach, SC 29577	
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association 8224 Old Court House Road Vienna, VA 22180	
SPIB	Southern Pine Inspection Bureau 4709 Scenic Highway Pensacola, FL 32504-9094	

SSPC	Steel Structures Painting Council 4400 Fifth Avenue Pittsburgh, PA 15213
TAS	Texas Accessibility Standards Act of 2012
TDHS	Texas Department of Human Services: Licensing Standards for Intermediate Care Facilities Serving persons with Mental Retardation or a Related Condition (ICF-MR)
TCA	Tile Council of America, Inc. Box 326 Princeton, NJ 08540
UBC	Uniform Building Code
UL	Underwriters' Laboratories, Inc. 333 Pfingston Road Northbrook, IL 60062
UMC	Uniform Mechanical Code
UPC	Uniform Plumbing Code
WCLIB	West Coast Lumber Inspection Bureau 6980 S.W. Varns Road Box 23145 Portland, OR 97223
WRI	Wire Reinforcement Institute 8361 A Greensboro Drive McLean, VA 22102
WWPA	Western Wood Products Association 1500 Yeon Building Portland, OR 97204
W.W.P.A.	Woven Wire Products Association 2515 N. Nordica Avenue Chicago, IL 60635

## **PART 2 - PRODUCTS**

Not Used

**PART 3 - EXECUTION**

Not Used

END OF SECTION



**SECTION 01 50 00**  
**CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS**

**PART 1 - STORAGE AREA (I.E. TEMPORARY FIELD OFFICE, STAGING AREAS, TOOL/JOB SHACKS, AND OTHER CONSTRUCTION FACILITIES):**

- 1.1 There are no State furnished covered or secure storage areas. Limited on campus, off site storage may be permitted at the discretion of the Facility and on a space available basis. The plans show the general location of the Contractor storage area for this project. Utilities at the storage area may or may not be available for Contractor use. The Owner implies no responsibility for lost or stolen materials, equipment or tools, the security of which lies solely with the Contractor. Contractor shall keep his storage areas clean, neat and orderly and shall keep grass mowed to a maximum height of 4 inches. Temporary fencing used by the Contractor to delineate construction sites shall be securely anchored with tension wires and posts as required to prevent sagging and an unsightly appearance. Fencing shall be maintained by the Contractor in this manner throughout the life of the contract. Due to high winds in west Texas, Contractor shall take every precaution to preclude trash from blowing off site.
  
- 1.2 Contractor shall post at the job site on a bulletin board or other suitable surface Article 7.9 Rules & Regulations, as well as wage rates, job site Points of Contact, and other relevant project information.

**PART 2 - TOILET FACILITIES:**

- 2.1 Use of existing toilet facilities will not be permitted. Contractor shall provide portable toilet facilities within the designated storage/laydown area. Contractor personnel shall ensure toilet facilities cleanliness is maintained at all times.

**PART 3 - IDENTIFICATION OF CONTRACTOR VEHICLES:**

- 3.1 Contractor vehicles shall be marked on each side with company name with either permanent or semi-permanent/magnetic signage to aide in identifying them.

**PART 4 - STREET CLOSINGS:**

- 4.1 The scope of work for this project should not necessitate road closures of any kind. Should the contractor feel that a road closure is necessary, advance approval of the Owner and Engineer are required. Provide a minimum of 14 days evaluation time for the road closure request.

PART 5 - CLEAN-UP:

- 5.1 The Contractor shall at all times keep the construction site and storage area(s) free from accumulation of waste, rubbish, weeds, overgrown grass or construction debris. All loose or light weight materials shall be secured to prevent blowing or scattering. The burning of trash or construction debris is strictly prohibited. Prior to final inspection, the Contractor shall remove all construction debris, tools, equipment, and materials not the property of the State. Upon completion of the work, the Contractor shall leave the work site and storage area(s) in a clean, neat and workmanlike condition satisfactory to the Facility. The contractor shall coordinate the location of all trash containers with the Plant Maintenance Manager. No trash shall be left unattended where clients have access.

PART 6 - SECURITY AND CLIENT PROTECTION REQUIREMENTS:

- 6.1 Access to Big Spring State Hospital is controlled. This Hospital serves a unique and challenging clientele. Security requirements can be briefed at the pre-construction conference. Requirements are subject to change. Full cooperation by Contractor work forces is required. Contractor should anticipate certain notification and reporting requirements, preparation of forms and lists for pass and identification (badges) of employees and their vehicles, entry restrictions, key/lock control, and compliance with all Facility traffic rules and regulations.
- 6.2 Contractor Orientation document in the following pages outlines the Facility regulations, hazards and required actions.

## **BIG SPRING STATE HOSPITAL CAMPUS REQUIREMENTS / CONTRACTOR ORIENTATION**

### **I. PURPOSE:**

Big Spring State Hospital is required to notify all Contractors performing work on Facility buildings and/or utility systems, of Facility regulations, hazards, and required actions. This notification is required by various State and Federal regulations.

### **II. APPLICATION:**

This procedure is applicable to all mechanical, construction and environmental vendors and contractors who have been contracted or hired to perform services on Big Spring State Hospital campus.

### **III. REFERENCES:**

TJC 20187, CAMH, Standard HR.01.04.01

National Fire Protection Association (NFPA) Chapter 101, *Life Safety Code*

Texas Administrative Code – 417-A: *Standing Operating Procedure*, Division 3 – 417.9  
Environmental Issues

Superintendent's Memo #37-A: Traffic Violation Enforcement

BSSH OPM EC.29: Hot Work Policy (Welding Brazing Flame Cutting)

BSSH OPM MA.15: Determining Contracts Requiring Worker's Compensation Insurance

### **IV. CONTENTS:**

N/A

### **V. DEFINITIONS:**

Contractor: A commercial vendor, general contractor, subcontractor, and their employees hired or awarded bid to conduct services for BSSH.

### **VI. RESPONSIBILITIES:**

The Projects Manager, Plant Manager and Safety Officer are responsible for the management and implementation of this procedure.

#### **Primary Points of Contact:**

George Oteiza, Assistant Superintendent/ Project Manager  
1901 N. Highway 87

Big Spring, Texas, 79720  
Office: (432) 268-7300  
Cell: (432) 230-1608

Maranda Moore, Safety Officer  
1901 N. Highway 87  
Big Spring, Texas, 79720  
Office: (432) 268-7687  
Cell: (432) 935-5768

## **VII. PROCEDURE:**

### **A. General Requirements**

The Contractor is subject to rules and regulations of the Big Spring State Hospital and will complete Contractor Orientation Forms provided at the Pre-Construction Conference prior to beginning work at BSSH.

1. Contractor will report to Plant Management Office (Building 543) prior to initiation of services.
2. Contractor will work as professionally as possible so as not to aggravate patients, staff and visitors; use courtesy, avoid loud and vulgar language.
3. Contractor will not physically or verbally interact with hospital patients. Contractor is subject to federal and state law regarding allegations of physical or verbal abuse of patients. Additionally, Contractor is subject to federal and state patient confidentiality laws.
4. Contractor will not provide gifts to patients nor receive gifts from patients despite how small the monetary value (gum, cigarettes, money, etc.).
5. Alcohol, drugs, and firearms are strictly prohibited on campus. Persons suspected to be under the influence will not be permitted on the hospital grounds.
6. Contractor will adhere to BSSH policy concerning tobacco-free campus.
7. Contractor will adhere to BSSH policy related to prohibition of aluminum cans, e.g., soda cans
8. If special parking or storage of materials is required, permission will be granted and coordinated through Plant Management Department.
9. Contractor will maintain their work area as clean as possible while working and clean up thoroughly at the end of each day and during interim periods as needed.
10. Contractor will notify Facilities Director designee of any utilities or systems to be interrupted. Advanced notification must be provided to allow the Safety Officer opportunity to assess the need for any Interim Life Safety Measure (ILSM).
11. BSSH reserves the right to prohibit Contractor, Subcontractor and/or personnel associated with Contractor from working on facility grounds. A list of individuals employed or contracted by Contractor for work at BSSH will be submitted to the Project Manager and the Security Office.
12. Contractor experiencing problems with patients or in the event of an accident (vehicle or personal) will immediately contact Security by dialing our emergency number of **X7211 (432 268-7211)** followed by the Plant Management Office (Extension # 7441 or X7267) for assistance.

13. If using a ladder outside of the Contractor's secured fenced work area, Contractor will either position personnel at bottom of ladder to prevent unauthorized access or pull ladder onto roof to prevent unauthorized access.
14. If Contractor is permitted entry into the gated Neighborhood area, Contractor personnel must ensure walk or service gate is locked after each pass through.
15. Contractor is responsible for briefing this Contractor Orientation policy to their sub-contractors.

**B. Emergency Procedures**

*In the event that a Contractor needs emergency care, the Contractor should directly call EMS 9-1-1. If using a facility phone:*

1. Access EMS by dialing 9, wait for a dial tone, then dial 9-1-1.
2. **Once 9-1-1 has been notified, contact the Switchboard immediately at 7211.**
3. If using a cell phone, contact the switchboard by calling **268-7211**.

**C. Safety/Security**

All Contractors are required to use competent subcontractors on hospital projects. Poor or unsafe work practices will not be tolerated. Once a project bid is awarded, a pre-construction meeting is scheduled with the agency Project Manager, BSSH Project Manager, Plant Manager, relevant Plant Management staff, Facilities Director, and the Safety Officer in attendance. The Safety Officer provides Safety/Security orientation. Key components of the orientation include:

1. Posted traffic regulations will be observed. Pedestrians have right of way.
2. Unattended vehicles will be secured (windows closed, doors locked and keys removed). Additionally, Contractor will not maintain equipment in unattended vehicles. Vehicles will be parked only in designated parking areas.
3. Work area must be fenced and equipment secured within the construction fence. Working fire extinguishers must be on site.
4. Contractor and subs must adhere to BSSH policies related to tobacco, alcohol and firearms.
5. Contractor will be accompanied/escorted by a Plant Management staff when in a patient occupied building.
6. No video/audio taping allowed except as approved by the Project or Plant Manager, Safety Officer or Facilities Director.
7. BSSH Hot work permit procedures must be followed.

**D. Life Safety**

1. Contractor will ensure exits provide free and unobstructed egress. The BSSH Safety Officer must be contacted if alternative exits must be designated. Contractors must provide assurance not to block corridors and fire exits. Building/areas under construction must maintain escape facilities for construction workers at all times. Means of egress in construction areas

- must be inspected daily. Security staff provide the daily inspection as documented on the Security Daily Report.
2. Contractor will ensure free and unobstructed access to emergency departments/services and for emergency responders.
  3. Contractor will ensure fire alarm, detection, and suppression systems are not impaired. A temporary, but equivalent, system will be provided when any fire system is impaired. Temporary systems must be inspected and tested daily. The Safety Officer must be notified and an interim life safety measure (ILSM) implemented for any occupied building when the fire alarm, detection or suppression system is non-functional for greater than 4 hours. The Safety Officer will determine need for a Fire Watch.
  4. Contractor will ensure temporary construction partitions are smoke tight and built of noncombustible or limited combustible materials that will not contribute to the development or spread of fire.
  5. Contractor will develop and enforce storage, housekeeping, and debris removal practices that reduce the flammable and combustible fire load of the building to the lowest level necessary for daily operations.
  6. Contractor will perform hazard surveillance of buildings, grounds, and equipment with special attention to excavations, construction areas, construction storage, and field offices.
  7. All Contractors working above the ceiling are required to replace all disturbed or damaged ceiling tile. No piping, cords, wires, etc. may be attached to any portion of the fire alarm, detection or suppression systems above the ceiling.
  8. Any life safety code violations incurred during construction or renovation will result in suspension of work until the Contractor has corrected the violation.
  9. All penetrations in smoke partitions are to be sealed with UL approved agents before final payment is made.
  10. During Fire Drills, Contractor will participate in the drill by following BSSH staff instructions for exiting the building. Contractor will maintain possession of hand tools and/or place items in a secure location. The Safety Officer/designee may authorize exemption from participation in planned fire or disaster drills.

E. Hazardous Materials

The Facility is required by various State and Federal regulations to notify persons who enter as Contractors, of the presence of hazardous materials. The intent of this section is to inform Contractors of the hazardous materials to which they may be exposed while on the job. Existing BSSH SDS (Safety Data Sheets) / MSDS (Material Safety Data Sheets) may be reviewed by dialing x7211 in emergency or X7204 to contact the receptionist at the Hospital Switchboard, Building 504.

Hazardous Materials present at Facility include:

- Asbestos: BSHS has asbestos in the form of Asbestos Containing Building Materials. The Asbestos file is located in Plant Management, Building 543, Extension 7443.
- Gasoline: Gasoline is stored in bulk (up to 2000 gallons) at Plant Management, Building 543, Extension 7443.

- Diesel: Diesel is stored in bulk (up to 5000 gallons) at the Steam Plant, Building 508, Extension 7443.

This section provides information concerning the Contractor's use of hazardous materials.

1. Contractor will submit SDS/MSDS for all hazardous chemicals used for the project site. Copies of SDS/MSDS for contractor chemicals must be provided to the Facilities Director when the chemical is brought to BSSH campus.
2. Contractors will not use hazardous materials at BSSH without consent from the Plant Manager and will provide SDS/MSDS for any hazardous chemicals used during construction or renovation that are not currently part of the BSSH SDS/MSDS listing.
3. Texas Administrative Code – 417-A: *Standing Operating Procedure*, Division 3 – 417.9 Environmental Issues states that "*The Plant Maintenance Manager or designee must ensure that a Contractor obtains a material safety data sheet before installing any material or replacement part at the facility. If according to the material safety data sheet the material or replacement part contains more than one percent asbestos and there is an alternative material or part available, the Contractor is prohibited from installing the material or replacement part.*"
4. Contractor will use or apply hazardous chemicals in accordance with manufacturer's recommendation.

F. Miscellaneous

BSSH Canteen, located at ATD Building 557, is a hot-grill restaurant that provides short-order food at reasonable prices. Contractor may utilize the Canteen and atrium area.

\*\*\*End of Section\*\*\*

**SECTION 01 70 00  
CLOSEOUT DOCUMENTS**

1. AS-BUILT DRAWINGS AND REAL PROPERTY DOCUMENTATION:

1.1 AS BUILTS:

- a. The Contractor shall maintain one set of the project drawings with red-lined "as-built" condition notations and markings. The Contractor shall mark these plans to indicate all "as-built" construction, changes, addenda, and utilities encountered and shall maintain them on the job site and available for viewing by the A/E, ODR, and/or the Facility at any time. These as-builts shall be readily available for review at each pay voucher meeting. Submit them to the A/E prior to substantial completion inspection for validation. Updated notations and markings shall be neat, clear, legible and accurate in all respects. Upon completion of the project, the contractor shall prepare final as-built drawings. These drawings shall be properly organized with a cover sheet and include all applicable project information. These as-builts will be reviewed by both the A/E and ODR prior to acceptance. The contractor may coordinate with the A/E for project CAD files prior to assembling the final as-builts.

1.2 OPERATION & MAINTENANCE (O&M) AND INSTRUCTION MANUALS:

Three copies of each manual(s) shall be provided in three-ring binder(s) with tabs and an index/table of contents. Provide permanent label entitled O&M Manual on front and side with project title, project number, building number(s), Facility, street address, Contractor/subcontractor name, address, phone number(s), and manual title/contents description. Include all wiring diagrams and parts lists.

1.3 WARRANTIES/GUARANTEES: Refer to UGC/SGC Article 13.

Any warranties given to the Contractor or subcontractor at any tier from a manufacturer of equipment or other items, which are provided under this contract, shall be transferred to the Facility upon final acceptance in accordance with the clauses contained in the basic contract Uniform and Standard General Conditions. Contractor shall submit in writing a single listing with all applicable warranties, dates in effect, and all other pertinent information attached. This listing and the warranties shall be the first tab in the O&M Manuals described above.

- a. Warranties shall not commence on any single building until project roofing work on all buildings is complete. A single substantial completion inspection and certificate will be accomplished for all buildings upon completion of all work under this project.

1.4 CERTIFICATION OF NO ACM: Refer to UGC/SGC Article 13.7.

The Contractor must provide a notarized certificate attesting to the fact that no ACM materials were incorporated into the work. This certificate shall be included as the second tab in the O&M Manuals described above.



- 1.5 FINAL PAY VOUCHER: Refer to UGC/SGC Article 12.5. In particular be sure to provide Consent of Surety to Final Payment and Power of Attorney. Also, the affidavit of all bills paid is different from the monthly affidavit used for the previous pay vouchers.

END OF SECTION 01 70 00

**SECTION 05 16 50**  
**RETROFIT ROOF FRAMING SYSTEMS**

**PART 1– GENERAL**

1.01 DESCRIPTION

A. General

1. The retrofit framing system shall provide support for a new metal roof panel system over the existing building roof and shall accommodate the irregularities of the existing roof to form a structural framework for supporting the new metal roof panels at the specified slope. Furnish all labor, material, tools, equipment and services for the retrofit framing system as indicated, in accord with the provisions of the contract documents. The metal roof panel system manufacturer will provide all components required for a complete single-supplier system including base members, clips, purlins, purlin supports, bracing and structural member-to-member fasteners as well as panels, panel clips, trim/flashing, fascias, ridge, closures, sealants, fillers and any other required items as specified in related sections.

B. Related work specified elsewhere:

1. Section 07 41 13 – Standing Seam Metal Roof System
2. Section 07 62 00 – Sheet Metal Flashing and Miscellaneous Accessories

1.02 QUALITY ASSURANCE

A. Applicable Standards: All following referenced publications shall be the most current edition in effect on the date of solicitation.

1. American Institute of Steel Construction (AISC)
  - a. AISC - Specification for Structural Steel for Buildings
2. American Iron and Steel Institute (AISI)
  - a. AISI CF00-01 – A Design Guide for Standing Seam Roof Panels
  - b. AISI CF97-01 – A Guide for Designing with Standing Seam Roof Panels.
  - c. AISI “Cold Form Steel Design Manual”
3. American Society of Civil Engineers (ASCE)
  - a. ASCE-7 - Minimum Design Loads for Buildings and other Structures
4. American Society for Testing and Materials (ASTM) (As Applicable)
  - a. ASTM A 36/A 36M - Structural Steel
  - b. ASTM A 307 - Steel Bolts and Studs
  - c. ASTM A 446 - Steel Sheet, Zinc Coated (Galvanized) By The Hot-Dip Process
  - d. ASTM A 525/A 525M - Steel Sheet, Zinc-Coated by the Hot-Dip Method
  - e. ASTM A 529/A 529M – Structural Steel with 42 KSI Minimum Yield Point
  - f. ASTM A 1101 – Steel Sheet and Strip, Carbon, Hot-Rolled
  - g. ASTM A 653/A 653M – Specification for Steel Sheet, Zinc Coated (Galvanized) or Zinc-Iron Alloy - Coated (Galvannealed) By Hot-Dip Method
  - h. ASTM E 1514 –Structural Standing Seam Steel Roof Panel Systems.
  - i. ASTM E 1592 - Structural Performance Test for Metal Panel and Siding Systems by Uniform Static Air Pressure Difference
  - j. ASTM A792 – Specification for Galvalume Coated Steel
5. Metal Building Manufacturers Association
  - a. MBMA – Metal Building Systems Design Practices Manual
6. Factory Mutual
  - a. FM-4471 – Wind Uplift Test for Metal Roof Panel Systems
7. American Welding Society
  - a. AWS D1.1 Structural Welding Code – Steel
  - b. AWS D1.3 Structural Welding Code – Steel Sheet

8. Steel Structures Painting Council
  - a. SSPC- SP10 - Steel Structures Painting Manual
9. Underwriters Laboratories, Inc. (UL)
  - a. UL 580 - Tests for Uplift Resistance of Roof Assemblies
10. American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
  - a. ANSI/ASHRAE Standard 90.1, Energy Standard for Buildings
- B. Manufacturers Qualifications
  1. Manufacturer of the retrofit framing system shall be experienced in fabricating complete single-supplier metal roof systems of similar size and scope to this project for a minimum of five (5) years.
- C. Installing Contractor Qualifications
  1. Installer shall be experienced in installation of structural light-gage retrofit framing and metal roof panel systems for a minimum of two (2) years and shall meet the following minimum criteria.
    - a. Shall be a factory-authorized installer of the manufacturer trained in the installation of the retrofit framing system specified.
    - b. Maintain \$1,000,000 minimum general liability insurance coverage.
    - c. Maintain statutory limits of worker's compensation coverage as mandated by law.
    - d. Will provide a full-time project foreman/superintendent at the jobsite that has been trained by the metal retrofit roofing system manufacturer for the supervision of the installation of all materials.
- D. Installation Quality Control
  1. The metal roof panel system manufacturer shall conduct inspections of the retrofit framing system prior to metal roof panel installation to ensure straightness and proper alignment to minimize oil-canning and to confirm the system components have been installed in accordance with the installation documents.

### 1.03 EXISTING ROOF SYSTEM AND TESTING

- A. The existing roof assembly consists of a structural wood plank decking over wooden rafter system with asphalt built-up roofing system.
- B. Where conditions permit and are required, the contractor shall obtain field measurements and forward them to the retrofit system manufacturer for coordination and integration into the installation documents and submittals. This shall be done prior to commencing any engineering and design work and before fabrication of any materials.
- C. The contractor shall have conduct field pullout testing for evaluation and selection of framing system anchors to attach the new retrofit framing base members to the existing roof support system. The testing will be conducted at multiple locations of the existing roof area using a calibrated pullout tester. Pullout values shall be recorded at each location for each specific anchor used. All anchors shall penetrate and attach to existing structural support members. The contractor shall have the attachment connection designed to satisfy wind uplift values, as provided by the retrofit system manufacturer, multiplied by a safety factor of 2.5. This analysis shall be submitted for review and approval.
- D. The contractor shall conduct field compressive strength testing performed for evaluation of the existing roof substrate and membrane assembly. These values, recorded in pounds per square inch (PSI), will be analyzed to determine if each retrofit framing system base member's bearing surface area is adequate in size, to distribute the imposing positive loads as to not exceed the compressive strength of the existing roof substrate and membrane assembly. If the values exceed the

compressive strength, then an additional bearing component of sufficient size will be added between the base member and the existing roof.

#### 1.04 DESIGN REQUIREMENTS

##### A. General

- a. Design for approval and installation in accordance with the included drawings and these specifications, a complete retrofit framing and metal roof panel system as a structural package, engineered and factory fabricated by one manufacturer in accordance with AISI, MBMA and ASCE references.
- b. Any additions/revisions to framing members as a result of field conditions and/or demands, shall be the contractor's responsibility, and shall be submitted for review and approval by the manufacturer.

##### B. Building Code

- a. The retrofit metal roof system manufacturer shall engineer the entire system to meet the International Building Code (IBC), code and per the current edition of ASCE-7 as applicable.

##### C. Wind Load Design

- a. The assembly shall withstand a wind load miles per hour (MPH) velocity as required by the code. The metal roof panel assembly, which includes portions of the retrofit framing system, must be tested in accordance with the UL-580 test procedure and the ASTM E 1592 Structural Performance Test for Metal Roof and Siding Systems by Uniform Static Air Pressure. The metal roof panel system shall be classified as a UL-90 rated assembly.

##### D. Live and Snow Load Design

- a. Horizontal Assemblies shall withstand minimum live and snow loads as required by the code plus the weight of the retrofit framing and metal roof panel assembly.
- b. The retrofit framing system shall transfer loads from the new roof system to the existing roof structure in such a manner as to not overload the existing roof's structural support members as well as the substrate and membrane assembly - refer to 1.03.C.
- c. Horizontal deflection shall be L/180 of span after installation of equipment and vertical deflection in framing members shall not exceed H/60<sup>th</sup> of their length.

#### 1.05 SUBMITTALS

- A. The following shall be submitted by the retrofit framing system manufacturer for approval in a timely manner after award of contract.
- B. Detail drawings shall consist of catalog cuts, design and installation drawings and other data necessary to clearly describe design, materials, gages, sizes, layouts, construction details, fasteners and erection. Detail drawings shall be accompanied by engineering design calculations for the structural properties of the retrofit framing components and metal roof panel system, which shall bear the seal and signature of a Professional Engineer registered to practice in the State of Texas.
- C. Manufacturer's product literature for retrofit framing system components including purlins and supports, clips, bracing and connection fasteners.
- D. A minimum of six (6) project references of similar use and size listing the Architect, owner, location, scope and name of project as provided by the manufacturer.
- E. Obtain approval of all submittals prior to fabrication and installation.

#### 1.06 DELIVERY AND STORAGE

- A. Materials shall be delivered to the site in a dry and undamaged condition and stored out of contact with the ground. Materials shall be covered with weathertight coverings and kept dry.

### PART 2 – PRODUCTS

#### 2.01 APPROVED MANUFACTURERS

- A. The retrofit framing and metal roof panel system as specified in section elsewhere in this specification shall be as manufactured by the following or a prior approved equal with all roof panel, framing components and accessories from a single source manufacturer

McElroy Metal Inc. - Corporate Office - 1500 Hamilton Road - Bossier City, LA 71111  
(800) 562-3576

- B. Supply all products specified in this section from the same manufacturer as for Sections 07 41 13 and 07 62 00.

## 2.02 FRAMING SYSTEM COMPONENTS

- A. The retrofit framing manufacturer shall engineer the framing system to comply with the "Design Intent" of the existing roof's supporting structure to ensure that all new load-bearing or load-transferring members are anchored to and located directly over existing secondary or primary load bearing support members. The retrofit framing system shall consist of any of the following components based on the Manufacturer's design and in accordance with the specifications herewith.
- Base clips for purlin supporting member attachment shall be a minimum 4"x4"x3½"x14-gage steel angle having of 14.0 square inches of bearing surface area.
  - Base channel members shall be a minimum 4-3/16"x2"x16-gage x 12" long having 50.25 square inches of bearing surface area.
  - Continuous base members shall be a minimum of 16-gage formed steel channel, cee or zee shape.
  - Purlin supports (vertical members) shall be a minimum 4"x2"x18-gage formed steel channel or cee shape.
  - Purlins shall be a minimum 3½"x1½"x16-gage formed steel zee shape.
  - Purlin clips shall be a minimum 16-gauge formed steel angle shape.
  - Perimeter elevated wall framing members shall be a minimum of 16-gage formed steel, channel, and cee or custom shapes to satisfy conditions.
  - Transverse and longitudinal angle bracing shall be a minimum of 18-gage formed steel with a minimum 4" pre-formed girth.
  - Purlin stabilization shall be a minimum 0.023" thick x 2" wide x 55 KSI steel strapping.
  - Hat channels used for bracing, girts, struts or other members shall be a minimum of 22-gage steel with galvanized, G-90 coating, in accordance with ASTM A 525.

## 2.03 MATERIALS

- Steel sheet for roll-formed or press-broke members of the gage indicated herein, conforming to ASTM A 1011 and minimum yield strength 55,000 PSI.
- Structural shapes if required for special conditions shall conform to ASTM A 36 and minimum yield strength of 36,000 PSI.
- Cold form steel framing system members of the minimum gages indicated herein shall have a protective shop primer coating conforming to FS TT-P-646 with base steel prepared in accordance with SSPC-SP10.
- Supply all hardware items required for installation of retrofit framing system in accordance with manufacturer's installation instructions and other indicated items.

## 2.04 MISCELLANEOUS PRODUCTS

- A. Fasteners And Anchors
  - a. Anchors used for the attachment of the new retrofit framing system to the existing roof structural support system shall be of the type and size that is appropriate for secure attachment to satisfy the required wind uplift pressure values at each location, as specified by the retrofit system manufacturer. All anchors shall attach directly into existing structural members. A minimum of two (2) anchors shall be used for base clips and channels.
  - b. Fasteners used for the retrofit framing system shall be a minimum ¼" diameter with 14 threads per inch having a stress relief head and a corrosion resistant coating.
- B. Anchor Penetration Sealant
  - a. Temporary construction sealant shall be used at each anchor penetration at attachment locations of the new retrofit framing system to the existing roof structural support system. The Installer shall select the appropriate sealant type that is compatible with the existing roof membrane, which will provide a leak-free condition throughout the erection of the framing and the completion of the metal roof panel system installation. The installing contractor is responsible for any and all leaks including damage to the building contents.

### **PART 3 – EXECUTION**

#### **3.01 DEMOLITION OF EXISTING ROOF MATERIALS**

- A. The installer shall remove the existing loose and semi-loose aggregate from the built-up roofing membrane. Removal shall be accomplished by carefully spudding the existing aggregate so as to minimize damage to the roofing membrane. The removal shall be thorough and shall render a smooth substrate suitable for that attachment of base framing members to the exposed roofing membrane. The installer shall exercise care and shall prevent aggregate from entering roof drains and clogging the existing roof's drainage system. All aggregate surfacing shall be removed and disposed of properly and in accordance with local ordinances and regulations.

#### **3.02 FRAMING SYSTEM INSTALLATION**

- A. General
  - 1. Installation shall be as specified and in accordance with the retrofit systems manufacturer's approved installation documents and erection drawings.
  - 2. Install the retrofit framing system with consistent purlins erected without waves, warpage, buckles, fastening stresses or other distortion. Every care should be taken in the installation of the retrofit framing to minimize oil canning in the metal roof panel system.
  - 3. Field cutting of framing members shall be done in a safe manner preventing damage to the existing roof or adjacent materials. The retrofit framing contractor shall use good construction practices to minimize scrap and to utilize the material as provided by the retrofit system manufacturer.
  - 4. Dissimilar materials that are not compatible when contacting each other shall be insulated from each other by means of gaskets or insulating compounds.
- B. Erection Tolerances
  - 1. Variation from plumb: 1/8 inch, maximum
  - 2. Variation from level: 1/8 inch, maximum
  - 3. Variation from true plane: 1/8 inch, maximum
  - 4. Variation from true position: 1/4 inch, maximum
  - 5. Variation of member from plane: 1/8 inch, maximum

#### **3.03 EXTENSION OF EXISTING COMPONENTS**

- A. Extension of Electrical Service: When power vents are removed and reinstalled on curbs on the new metal roof panel system, the contractor shall extend the electrical service as required to render the power vent operational. Extensions shall be made with like gage and type wire. If the original service is run in conduit, conduit shall be installed on the extension. Junction boxes shall be provided at splices in wire or conduits. Junction boxes and conduit shall be secured to the steel framing structure. All work shall be accomplished to comply with the local electrical code.
- B. Extension of Existing Plumbing Vents: During the installation of the specified metal roof panel system, the extension and flashing of existing plumbing vents will be required. The contractor shall extend existing plumbing vents through the metal roof panels, as required and provide flexible vent pipe flashings at the roof panel penetration. Plumbing vent extensions shall be made with material of like composition of the plumbing vent being extended, and shall be securely braced within the attic space to ensure continued service of the vent. As often as possible, when extending plumbing vents, the contractor shall ensure that the roof penetration is located between the side seams of the metal roof panels such that the malleable ring on the flexible vent pipe flashing will lay flat against the roof panel around its entire circumference. The contractor shall install elbow fittings to horizontally displace the pipe if necessary. The metal roof panel system manufacturer must approve plumbing vents that do not fall between side seams.
- C. Extension Of Existing Hot Flue Stacks: During the installation of the specified metal roof panel system, the extension and flashing of existing hot flue stacks will be required. The contractor shall extend existing hot flue stacks through the metal roof panels, as required and provide flashings at the roof panel's penetration. Flashings shall be flexible vent stack type or rooftop equipment curb type depending on the size of the existing stack. Hot flue stack extensions shall be of double wall construction made with material of like composition of the hot flue stack being extended, and shall be securely braced within the attic space to ensure continued service of the vent. Hot flue stacks shall be extended to be 3 feet higher than the elevation of any roof within a 10-foot radius of the hot flue stack penetration.
- D. Extension Of Existing Ductwork: When existing gravity vents, power vents, gooseneck fresh air make-up, and other vents are installed on curbs on the new metal roof panel system, the extension of vent ductwork will be required. The contractor shall extend existing ductwork through the metal roof panel system, as required to ensure the continued service of the vent. Ductwork shall be securely attached to new rooftop equipment curb and joints shall be sealed tight to provide a leak-proof assembly. Ductwork extensions shall be made with material of like composition and gage of the ductwork being extended.

#### 3.04 REINSTALLATION OF EXISTING COMPONENTS

- A. Reinstallation Of Existing Vents: During the installation of the specified metal roof panel system, the removal and reinstallation of existing power vents, gravity vents, and gooseneck vents shall be required. The contractor shall remove and reinstall vents indicated to extend through the metal roof panel system. The contractor shall have the responsibility to remove such vents without damage, and reinstall the vents on new rooftop equipment curbs. Vents shall be securely fastened to the equipment curb to prevent displacement and to provide a weathertight installation. In the case of power vents, the electrical service shall be extended to ensure continued service of the vent.

#### 3.05 CLEAN UP

- A. The Contractor shall protect installed products from damage by subsequent construction activities until final acceptance. The contractor shall collect and dispose of all framing system cuttings and debris including unused anchors, framing fasteners, sealant and associated material from the jobsite.

**END OF SECTION 05 16 50**



**SECTION 06 10 00  
ROUGH CARPENTRY**

**PART 1 – GENERAL**

1.01 SECTION INCLUDES

- A. This Section includes the following:
  - 1. Rooftop equipment bases and support curbs, as required.
  - 2. Wood furring, grounds, nailers, and blocking, as required.
  - 3. Removal and replacement of damaged, deteriorated or non-compliant five-eighths inch (5/8") fire rated plywood sheathing for roof substrate, as required.

1.02 DEFINITIONS

- A. Rough Carpentry: Carpentry work not specified in other Sections and not exposed, unless otherwise specified.
- B. Exposed Framing: Dimension lumber not concealed by other construction and indicated to receive a stained or natural finish.

1.03 SUBMITTALS

- A. General: Submit each item in this Article according to the Conditions of the Contract and Division 1 Specification Sections.
- B. Product Data for the following products:
  - 1. Metal framing anchors.
  - 2. Construction adhesives.
- C. Material certificates for dimension lumber specified to comply with minimum allowable unit stresses. Indicate species and grade selected for each use and design values approved by the American Lumber Standards Committee's (ALSC) Board of Review.
- D. Wood treatment data as follows, including chemical treatment manufacturer's instructions for handling, storing, installing, and finishing treated materials:
  - 1. For each type of preservative-treated wood product, include certification by treating plant stating type of preservative solution and pressure process used, net amount of preservative retained, and compliance with applicable standards.
  - 2. For waterborne-treated products, include statement that moisture content of treated materials was reduced to levels indicated before shipment to Project site.
- E. Warranty of chemical treatment manufacturer for each type of treatment.
- F. Research or evaluation reports of the model code organization acceptable to authorities having jurisdiction that evidence the following products' compliance with building code in effect for Project.
  - 1. Metal framing anchors.
  - 2. Power-driven fasteners.

#### 1.04 QUALITY ASSURANCE

- A. Testing Agency Qualifications: To qualify for approval, an independent testing agency must demonstrate to Structural Engineer 's and/or Project Manager's satisfaction, based on evaluation of agency-submitted criteria conforming to ASTM E 699, that it has the experience and capability to satisfactorily conduct the testing indicated without delaying the Work.
- B. Single-Source Responsibility for Engineered Wood Products: Obtain each type of engineered wood product from one source and by a single manufacturer.

#### 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Keep materials under cover and dry. Protect from weather and contact with damp or wet surfaces. Stack lumber, plywood, and other panels. Provide for air circulation within and around stacks and under temporary coverings.
  - 1. For lumber and plywood pressure treated with waterborne chemicals, place spacers between each bundle to provide air circulation.

### **PART 2 – PRODUCTS**

#### 2.01 MANUFACTURERS

- A. Available Manufacturers (For Wood Sources Outside the Scope Requirements for Fire-Treated Plywood): Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. Wood-Preservative-Treated Materials:
    - a) Baxter: J. H. Baxter Co.
    - b) Chemical Specialties, Inc.
    - c) Continental Wood Preservers, Inc.
    - d) Hickson Corp.
    - e) Hoover Treated Wood Products, Inc.
    - f) Osiose Wood Preserving, Inc.
  - 2. Metal Framing Anchors:
    - a) Cleveland Steel Specialty Co.
    - b) Harlen Metal Products, Inc.
    - c) Silver Metal Products, Inc.
    - d) Simpson Strong-Tie Company, Inc.
    - e) Southeastern Metals Manufacturing Co., Inc.

#### 2.02 LUMBER, GENERAL

- A. Lumber Standards: Comply with DOC PS 20, "American Softwood Lumber Standard," and with applicable grading rules of inspection agencies certified by ALSC's Board of Review.
- B. Inspection Agencies: Inspection agencies, and the abbreviations used to reference them, include the following:
  - 1. NELMA - Northeastern Lumber Manufacturers Association.
  - 2. NLGA - National Lumber Grades Authority (Canadian).
  - 3. RIS - Redwood Inspection Service.

4. SPIB - Southern Pine Inspection Bureau.
  5. WCLIB - West Coast Lumber Inspection Bureau.
  6. WWPA - Western Wood Products Association.
- C. Grade Stamps: Provide lumber with each piece factory marked with grade stamp of inspection agency evidencing compliance with grading rule requirements and identifying grading agency, grade, species, moisture content at time of surfacing, and mill.
1. For exposed lumber, furnish pieces with grade stamps applied to ends or back of each piece, or omit grade stamps and provide grade-compliance certificates issued by inspection agency.
- D. Where nominal sizes are indicated, provide actual sizes required by DOC PS 20 for moisture content specified. Where actual sizes are indicated, they are minimum dressed sizes for dry lumber.
1. Provide dressed lumber, S4S, unless otherwise indicated.
  2. Provide dry lumber with nineteen percent (19%) maximum moisture content at time of dressing for two inch (2") nominal thickness or less, unless otherwise indicated.

### 2.03 WOOD-PRESERVATIVE-TREATED MATERIALS

- A. General: Where lumber or plywood is indicated as preservative treated or is specified to be treated, comply with applicable requirements of AWWA C2 (lumber) and AWWA C9 (plywood). Mark each treated item with the Quality Mark Requirements of an inspection agency approved by ALSC's Board of Review.
1. Do not use chemicals containing chromium or arsenic.
  2. For exposed items indicated to receive stained finish, use chemical formulations that do not bleed through, contain colorants, or otherwise adversely affect finishes.
- B. Pressure treat aboveground items with waterborne preservatives to a minimum retention of 0.25 lb/cu. ft. After treatment, kiln-dry lumber and plywood to a maximum moisture content of 19 and 15 percent, respectively. Treat indicated items and the following:
1. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.
  2. Wood sills, sleepers, blocking, furring, stripping, and similar concealed members in contact with masonry or concrete.
- C. Complete fabrication of treated items before treatment, where possible. If cut after treatment, apply field treatment complying with AWWA M4 to cut surfaces. Inspect each piece of lumber or plywood after drying and discard damaged or defective pieces.

### 2.04 DIMENSION LUMBER

- A. General: Provide dimension lumber of grades indicated according to the ALSC National Grading Rule (NGR) provisions of the inspection agency indicated.
- B. Framing Other than Non-Load-Bearing Partitions: Provide framing of the following grade and species:
1. Grade: No. 2.
  2. Species: Southern pine; SPIB.
- C. Ceilings (Non-Load-Bearing): For ceiling framing that does not support a floor, roof, or attic, provide the following grade and species:

1. Grade: No. 2.
2. Species: Southern pine; SPIB.

D. Other Framing Not Listed Above: Provide the following grades and species:

1. Grade: No. 2.
2. Species: Southern pine; SPIB.

## 2.05 MISCELLANEOUS LUMBER

- A. General: Provide lumber for support or attachment of other construction, including rooftop equipment curbs and support bases, cant strips, bucks, nailers, blocking, furring, grounds, stripping, and similar members.
- B. Fabricate miscellaneous lumber from dimension lumber of sizes indicated and into shapes shown.
- C. Moisture Content: Nineteen percent (19%) maximum for lumber items not specified to receive wood preservative treatment.
- D. Grade: For dimension lumber sizes, provide No. 3 or Standard grade lumber per ALSC's NGRs of any species. For board-size lumber, provide No. 3 Common grade per NELMA, NLGA, or WWPA; No. 2 grade per SPIB; or Standard grade per NLGA, WCLIB or WWPA of any species.

## 2.06 WOOD-BASED STRUCTURAL-USE PANELS, GENERAL

- A. Structural-Use Panel Standard: Provide plywood panels complying with DOC PS 1, "U.S. Product Standard for Construction and Industrial Plywood."
- B. Trademark: Factory mark structural-use panels with APA trademark evidencing compliance with grade requirements.

## 2.07 CONCEALED, PERFORMANCE-RATED STRUCTURAL-USE PANELS

- A. General: Where structural-use panels are indicated for the following concealed types of applications, provide APA-performance-rated panels complying with requirements designated under each application for grade, span rating, exposure durability classification, and edge detail (where applicable).
  1. Thickness: Provide panels meeting requirements specified but not less than thickness indicated.
  2. Span Ratings: Provide panels with span ratings required to meet "Code Plus" provisions of APA Form No. E30, "APA Design/Construction Guide: Residential & Commercial."
- B. Roof Sheathing: APA-rated sheathing, minimum five-eighths inch (5/8").
- C. Roof Sheathing: APA-rated Structural I sheathing.
  1. Exposure Durability Classification: Exterior.
  2. Span Rating: 40/20 or Roof - 40.

## 2.08 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this Article for material and manufacture.
  - 1. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with a hot-dip zinc coating per ASTM A 153 or of Type 304 stainless steel.
- B. Nails, Wire, Brads, and Staples: FS FF-N-105.
- C. Power-Driven Fasteners: CABO NER-272.
- D. Wood Screws: ASME B18.6.1.
- E. Lag Bolts: ASME B18.2.1.
- F. Bolts: Steel bolts complying with ASTM A 325, Grade A; with ASTM A 563 hex nuts and, where indicated, flat washers.
- G. Fastener for Wood Deck: Shall be a #14 fastener, fluorocarbon coated, with CR-10 coating. A minimum .200 diameter shank and .250 diameter thread. To be used with round pressure plates or bar, and having a fluorocarbon CR-10 coating, when subjected to thirty (30) Kesternich cycles (DIN 50018) shows less than 10% red rust which surpasses FM Global Approval Standard 4470, or approved equal. Fasteners, plates, and/or bars shall be listed in the FM Global Approval Guide.

## 2.09 METAL FRAMING ANCHORS

- A. General: Provide galvanized steel framing anchors of structural capacity, type, and size indicated and as follows:
  - 1. Research or Evaluation Reports: Provide products for which model code research or evaluation reports exist that are acceptable to authorities having jurisdiction and that evidence compliance of metal framing anchors for application indicated with building code in effect for Project.
  - 2. Allowable Design Loads: Provide products with allowable design loads, as published by manufacturer, that meet or exceed those indicated. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis, and demonstrated by comprehensive testing performed by a qualified independent testing agency.
- B. Galvanized Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A 653, G60 coating designation; structural, commercial, or lock-forming quality, as standard with manufacturer for type of anchor indicated.
- C. Joist Hangers: U-shaped joist hangers with two inch (2") long seat and one and one-fourth inch (1-1/4") wide nailing flanges at least 85 percent of joist depth.
  - 1. Thickness: 0.052 inch.
  - 2. Thickness: 0.064 inch.
- D. Top Flange Hangers: U-shaped joist hangers, full depth of joist, formed from metal strap with tabs bent to extend over and be fastened to supporting member.
  - 1. Strap Width: 1-1/2 inches.

2. Strap Width: 2 inches.
  3. Thickness: 0.052 inch.
  4. Thickness: 0.064 inch.
- E. Bridging: Rigid, V-section, nail-less type, 0.064 inch thick, length to suit joist size and spacing.

## 2.10 VERTICAL WALL SHIMMING MATERIAL

- A. Shall be one of the following unless otherwise accepted by Owner's representative: OSB, exterior grade plywood, gypsum core board or concrete core board. Proper selection of material is required to achieve FM Global and UL guidelines.

## **PART 3 – EXECUTION**

### 3.01 INSTALLATION, GENERAL

- A. Discard units of material with defects that impair quality of rough carpentry and that are too small to use with minimum number of joints or optimum joint arrangement.
- B. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted.
- C. Fit rough carpentry to other construction; scribe and cope as required for accurate fit. Correlate location of furring, nailers, blocking, grounds, and similar supports to allow attachment of other construction.
- D. Apply field treatment complying with AWPA M4 to cut surfaces of preservative-treated lumber and plywood.
- E. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
1. CABO NER-272 for power-driven staples, P-nails, and allied fasteners.
  2. Published requirements of metal framing anchor manufacturer.
  3. "Recommended Nailing Schedule" of referenced framing standard and with AFPA's "National Design Specifications for Wood Construction."
  4. "Table 2304.9.1-Fastening Schedule" of the 2015 International Building Code.
- F. Use common wire nails, unless otherwise indicated. Use finishing nails for finish work. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood; predrill as required.
- G. Use stainless-steel nails where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity.
- H. Countersink nail heads on exposed carpentry work and fill holes with wood filler.

### 3.02 NAILERS

- A. Wooden nailers shall be installed at gravel stops, drip edges, and expansion joints on outside perimeter of building according to NRCA, Underwriters Laboratory and IBC guidelines.
- B. All Construction: Gravel stop and drip edge nailers shall be the same height as the new insulation being installed where required. Nailers shall be raised if necessary by anchoring an additional nailer of appropriate height to the existing nailer if the existing nailer is not to be replaced. Nailers shall be anchored to resist a pull-out force of one hundred seventy-five pounds (175#) per foot. Fasteners shall be no less than two (2) per nailer, and be spaced at three feet (3') on center maximum. Expansion joint nailers shall extend upward a minimum of eight inches (8") above finish roof height.
- C. Where parapet wall exists, fire treated plywood lumber must be installed a minimum of twelve inches (12") above finished roof surface to provide substrate for horizontal termination of roof to wall flashing system.

### 3.03 WOOD CANTS

- A. Toe of cant shall be level with the surface to receive new roof membrane and in all cases anchored according to NRCA, Underwriters Laboratory and IBC guidelines.

### 3.04 WOOD GROUNDS, NAILERS, BLOCKING, AND SLEEPERS

- A. Install wood grounds, nailers, blocking, and sleepers where required for screeding or attaching other work. Form to shapes shown and cut as required for true line and level of attached work. Coordinate locations with other work involved.
- B. Attach to substrates to support applied loading. Recess bolts and nuts flush with surfaces, unless otherwise indicated. Build into masonry during installation of masonry work. Where possible, anchor to formwork before concrete placement.
- C. Install permanent grounds of dressed, preservative-treated, key-beveled lumber not less than one and one-half inches (1-1/2") wide and of thickness required to bring face of ground to exact thickness of finish material. Remove temporary grounds when no longer required.

### 3.05 WOOD FRAMING, GENERAL

- A. Framing Standard: Comply with AFPA's "Manual for Wood Frame Construction," unless otherwise indicated.
- B. Install framing members of size and at spacing indicated.
- C. Do not splice structural members between supports.
- D. Firestop concealed spaces of wood-framed walls and partitions at each floor level and at ceiling line of top story. Where firestopping is not inherent in framing system used, provide closely fitted wood blocks of two inch (2") nominal thickness lumber of same width as framing members.

### 3.06 INSTALLATION OF STRUCTURAL-USE PANELS

- A. General: Comply with applicable recommendations contained in APA Form No. E30, "APA Design/Construction Guide: Residential & Commercial," for types of structural-use panels and applications indicated.
  - 1. Comply with "Code Plus" provisions of above-referenced guide.
- B. Fastening Methods: Fasten panels as indicated below:
  - 1. Sheathing: Mechanically attach to steel framing.
    - a) Space panels 1/8 inch at edges and ends.
- C. Roof Deck: Shall consist of five-eighths inch (5/8") thick fire rated plywood, conforming to APA psi rated sheathing 42/20, exterior. Face grain of plywood shall be perpendicular to supports with a staggered lay-up. Plywood shall span over at least two supports. Plywood shall be attached to supports with self-drilling screws at twelve inches (12") on center maximum at intermediate supports and at six inches (6") on center maximum at panel edges in the field of the roof, and at six inches (6") on center along the panel perimeter, and six inches (6") on center through the field of the panel along the building perimeter. All attachment shall be in strict accordance with provisions of ASCE 7-05. Minimum modulus of elasticity shall be 180,000 psi.

**END OF SECTION 06 10 00**



**SECTION 07 21 50**  
**ROOF AND DECK INSULATION**

**PART 1 – GENERAL**

1.01 DESCRIPTION

- A. Related Work
  - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Requirements / Conditions, Supplementary General Conditions, and Sections in Division 01 of these Specifications.

1.02 REFERENCES

- A. American Society of Testing Materials (ASTM)
  - 1. C 177-85 Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus.
  - 2. C 209-84 Methods of Testing Insulating Board (Cellulosic Fiber), Structural and Decorative.
  - 3. C 728-89a Perlite Thermal Insulation Board
  - 4. D 41-85 Asphalt Primer Used in Roofing and Waterproofing.
  - 5. D 312-89 Asphalt Used in Roofing.
  - 6. D 1621-73 (1979) Test Method for Compressive Properties of Rigid Cellular Plastics.
  - 7. D 4601-86 Asphalt Coated Glass Fiber Base Sheet Used in Roofing.
- B. National Roofing Contractors Association (NRCA)
  - 1. (ANSI/SPRI)
  - 2. ASCE 7 wind uplift criteria

1.03 QUALITY ASSURANCE

- A. Regulatory Requirements
  - 1. Classified by Underwriter's Laboratories (UL) as Class A roof covering.
  - 2. Follow local, state, and federal regulations, safety standards, and codes.
- B. Installation
  - 1. Installation shall be in accordance with manufacturer's current published application procedures, NRCA general recommendations, and ASCE 7 wind uplift criteria.
  - 2. Roof system manufacturer's technical specifications shall be considered part of this specification and shall be used as reference for specific application procedures.

1.04 SUBMITTALS

- A. Product Data: Submit Manufacturer's product data sheets for each product.
- B. Shop Drawings: Layout of roof plan showing tapered design, tapered insulation pattern, direction of slope, amount of slope, spot elevations indicating thicknesses at high and low points.

- C. Certification: Submit roof manufacturer's certification in writing that insulation is acceptable as substrate for application of specified roof system.

#### 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Store materials in accordance with manufacturer's recommendations.
- B. When stored outdoors:
  - 1. Tarp and shield insulation from moisture and ultraviolet rays.
  - 2. Elevate insulation above substrate four inches minimum.
  - 3. Secure insulation to resist high winds.
  - 4. Distribute insulation stored on roof deck to prevent concentrated loads that would impose excessive stress or stain on deck or structural members. Verify that structure can accommodate additional loading.
  - 5. Wet insulation, or insulation that has been wet but which has dried, may not be used and shall be removed completely and immediately from the job site.
  - 6. Do not double stack bundles of insulation on the roof top.

#### 1.06 SEQUENCING AND SCHEDULING

- A. Substrate Acceptance: Roof system manufacturer's representative shall inspect roof deck and associated substrates and provide written acceptance of conditions.
- B. Manufacturer's approved roofing contractor shall inspect and approve deck and substrates.
- C. Plan roof layout with respect to roof deck slope to prevent rainwater drainage into completed roofing.
- D. Do not install more insulation than can be covered with complete roof system in same day.

#### 1.07 PRODUCT CONDITIONS

- A. Environmental Requirements:
  - 1. Apply roofing and insulation in dry weather.
  - 2. Do not proceed with roof construction during inclement weather or when precipitation is predicted 40% or more possibility.
  - 3. Do not apply insulation over wet or moist deck or in foggy conditions.
  - 4. Days with wind speeds of 30 mph or greater shall be considered "Bad Weather" days.
- B. Emergency Equipment: Maintain on-site equipment and material necessary to apply emergency temporary seals I the event of sudden storms or inclement weather.
- C. Costs for emergency roofing shall be borne by Contractor.

## PART 2 – PRODUCTS

### 2.01 INSULATION

- A. All insulation shall be approved in writing by the membrane manufacturer as to thickness, type, and manufacturer. All insulation must be approved for the specific application, Underwriters Laboratory approved, and be listed in the FM Global Approval Guide.
- B. Tapered Polyisocyanurate Roof Insulation: Shall be tapered polyisocyanurate board per Federal Specification No. HH-I-1972/1 or 2, with a 20 psi minimum compressive strength and 2.0 pcf density minimum. Insulation shall be of thickness required for one-eighth inch (1/8") slope per foot to roof drains as shown on drawings. Insulation shall be surfaced on two (2) sides with a non-asphaltic facer material.
- C. Shall be impact-resistant, nonstructural, specially engineered gypsum and cellulose fiber panels with 95% recycled content; uniform water-resistance throughout core and surface. Board size four feet by eight feet (4' x 8'), thickness 1/2"; conforming to ASTM C 1278, meeting FM 4470 Class 1 criteria, classified by Underwriters Laboratories, and listed in the FM Global Approval Guide. Board will meet the following physical properties, Securock® Roof Board, as manufactured by USG Corporation, or approved equal.

<u>Test</u>	<u>Typical Value</u>	<u>Test Method</u>
Fire Resistance	Class A	UL 790
Permeance	≤ 30	ASTM C473
Surface water absorption	≤ 1.6 nominal grams	ASTM C473
Water resistance	Maximum 10% weight percentage gain	
Mold Resistance	Minimum rating of "10"	ASTM D3273

### 2.02 BITUMEN

- A. Shall be ASTM D 312 Type IV extra steep asphalt.

### 2.03 ASPHALT ROOF PRIMER

- A. Quick-dry asphalt-based primer for priming of asphalt roof surfaces, Handi-Gard RC-114, as manufactured by Gibson Homans Company / GAF, or approved equal.

Applicable Federal Specification	SS-A-701B
ASTM	D 41
Flash Point	105° F
Viscosity at 80° F (ASTM D 217)	50-60 K.U.
Weight per gallon	7.4 pounds
Drying time (to touch)	Min. 4 hours

## 2.04 FASTENERS

- A. Fasteners and fastening plates and/or termination bars shall be FM Approved and shall be listed in the FM Global Approval Guide, and as recommended by the insulation/ fastener manufacturer for the specific application to meet the minimal requirements for wind uplift as required by the local jurisdiction and/or FM Global.
- B. Standard Fastener for Structural Concrete/Masonry Applications: Shall be one-fourth inch by two inches (1/4" x 2"), shank shall be zinc coated steel and pin shall be zinc-coated stainless steel, one-piece unit, flat head. The fastener must meet or exceed GSA Specification No. FFS-325, Group V, Type 2, Class 3 as manufactured by OMG Roofing Products, Agawam, MA or approved equal.

## PART 3 – EXECUTION

### 3.01 PROTECTION

- A. Provide special protection from traffic on yet to be removed roofing.
- B. Provide special protection from traffic on completed work.

### 3.02 EXAMINATION AND PREPARATION

- A. Do not install until defects are corrected and deck substrate meets roof system manufacturer's requirements.
- B. Do not apply insulation unless asphalt application temperature, EVT of approximately 375° F to 425° F, can be maintained or when water or moisture is present on substrate. Do not heat asphalt above flashing point, or 525° F.
- C. Examine substrate and related surfaces, and verify that there are no conditions such as inadequate anchorage, foreign materials, moisture, ridges, depressions, or other conditions which would prevent satisfactory installation of roof system.
- D. Start of work constitutes acceptance of deck substrate and site conditions.
- E. Sweep deck substrate clean of dust and debris immediately prior to installation of tapered insulation.

### 3.03 INSULATION INSTALLATION

- A. Manufacturer's Instructions: In regard to attachment, the manufacturer's instructions or specifications shall determine the suitability for an application. Installation must meet ASCE 7 criteria and meet local governing building codes.
- B. Precautions: The surface of the insulation must not be ruptured due to overdriving of fasteners.

- C. Thermal insulation boards shall be laid on the substrate in parallel rows with end joints staggered and butted as close as possible. All joints shall be tight and at the roof perimeter and roof penetrations, insulation shall be cut neatly and fitted to reduce openings to a minimum. All openings one-fourth inch (1/4") or larger shall be filled with insulation.
- D. Insulation shall be tapered or feathered at drains and scuppers to provide proper drainage (if applicable).
- E. No more insulation shall be installed than can be covered by the completed roof system by the end of the day or the onset of inclement weather.
- F. Tapered insulation and crickets, when specified, shall be placed in accordance with the drawings and/or as required to minimum of NRCA standards.

#### 3.04 ADHERED INSULATION

- A. Specified insulation shall be bonded to the concrete deck with a solid mopping of steep asphalt Type IV, as required by slope (NRCA), at the minimum rate of thirty pounds (30#)  $\pm$  20% per one hundred (100) square feet and immediately walked in place.
- B. The top surface of the first layer of insulation shall be coated with hot asphalt using twenty-five pounds (25#) per one hundred (100) square feet of surface, and a one-fourth inch (1/4") tapered layer of insulation shall be applied using offset joints, so that each layer breaks joints to a minimum of six inches (6") both ways with the preceding layer, and immediately walked in place.

#### 3.05 ADJUSTING

- A. Remove insulation which has been damaged (broken, cracked, punctured, wet, etc.) and install acceptable new units before installation of roof system.

#### 3.06 CLEANING

- A. Remove debris and material wrappers from jobsite. Leave insulation clean and dry, ready to receive roofing membrane.

#### 3.07 PROTECTION

- A. Provide special protection from traffic on completed work.

END OF SECTION 07 21 50

**SECTION 07 41 13**  
**STANDING SEAM METAL ROOF SYSTEM**

**PART 1 - GENERAL**

1.01 SUMMARY

A. SECTION INCLUDES

1. Standing-seam metal roof panels, including trim and accessories
2. RELATED SECTIONS
  - a) Section 07 21 50 - Roof and Deck Insulation
  - b) Section 07 62 00 - Sheet Metal Flashing and Trim
  - c) Section 07 72 00 - Roof Accessories

1.02 REFERENCES

- A. AISI S-100 – North American Specification for the Design of Cold-Formed Steel Structural Members.
- B. ASCE-7: American Society of Civil Engineers -Minimum Design Loads for Buildings and Other Structures; version adopted by local Building Code authority having jurisdiction.
- C. ASTM A792 - Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process.
- D. ASTM E1592 - Standard Test Method for Structural Performance of Sheet Metal Roof and Siding System by Uniform Static Air Pressure Difference
- E. ASTM E1646 - Standard Test Method for Rate of Water Penetration Through Exterior Metal Roof Panel Systems By Uniform Static Air Pressure Difference.
- F. ASTM E1680 - Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems.
- G. ASTM E2140 - Standard Test method for water penetration of metal roof panel systems by static water pressure head.
- H. Factory Mutual 4471 Appendix G - Susceptibility to Leakage Test Procedure for Class 1 Panel Roofs.
- I. UL 580 - Tests for Uplift Resistance of Roof Assemblies.
- J. UL 1897 - Uplift Tests for Roof Covering Systems.

1.03 ADMINISTRATIVE REQUIREMENTS

- A. Pre-installation Meetings:

1. Schedule meeting to discuss roof project requirements, substrate conditions, manufacturer's installation instructions, and manufacturer's warranty requirements before start of work onsite.
2. Required attendees: Contractor, metal deck & roof installer, and any other subcontractors who have equipment penetrating the roof or Work that requires roof access or traffic.

#### 1.04 SUBMITTALS

- A. Product Data: Manufacturer literature indicating product specifications, installation instructions, and standard construction details for specified products.
- B. Shop Drawings: To be prepared by metal roof system manufacturer.
  1. Submit roof plan showing panel layout, profiles, components, accessories, finish colors, gutters and downspouts as applicable.
    - a) Indicate layout of roofing panels and roof panel sizes, including custom fabricated roofing panels if indicated, indicate each trim condition.
    - b) Include details of each condition of installation, including the locations and types of fasteners, sealants and accessories. Indicate locations, gauges, shapes, and methods of attachment of all panels, accessories and trim.
    - c) Indicate products/materials required for construction activities of this section not supplied by manufacturer of products of this section.
    - d) Indicate locations of field applied sealant.
    - e) Indicate locations of field worked conditions.
  2. Roof Panel Attachment:
    - a) Roof plan with wind uplift pressure calculations at field, corner and perimeter areas according to version of ASCE-7 referenced by locally-adopted Building Code and the authority having jurisdiction.
    - b) Roof plan indication roof clip spacing pattern at field, corner, perimeters and where panels are to be fixed from thermal movement.
    - c) Roof panel attachment plan must be stamped by licensed engineer in State in which project is constructed, certifying roof attachment meets local Building Code requirements for wind uplift.
- C. Samples:
  1. Submit two samples, 12" long, full width panel, showing metal gage, and seam.
  2. Two samples each for roof panel clip, bearing plate and clip fastener.
  3. Submit color samples for Architect's selection.
  4. Submit sample warranties:
    - a) Manufacturer Finish Warranty
    - b) Manufacturer Weathertightness Warranty complying with this Specification
    - c) Installer Warranty
- D. Certificates:
  1. Submit roof panel manufacturer's certification that fasteners, clips, backup plates, closures, roof panels and finishes meet the specification requirements.
  2. Submit roof panel manufacturer's certification that installer meets requirements to install roof system and is qualified to obtain required warranties.

- E. Delegated Design Submittals: Submit engineering calculations indicating wind uplift pressure calculations according to local building code for project location with respect to appropriate Importance Factor, Exposure category and Safety Factor. Calculations shall be sealed by a professional engineer licensed to practice structural engineering in the state in which project is located.
- F. Test and Evaluation Reports - Certified test results that indicate roof system meets or exceeds design and performance criteria. Testing to include:
  - 1. Static Water Testing Certification: Manufacturers test data, signed and sealed by a registered professional engineer, in accordance with FM4471 Appendix G, and pass with no leakage. The test specimen must successfully withstand being submerged under 6" of water for a minimum period of 7 days.
  - 2. ASTM E1680 - Manufacturer's test data, signed and sealed by a registered professional engineer, for air infiltration rates meeting the following:
    - a) 16" panel width - 0.0028 cfm/sf maximum at a differential pressure of +/- 20 pounds per square foot.
  - 3. ASTM E1646 - Manufacturer's test data, signed and sealed by a registered professional engineer, indicating no water penetration up to 20 pounds per square foot differential pressure.
  - 4. ASTM E1592 - Manufacturers test data, signed and sealed by a registered professional engineer, substantiating that roof system will meet the allowable wind pressures using an appropriate Factor of Safety in accordance with AISI S-100.
  - 5. ASTM E2140 - Manufacturers test data, signed and sealed by a registered professional engineer, on a test specimen with no end lap, indicating that no water leakage was observed during the testing period of 6 hours with a 6" water head on the specimen.
- G. Qualification Statements: For Manufacturer and Installer.

#### 1.05 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: Manual indicating requirements and recommendations, to maintain the roof system, in good working condition.
- B. Warranty Documentation: Submit final warranties required in this section.

#### 1.06 QUALITY ASSURANCE

- A. Qualifications:
  - 1. Manufacturer Qualifications: Manufacturer shall have a minimum of ten years experience in the manufacturing of metal roof systems similar to those required for this project. Manufacturer must have a current installer training program.
  - 2. Installer Qualifications: Installer ("roofer") to perform the work of this section, shall have no fewer than 5 years of successful experience with the installation of metal roof systems similar to those required for this project. The installer shall be qualified by the roof panel manufacturer for installation of manufacturer-warranted systems.



- B. Field Measurements: Prior to fabrication of panels, take field measurements of structure or substrates to receive panel system. Allow for trimming panel units, where final dimensions cannot be established prior to fabrication.
- C. Mock-Ups: Install a 30 foot wide, quality control area of metal roofing, for review by the Architect. The Architect shall approve the quality of installation for the roof, prior to installing additional metal panels.

#### 1.07 DELIVERY, STORAGE AND HANDLING

- A. Delivery and Acceptance Requirements: Deliver panels to jobsite properly packaged to provide protection against transportation damage. Panels too long to ship shall be site formed onto the roof by manufacturer's factory personnel using manufacturer's factory roll forming equipment.
- B. Storage and Handling Requirements:
  - 1. Exercise care in unloading, storing and erecting panels to prevent bending, warping, twisting, and surface damage.
  - 2. Store all material and accessories above ground on well skidded platforms. Store under waterproof covering. Provide proper ventilation to panels to prevent condensation build-up between each panel.
  - 3. Remove from site and replace panels which are damaged or become water-stained during storage and handling.

#### 1.08 WARRANTIES

- A. Manufacturer Warranties:
  - 1. Panel Material: Furnish manufacturers 25-year warranty covering the panel against rupture, structural failure, or perforation.
  - 2. Panel Coating: Furnish manufacturer's 40-year warranty panel coating warranty covering cracking, checking, and peeling, and 30-year warranty covering fade and chalk.
  - 3. Metal Roof Weathertightness Warranty:
    - a) Manufacturer's Single Source Weathertightness Warranty
      - (1) Warranty term: 20 years commencing on date of substantial completion.
      - (2) Total manufacturer's liability: NRL (No Repair Limit) / sq. ft.
      - (3) Warranty must cover: Pipe Penetrations; Wind Speeds up to 75 mph.
        - (a) Pipes must be centered in pan or a pipe curb must be used. Pipe must be flashed with an EPDM dektite.
        - (b) Manufacturer must supply engineered installation drawings signed and sealed by an engineer registered in the state in which the project is located.

- B. Installer Warranty: Installer to provide warranty agreeing to repair or replace metal roof panels, trim, or accessories that fails due to poor workmanship or faulty installation.
  - 1. Warranty term: 2 years commencing on date of substantial completion.

## **PART 2 - PRODUCTS**

### **2.01 ROOF PANEL SYSTEM**

- A. Basis of Design: 238T by McElroy Metal, Inc. Bossier City, LA, or approved substitute.
- B. Substitution Limitations
  - 1. Requests for approval must be submitted in writing at least ten (10) days prior to bid date and are accompanied by all related test reports and design calculations listed in section 1.4 and Design and Performance criteria Section 2.2.
  - 2. Substitute manufactures will be approved by written addendum to all bidders. Voluntary alternates will not be considered. Substitutions will not be permitted after the bid date of this project.
  - 3. Roof panels proposed for substitution shall fully comply with specified requirements in appearance, assembly, and performance.
- C. Product Options
  - 1. Factory-formed panel, width of 16 inches. Panels shall be symmetrical in design and shall be mechanically seamed with a field operated electric seaming machine approved by the manufacturer.
  - 2. Minimum seam height 2 3/8 inches. Integral seam, double lock and snap together type panels are not acceptable
  - 3. Seam cap matching panel finish with two rows of integral factory hot applied sealant. Sealant should not come in contact with clip, and clip should not require sealant to maintain a weathertight condition.
  - 4. Galvalume coated sheet steel, Type AZ-50, Grade 50 as described in ASTM A792; 24 gauge.
  - 5. Color: Evergreen
  - 6. Finish: Two coat coil applied, baked-on full-strength (70% resin, PVF2) fluorocarbon coating consisting of a nominal 0.25 mil dry film thickness primer, and a nominal dry film thickness of 0.7 - 0.8 mil color coat for a total 0.9 to 1.1 mil total system dry film thickness. Finish to be selected from manufacturer's standard color selection. The back side of the material should be 0.25 mil primer and 0.25 mil polyester wash coat.
  - 7. Roof panel system must allow individual roof panel removal and replacement from any point on the roof without damage to adjacent roof panel(s).
  - 8. Roof panel system must be approved by manufacturer to be installed on slopes as low as 1/2:12.
  - 9. Panels must be furnished and installed in continuous lengths from ridge to eave with no overlaps. Panels too long to ship will be manufactured on site using manufacturer's employees and equipment.
  - 10. Panel surface characteristics to be Striated.
  - 11. Manufacturer weathertightness warranty meeting requirements of this Section.

## 2.02 PERFORMANCE/DESIGN CRITERIA

- A. Thermal Movement: Metal Roofing system, including flashing, shall accommodate unlimited thermal movement without buckling or excess stress on the structure.
- B. Roof panel and trim attachments will be designed to satisfy the requirements of the roof design (shown in shop drawings).
- C. Maximum wind uplift capacity of roof system shall be determined using ASTM E 1592 test results, with an appropriate Factor of Safety in accordance with AISI S-100.
- D. Panel system shall be designed in accordance with the local building code and ASCE7 for project location with respect to appropriate Exposure category, Importance Factor and Factor of Safety in accordance with AISI S-100.
- E. Tested and listed by Underwriters Laboratories to comply with UL 580 for wind uplift Class 90 rating.

## 2.03 THERMAL-BATT INSULATION

- A. Shall be fiberglass batt style insulation six-inch thickness, "R-19" value and profile with polyvinyl protection sheet on the underside.

## 2.04 ACCESSORIES

- A. Panel Clip Screw - screw required in wind uplift rating requirements and design specification for application, with corrosion-resistant coating, in length necessary to penetrate substrate minimum 3/4 inch., as supplied by roof panel manufacturer.
- B. Roof Panel Clip:
  - 1. Intermittent Clip: 16-gauge galvanized steel, one-piece, designed to allow roof panel thermal movement and not contact roof panel cap, as supplied by roof panel manufacturer, meeting wind uplift requirements and design criteria of this section.
  - 2. Intermittent Clip Bearing Plate: If required, in gauge, size and finish as supplied by and approved by roof panel manufacturer for use in roof panel manufacturer's full assembly warranted systems.
  - 3. Multi-Span Clip: as provided by roof panel manufacturer for full assembly warranted systems.
- C. Trim and flashing will be of the same gauge and finish unless approved otherwise by the metal roof system manufacturer.
  - 1. Ridge closures, consisting of metal channel surrounding factory pre-cut closed cell foam, will not be secured through the field of the panel.
  - 2. Trim will be installed specifically as displayed in the manufacturer provided shop drawings. Proposed changes must be approved in writing by the metal roof system manufacturer.

- D. Concealed supports, angles, plates, accessories and brackets: gauge and finish as recommended, and furnished by manufacturer.
- E. Accessory Screw: Size and screw type as provided by panel manufacturer for each use, with prefinished hex washer head in color to match panels where exposed to view.
- F. Rivets: full stainless steel, including mandrel, in size to match application.
- G. Field Sealant:
  - 1. Exposed Sealant: Color coordinated urethane or polymer sealant as supplied by panel manufacturer.
  - 2. Non-exposed Sealant: Non-curing, non-skinning, butyl tape or tube sealant as supplied by manufacturer.
- H. Sealant Tape: non-drying, 100 percent solids, high grade butyl tape, as supplied by panel manufacturer, in sizes to match application.
- I. Pipe Penetration Flashings: 20 year warranted flexible boot type, with stainless steel compression ring. Use silicone type at hot pipes.
- J. Metal Roof Curbs: 0.063 minimum thickness welded aluminum, or 18 gauge minimum welded stainless steel, factory-insulated, with integral cricket, and designed to fit roof panel module, sized to meet application.

### **PART 3 - EXECUTION**

#### **3.01 INSTALLERS**

- A. Must be certified and qualified by Manufacturer.

#### **3.02 EXAMINATION**

- A. Verification of Conditions
  - 1. Ensure surfaces are ready for panel application.
  - 2. Inspect and ensure surfaces are free from objectionable warp, wave, and buckle before proceeding with installation of pre-formed metal roofing.
  - 3. Ensure substrate is ready to receive metal roofing. Report items for correction and do not proceed with metal roof panel system installation until resolved.

#### **3.03 PREPARATION**

- A. Install substrate boards, hat channels, purlins, or furring channels in accordance with manufacturer's recommendations.
- B. Coordinate Work, with installation of other associated Work, to ensure quality application.
- C. Coordinate Work with installation of associated metal flashings and building walls.

- D. Coordinate Work to minimize foot traffic and construction activity on installed finished surfaces.
- E. Coordinate location of pipe penetrations to allow centering of pipe in panel.
- F. Coordinate location of roof curbs, to allow proper integration with roof panel seams.

#### 3.04 INSTALLATION OF THERMAL BATT INSULATION

- A. Install new batt type insulation, protected on two sides with polyvinyl sheeting. Insulation and attachment of new insulation shall be as recommended by the material manufacturer

#### 3.05 INSTALLATION

- A. Comply with and install roofing and flashings in accordance with all details shown on manufacturer's approved shop drawings and manufacturer's product data, instructions, and installation manuals, within specified erection tolerances.
- B. Install field panels in continuous lengths, without end laps
- C. Do not install panels damaged by shipment or handling.
- D. Install intermittent clips with bearing plates, if required, and continuous clips, if required, according to the engineered design pattern in the field, perimeter, and corner areas of the roof.
- E. Fix panels at location depicted on reviewed shop drawing(s).
- F. Fold up pan of panel at ridge, hip and headwalls. Commonly referred to as bread panning.
- G. Allow for required panel clearance at penetrations for thermal movement.
- H. Install concealed supports, angles and brackets as furnished by manufacturer to form complete assemblies.
- I. Remove roof panel and flashing protective film prior to extended exposure to sunlight, heat, and other weather elements.
- J. Field-apply sealant tape and gun-grade sealant according to reviewed shop drawings and manufacturer's requirements for airtight, watertight installation.
- K. Ensure sealant beads and tapes are applied prior to sheet metal installation to achieve a concealed bead. Neatly trim exposed portions of sealant without damaging roof panel or flashing finish.
- L. Align pipe penetrations to occur at center of roof panel. Report and have corrected improperly-placed penetrations before proceeding with panel installation. Remove and replace roof panels which have improperly-placed penetration flashings.

- M. Align roof curbs to fit roof panel module and overlap standing seam(s). Allow for proper drainage on both sides of curb.
- N. Install sheet metal flashings according to manufacturer's recommendations, reviewed shop drawings and in accordance with provision of Section 07 62 00 Sheet Metal and Accessories.

### 3.06 CLEANING

- A. Clean exposed surfaces of work promptly after completion of installation.
- B. Clean mud, dirt, and construction-related debris from panels before panels are scratched or marred.

### 3.07 PROTECTION

- A. Protect Work as required to ensure roofing will be without damage at time of final completion.
- B. Do not allow excessive foot traffic over finished surfaces.
- C. Do not track mud, dirt, or construction-related debris onto panel surfaces.
- D. Replace damaged Work before final completion.

END OF SECTION 07 41 13

**SECTION 07 52 16**  
**SBS ASPHALT MODIFIED BITUMEN ROOF SYSTEM**

**PART 1 - GENERAL**

1.01 RELATED DOCUMENTS

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

1.02 DEFINITIONS

ACM	Asbestos Containing Materials
ASCE	American Society of Civil Engineers
ASTM	American Society for Testing and Materials
CTEM	Coal-Tar Elastomeric Membrane
EIP	Ethylene Interpolymer
EPA	Environmental Protection Agency
EPDM	Ethylene Propylene Diene Monomer
EPS	Expanded Polystyrene
EVT	Equiviscous Temperatures
FM	Factory Mutual
IBC	International Building Code
KEE	Ketone Ethylene Ester
NDL	No Dollar Limit
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NRCA	National Roofing Contractors Association
OSHA	Occupational Safety & Health Administration
SBS	Styrene-Butadiene-Styrene
SDI	Steel Deck Institute
SMACNA	Sheet Metal and Air Conditioning Contractors National Association
UL	Underwriters Laboratories, Inc.

1.05 REFERENCES (INCLUDING LATEST REVISIONS)

- A. Comply with governing local, state, and federal regulations, safety standards, and codes.
- B. Testing Laboratory Services: Test results shall meet or exceed established standards.
- C. Underwriters Laboratories, Inc. (Roofing Covering): Class A fire hazard classification.
- D. American Society for Testing and Materials (ASTM)
- E. The National Roofing Contractors Association (NRCA) - Roofing and Waterproofing Manual
- F. Sheet Metal and Air Conditioning Contractors National Association (SMACNA) - Architectural Sheet Metal Manual

G. American Society of Civil Engineers – ASCE 7

#### 1.03 INSTALLER QUALIFICATIONS

- A. Roofing installer must be:
1. Currently prequalified with the Owner in accordance with Owner's prequalification requirements.
  2. Currently in good standing with the manufacturer.
  3. Installer must be an experienced single firm specializing in the type of roofing repair and/or removal and replacement work required, employing only experienced workers for the class of work in which they are employed, having at least five (5) years successful experience on projects similar in size and scope and acceptable as applicators by the Owner's representative.
  4. Contractor must have successfully completed previous projects warranted by the manufacturer.
- B. It shall remain each Bidder's responsibility to determine his current status with the manufacturer's certification plan.

#### 1.05 MANUFACTURER QUALIFICATIONS

- A. Manufacturer Requirements: Ensure that the primary roofing materials manufacturer provides direct trained company personnel to attend necessary job meetings, perform periodic inspections as necessary, and conducts a final inspection upon successful completion of the project.

#### 1.06 CONTRACT DOCUMENT QUALITY ASSURANCE

- A. In the case of an inconsistency between the drawings and specifications or within either document not clarified by addendum, the better quality or greater quantity of work shall be provided in accordance with the Project Manager's/Architect's interpretation.

#### 1.06 SUBMITTALS

- A. Samples and Manufacturer's Submittals: Submit prior to delivery or installation.
1. Samples of all roofing system components including all specified accessories.
  2. Samples of all materials used on the project, which are not supplied by the membrane manufacturer, shall be submitted to the membrane manufacturer for written approval prior to work starting.
  2. Submit samples of proposed warranty complete with any addenda necessary to meet the warranty requirements as specified.
  3. Submit latest edition of manufacturer's specifications and installation procedures. Submit only those items applicable to this project.
  4. A written statement from the roofing materials manufacturer approving the installer, specifications and drawings as described and/or shown for this project and stating the intent to guarantee the completed project.
- B. Shop Drawings: Provide manufacturer's approved details of all perimeter conditions, projection conditions, and any additional special job conditions which require details other than indicated in the drawings.



- C. Maintenance Procedures: Within ten days of the date of Substantial Completion of the project, deliver to the Owner three copies of the manufacturer's printed instructions regarding care and maintenance of the roof.

#### 1.04 QUALITY ASSURANCE

- A. Regulatory Requirements:
  - 1. System shall be classified by Underwriters Laboratories Inc., UL 790, as Class A roof covering.
  - 2. System shall be classified by FM Global as 1-90 approved assembly. Follow installation requirements for 1-90.
  - 3. Follow local, state, and federal requirements, safety standards, and codes.
  - 4. Refer to applicable building codes for roofing system installation requirements and limitations. When conflict exists, the more restrictive document will govern.
  
- B. Pre-installation Conference:
  - 1. Prior to roofing installation, conduct pre-installation conference at project site.
  - 2. Attendance: Owner, Consultant, Contractor, project superintendent, roof applicator, and roof manufacturer's technical representative.
  - 3. Agenda:
    - a) Scheduling of roofing operation.
    - b) Daily production anticipated.
    - c) Designation of key individuals and their respective responsibilities.
    - d) Processing procedures of field and change orders.
    - e) Review of staging and material storage locations.
    - f) Accommodations for temporary services (water, power).
    - g) Coordination of work by other trades.
    - h) Protection of completed roofing.
    - i) Emergency rain protection procedures.
    - j) Discussion of process for manufacture's inspection and acceptance of completed roofing and flashings.
    - k) Manufacturer's deck inspection to be performed.
  
- C. Installation:
  - 1. Installation shall be in accordance with current published application procedures and standards set forth by National Roofing Contractors Association.
  - 2. Follow Underwriters Laboratories' requirements acceptable for use with specified products or systems.
  - 3. Installation shall be in accordance with manufacturer's current published application procedures.
  - 4. Roofing shall be as described in this section and shall be provided and approved by roof system manufacturer. Materials not manufactured or provided by manufacturer shall have written approval from manufacturer stating that materials are acceptable and are compatible with other materials and systems required.
  - 5. There shall be no deviations made from manufacturer's published specification, this specification, or approved shop drawings without prior written approval of Owner's representative and Roof Membrane Manufacturer.
  - 6. Perform work on this section in accordance with best standards of practice relating to trades involved.

- D. Pullout Tests: Conduct pullout test on deck using appropriate fastener prior to roof system installation. Submit pullout results for manufacturer's review to determine specific fastening pattern for this project, minimum uplift requirements shall conform to current ASCE 7 criteria.
- E. Material Manufacturer's Inspection Paid for By Contractor: Minimum of two inspections shall be made during Project schedule by authorized representative of roof system manufacturer to ensure that said Project is installed in accordance with manufacturer's requirements. Manufacturer shall provide written report to the Owner's representative within five days of each inspection stating acceptance of Contractor procedures and outlining items of non-compliance with manufacturer's requirements.
- F. Material Manufacturer's Final Inspection:
  - 1. Manufacturer's authorized representative shall provide final inspection at completion of project to ensure that project has been completed in accordance with manufacturer's requirements. Upon approval and acceptance of project, manufacturer's warranty certification shall be written, executed, and furnished to Owner.
  - 2. Contractor shall pay for manufacturer's final inspection and additional inspections.
- G. Laboratory Testing and Samples:
  - 1. At Owner's request, obtain 3 field samples of completed roof membrane and assembly. Take samples at locations designated by Owner's representative, Owner's representative, and test for compliance with requirements on Contract Documents and with manufacturer's published performance criteria. Test shall be performed by nationally recognized testing laboratory in accordance with accepted ASTM methods. Contractor shall assume costs for extraction and patch of samples. Owner will assume costs for testing of field sample.
  - 2. Correct deficiencies in accordance with manufacture's recommended procedures at no cost to Owner.
  - 3. If, for any reason, areas that are tested by Owner fail to meet manufacturer's requirements, then subsequent expense for retesting of those areas will be borne by Contractor.

#### 1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in manufacturer's original, unopened containers and rolls with all labels intact and legible including labels indicating appropriate warnings, storage conditions, lot numbers, and usage instructions. Materials damaged in shipping or storage shall not be used.
- B. Manufacturer's packaging and/or roll plastic is not acceptable for exterior storage. Tarpaulin with grommets shall be minimum acceptable for exterior coverings. All materials stored as above shall be minimum of four inches (4") off the substrate, and the tarpaulin tied off with rope.
- C. Deliver materials requiring fire resistance classification to the job with labels attached and packaged as required by labeling service.
- D. Deliver materials in sufficient quantity to allow continuity of work.

- E. Handle and store material and equipment in such a manner as to avoid damage. Liquid products shall be delivered sealed, in original containers.
- F. Handle rolled goods so as to prevent damage to edge or ends.
- G. Select and operate material handling equipment so as not to damage existing construction or applied roofing.
- H. Moisture-sensitive products shall be maintained in dry storage areas and properly covered. Provide continuous protection of materials against wetting and moisture absorption. Store roofing and flashing materials on clean raised platforms with weather protective covering when stored outdoors.
- I. Store rolled goods on end.
- J. Protect materials against damage by construction traffic.
- K. The proper storage of materials is the sole responsibility of the contractor and any wet or damaged roofing materials shall be discarded, removed from the project site, and replaced prior to application.
- L. Comply with fire and safety regulations, especially with materials which are extremely flammable and/or toxic. Use safety precautions indicated on labels.
- M. Products liable, such as emulsions, to degrade as a result of being frozen shall be maintained above 40° F in heated storage.
- N. No storage of materials shall be permitted on roof areas other than those materials that are to be installed the same day. Any exception must be in written form.

#### 1.08 SITE CONDITIONS

- A. Job Condition Requirements:
  - 1. Coordinate the work of the contractor with the work to be performed by other trades, to ensure proper sequencing of the entire work. The contractor is to schedule his work so that adequate time is allowed for other trades to perform their work.
  - 2. Apply roofing in dry weather.
  - 3. Do not apply roofing when ambient temperature is below 40° F (4° C).
  - 4. Proceed with roofing work only when weather conditions are in compliance with manufacturer's recommended limitations, and when conditions will permit the work to proceed in accordance with specifications.
  - 5. Schedule the work so the building will be left watertight at the end of each day. Do not remove more roofing or insulation material than can be reinstalled in any working day.
  - 6. Load placed on the roof at any point shall not exceed the safe load for which the roof is designed.
  - 7. All surfaces to receive new roofing shall be smooth, dry, and free from dirt, debris, and foreign material before any of this work is installed. Competent operators shall be in attendance at all times equipment is in use. Materials shall be stored neatly in areas designated by the Owner.

8. The contractor is to be aware of the potential for roof leaks on the existing roof as a result of ruptured blisters and/or roof mat damage caused by the vacuum process, foot traffic, or material and equipment storage. The contractor is to take all necessary precautions to prevent damage to the existing roof. All damage to the existing roof that could result in roof leaks is to be repaired on a daily basis by the roofing contractor.
  9. The contractor shall follow local, state, and federal regulations, safety standards, and codes for the removal, handling, and disposal of asbestos containing materials, if present. When a conflict exists, use the stricter document.
  10. Due caution should be exercised so as not to alter the structural integrity of the deck. When cutting through any deck, care should be taken so as not to damage the deck or any part of the deck, such as post tension cables, etc.
  11. Torch Safety: Crew members handling torches shall be trained by an Authorized Certified Roofing Torch Applicator (CERTA) Trainer, be certified according to CERTA torch safety guidelines as published by the National Roofing Contractor's Association (NRCA), and follow torch safety practices as required by the contractor's insurance carrier. Designate one person on each crew to perform a daily fire watch. The designated crew member shall watch for fires or smoldering materials on all areas during roof construction activity, and for the minimum period required by CERTA guidelines after roofing material application has been suspended for the day
  12. The contractor is to verify the location of all interior ducts, electrical lines, piping, conduit, and/or similar obstructions. The contractor is to perform all work in such a manner as to avoid contact with the above mentioned items.
  13. Surface and air temperatures should be a minimum 40° F during applications of cleaner and waterproof coating and remain above 40° F for a minimum of four (4) hours following applications. Verify compatibility of cleaner with coatings, paints, primers and joint sealers specified. Advise Owner's representative of any problems in this regard prior to commencing cleaning operations.
  14. Temporary Sanitary Facilities: The contractor shall furnish and maintain temporary sanitary facilities for employees' use during this project. These will be removed after the completion of the project. All portable facilities shall comply with local laws, codes, and regulations.
  15. For further information regarding roofing material manufacturer's recommendations for project conditions, refer to the manufacturer's published application manual.
  16. The contractor shall take all necessary precautions to protect the roof mat and deck from damage. The contractor shall be responsible for repairing all new areas of damage caused by the negligence of the contractor, at the contractor's expense. The Owner's on-site representative shall determine damage caused by contractor negligence.
  17. Follow insurance underwriter's requirements acceptable for use with specified products or systems.
- B. Protection of Work and Property:
1. Work: The contractor shall maintain adequate protection of all his work from damage and shall protect the Owner's and adjacent property from injury or loss arising from this contract. He shall provide and maintain at all times any OSHA required danger signs, guards, and/or obstructions necessary to protect the public and his workmen from any dangers inherent with or created by the work in progress. All federal, state, and city rules and requirements pertaining to safety and all EPA standards, OSHA standards, NESHAP regulations pertaining to asbestos as required shall be fulfilled by the contractor as part of his proposal.

2. Property: Protect existing planting and landscaping as necessary or required to provide and maintain clearance and access to the work of this contract. Examples of two categories or degrees of protection are generally as follows: a) removal, protection, preservation, or replacement and replanting of plant materials; b) protection of plant materials in place, and replacement of any damage resulting from the contractor's operations.
  3. Twenty-four Hour Call: The contractor shall have personnel on call 24 hours per day, seven (7) days per week for emergencies during the course of a job. The Owner's Project Manager is to have the 24 hour numbers for the contact. Contractor must be able to respond to any emergency call and have personnel on-site within two (2) hours after contact. Numbers available to the Owner's Project Manager are to be both home and office numbers for:
    - a) Job Foreman
    - b) Job Superintendent
    - c) Owner or Company Officer
- C. Damage to Work of Others: The contractor shall repair, refinish, and make good any damage to the building or landscaping resulting from any of his operation. This shall include, but is not limited to, any damage to plaster, tile work, wall covering, paint, ceilings, floors, or any other finished work. Damage done to the building, equipment, or grounds must be repaired at the successful contractor's expense holding the Owner harmless from any other claims for property damage and/or personal injury.
- D. Measurements: It will be the contractor's responsibility to obtain and/or verify any necessary dimensions by visiting the job site, and the contractor shall be responsible for the correctness of same. Any drawings supplied are for reference only.
- E. Use of Premises:
1. The contractor is advised that the Owner will occupy the building at all times, and the contractor must provide all safeguards required to protect personnel and to keep noise levels as low as reasonably possible for each operation.
  2. The contractor shall:
    - a) Coordinate work in such a manner as to not interfere with the normal operation of the building.
    - b) Assume full responsibility for protection and safekeeping of products stored on premises.
    - c) Agree to hold the Owner harmless in any and all liability of every nature and description which may be suffered through bodily injuries, including death of any persons by reason of negligence of the contractor, agents, employees, or subcontractors.
- F. Cleaning and Disposal of Materials:
1. Contractor shall keep the job clean and free from all loose materials and foreign matter. Contractor shall take necessary precautions to keep outside walls clean and shall allow no roofing materials to remain on the outside walls.
  2. All waste materials, rubbish, etc., shall be removed from the Owner's premises as accumulated. Rubbish shall be carefully handled to reduce the spread of dust. A suitable scrap chute or hoist must be used to lower any debris. At completion, all work areas shall be left broom clean and all contractor's equipment and materials removed from the site.

3. All bituminous or roofing related materials shall be removed from ladders, stairs, railings, and similar parts of the building.
4. Debris shall be deposited at an approved disposal site.

#### 1.09 SEQUENCING AND SCHEDULING

- A. Coordinate roofing schedule with work of other trades.
- B. Plan lay up roofing membrane with respect to deck slope. Avoid situations where excessive drainage could pass into completed roofing.
- C. Maintain communication with roofing manufacturer's representative to inform of progress and to schedule periodic sample testing.
- D. All penetrations shall be made in roof prior to beginning with roof installation.

#### 1.10 WARRANTY

- A. Roofing - Manufacturer: Project shall be installed in such a manner that the roofing material manufacturer will furnish a written twenty (20) year NDL type warranty from the date of substantial completion of the completed project.
- B. Roofing - Contractor: The contractor, jointly with any subcontractors employed by him, shall guarantee the work required and performed under this contract will be free from defects in workmanship and materials, and that the building will be and remain waterproof for a five (5) year warranty period, after the Owner accepts the work as substantially complete. The warranty shall be in approved notarized written form, to obligate the contractor and his subcontractors, if any, to make good the requirements of the warranty.
- C. During the proposal period each Bidder shall make arrangements with the material manufacturer to provide the required warranty. Refer to SUBMITTALS Paragraph in this section for requirements concerning submittals of warranty.

### **PART 2 - PRODUCTS**

#### 2.01 GENERAL

- A. Compatibility: Provide materials that are recommended by manufacturers to be fully compatible with indicated substrates, or provide separation materials as required to eliminate contact between incompatible materials.
- B. All materials shall be furnished, specified, or approved in writing by the manufacturer issuing the warranty.
- C. All materials used on the project shall be asbestos free.
- D. Liquid-type auxiliary materials shall meet VOC limits of authorities having jurisdiction.

## 2.02 MEMBRANE SYSTEM

- A. **Roofing Membrane Assembly:** A roof membrane assembly consisting of two plies of a prefabricated, reinforced, homogeneous Styrene-Butadiene-Styrene (SBS) block copolymer modified asphalt membrane, applied over a prepared substrate. Reinforcement mats shall be impregnated/saturated and coated each side with SBS modified bitumen blend and coated one side with a torch grade SBS bitumen blend adhesive layer. The adhesive layer shall be manufactured using a process that embosses the surface with a grooved pattern to provide optimum burn-off of the plastic film and to maximize application rates. The cross sectional area of the sheet material shall contain no oxidized or non-SBS modified bitumen. The roof system shall pass 500 cycles of ASTM D 5849 Resistance to Cyclic Joint Displacement (fatigue) at 14°F (-10°C). Passing results shall show no signs of membrane cracking or interply delamination after 500 cycles. The roof system shall pass 200 cycles of ASTM D 5849 after heat conditioning performed in accordance with ASTM D 5147. The assembly shall possess waterproofing capability, such that a phased roof application, with only the modified bitumen base ply in place, can be achieved for prolonged periods of time without detriment to the watertight integrity of the entire roof system.
- B. **Modified Bitumen Base Sheet and Stripping Ply:** Siplast Paradiene 20 - torchable grade, or approved equal.

Physical Properties (ASTM D 5147 Test Method)

Thickness (avg):	114 mils
Thickness (min):	110 mils
Weight (min per 100 ft <sup>2</sup> of coverage):	76 lb (3.7 kg/m <sup>2</sup> )
Maximum filler content in elastomeric blend:	35% by weight
Low temperature flexibility @ -15°F:	PASS
Peak Load (avg) @ 73°F:	30 lbf/inch
Peak Load (avg) @ 0°F:	75 lbf/inch
Ultimate Elongation (avg.) @ 73°F:	50%
Dimensional Stability (max):	0.1%
Compound Stability (min):	250°F
Approvals:	UL Class listed, FM Approved (products shall bear seals of approval)
Reinforcement:	fiberglass mat or other meeting the performance and dimensional stability criteria
Surfacing	Ceramic granules

- B. **Finish Ply:** Siplast Paradiene 30 FR - torchable grade, or approved equal.

Physical Properties (ASTM D 5147 Test Method)

Thickness (avg):	138 mils
Thickness at selvage (coating thickness) (avg):	118 mils
Thickness at selvage (coating thickness) (min):	114 mils
Weight (min per 100 ft <sup>2</sup> of coverage):	112 lb
Maximum filler content in elastomeric blend:	35% by weight
Low temperature flexibility @ -15°F:	PASS
Peak Load (avg) @ 73°F:	30 lbf/inch
Peak Load (avg) @ 0°F:	75 lbf/inch
Ultimate Elongation (avg.) @ 73°F:	55%
Dimensional Stability (max):	0.1%
Compound Stability (min):	250°F
Granule Embedment (max loss):	2.0 grams per sample
Approvals:	UL Class listed, FM Approved (products shall bear seals of approval)

Reinforcement:	fiberglass mat or other meeting the performance and dimensional stability criteria
Surfacing	Ceramic granules

**2.03 FLASHING MEMBRANE ASSEMBLY**

- A. Flashing Membrane Assembly: A flashing membrane assembly consisting of a prefabricated, reinforced, Styrene-Butadiene-Styrene (SBS) block copolymer modified asphalt membrane with a continuous, channel-embossed metal-foil surfacing. The finish ply shall conform to ASTM D 6298 and the following physical and mechanical property requirements.
- B. Cant Backing Sheet and Flashing Reinforcing Ply: Siplast Paradiene 20 SA or approved equal.

Physical Properties (ASTM D 5147 Test Method)

Thickness (avg)	102 mils
Thickness (min)	98 mils
Weight (min per 100 ft <sup>2</sup> of coverage)	72 lb
Maximum filler content in elastomeric blend	35% by weight
Low temperature flexibility @ -15° F	PASS
Peak Load (avg) @ 73° F	30 lbf/inch
Peak Load (avg) @ 0° F	75 lbf/inch
Ultimate Elongation @ 73° F	50%
Dimensional Stability (max)	0.1%
Compound Stability (min - sheet)	250° F
Compound Stability (min – adhesive coating)	212° F
Approvals	UL Class listed, FM Approved (products shall bear seals of approval)
Reinforcement	Fiberglass mat or other meeting the performance and dimensional stability criteria
Back Surfacing	Polyolefin film

- C. Metal-Clad Modified Bitumen Flashing Sheet: Siplast Veral Aluminum or approved equal.

Physical Properties (ASTM D 5147 Test Method)

Thickness (avg)	142 mils
Thickness (min)	138 mils
Weight (min per 100 ft <sup>2</sup> of coverage)	92 lb (4.6 kg/m <sup>2</sup> )
Coating Thickness – back surface (min)	40 mils
Maximum filler content in elastomeric blend	35% by weight
Low temperature flexibility @ 0° F	PASS
Peak Load (avg) @ 73° F	85 lbf/inch
Peak Load (avg) @ 0° F	180 lbf/inch
Ultimate Elongation @ 73° F	45%
Tear-Strength (avg)	120 lbf
Dimensional Stability (max)	0.2%
Compound Stability (min)	225° F
Cyclic Thermal Shock Stability (max)	0.2% (ASTM D 6298)
Approvals	UL Approved, FM Approved (products shall bear seals of approval)
Reinforcement	Fiberglass scrim mat or other meeting the performance and dimensional stability criteria
Surfacing	Aluminum metal foil



#### 2.04 CATALYZED ACRYLIC RESIN FLASHING SYSTEM

- A. A specialty flashing system consisting of a liquid-applied, fully reinforced, multi-component acrylic membrane installed over a prepared or primed substrate. The flashing system consists of a catalyzed acrylic resin primer, basecoat and topcoat, combined with a non-woven polyester fleece. The resin and catalyst are pre-mixed immediately prior to installation. The use of the specialty flashing system shall be specifically approved in advance by the membrane manufacturer for each application.

#### 2.05 BITUMEN

- A. Shall be ASTM D 312 Type IV extra steep asphalt, or as acceptable by roofing manufacturer to comply with warranty requirements.

#### 2.06 UNDERLAYMENT PLIES

- A. Shall be Underwriters Laboratory approved.

#### 2.07 INSULATION

- A. All insulation shall be in compliance with Section 07215 Roof and Deck Insulation.
- B. All insulation shall be approved in writing by the membrane manufacturer as to thickness, type, and manufacturer. All insulation must be approved for the specific application, Underwriters Laboratory approved, and be listed in the FM Global Approval Guide.

#### 2.08 CANT STRIP

- A. Structural: Shall be wood where used for structural purposes meeting NRCA, FM Global and Underwriters Laboratory guidelines.
- B, Non-structural: Shall be wood fiber where used for non-structural purposes, conforming to ASTM C208 and C209.

#### 2.09 ROUGH LUMBER

- A. All wood nailers, structural cants, curbs, and other miscellaneous rough carpentry, shall be lumber as recommended by NRCA, and Underwriters Laboratory guidelines.

#### 2.10 SEALANTS

- A. Sealant: A moisture-curing, non-slump elastomeric sealant designed for roofing applications. The sealant shall be approved by the roof membrane manufacturer for use in conjunction with the roof membrane materials. Acceptable types are as follows: Siplast PS-304 Elastomeric Sealant by Siplast or approved equal.

#### 2.11 FASTENERS

- A. Fasteners and fastening plates or bars shall be as recommended by the fastener manufacturer for the specific application.

- B. Fastener for Brick: Shall be one-fourth inch by two inches (1/4" x 2"), zinc with plated steel or stainless steel nail, one piece unit, flat head, as manufactured by Rawl Zamac Nailin, or approved equal.

## 2.12 BITUMINOUS CUTBACK MATERIALS

- A. Primer: An asphalt, solvent blend conforming to ASTM D 41 requirements. Siplast PA-1125 Asphalt Primer by Siplast, or approved equal.

ASTM	D 41
Flash Point	105° F
Viscosity at 80° F (ASTM D 217)	50-60 K.U.
Weight per gallon	7.4 pounds
Drying time (to touch)	Min. 4 hours

- B. Primer for Self-Adhesive Sheets: A quick drying, low-VOC, water-based, high-tack primer specifically designed to promote adhesion of roofing and waterproofing sheets to approved substrates. Primer shall meet South Coast Air Quality District and Ozone Transport Commission requirements. Siplast TA-119 Primer by Siplast or approved equal.
- C. Mastics: An asphalt cutback mastic, reinforced with non-asbestos fibers, used as a base for setting metal flanges conforming to ASTM D 4586 Type II requirements. Siplast PA-1021 Plastic Cement by Siplast or approved equal.

## 2.13 LEAD JACKS

- A. Shall be four pound (4#) lead, and of dimensions required to completely cover existing plumbing stack.

## 2.14 TERMINATION/PRESSURE BARS

- A. Aluminum strip shall be extruded channel bar with a mill finish, height to be one inch (1"), thickness to be 0.25" ± 0.1", leg height to be one-fourth inch (1/4") top and bottom, leg angle to be ninety degrees (90°), for perimeter and curb anchorage, having predrilled holes six inches (6") on center, as manufactured by Olympic Fasteners, or approved equal.

## 2.15 ROOF WALKWAY MEMBRANE

- A. Walktread: A prefabricated, puncture resistant polyester core reinforced, polymer modified bitumen sheet material topped with a ceramic-coated granule wearing surface. Paratread Roof Protection Material by Siplast or approved equal.

1. Thickness: 0.217 in
2. Weight: 1.8 lb/ft<sup>2</sup>
3. Width: 30 in

## 2.18 ELASTOMERIC SEALANT

- A. Multi-Component Polysulfide Sealant: Except as otherwise indicated, provide manufacturer's standard, non-modified, two-or-more-part, polysulfide-based, elastomeric sealant; complying with either ASTM C 920, Type M, Class 25, or FS TT-S-00227E, Class A; self-leveling grade/type where used in joints of surfaces subject to traffic, otherwise non-sag grade/type, as manufactured by Sonneborn, or approved equal.
- B. Durability: Less than 0.5 square inch adhesion/cohesion loss for three (3) samples of both mortar and aluminum; ASTM C 719 test procedure.
- C. Adhesion in Peel: Fifteen pound (15#) peel strength and ten percent (10%) maximum loss of bond to substrate; ASTM C 794.
- D. Bituminous Modification: Where joint surfaces contain or are contaminated with bituminous materials, provide manufacturer's modified type sealant which is compatible with joint surfaces (modified with coal tar or asphalt as required).

## 2.19 DELIVERY AND STORAGE

- A. All materials shall be delivered with appropriate carton and can labels indicating appropriate warnings, storage conditions, lot numbers, and usage instructions. Materials damaged in shipping or storage shall not be used.

## 2.20 PRECAUTIONS

- A. Some of the indicated materials are extremely flammable and/or toxic. Use precautions indicated on can and carton labels.

## 2.21 MISCELLANEOUS MATERIALS

- A. Other materials shall be as specified or of the best grade for the proposed use as recommended by the manufacturer.

## **PART 3 - EXECUTION**

### 3.01 REFERENCE

- A. In the instance of a conflict between these specifications and those of the manufacturer and/or current NRCA, Underwriters Laboratory, and IBC guidelines, the more stringent specifications (better quality or greater quantity of work) shall take precedence.
- B. The manufacturer's Technical Specifications and current NRCA, Underwriters Laboratory and IBC guidelines shall be considered a part of this specification and shall be referred to for general application procedures and recommendations.

- D. Application of materials shall be in strict accordance with the manufacturer's recommendations and current NRCA, Underwriters Laboratory and IBC guidelines, except where more stringent requirements (better quality or greater quantity of work) are shown or specified.
- E. General Installation:
1. Comply with governing local, state, and federal regulations, safety standards, and codes.
  2. Protect adjacent areas with tarpaulin or other durable materials.
  3. Contractor shall prevent overspray, and be responsible for parking lot areas and/or adjoining areas not part of this contract.
  4. Contractor shall be responsible for sealing, as required, all openings that may allow bitumen migration or drippage, i.e. pitch dams, envelopes, and filler strips.
  5. Prepare surfaces according to manufacturer's or applicator's published instructions. All metal that is to receive bitumen, or come in contact with bitumen or adhesive, shall be first primed with appropriate primer. Any prefinished galvanized sheet steel that is to receive bitumen, or come in contact with bitumen or adhesive, shall be scored, scuffed or abraded before receiving primer application.
  6. Use cleaning materials or primers necessary to render an acceptable surface/substrate.
  7. All surfaces/substrates shall be clean and dry prior to application of materials.
  8. Prior to application of felts and membrane, all foreign matter, gravel, etc., shall be removed from the insulation and/or substrate.
  9. Prior to application of flashing membranes, substrate shall be clean and free of any previously installed roofing materials. Contractor shall ensure that all components of substrate be structurally sound before application of flashing materials.
  10. Ambient temperature shall be 40° F and rising.
  11. The underlayment plies and field membranes are to be laid in the direction of maximum roof slope, working from bottom of slope toward ridge.
  12. Wrinkles, buckles, kinks, and fishmouths are not acceptable when laying felt and membrane.
  13. Dry voids of felt on felt or membrane on membrane are not acceptable.
  14. Where deteriorated base flashing is removed, primed cant strips shall be installed at the intersection of the deck and the vertical surfaces. All flashings shall be mechanically top-fastened with a termination bar a minimum of six inches (6") on center at the top leading edge, and be a minimum of eight inches (8") in height from finished membrane.

### 3.02 SUBSTRATE PREPARATION

- A. All substrate preparation shall be in accordance with Section 07 59 10 Membrane Reroofing Preparation.

### 3.03 ROUGH CARPENTRY

- A. All rough carpentry shall be installed in accordance with Section 06 10 50 Miscellaneous Carpentry.
- B. Toe of cant shall be level with the surface to receive new roof membrane and in all cases anchored according to NRCA, Underwriters Laboratory and IBC guidelines.

- C. Where parapet wall exists, specified vertical wall shimming material shall be installed beginning at roof height up to a minimum of twelve inches (12") above finished roof surface, or as detailed, to provide substrate for horizontal termination of roof to wall flashing system.
- G. Any lumber or shimming required for attachment, or to make material flashing flush or level with offsets and/or transitions, shall be incorporated in these specifications.

### 3.06 CANTS

- A. All wood cants shall be installed in accordance with Section 06 10 50 Miscellaneous Carpentry.
- B. Toe of cant shall be level with the surface to receive new roof membrane and in all cases anchored according to NRCA, Underwriters Laboratory and IBC guidelines.

### 3.07 INSULATION - GENERAL

- A. Installation of roof insulation shall be in accordance with Section 07 21 60 Roof and Deck Insulation.
- B. Manufacturer's Instructions: In regard to attachment, the manufacturer's instructions or specifications shall determine the suitability for an application. Installation must meet ASCE 7 criteria and meet local governing building codes.
- C. Precautions: The surface of the insulation must not be ruptured due to overdriving of fasteners.
- D. Insulation shall be tapered or feathered at drains and scuppers to provide proper drainage (if applicable).
- E. No more insulation shall be installed than can be covered by the completed roof system by the end of the day or the onset of inclement weather.

### 3.08 ROOF MEMBRANE INSTALLATION

- A. Membrane Application: Apply roofing in accordance with roofing system manufacturer's instructions and the following requirements. Application of roofing membrane components shall immediately follow application of base sheet and/or insulation as a continuous operation.
- B. Aesthetic Considerations: Construction of an aesthetically pleasing overall appearance of the finished roof application is a standard requirement for this project. Make necessary preparations, utilize recommended application techniques, apply the specified materials including granules, and exercise care in ensuring that the finished application is acceptable to the Owner.

- C. Priming with tacky primer: Apply the specified tacky primer by roller or spray in an even film. Refer to the manufacturer's literature for the approved rate of application over various substrate types. Allow the primer to dry until it leaves a slightly sticky surface without transfer when touched.
- D. Priming with asphaltic primer: Prime metal and concrete and masonry surfaces with a uniform coating of the specified asphalt primer.
- E. Bitumen Consistency: Cutting or alterations of bitumen, primer, and sealants will not be permitted.
- F. Roofing Application: Apply all layers of roofing free of wrinkles, creases or fishmouths. Exert sufficient pressure on the roll during application to ensure prevention of air pockets.
  - 1. Apply all layers of roofing perpendicular to the slope of the deck.
  - 2. Fully bond the base ply to the prepared substrate, utilizing minimum 3 inch side and end laps. Apply each sheet directly behind the torch applicator. Cut a dog ear angle at the end laps on overlapping selvage edges. Using a clean trowel, apply top pressure to top seal T-laps immediately following sheet application. Stagger end laps a minimum of 3 feet.
  - 3. Fully bond the finish ply to the base ply, utilizing minimum 3 inch side and end laps. Apply each sheet directly behind the torch. Stagger end laps of the finish ply a minimum 3 feet. Cut a dog ear angle at the end laps on overlapping selvage edges. Using a clean trowel, apply top pressure to top seal T-laps immediately following sheet application. Stagger side laps of the finish ply a minimum 12 inches from side laps in the underlying base ply. Stagger end laps of the finish ply a minimum 3 feet from end laps in the underlying base ply.
  - 4. Maximum sheet lengths and special fastening of the specified roof membrane system may be required at various slope increments where the roof deck slope exceeds 1/2 inch per foot. The manufacturer shall provide acceptable sheet lengths and the required fastening schedule for all roofing sheet applications to applicable roof slopes.
- G. Granule Embedment: Broadcast mineral granules over all bitumen overruns on the finish ply surface, while the bitumen is still hot or the adhesive is soft, to ensure a monolithic surface color.

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

### 3.04 ROOF SYSTEM INTERFACE WITH RELATED COMPONENTS

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

### 3.05 FIELD QUALITY CONTROL AND INSPECTIONS

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

C. Final Inspection

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

**END OF SECTION 07 52 18**



**SECTION 07 56 00**  
**FLUID APPLIED COATING OVER GRANULATED MODIFIED BITUMEN**

**PART 1 - GENERAL**

1.01 AREAS and WORK INCLUDED

- A. The work shall include furnishing all materials, labor, equipment, services, and roofing accessories to complete the installation of the repair system specified herein.

1.02 QUALITY CONTROL

- A. All applicable requirements of the manufacturer's specification and application guide are to be considered hereby incorporated by this reference. Any conflicts or ambiguities between these project documents, manufacturer's requirements, and any other documents pertaining to this project shall be brought to the attention of manufacturer's Technical Representative and the Owner's representative before the proposal is submitted. In the event that such questions are not resolved before proposal submission, the Contractor will be considered to have based his proposal on the more stringent requirements.
- B. Contractor Requirements:
1. The contractor bidding work to these specifications shall be approved by the primary coating manufacturer as an approved applicator prior to submitting this bid.
  2. Prior to the award of the contract, the Contractor shall furnish to the Owner satisfaction, evidence of his status as an approved applicator, a list of successfully completed projects of similar scope, and such financial information as requested.
- C. Primary Coating Manufacturer Requirements:
1. Basis of Design: Tufflex Polymers – Fontana, California
  2. Manufacturer shall have been engaged in the production of roof coatings and waterproofing materials for a minimum of 20 years.
  3. Primary coating manufacturer shall be an associate member in good standing of the National Roofing Contractor's Association.
  4. Primary coating manufacturer, at the Owner's representative's request may make available a technical representative who will monitor the procedures used by the contractor to assure adherence to manufacturer's recommended application procedures.
  5. The primary coating manufacturer's representative shall advise the Contractor of any materials, detail of the work, or work methods that do not comply with these specifications and any accompanying drawings. If corrections are not completed, the Technical Representative shall notify the Owner's representative of the items which do not comply.

### 1.03 SUBMITTALS

- A. At least ten (10) days before the pre-construction meeting, the Contractor shall submit to the Owner's representative, copies of any applicable specification sheets, drawings of flashing details, and material data sheets on all materials, and Certificates of Insurance. The exact specification to be used and any modifications to the details shall be clearly marked on the submittals of which sufficient copies shall be furnished to provide for the Owner's needs, an approved copy for the Technical Representative, and one approved copy for the Contractor's files.
- B. Submit a sample copy of the Contractor's required five (5) year warranty, which shall cover any and all defects in workmanship and materials. The warranty may exclude physical damage caused by Acts of God, any activity by anyone other than the Contractor's employees, or failure of the building's structural components.
- C. Submit a sample copy of the primary coating manufacturer's material warranty providing for ten (10) years coverage for the specified coating system.

### 1.04 SUBSTITUTIONS OF SPECIFIED MATERIALS

- A. Whenever a particular specification assembly number, material or trade name is shown or specified herein, it shall be regarded as being indicative of the standard required. A bidder who proposes to quote on the basis of substituted materials or systems shall submit to the Owner's representative not less than 10 days prior to scheduled bid date the following items:
  - 1. A written application for approval and an explanation of the reason for consideration of an alternate system or product. Both the specification and individual component items shall be equivalent to that specified to be eligible for consideration.
  - 2. All requests for alternates must include a current certificate from a nationally known testing laboratory which has been accredited by BOCA and/or ICBO and/or CABO.
  - 3. The Owner's representative reserves the right to be the final authority on the acceptance or rejection of any proposed alternate materials or systems. A proposal based on unapproved systems, materials, or unsubstantiated data will be considered non-responsive.

### 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Delivery of Materials: All materials delivered to the job site shall be new, dry, and undamaged. Containers shall be unopened and undamaged. All manufacturers' labels shall be intact and contain the product and manufacturers' names, run code of manufacture and testing approvals.
- B. Storage of Materials:
  - 1. Membrane materials shall be set on ends only, with the selvage end up. Discard containers which may have been flattened, creased, or otherwise damaged. Place materials on pallets or dunnage. Palletized materials shall not be stacked.
  - 2. Cover all materials with weatherproof materials secured to prevent materials becoming exposed. Coverings shall be breathable material, vented, or the material placed on a ground cover to prevent condensation on the underside of the cover.

3. Materials stored on the roof surface shall be covered with weatherproof coverings and dispersed to avoid concentrated loading, with any larger concentrations set over major structural members.

#### 1.06 SITE CONDITIONS

- A. No work shall be performed that will reduce the degree to protection from weather by the existing roof. Removed areas of the roof shall have either new roofing or weather-tight temporary roofing applied to provide continuous protection for the building.
- B. The Contractor shall comply with all reasonably applicable requirements of the Owner's safety and security requirements and with all applicable Federal, State, Local and City regulations, laws, and ordinances.
- C. The Contractor shall provide coverings to protect building and ground surfaces in all areas in which work is being performed. The type of covering will be appropriate to the type of work being performed and the surfaces to be protected in that location. Protection requirements shall include those surfaces over or past which materials, including pumped adhesives, are being transported.
- D. Proceed with roofing work only when existing and forecasted weather conditions will permit work to be performed in accordance with manufacturers' recommendations and guarantee requirements.
- E. Store and handle coating materials in a manner that shall ensure there is no possibility of contamination. Store in a dry, well ventilated, weather-tight place at temperatures between 50° F and 80° F until product is ready to be applied. Do not allow product to freeze, or sit open unless in use.
- F. Do not begin work if rain is expected within twenty-four hours of application, or if temperatures are expected to fall below 42° F during the duration of the job.
- G. Upper temperature restriction (both air and substrate) for application of coating products is 110° F
- H. No moisture can be present when applying the coating products.
- I. Allow for sufficient daylight hours necessary for curing of materials, taking into consideration the curing properties of the Roof Coating and flashing grade.
- J. Do not apply indoors or in a confined space. Allow for proper ventilation.
- K. Do not exceed one-eighth inch (1/8") in a single spray application.
- L. Not for use over silicone or fluorocarbon (PVDF – Kynar) coatings.
- M. Do not apply to damp or wet surfaces.
- N. Must be applied to primed surfaces only.

## 1.07 ENVIRONMENTAL REQUIREMENTS

- A. Application of materials shall not be performed when weather conditions interfere with good application practices. Materials shall not be placed on damp surfaces or in the presence of rain or snow. Any materials applied under such conditions to protect building surfaces shall be removed before application of the coating system continues and may not be incorporated into the finished project.
- B. Generally, the ambient temperature shall be 45° F and rising during the application of the specified materials. For specific requirements for cold weather application, contact the primary coating manufacturer.

## 1.08 WARRANTY

- A. Upon project completion and acceptance by the Owner's representative and primary coating manufacturer, executed copies of the submitted manufacturer's ten (10) year material and contractor's five (5) year labor warranties shall be furnished promptly.

## PART 2 - PRODUCTS

### 2.01 SYSTEM REQUIREMENTS

- A. Recoating system shall be a fluid applied, cold process coating designed for the specific application of coating a granulated modified bitumen roof. Surface preparation and a two (2) layer reflective coating application shall be included and performed as part of the system.

### 2.02 PRIMARY COATING MATERIALS

- A. Cold Liquid Membrane: White, rapid set, 100% solid, cold applied liquid, chemical-cured, monolithic elastomeric membrane, shall meet or exceed the following:

<u>Property</u>	<u>Typical Value</u>	<u>Test Method</u>
Work Life	20 minutes	@77° F, 50% RH
Cure Time (initial)	2-4 hours	@77° F, 50% RH
Viscosity at 77° F	33 ± 5 poise	Brookfield
Weight per gallon		
A-Component	9.3 pounds	
B-Component	8.3 pounds	
Percent Solids Content	100% (weight)	
	100% (volume)	ASTM D 2369
Hardness	80 Shore A ± 3	ASTM D 2240
Tensile Strength	3200 psi ± 300	ASTM D 412
Percent Elongation	400% ± 50	ASTM D 412
Adhesive Peel Strength on Primed Concrete	35 pli	ASTM D 903
Water Absorption	1.2% by weight	ASTM D 471
Moisture Vapor Transmission	3.9 perms	ASTM E 96
Abrasion Resistance	2.mg wt loss	ASTM D 4060
		30 dry mil film on 4" x 4" metal

		C-17 wheel, 1000 rev
		1000 gr weight
Tear Resistance	280 pli ± 30	AST< D 624
VOC Content	0 gm/l	Calculated
UV Stability (2000 hours)	No cracking or crazing	Q panel Weather-O-Meter

- B. Primer: Two-component, low VOC, epoxy primer/sealer, shall meet or exceed the following. Shall be used on metal surfaces only prior to application of coating.

<u>Property</u>	<u>Typical Value</u>	<u>Test Method</u>
Coverage Rate	300-400 ft <sup>2</sup> /gal	
Film Thickness per Coat	4 ± 1 mil	
Hardness	70 ± 5 Shore D	
Shelf Life	12 months	
Specific Gravity – Side A	1.05	
– Side B	1.02	
Solids Content (mixed)	92 ± 2%	ASTM D 1353
VOC Content	100 gm/l	Calculated
Viscosity at 24° C (75° F) – Side A	150 ± 50 cps	
– Side B	300 ± 50 cps	

- C. Polyester Reinforcing Fabric: Woven polyester sheet, shall meet or exceed the following:

<u>Typical Physical Properties</u>	
Tensile Strength	60 lbs of grab
Elongation	Up to 40%
Tear Strength	Excellent stress distribution
Moisture Effects	0.5% absorption at RH of 98%
Sunlight Resistance	80% tensile strength retention after 6 month exposure test
Temperature Resistance	Up to 350° F
Chemical Resistance	Good resistance to acids & alkalis at ph of 1 to 10 at room temperatures

## 2.03 SEALANT

- A. Sealant for use at coping joints, reglet joints, cracks, etc., shall be a one-component urethane non-sag, gun grade sealant designed for use in active exterior joints, and shall meet or exceed Federal Specification No. 1 TT-S-00230C, Type II, Class A, ASTM C 920. Where joint surfaces are contained or are contaminated with bituminous materials, provide manufacturer's modified-type sealant (modified with coal-tar or asphalt as required), or approved equal.

## 2.04 SHEET METAL REQUIREMENTS

- A. General: Replace existing defective sheet metal components with like kind, quality and profile and fasten according to manufacturer's guidelines and/or SMACNA.

## PART 3 - EXECUTION

### 3.01 INSPECTION AND SURFACE PREPARATION

- A. All dirt, debris, and loose granules shall be removed and the existing surface cleaned, using a high-pressure washer. Defects in the existing surface shall repaired with like and shall conform to requirements of the Primary Materials Manufacturer.

- B. The methods used to remove any required existing materials shall not cause preventable damage to the other building components. Where removal will permit excessive dust or debris to enter habitable spaces within the building.
- C. All surfaces to receive the new roof coating or flashing materials shall be smooth, clean, dry and in good repair. The surface to receive the roof coating shall continue to provide for drainage of rainwater to roof edges, roof drains, or scuppers. Any exceptions to these requirements or variations to applicable building codes shall be noted in writing before work is undertaken.
- D. All blisters shall be cut and target patches of modified bitumen roofing membrane applied according to NRCA guidelines.
- E. Small blisters may be split and adhered to the substrate by melting the existing modified bitumen membrane with a heat gun, then applying a three-course repair using polyester fabric and base coat material over the split blister.
- F. Splits, open laps and/or joints shall be repaired with a three-course repair using polyester fabric and base coat material. Trimming of open seams and laps shall be done prior to three-course repair as required.

### 3.02 COATING MIXING INSTRUCTIONS

- A. Mix for two to three (2-3) minutes and pour entire contents in an area matching the prescribed coverage rate. Resulting work life varies with temperature. At 77° F, work life is about twenty (20) minutes.

### 3.03 APPLICATION INSTRUCTIONS

- A. Application shall commence at the low points of the roof surface. Locations shall be sequenced to avoid or minimize traffic over newly coated areas.
- B. Use notched squeegees for even distribution and controlled thickness. Application with brush or roller is acceptable.
- C. Spraying of material is not recommended.
- D. Equipment loads shall be adjusted as necessary to prevent overloading of the structure or damage to materials already placed.
- E. Fire extinguishers and all safety-related equipment shall be provided, used, and maintained to comply with all applicable OSHA requirements and local codes and ordinances.
- F. Coatings and other materials shall be protected from adverse temperatures or conditions.
- G. Application of all components of the coating shall comply with the primary coating manufacturer's requirements just as if reproduced in their entirety within this specification section.

- H. The type of primer, base/surface coating, flashing mastics, and fabrics shall be as required by these specifications and any pertinent supplements.
- I. Prior to the application of base coating, all repairs and other details shall be completed as required by the primary coating manufacturer.
- J. Coverage Rates: Detail, base and surface coatings shall be applied at the rate of 20 mils, or 80 square feet, per gallon.

#### 3.04 REFLECTIVE COATING APPLICATION

- A. Base coat and surface coat materials shall be freshly mixed and applied within ten (10) minutes from completion of mixing.
- B. The base coat and surface coat shall be supplied in cross-hatch fashion.
- C. Base Coat Application: To all areas to receive base coating, including any vertical transitions, uniformly apply twenty (20) wet mils at the rate of eighty (80) square feet per gallon.
- D. Surface Coat Application: After base coat has fully cured, uniformly apply twenty (20) wet mils of over base coated areas at the rate of eighty (80) square feet per gallon. Completed system will be approximately forty (40) mils thick.
- E. At open air plaza deck locations, broadcast silica products as per manufacturer's application criteria in order to provide a non-slip or traffic bearing surface.
- F. After full cure, inspect all finished surfaces for defects in the coating application and apply additional coating for touch-up to achieve the proper overall thickness. Care should be taken to ensure all corners and crevices are covered.

#### 3.05 CLEANING

- A. Remove debris resulting from completion of fluid-applied roofing operation from the project site.

#### 3.06 PROTECTION

- A. After completion of application, do not allow traffic on coated surfaces for a period of at least 48 hours at 75 deg. F and 50% relative humidity, or until completely cured.

**END OF SECTION 07 56 00**

**SECTION 07 57 30  
ROOFING REPAIRS**

**PART I - GENERAL**

1.01 RELATED DOCUMENTS

- A. The attached are components of this section:
  - 1. General Conditions.

1.02 SCOPE OF WORK

- A. Work includes:
  - 1. Installation of the following on Administration Building No. 502:
    - a. Replacing base flashing on Roof Area D.

1.03 QUALITY CONTROL

- A. Contractor shall:
  - 1. Be experienced in cold process roofing.
    - a. 5 years minimum.
  - 2. Be acceptable by Owner.
- B. Roofing material manufacturer shall:
  - 1. Be Associate Member in good standing with National Roofing Contractors' Association (NRCA) for at least five (5) years.
  - 2. Be nationally recognized in roofing, waterproofing, and moisture survey industry.
  - 3. Be approved by Owner.
- C. Random sampling:
  - 1. Roofing material:
    - a. During course of work, Owner's Representative may secure samples according to ASTM D-140 of materials being used from containers at job site and submit them to an independent laboratory for comparison to specified material.
    - b. Should test results prove that a material is not functionally equal to specified material:
      - (1) Contractor shall pay for all testing.
      - (2) Roofing installed and found not to comply with the specifications shall be removed and replaced at no change in the contract price.
- D. Regulatory requirements:
  - 1. International Building Code (IBC).
  - 2. UL Classified Fire Rating - UL 790.
    - a. Class A.

1.04 REFERENCES

- A. ARMA - Asphalt Roof Manufacturers Association, Calverton, MD.



- B. ASTM - American Society for Testing and Materials, West Conshohocken, PA.
- C. NRCA - National Roofing Contractors Association, Chicago, IL.
- D. SMACNA - Sheet Metal and Air Conditioning Contractors National Association, Chantilly, VA.
- E. UL - Underwriters Laboratories, Northbrook, IL.

#### 1.05 SUBMITTALS

- A. Submit prior to job-start:
  - 1. Product data:
    - a. Product data sheets.
    - b. Material safety data sheets.

#### 1.06 DELIVERY, STORAGE AND HANDLING

- A. Delivery of materials:
  - 1. Deliver materials to job-site in new, dry, unopened, and well-marked containers showing product and manufacturer's name.
  - 2. Deliver materials in sufficient quantity to allow continuity of work.
  - 3. Coordinate delivery with Owner.
- B. Do not order project materials or start work before receiving Owner's written approval.
- C. Storage of materials:
  - 1. Store materials marked "KEEP FROM FREEZING" in areas where temperatures will remain above 40°F.
  - 2. For insulation, remove plastic packaging shrouds. For felt rolls, slit the top of the plastic shrink wrap only. Cover top and sides of all stored materials with tarpaulin (not polyethylene). Secure tarpaulin.
  - 3. Do not store materials in open or in contact with ground or roof surface.
  - 4. Store all materials on a raised platform covered with secured canvas tarpaulin (not polyethylene), top to bottom. Cover all materials when project is not in progress and maintain the ability at all times to cover the materials when required, such as during an unanticipated rain shower.
  - 5. Contractor shall assume full responsibility for the protection and safekeeping of products stored on premises.
- D. Material handling:
  - 1. Handle materials to avoid bending, tearing, or other damage during transportation and installation.
  - 2. Material handling equipment shall be selected and operated so as not to damage existing construction or applied roofing. Do not operate or situate material handling equipment in locations that will hinder smooth flow of vehicular or pedestrian traffic.

#### 1.07 SITE CONDITIONS

- A. Field measurements and material quantities:

1. Contractor shall have SOLE responsibility for accuracy of all measurements, estimates of material quantities and sizes, and site conditions that will affect work.
  
- B. Existing conditions:
  1. Building space directly under roof area covered by this specification will be utilized by on-going operations. Do not interrupt Owner operations unless prior written approval is received from Owner.
  2. Access to roof shall be from exterior only.
  
- C. Waste Disposal:
  1. Do not re-use, re-cycle or dispose of material manufacturers product containers except in accordance with all applicable regulations. The user of manufactured products is responsible for proper use and disposal of product containers.
  
- D. Safety requirements:
  1. All application, material handling, and associated equipment shall conform to and be operated in conformance with OSHA safety requirements.
  2. Comply with federal, state, local and Owner fire and safety requirements.
  3. Advise Owner whenever work is expected to be hazardous to Owner, employees, and/or operators.
  4. Maintain a crewman as a floor area guard whenever roof decking is being repaired or replaced.
  5. Maintain fire extinguisher within easy access whenever power tools, roofing kettles, fuels, solvents, torches, and open flames are being used.
  
- E. Environmental requirements:
  1. Do not work in rain, snow, or in presence of water.
  2. Do not install materials marked "KEEP FROM FREEZING" when daily temperatures are scheduled to fall below 40°F.
  3. Do not perform masonry work below 40°F.
  4. Remove any work exposed to freezing.
  5. Advise Owner when volatile materials are to be used near air ventilation intakes so Owner can use some or all of the following methods to minimize disruptions to building occupants and operations:
    - a. Divert air intake from work area by attaching scoops or temporary duct work.
    - b. Temporarily shut down or block air intakes.
    - c. Provide make-up air or intake air from sources away from work area.
  
- F. Security requirements:
  1. Comply with Owner security requirements.
  2. No access permitted in building by persons employed on this project.

#### 1.10 WARRANTY/GUARANTEE

- A. Guarantee:
  1. Upon project completion and Owner acceptance, effective upon complete payment, Contractor shall issue Owner a guarantee against defective workmanship and materials for a period of two (2) years.

## **PART II - PRODUCTS**

### **2.01 GENERAL**

- A. Comply with quality control, references, specifications, and manufacturer's data. Products containing asbestos are prohibited on this project. Use only asbestos-free products.
- B. Use products with personal protection. User must read container label and material safety data sheets prior to use.

### **2.02 ROOFING MATERIALS**

- A. Related materials:
  - 1. Asphalt primer:
    - a. Solvent based, quick drying formulation.
  - 2. Asphalt mastic:
    - a. ASTM D 4586 fibrated asphalt mastic.
  - 3. Sealants:
    - a. Drawband sealant:
      - (1) FS TT-S-00230C(2), single component, polyurethane sealant.

### **2.03 FLASHING MEMBRANE ASSEMBLY**

- A. Flashing Membrane Assembly: A flashing membrane assembly consisting of a prefabricated, reinforced, Styrene-Butadiene-Styrene (SBS) block copolymer modified asphalt membrane with a continuous, channel-embossed metal-foil surfacing. The finish ply shall conform to ASTM D 6298 and the following physical and mechanical property requirements.
- B. Cant Backing Sheet and Flashing Reinforcing Ply: Siplast Paradiene 20 SA or approved equal.
- C. Metal-Clad Modified Bitumen Flashing Sheet: Siplast Veral Aluminum or approved equal.

### **2.04 METAL FLASHINGS**

- A. Prefinished Galvanized Sheet Steel: Shall be 24-gauge flat stock, prefinished with Kynar finish meeting ASTM A 446, forty-five and one-half inches to forty-eight inches width by one hundred twenty inches in length (45-1/2" - 48" x 120") for use as new metal edge gravel guard, cover plates, downspouts, gutters, coping and miscellaneous metal. Standard color to be selected by Owner/Project Consultant.
- B. Details not addressed in specification shall be in accordance with Architectural Sheet Metal Manual, as issued by Sheet Metal and Air Conditioning Contractors' National Association, Inc., (SMACNA).

## **PART III - EXECUTION**

### **3.01 EXAMINATION**

- A. Verify conditions as satisfactory to receive work.
- B. Do not begin roofing until all unsatisfactory conditions are corrected. Beginning work constitutes acceptance of conditions.

### 3.02 GENERAL WORKMANSHIP

- A. All work performed by Contractor shall conform to this specification.

### 3.03 PREPARATION

- A. Protection:
  - 1. Contractor shall be responsible for protection of property during course of work. Lawns, shrubbery, paved areas, and building shall be protected from damage. Repair damage at no extra cost to Owner.
  - 2. Provide at site prior to commencing removal of debris, a dumpster or dump truck to be located adjacent to building where directed by Owner.
  - 3. Roofing, flashings, membrane repairs, and insulation shall be installed and sealed in a watertight manner on same day of installation or before arrival of inclement weather.
- B. Surface preparation:
  - 1. Prime roof surface with asphalt primer applied at 1 gal./250 sq. ft. Allow to dry.
- C. Flashing Application: Cut the cant backing sheet into 12 inch widths and peel the release film from the back of the sheet. Set the sheet into place over the primed substrate extending 6 inches onto the field of the roof area and 6 inches up the vertical surface utilizing minimum 3 inch laps. Set the non-combustible cant into place dry prior to installation of the roof membrane base ply. Flash walls and curbs using the reinforcing sheet and the metal foil flashing membrane. After the base ply has been applied to the top of the cant, prime the base ply surfaces to receive the reinforcing sheet. Fully adhere the reinforcing sheet, utilizing minimum 3 inch side laps onto the primed base ply surface and up the primed wall or curb to the desired flashing height. After the final roofing ply has been applied to the top of the cant, prepare the surface area that is to receive flashing coverage by torch heating granular surfaces or by application of asphalt primer; allowing primer to dry thoroughly. Torch apply the metal foil-faced flashing into place using three foot widths (cut off the end of roll) always lapping the factory selvage edge. Stagger the laps of the metal foil flashing layer from lap seams in the reinforcing layer. Extend the flashing sheet a minimum of 4 inches beyond the toe of the cant onto the prepared surface of the finished roof and up the wall or curb to the desired flashing height. Exert pressure on the flashing sheet during application to ensure complete contact with the vertical/horizontal surfaces, preventing air pockets; this can be accomplished by using a damp sponge or shop rag. Check and seal all loose laps and edges. Nail the top edge of the flashing on 9 inch centers. (See manufacturer's schematic for visual interpretation).

### 3.04 ADJUSTING AND CLEANING

- A. Repair of deficiencies:

1. Installations of details noted as deficient during final inspection must be repaired and corrected by applicator, and made ready for reinspection, within five (5) working days.
- B. Clean-up:
1. Immediately upon job completion, roof membrane and flashing surfaces shall be cleaned of debris.
  2. Clean gutters and downspouts of debris.

END OF SECTION 07 57 30

**SECTION 07 59 10**  
**MEMBRANE REROOFING PREPARATION**

**PART 1 - GENERAL**

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. This Section includes the following:
  - 1. Roof tear-off.
  - 2. Protection of existing roofing system that is not reroofed.

1.03 MATERIALS OWNERSHIP

- A. Except for items or materials indicated to be reused, reinstalled, or otherwise indicated to remain Owner's property, demolished materials shall become Contractor's property and shall be removed from Project site.

1.04 DEFINITIONS

- A. Roofing Terminology: Refer to ASTM D 1079 and glossary in NRCA's "The NRCA Roofing and Waterproofing Manual" for definition of terms related to roofing work in this Section.
- B. Existing Membrane Roofing System: Built-up roofing membrane, surfacing, and components and accessories between deck and roofing membrane.
- C. Substrate Board: Rigid board or panel products placed over the roof deck that serve as thermal barriers, provide a smooth substrate, or serve as a component of a fire-resistance-rated roofing system.
- D. Roof Re-Cover Preparation: Existing roofing membrane that is to remain and be prepared for reuse.
- E. Roof Tear-Off: Removal of existing membrane roofing system from deck.
- F. Partial Roof Tear-Off: Removal of a portion of existing membrane roofing system from deck or removal of selected components and accessories from existing membrane roofing system.
- G. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and reinstalled.
- H. Existing to Remain: Existing items of construction that are not indicated to be removed.

1.05 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Temporary Roofing: Include Product Data and description of temporary roofing system. If temporary roof will remain in place, submit surface preparation requirements needed to receive permanent roof, and submit a letter from roofing membrane manufacturer stating acceptance of the temporary membrane, and that its inclusion will not adversely affect the roofing system's resistance to fire and wind.
- C. Fastener pull-out test report.
- D. Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including exterior and interior finish surfaces, that might be misconstrued as having been damaged by reroofing operations. Submit before Work begins.
- E. Landfill Records: Indicate receipt and acceptance of hazardous wastes, such as asbestos-containing material, by a landfill facility licensed to accept hazardous wastes.

1.06 QUALITY ASSURANCE

- A. Installer Qualifications: Installer of new membrane roofing system approved by warrantor of existing roofing system to work on existing roofing.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before beginning membrane roofing removal. Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Preliminary Reroofing Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination." Review methods and procedures related to roofing system including, but not limited to, the following:
  - 1. Meet with Owner; Owner's representative; Owner's insurer if applicable; testing and inspecting agency representative; roofing system manufacturer's representative; deck Installer; roofing Installer including project manager, superintendent, and foreman; and installers whose work interfaces with or affects reroofing including installers of roof accessories and roof-mounted equipment.
  - 2. Review methods and procedures related to reroofing preparation, including membrane roofing system manufacturer's written instructions.
  - 3. Review temporary protection requirements for existing roofing system that is to remain, during and after installation.
  - 4. Review roof drainage during each stage of reroofing and review roof drain plugging and plug removal procedures.
  - 5. Review and finalize construction schedule, and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
  - 6. Review existing deck removal procedures and Owner notifications.
  - 7. Review procedures to determine condition and acceptance of existing deck and base flashing substrate for reuse.

8. Review structural loading limitations of deck during reroofing.
  9. Review base flashings, special roofing details, drainage, penetrations, equipment curbs, and condition of other construction that will affect reroofing.
  10. Review HVAC shutdown and sealing of air intakes.
  11. Review shutdown of fire-suppression, -protection, and -alarm and -detection systems.
  12. Review procedures for asbestos removal or unexpected discovery of asbestos-containing materials.
  13. Review governing regulations and requirements for insurance and certificates if applicable.
  14. Review existing conditions that may require notification of Architect before proceeding.
- D. Reroofing Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination." Review methods and procedures related to roofing system including, but not limited to, the following:
1. Meet with Owner, Owner's representative, Owner's insurer if applicable, testing and inspecting agency representative, roofing system manufacturer's representative, deck Installer, roofing Installer including project manager, superintendent, foreman, and installers whose work interfaces with or affects reroofing including installers of roof accessories and roof-mounted equipment.
  2. Review methods and procedures related to reroofing preparation, including membrane roofing system manufacturer's written instructions.
  3. Review temporary protection requirements for existing roofing system that is to remain, during and after installation.
  4. Review roof drainage during each stage of reroofing and review roof drain plugging and plug removal procedures.
  5. Review and finalize construction schedule, and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
  6. Review existing deck removal procedures and Owner notifications.
  7. Review procedures to determine condition and acceptance of existing deck for reuse.
  8. Review structural loading limitations of deck during reroofing.
  9. Review base flashings, special roofing details, drainage, penetrations, equipment curbs, and condition of other construction that will affect reroofing.
  10. Review HVAC shutdown and sealing of air intakes.
  11. Review shutdown of fire-suppression, -protection, and -alarm and -detection systems.
  12. Review procedures for asbestos removal or unexpected discovery of asbestos-containing materials.
  13. Review governing regulations and requirements for insurance and certificates if applicable.
  14. Review existing conditions that may require notification of Architect before proceeding.

## 1.07 PROJECT CONDITIONS



- A. Owner will occupy portions of building immediately below reroofing area. Conduct reroofing so Owner's operations will not be disrupted. Provide Owner with not less than 48 hours notice of activities that may affect Owner's operations.
  - 1. Coordinate work activities daily with Owner so Owner can place protective dust or water leakage covers over sensitive equipment or furnishings, shut down HVAC and fire-alarm or -detection equipment if needed, and evacuate occupants from below the work area if desired.
  - 2. Before working over structurally impaired areas of deck, notify Owner to evacuate occupants from below the affected area. Verify that occupants below the work area have been evacuated prior to proceeding with work over the impaired deck area.
- B. Protect building to be reroofed, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from reroofing operations.
- C. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.
- D. Owner assumes no responsibility for condition of areas to be reroofed.
  - 1. Conditions existing at time of inspection for bidding will be maintained by Owner as far as practical.
- E. Limit construction loads on roof for uniformly distributed loads.
- F. Weather Limitations: Proceed with reroofing preparation only when existing and forecasted weather conditions permit Work to proceed without water entering into existing roofing system or building.

#### 1.08 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during reroofing, by methods and with materials so as not to void existing roofing system warranty. Notify warrantor before proceeding.
  - 1. Notify warrantor of existing roofing system on completion of reroofing, and obtain documentation verifying that existing roofing system has been inspected and warranty remains in effect. Submit documentation at Project closeout.

### **PART 2 - PRODUCTS**

#### 2.01 INFILL MATERIALS

- A. Use infill materials matching existing membrane roofing system materials, unless otherwise indicated.
  - 1. Infill materials are specified in Division 7 Section Insert Section title of applicable membrane roofing Section.

#### 2.02 TEMPORARY ROOFING MATERIALS

- A. Selection of materials and design of temporary roofing is responsibility of Contractor.

- B. Base Sheet: ASTM D 4601, Type II, nonperforated, asphalt-impregnated and coated, glass-fiber sheet.
- C. Glass-Fiber Felts: ASTM D 2178, Type IV, asphalt-impregnated, glass-fiber felt.
- E. Asphalt Primer: ASTM D 41.
- F. Roofing Asphalt: ASTM D 312, Type III or IV.

### 2.03 RECOVER BOARDS

- A. Recover Board: ASTM C 728, perlite board; 1/2 inch / 3/4 inch / 1 inch thick.
- B. Fasteners: Factory-coated steel fasteners, No. 14, and metal or plastic plates listed in FMG's "Approval Guide," designed for fastening recover boards to deck.

### 2.04 AUXILIARY REROOFING MATERIALS

- A. General: Auxiliary reroofing preparation materials recommended by roofing system manufacturer for intended use and compatible with components of existing and new membrane roofing system.
- B. Base Sheet Fasteners: Capped head, factory-coated steel fasteners, listed in FMG's "Approval Guide."
- C. Metal Flashing Sheet: Metal flashing sheet is specified in Division 7 Section "Sheet Metal Flashing and Trim."

## **PART 3 - EXECUTION**

### 3.01 PREPARATION

- A. Protect existing membrane roofing system that is indicated not to be reroofed.
  - 1. Loosely lay 1/2" plywood or OSB panels over existing roof surface.
  - 2. Limit traffic and material storage to areas of existing roofing membrane that have been protected.
  - 3. Maintain temporary protection and leave in place until replacement roofing has been completed.
- B. Coordinate with Owner to shut down air intake equipment in the vicinity of the Work. Cover air intake louvers before proceeding with reroofing work that could affect indoor air quality or activate smoke detectors in the ductwork.
- C. During removal operations, have sufficient and suitable materials on-site to facilitate rapid installation of temporary protection in the event of unexpected rain.

- D. Maintain roof drains in functioning condition to ensure roof drainage at end of each workday. Prevent debris from entering or blocking roof drains and conductors. Use roof-drain plugs specifically designed for this purpose. Remove roof-drain plugs at end of each workday, when no work is taking place, or when rain is forecast.
  - 1. If roof drains will be temporarily blocked or unserviceable due to roofing system removal or partial installation of new membrane roofing system, provide alternative drainage method to remove water and eliminate ponding. Do not permit water to enter into or under existing membrane roofing system components that are to remain.
- E. Verify that rooftop utilities and service piping have been shut off before commencing Work.

### 3.02 ROOF TEAR-OFF

- A. General: Notify Owner each day of extent of roof tear-off proposed.
- B. Remove loose aggregate from aggregate-surfaced built-up bituminous roofing with a power broom.
- C. Roof Tear-Off: Remove existing roofing membrane and other membrane roofing system components down to the deck.
  - 1. Remove roof insulation.
  - 2. Bitumen and felts that are firmly bonded to concrete decks are permitted to remain if felts are dry. Remove unadhered bitumen and felts and wet felts.
  - 3. Remove excess asphalt from steel deck. A maximum of 15 lb/100 sq. ft. (0.72 kg/sq. m) of asphalt is permitted to remain on steel decks.
  - 4. Remove fasteners from deck or cut fasteners off slightly above deck surface.

### 3.03 DECK PREPARATION

- A. Inspect deck after tear-off of membrane roofing system.
  - 1. Verify that concrete substrate is visibly dry and free of moisture. Test for capillary moisture by plastic sheet method according to ASTM D 4263 or by pouring 1 pint of hot roofing asphalt on deck at start of each day's work and at start of each roof area or plane. Do not proceed with roofing work if moisture condenses under the plastic sheet or if asphalt test sample foams or can be easily and cleanly stripped after cooling.
- B. If broken or loose fasteners that secure deck panels to one another or to structure are observed, or if deck appears or feels inadequately attached, immediately notify Architect. Do not proceed with installation until directed by Architect.
- C. If deck surface is not suitable for receiving new roofing, or if structural integrity of deck is suspect, immediately notify Architect. Do not proceed with installation until directed by Architect.
- D. Provide additional deck securement as indicated on Drawings.
- E. Replace deck as indicated on Drawings.

### 3.04 INFILL MATERIALS INSTALLATION

- A. Immediately after removal of selected portions of existing membrane roofing system, and inspection and repair, if needed, of deck, fill in the tear-off areas to match existing membrane roofing system construction.
  - 1. Installation of infill materials is specified in Division 7 Section.
  - 2. Install new roofing membrane patch over roof infill area. If new roofing membrane is installed the same day tear-off is made, roofing membrane patch is not required.

### 3.05 FASTENER PULL-OUT TESTING

- A. Perform fastener pull-out tests according to SPRI FX-1 and submit test report to Architect before installing new membrane roofing system.
  - 1. Obtain Architect's approval to proceed with specified fastening pattern. Architect may furnish revised fastening pattern commensurate with pull-out test results.

### 3.06 DISPOSAL

- A. Collect and place demolished materials in containers. Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
  - 1. Storage or sale of demolished items or materials on-site will not be permitted.
- B. Transport demolished materials off Owner's property and legally dispose of them.

END OF SECTION 07 59 10

**SECTION 07 62 00**  
**SHEET METAL AND MISCELLANEOUS ACCESSORIES**

**PART 1 - GENERAL**

1.01 SUMMARY

- A. Section Includes:
  - 1. Provide flashing and sheet metal components for moisture protection.
  - 2. Related accessories.

1.02 QUALITY ASSURANCE

- A. Comply with governing local, state, and federal regulations, safety standards, and codes. Provide products of acceptable manufacturers in satisfactory use in similar service for five (5) years. Use experienced installers. Deliver, handle and store materials in accordance with manufacturer's instructions.
- B. Reference Standards: Applicable portions of ASCE, SMACNA, ASTM and NAAMM publications.

1.03 WARRANTIES

- A. Manufacturer's Product Warranty: Submit manufacturer's standard limited product warranty signed by the manufacturer's authorized official, guaranteeing to correct failures in product which may occur during the warranty period, without reducing or otherwise limiting any other rights to correction which the Owner/Project Consultant may have under the contract documents. Failure is defined to include product failure which leads to interruption of a watertight installation. Correction may include repair or replacement of failed product.
- B. Contractor's Warranty Period: For roofing flashing and sheet metal, provide a written warranty which shall warrant work to be free of leaks and defects in materials and workmanship for two (2) years, starting from date of substantial completion.
- C. Defects of the sheet metal occurring during the warranty period shall be promptly corrected by the contractor, and defects of the roofing shall be promptly corrected by the manufacturer at no additional cost to the Owner. Upon notification from the Owner or the Owner's representative that evidence of a defect exists, the responsible party shall immediately inform the Owner's representative of the date on which corrective work will be scheduled, and shall notify the Owner's representative when the corrective work has been completed.

**PART 2 - PRODUCTS**

2.01 SHEET METAL MATERIAL

- A. Hot-dipped Galvanized Steel for use as counterflashings (where not visible from the ground), pitch pans and expansion joints: Minimum 24-gauge, G-90, hot-dipped galvanized metal, commercial quality, ASTM A 525.

- B. Hot-dipped Galvanized Steel for use as continuous clips: Minimum 22-gauge, G-90, hot-dipped galvanized metal, commercial quality, ASTM A 525.
- C. Prefinished Galvanized Sheet Steel (where visible from the ground): Shall be 24-gauge flat stock, prefinished with Kynar finish meeting ASTM A 446, forty-five and one-half inches to forty-eight inches width by one hundred twenty inches in length (45-1/2" - 48" x 120") for use as new metal edge gravel guard, cover plates, downspouts, gutters, coping and miscellaneous metal. Standard color to be selected by Owner/Project Consultant.
- D. Sheet Lead: QQ-L-201, Grade B.
- E. All existing sheet metal shall be replaced with new metal of like gauge and type, or as specified on drawings.

## 2.02 FASTENERS

- A. Fasteners shall be same metal as flashing/sheet metal, or other non-corrosive metal as recommended by sheet manufacturer for the specific application. Match finish of exposed heads with material being fastened.
- B. Fasteners and fastening plates or bars shall be listed in the FM Global Approval Guide.
- C. Fastener for Brick: Shall be one-fourth inch by two inches (1/4" x 2"), zinc with plated steel or stainless steel nail, one piece unit, flat head.
- D. Screws: Self-taping sheet metal type with neoprene washer, as appropriate.
- E. Pop Rivets: Full stainless steel Series 42 or 44, as appropriate.
- F. Continuous Clip: Concealed hold-down clip type; of same materials as coping, gravel guard, sized to suit application. Use a continuous clip, minimum 22-gauge G-90 galvanized.

## 2.03 RELATED MATERIAL

- A. Bituminous Paint: Acid and alkali resistant, black color.
- B. Plastic Cement: FS SS-C-153, cutback asphalt type.
- C. Solder: QQ-S-571 composition best suited for purpose; use high tin content, minimum 60/40, for stainless steel and monel alloy.
- D. Copper, Sheet, and Strip: QQ-C-576, ASTM B 370, light cold-rolled temper.
- E. Lead-coated Copper: ASTM B 101, Type I or II, Class A.
- F. Sealant (for Sheet Metal): One-component polyurethane, conforming to requirements of FS TT-S-230C, non-staining and non-bleeding.

- G. Miscellaneous Materials:
  - 1. Downspout Boots: Cast iron by Neenah Foundry Company, or pre-approved equal, provide and install.
  - 2. Splash Blocks: Concrete, 3000 psi, 28 days. Provide and install with protection pads at all downspouts.
  - 3. Metal Accessories: Provide sheet metal clips, straps, anchoring devices, and similar accessory units as required for installation of work, matching or compatible with material being installed, non-corrosive, size, and gauge required for performance.

### **PART 3 - EXECUTION**

#### **3.01 INSPECTION**

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

#### **3.02 PREPARATION**

- A. Field measure site conditions prior to fabricating work. Provide all shop drawings and mock-ups one month prior to installation to the Owner/Project Consultant for approval.
- B. Install starter and edge strips and cleats before starting installation.

#### **3.03 FABRICATION - GENERAL**

- A. Shop-fabricate work to greatest extent possible. Comply with details shown, and with applicable requirements of SMACNA "Architectural Sheet Metal Manual" and other recognized industry practices. Fabricate for waterproof and weather-resistant performance; with expansion provisions for running work, sufficient to permanently prevent leakage, damage or deterioration of the work. Form work to fit substrates. Comply with material manufacturer's instructions and recommendations. Form exposed sheet metal work without excessive oil-canning, buckling, and tool marks, true to line and levels as indicated, with exposed edges folded back to form hems.
- B. Fabricate gravel stops/fascia, gutters/downspouts, counterflashings, pitch pans, expansion joints, and copings with new galvanized sheet metal as specified. Fabricate gravel guard and fascia to size and dimensions as indicated on the drawings. Fabricate light metal coping, gutters and downspouts as indicated.
- C. Form sheet metal on bending brake.
- D. Shape, trim and hand seam metal on bench insofar as practicable.
- E. Form materials with straight lines, sharp angles and smooth curves.
- F. Fold back edges on concealed side of exposed edge to form hem (1/2" minimum).

- G. Weld or solder joints on parts that are to be permanently and rigidly assembled.
- H. Submit sheet metal models for approval by the Owner/Project Consultant.
- I. Limit single-piece lengths to ten feet (10').
- J. Fabricate corner pieces with eighteen inch (18") extensions, metered and sealed by forming as one piece.
- K. Surface sand flange prior to applying any primers on Kynar metal.
- L. Backpaint flashing in contact with masonry or dissimilar materials with bituminous paint.
- M. Install new metal rooftop projections. New rooftop projection details shall be as recommended in NRCA or SMACNA handbooks. All rooftop projections shall be cleaned, all joints sealed, and painted with a rust inhibitive paint. Standard color to be selected by the Owner/Project Consultant.
- N. All sheet metal shall be sealed and watertight.
- O. Metal work should be secured so as to prevent damage from buckling or wind. Where clips are shown, these are to be continuous.
- P. All metal to receive bitumen or adhesive shall be first primed with asphalt primer.
- Q. All prefinished metal shall be sanded and/or abraded prior to receiving primer.
- R. Seams: Fabricate non-moving seams in sheet metal with flat-lock seams. For metal other than aluminum, tin edges are to be seamed, form seams, and soldered.
- S. Expansion Provisions: Form expansion joints of intermeshing hooked flanges, not less than one inch (1") deep, filled with mastic sealant (concealed within joints).
- T. Sealant Joints: Where movable, non-expansion type joints are indicated or required for proper performance of work, form metal to provide for proper installation of elastomeric sealant, in compliance with industry standards.
- U. Separations: Provide for separation of metal from non-compatible metal or corrosive substrates by coating concealed surfaces at locations of contact, with bituminous coating or other permanent separation as recommended by manufacturer/fabricator.
- V. Bed flanges of work in a thick coat of bituminous roofing cement where required for waterproof performance.



### 3.04 INSTALLATION

- A. General: All sheet metal termination to vertical wall shall have a through-wall with receiver installed on masonry walls or prefabricated "Z" bar flashing pre-installed to fluid applied wall finished prior to installation of sheet metal termination. This applies to edge metal, base flashing closures and all vertical surface intersections. Refer to NRCA, SMACNA, and metal manufacturer's guidelines.
- B. Gravel Guard/Fascia:
1. Shall be installed with expansion joints, ten feet (10') on center, one-fourth inch (1/4") expansion leeway, with a cover plate.
  2. Secure metal flashings per specifications.
  3. Lock seams and end joints.
  4. Form sections identical to profiles as shown or approved similar, to match existing building.
  5. Fabricate corner pieces with minimum eighteen inch (18"), maximum forty-eight inch (48") extensions, formed and sealed with rivets and sealant, as one piece.
  6. Hem exposed edges three-fourths inch (3/4") minimum.
  7. Backpaint flashing in contact with masonry or dissimilar materials with bituminous paint. Surface sand before applying primers.
  8. Integrate flashing in a manner consistent with detailing.
  9. Provide and install continuous clip around perimeter.
  10. Apply sealant at horizontal juncture of gravel guard metal to exterior vertical wall.
  11. Shall be fabricated in accordance with all SMACNA provisions.
  12. Install bead of sealant at metal edge juncture at exterior wall surface.
- C. Coping:
1. Install new metal coping as required for a permanent watertight installation.
  2. All coping shall be manufactured with low profile standing seam metal.
  3. Shall be minimum 24-gauge prefinished Kynar installed in ten foot (10') sections maximum.
  4. Vertical fascia shall extend minimum two and one-half inches (2-1/2") or be minimum one and one-half inches (1-1/2") below bottom of nailer, whichever is greater.
  5. Secure metal flashings per specifications.
  6. Lock seams and end joints.
  7. Form sections identical to profiles as shown or approved similar, to match existing building.
  8. Fabricate corner pieces with minimum eighteen inch (18"), maximum forty-eight inch (48") extensions, formed and sealed with rivets and sealant, as one piece.
  9. Hem exposed edges three-fourths inch (3/4") minimum.
  10. Backpaint flashing in contact with masonry or dissimilar materials with bituminous paint. Surface sand before applying primers.
  11. Integrate flashing in a manner consistent with detailing.
  12. Provide and install continuous clip, minimum 22-gauge.
  13. Apply sealant at horizontal juncture of coping metal to exterior vertical wall.
  14. Shall be fabricated in accordance with all SMACNA provisions.
  15. Install bead of sealant at metal edge juncture at exterior wall surface.

- D. Expansion Joint Field and at Wall:
1. Shall be as outlined by details, and be in full compliance with all provisions of SMACNA and FM Global requirements for attachment, installation and recommendations.
  2. Secure metal flashings per specifications.
  3. Lock seams and end joints.
  4. Form sections identical to profiles as shown or approved similar, to match existing building.
  5. Fabricate corner pieces with minimum eighteen inch (18"), maximum forty-eight inch (48") extensions, formed and sealed with rivets and sealant, as one piece.
  6. Hem exposed edges three-fourths inch (3/4") minimum.
  7. Backpaint flashing in contact with masonry or dissimilar materials with bituminous paint. Surface sand before applying primers.
  8. Integrate flashing in a manner consistent with detailing.
  9. Provide and install continuous clip around perimeter.
  10. Shall be fabricated in accordance with all SMACNA provisions.
- E. Counterflashing:
1. Install new metal counterflashing as required for a permanent watertight installation.
  2. Saw cut brick mortar joint to receive friction fit reglet and removable counterflashing as detailed in SMACNA Figure 4-3E.
- F. Gutter and Downspout:
1. Fabrication:
    - a) Fabricate gutter and downspout of profile and size indicated.
    - b) Field measure site conditions prior to fabricating work.
    - c) Fabricate with required connection pieces.
    - d) Fabricate section square, true, and accurate in size, in maximum possible lengths and free of distortion or defects detrimental to appearance or performance.
    - e) Hem exposed edges of metal.
    - f) Form and seal all metal joints; provide for expansion joints per SMACNA.
  2. Installation:
    - a) Install collector head, downspout, and accessories.
    - b) Join lengths with seams pop riveted and sealed watertight. Flash and seal collector head to downspouts and accessories.
    - c) Seal all metal joints watertight for full metal surface contact.
    - d) Collector Head: SMACNA style profile; submit detail for approval.
    - e) Downspouts: Rectangular profile. Seal all joints, four inches by six inches (4" x 6").
    - f) Support Brackets, Joint Fasteners: Profiled to suit gutters and downspouts.
    - g) Anchorage Devices: SMACNA requirements. Type recommended by fabricator.
    - h) Collector Head Support - Kynar: Color and Finish to match, as recommended by SMACNA.
    - i) Downspout Supports - Straps, Kynar: Color and Finish to match.

- G. Overflow Scupper, Collector Head and Downspout:
1. Fabrication:
    - a) Fabricate overflow scupper, collector head and downspout of profile and size indicated, taking care that the roof drain leader fits properly into the back of the collector head. Seal the pipe to the collector head for watertightness.
    - b) Field measure site conditions prior to fabricating work.
    - c) Fabricate with required connection pieces.
    - d) Fabricate section square, true, and accurate in size, in maximum possible lengths and free of distortion or defects detrimental to appearance or performance.
    - e) Hem exposed edges of metal.
    - f) Form and seal all metal joints; provide for expansion joints per SMACNA.
  2. Installation:
    - a) Install collector head, downspout, and accessories.
    - b) Join lengths with seams pop riveted and sealed watertight. Flash and seal collector head to downspouts and accessories.
    - c) Seal all metal joints watertight for full metal surface contact.
    - d) Collector Head: SMACNA style profile; submit detail for approval.
    - e) Downspouts: Rectangular profile. Seal all joints, four inches by six inches (4" x 6").
    - f) Support Brackets, Joint Fasteners: Profiled to suit gutters and downspouts.
    - g) Anchorage Devices: SMACNA requirements. Type recommended by fabricator.
    - h) Collector Head Support - Kynar: Color and Finish to match, as recommended by SMACNA.
    - i) Downspout Supports - Straps, Kynar: Color and Finish to match.
- H. Pitch Pans:
1. Install pitch pans of 24-gauge galvanized steel according to NRCA standards, minimum of six inches by six inches (6" x 6").
  2. Pitch pans shall be fabricated to minimum of four inches (4") above the finished roof membrane. Seams of pitch pans shall be soldered.
  3. Mastic shall be applied under pitch pan flange a minimum of one-half pound (1/2#) per linear foot.
  4. All metal flanges shall be primed with asphalt primer prior to flashing installation. Inside of pitch pan shall be cleaned and primed as required by pitch pan sealant manufacturer.
  5. All projections enclosed in pitch pans shall be cleaned in any manner suitable and coated with a rust inhibitive coating as approved by the Owner/Project Consultant. Coating shall be allowed to dry prior to pitch pan fill.
  6. Base of pitch pans shall be filled with grout or cementitious binder to proper height and allowed to cure.
  7. Top finish fill shall be self-leveling, one-part urethane, with maximum fill to within three-eighths inch (3/8") of top of pitch pan sides.
  8. Strip metal flange of pitch pan with one strip of Type IV fiberglass felt set in hot bitumen extending from the outer edge of the flange a minimum of three inches (3") inward to base of pitch pan.
  9. Strip in fiberglass felt with 60 mil coal-tar elastomeric membrane (CTEM) flashing set in hot asphalt extending from the outer edge of the Type IV fiberglass underlayment a minimum of three inches (3") inward to the base of the pitch pan.

- I. Bonnets/Hoods:
  - 1. Fabricate and install above all pitch pans, where necessary, or reinstall as applicable, metal bonnets over all pitch pans, NO EXCEPTIONS.
  - 2. Bonnets/Hoods shall be manufactured with metal compatible with metal to which bonnet is to be attached.
  - 3. On beams and other steel, weld in place bonnets fabricated from one-fourth inch (1/4") steel plate.
  - 4. Draw band bonnets fabricated from 22-gauge galvanized steel may be used on circular projections.
  
- J. Rain Diverters Above Doors as noted on drawings:
  - 1. Install new metal counterflashing as required for a permanent watertight installation.
  - 2. Saw cut brick mortar joint to receive friction fit reglet and removable counterflashing as detailed in SMACNA Figure 4-3E.

### 3.05 FINISH

- A. Backpaint concealed metal surfaces with bituminous paint where expected to be in contact with cementitious materials or dissimilar metals. Exposed surfaces to be provided with a factory applied fluorocarbon Kynar finish meeting ASTM A 446 and AAMA specification 605.2 for high performance coating.
  
- B. New 24-gauge hot-dipped galvanized metal shall be painted on all locations visible from the ground with an industrial grade paint to match existing, or standard color selected by Owner/Project Consultant. Galvanized metal surface must be properly prepared by removing all oil, grease, and/or protective mill coatings by solvent cleaning surface in accordance with SSPC-SP1, and according to paint manufacturer's recommendation, to ensure proper adhesion of paint to metal.

END OF SECTION 07 62 00

**SECTION 07 72 00  
ROOF ACCESSORIES**

**PART 1 – GENERAL**

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. This Section includes the following:
  - 1. Equipment supports
  - 2. Roof supports
  - 3. Wall mounted access ladders

1.03 SUBMITTALS

- A. Product Data: For each type of roof accessory indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Shop Drawings: Show fabrication and installation details for roof accessories. Show layouts of roof accessories including plans and elevations. Indicate dimensions, weights, loadings, required clearances, method of field assembly, and components. Include plans, elevations, sections, details, and attachments to other work.
- C. Coordination Drawings: Roof plans, drawn to scale, and coordinating penetrations and roof-mounted items. Show the following:
  - 1. Size and location of roof accessories specified in this Section.
  - 2. Method of attaching roof accessories to roof or building structure.
  - 3. Other roof-mounted items including mechanical and electrical equipment, ductwork, piping, and conduit.
- D. Samples: For each type of exposed factory-applied finish required and for each type of roof accessory indicated, prepared on Samples of size to adequately show color.
- E. Warranty: Special warranty specified in this Section.

1.04 QUALITY ASSURANCE

- A. Sheet Metal Standard: Comply with SMACNA's "Architectural Sheet Metal Manual" details for fabrication of units, including flanges and cap flashing to coordinate with type of roofing indicated.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Pack, handle, and ship roof accessories properly labeled in heavy-duty packaging to prevent damage.

1.06 PROJECT CONDITIONS

- A. Field Measurements: Verify required openings for each type of roof accessory by field measurements before fabrication and indicate measurements on Shop Drawings.

1.07 COORDINATION

- A. Coordinate layout and installation of roof accessories with **roofing membrane and base flashing and** interfacing and adjoining construction to provide a leakproof, weathertight, secure, and noncorrosive installation.
  - 1. With Architect's approval, adjust location of roof accessories that would interrupt **roof drainage routes and roof expansion joints.**

1.08 WARRANTY

- A. The product manufacturer shall provide a one-year full system material warranty necessary to cover replacement of all components of the system against defects in manufacturing. The warranty will not include Acts of God, vandalism, neglect, metal finish or improper spacing of equipment, which would be a result of improper application.

**PART 2 – PRODUCTS**

2.01 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, manufacturers listed in other Part 2 articles.
- B. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers listed in other Part 2 articles.

2.02 EQUIPMENT SUPPORTS

- A. To support HVAC Duct use Model # SS2000D Duct Support. SS2000D is two 17" circular bases with 12 ga. framing channel formed to make an "H" shaped support. Framing channel is adjustable in both height and width.
  - 1. Manufacturers:
    - a). Advanced Support Products, Inc.
- B. To support heavier HVAC equipment use equipment platform Model # HV0505B Base Platform designed by manufacturer to support the weight of the equipment and load requirements. Equipment platform shall consist of (a) 17" circular bases supporting a structural steel frame OR (b) galvanized steel plates, with four holes for approved anchoring per engineering data, supporting a structural steel frame.
  - 1. Manufacturers:
    - a). Advanced Support Products, Inc.

## 2.03 ROOF SUPPORTS

- A. To support conduit or pipe sized up to Ø8" when height adjustment is needed use Model # SS1000A Adjustable Pipe Support. 17" circular base with 12 ga. framing channel, 18"L, attached to 17" circular base using ½" threaded rods, 12"L, with washers and nuts. Height of channel can be adjusted along the length of the ½" threaded rods. Strut clamps are suggested to hold piping or conduit in place.
1. Manufacturers:
    - a) Advanced Support Products, Inc.
- B. To support water or gas piping up to Ø8" or when a roller support with height adjustment is needed use Model # SS1000RA Pipe Support with Adjustable Roller. 17" circular base with SBR heavy duty rubber roller assembly attached to 17" circular base using ½" threaded rods, 12"L, with washers and nuts. Height of roller assembly can be adjusted along the length of the ½" threaded rods.
1. Manufacturers:
    - a) Advanced Support Products, Inc.
- C. To support multiple pipe runs, piping up to Ø12" when height adjustment or pipe suspension is needed use Model # SS4000P, SS6000P or SS8000P Adjustable Support Bridge. SS4000P Adjustable Support Bridge is made of four (4) 17" circular bases and 12ga. framing channel formed to make one "H" shaped support with crossbar. SS6000P Adjustable Support Bridge is made of six (6) 17" circular bases and 12ga. framing channel formed to make two "H" shaped supports with crossbar. SS8000P Adjustable Support Bridge is made of eight (8) 17" circular bases and 12ga. framing channel formed to make three "H" shaped supports with crossbar. Crossbar height is adjustable and offered in 18", 24", 36", and 48" lengths. Use Adjustable Support Bridge with strut clamps or roller accessories or use optional hanger supports to suspend water or gas piping at various heights. Optional hanger supports attached to support frame using ½" threaded rods. Hangers offer complete height adjustments along the length of ½" threaded rods.
1. Manufacturers:
    - a) Advanced Support Products, Inc.

## 2.04 WALL MOUNTED ACCESS LADDERS

- A. Provide Safety Rail Company fixed ladder including railings, bases, accessories and fittings.
1. Product: Fixed Ladders.
    - a. Standards Compliance: ANSI A14.3 and 29 CFR 1910.23.
    - b. Length: 2 to 20 ft (0.61 to 6.1 m).
    - c. Width: 24 in (610 mm).
    - d. Material: Steel, round.
    - e. Finish: Galvanized.
  2. Product: Caged Ladders.
    - a. Standards Compliance: ANSI A14.3 and 29 CFR 1910.23
    - b. Length: 7 to 30 ft (2.13 to 9.14 m).
    - c. Width: 18 in (457 mm).
    - d. Material: Steel, flat.
    - e. Finish: Galvanized.
  3. Accessories:
    - a. Step-Over Bars: Extended handles to assist personnel stepping over a parapet

- wall onto a roof.
- b. Step-Down Ladder: Small ladder rung extension on roof for parapet walls over 12 in (305 mm) high to maintain safe ingress/egress from or to ladder platform.
- 4. Finish: Steel surfaces.
  - a. Factory finished powder coat paint.
  - b. Color: None

## **PART 3 – EXECUTION**

### **3.01 EXAMINATION**

- A. Examine substrates, areas, and conditions, with Installer present, to verify actual locations, dimensions, and other conditions affecting performance of work.
  - 1. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and securely anchored and is ready to receive roof accessories.
  - 2. Verify dimensions of roof openings for roof accessories.
  - 3. Proceed with installation only after unsatisfactory conditions have been corrected.

### **3.02 INSTALLATION**

- A. General: Install roof accessories according to manufacturer's written instructions. Anchor roof accessories securely in place and capable of resisting forces specified. Use fasteners, separators, sealants, and other miscellaneous items as required for completing roof accessory installation. Install roof accessories to resist exposure to weather without failing, rattling, leaking, and fastener disengagement.
- B. Install roof accessories to fit substrates and to result in watertight performance.
- C. Metal Protection: Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with bituminous coating or by other permanent separation as recommended by manufacturer.
  - 1. Coat concealed side of uncoated aluminum roof accessories with bituminous coating where in contact with wood, ferrous metal, or cementitious construction.
  - 2. Underlayment: Where installing exposed-to-view components of roof accessories directly on cementitious or wood substrates, install a course of felt underlayment and cover with a slip sheet, or install a course of polyethylene underlayment.
  - 3. Bed flanges in thick coat of asphalt roofing cement where required by roof accessory manufacturers for waterproof performance.
- D. Install roof accessories level, plumb, true to line and elevation, and without warping, jogs in alignment, excessive oil canning, buckling, or tool marks.
- E. Equipment Support Installation:
  - 1. Install support systems in accordance with manufacturer's instructions and approved shop drawings.
  - 2. Accurately locate and align pre-fabricated pipe supports in locations specified as per approved shop drawings or as required herein and by site conditions to limit pipe and/or conduit deflection to L/240, not to exceed 10' (3m) on center. No Isolation pads are required under the 17" circular bases.



3. Should the roofing manufacturer require a separation sheet between the roof and the support system, place a separation sheet or protective pad conforming to the existing roof manufacturer's system under 17" circular bases. Do not adhere to the roof system or 17" circular bases.
  4. If required, insert frame structures into 17" circular bases as indicated by manufacturer's instructions.
  5. Adjust height of each strut or channel and hanger or roller to its required height and tighten with nut, but do not over-tighten. Check each support for equal weight disbursement. Correct if necessary.
  6. Remove any unused materials and packaging from job site.
- F. Seal joints with elastomeric sealant as required by manufacturer of roof accessories.
- G. Fixed Ladder Installation:
1. Install in accordance with manufacturer's instructions, approved submittals and in proper relationship with adjacent construction.
- 3.03 TOUCH UP
- A. Touch up factory-primed surfaces with compatible primer ready for field painting in accordance with Division 9 painting Sections.
- B. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A 780.
- 3.04 CLEANING
- A. Clean exposed surfaces according to manufacturer's written instructions.

END OF SECTION 07720

**SECTION 07 92 00  
JOINT SEALANTS**

**PART 1 – GENERAL**

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. This Section includes joint sealants for the following applications:
  - 1. Exterior joints in the following vertical surfaces and horizontal non-traffic surfaces:
    - a) Joints between plant-precast architectural concrete units.
    - b) Joints between different materials listed above.
    - c) Perimeter joints between materials listed above and frames of doors, windows and louvers.

1.03 PERFORMANCE REQUIREMENTS

- A. Provide elastomeric joint sealants that establish and maintain watertight and airtight continuous joint seals without staining or deteriorating joint substrates.
- B. Provide joint sealants for interior applications that establish and maintain airtight and water-resistant continuous joint seals without staining or deteriorating joint substrates.

1.04 SUBMITTALS

- A. Product Data: For each joint-sealant product indicated.
- B. Samples for Initial Selection: Manufacturer's color charts consisting of strips of cured sealants showing the full range of colors available for each product exposed to view.
- C. Samples for Verification: For each type and color of joint sealant required, provide Samples with joint sealants in one-half inch (1/2") wide joints formed between two (2) six inch (6") long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.
- D. Preconstruction Field Test Reports: Indicate which sealants and joint preparation methods resulted in optimum adhesion to joint substrates based on preconstruction testing specified in "Quality Assurance" Article.
- E. Compatibility and Adhesion Test Reports: From sealant manufacturer, indicating the following:
  - 1. Materials forming joint substrates and joint-sealant backings have been tested for compatibility and adhesion with joint sealants.
  - 2. Interpretation of test results and written recommendations for primers and substrate preparation needed for adhesion.

- F. Field Test Report Log: For each elastomeric sealant application.
- G. Product Test Reports: Based on comprehensive testing of product formulations performed by a qualified testing agency, indicating that sealants comply with requirements.
- H. Warranties: Special warranties specified in this Section.

#### 1.05 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized Installer who is approved or licensed for installation of elastomeric sealants required for this Project.
- B. Source Limitations: Obtain each type of joint sealant through one source from a single manufacturer.
- C. Preconstruction Compatibility and Adhesion Testing: Submit to joint-sealant manufacturers, for testing indicated below, samples of materials that will contact or affect joint sealants.
  - 1. Use manufacturer's standard test method to determine whether priming and other specific joint preparation techniques are required to obtain rapid, optimum adhesion of joint sealants to joint substrates.
  - 2. Submit not fewer than four (4) pieces of each type of material, including joint substrates, shims, joint-sealant backings, secondary seals, and miscellaneous materials.
  - 3. Schedule sufficient time for testing and analyzing results to prevent delaying the Work.
  - 4. For materials failing tests, obtain joint-sealant manufacturer's written instructions for corrective measures including use of specially formulated primers.
  - 5. Testing will not be required if joint-sealant manufacturers submit joint preparation data that are based on previous testing of current sealant products for adhesion to, and compatibility with, joint substrates and other materials matching those submitted.
- D. Product Testing: Obtain test results for "Product Test Reports" Paragraph in "Submittals" Article from a qualified testing agency based on testing current sealant formulations within a 36-month period preceding the Notice to Proceed the Work.
  - 1. Testing Agency Qualifications: An independent testing agency qualified according to ASTM C 1021 to conduct the testing indicated, as documented according to ASTM E 548.
  - 2. Test elastomeric joint sealants for compliance with requirements specified by reference to ASTM C 920, and where applicable, to other standard test methods.
  - 3. Test elastomeric joint sealants according to SWRI's Sealant Validation Program for compliance with requirements specified by reference to ASTM C 920 for adhesion and cohesion under cyclic movement, adhesion-in-peel, and indentation hardness.
  - 4. Test other joint sealants for compliance with requirements indicated by referencing standard specifications and test methods.
- E. Preconstruction Field-Adhesion Testing: Before installing elastomeric sealants, field test their adhesion to Project joint substrates as follows:
  - 1. Locate test joints where indicated on Project or, if not indicated, as directed by Architect.

2. Conduct field tests for each application indicated below:  
Each type of elastomeric sealant and joint substrate indicated.  
Each type of nonelastomeric sealant and joint substrate indicated.
  3. Notify Architect seven days in advance of dates and times when test joints will be erected.
  4. Arrange for tests to take place with joint-sealant manufacturer's technical representative present.
    - a) Test Method: Test joint sealants according to Method A, Field-Applied Sealant Joint Hand Pull Tab, in Appendix X1 in ASTM C 1193.
      - i For joints with dissimilar substrates, verify adhesion to each substrate separately; extend cut along one side, verifying adhesion to opposite side. Repeat procedure for opposite side.
  5. Report whether sealant in joint connected to pulled-out portion failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each type of product and joint substrate. For sealants that fail adhesively, retest until satisfactory adhesion is obtained.
  6. Evaluation of Preconstruction Field-Adhesion-Test Results: Sealants not evidencing adhesive failure from testing, in absence of other indications of noncompliance with requirements, will be considered satisfactory. Do not use sealants that fail to adhere to joint substrates during testing.
- F. Mockups: Build mockups incorporating sealant joints, as follows, to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution:
1. Joints in mockups of assemblies specified in other Sections that are indicated to receive elastomeric joint sealants, which are specified by reference to this Section.
- G. Preinstallation Conference: Conduct conference at Project site.

#### 1.06 PROJECT CONDITIONS

- A. Do not proceed with installation of joint sealants under the following conditions:
1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.
  2. When joint substrates are wet.
  3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
  4. Contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

#### 1.07 WARRANTY

- A. Special Installer's Warranty: Installer's standard form in which Installer agrees to repair or replace elastomeric joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.  
Warranty Period: Five (5) years from date of Substantial Completion.
- B. Special Manufacturer's Warranty: Manufacturer's standard form in which elastomeric sealant manufacturer agrees to furnish elastomeric joint sealants to repair or replace those that do not comply with performance and other requirements specified in this Section within specified warranty period.

1. Warranty Period: Five (5) years from date of Substantial Completion.
- C. Special warranties specified in this Article exclude deterioration or failure of elastomeric joint sealants from the following:
1. Movement of the structure resulting in stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression caused by structural settlement or errors attributable to design or construction.
  2. Disintegration of joint substrates from natural causes exceeding design specifications.
  4. Mechanical damage caused by individuals, tools, or other outside agents.
  5. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

## **PART 2 – PRODUCTS**

### **2.01 MANUFACTURERS**

- A. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, products listed in other Part 2 articles.
- B. Products: Subject to compliance with requirements, provide one of the products listed in other Part 2 articles.

### **2.02 MATERIALS, GENERAL**

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer, based on testing and field experience.
- B. VOC Content of Interior Sealants: Provide interior sealants and sealant primers that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24):
  1. Sealants: 250 g/L.
  2. Sealant Primers for Nonporous Substrates: 250 g/L.
  3. Sealant Primers for Porous Substrates: 775 g/L.
- C. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

### **2.03 ELASTOMERIC JOINT SEALANTS**

- A. Elastomeric Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid-applied chemically curing sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.
- B. Stain-Test-Response Characteristics: Where elastomeric sealants are specified to be nonstaining to porous substrates, provide products that have undergone testing according to ASTM C 1248 and have not stained porous joint substrates indicated for Project.

- C. Single-Component Neutral- and Basic-Curing Silicone Sealant:
  - 1. Available Products:
    - a) GE Silicones; SilPruf.
    - b) Dow Corning Corporation; 795
  - 2. Type and Grade: S (single component) and NS (nonsag).
  - 3. Class: 100/50.
  - 4. Use Related to Exposure: NT (nontraffic).
  - 5. Uses Related to Joint Substrates: M, G, A, and, as applicable to joint substrates indicated, O.
    - a) Use O Joint Substrates: Coated glass, color anodic aluminum, and substrates.
  - 6. Stain-Test-Response Characteristics: Nonstaining to porous substrates per ASTM C 1248.
  
- D. Multi-component Nonsag Urethane Sealant:
  - 1. Available Products:
    - a) Sonneborn, Division of ChemRex Inc.; NP 2.
  - 2. Type and Grade: M (multi-component) and NS (nonsag).
  - 3. Class: 25.
  - 4. Uses Related to Exposure: NT (nontraffic).
  - 5. Uses Related to Joint Substrates: M, G, A, and, as applicable to joint substrates indicated, O.
    - a) Use O Joint Substrates: granite and limestone substrates.

#### 2.04 PREFORMED JOINT SEALANTS

- A. Preformed Silicone-Sealant System: Manufacturer's standard system consisting of precured low-modulus silicone extrusion, in sizes to fit joint widths as applicable, combined with a neutral-curing silicone sealant for bonding extrusions to substrates.
  - 1. Available Products:
    - a) Dow Corning Corporation; 123 Silicone Seal.
    - b) GE Silicones; UltraSpan US1100.

#### 2.05 JOINT-SEALANT BACKING

- A. General: Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
- B. Cylindrical Sealant Backings: ASTM C 1330, O (open-cell material) or any of the preceding types, as approved in writing by joint-sealant manufacturer for joint application indicated, and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance:
- C. Elastomeric Tubing Sealant Backings: Neoprene, butyl, EPDM, or silicone tubing complying with ASTM D 1056, nonabsorbent to water and gas, and capable of remaining resilient at temperatures down to minus 26 deg F (minus 32 deg C). Provide products with low compression set and of size and shape to provide a secondary seal, to control sealant depth, and to otherwise contribute to optimum sealant performance.

- D. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where applicable.

## 2.06 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.
- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.
- C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

## **PART 3 – EXECUTION**

### 3.01 EXAMINATION

- A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.02 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
  - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, gaskets, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
  - 2. Clean porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air. Porous joint substrates include the following:
    - a) Concrete.
    - b) Masonry.
    - c) Unglazed surfaces of ceramic tile.
  - 3. Remove laitance and form-release agents from concrete.

4. Clean nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants. Nonporous joint substrates include the following:
  - a) Metal.
  - b) Glass.
- B. Joint Priming: Prime joint substrates based on preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

### 3.03 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. Install sealant backings of type indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.  
Do not leave gaps between ends of sealant backings.  
Do not stretch, twist, puncture, or tear sealant backings.
  1. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- D. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- E. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
  1. Place sealants so they directly contact and fully wet joint substrates.
  2. Completely fill recesses in each joint configuration.
  3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- F. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
  1. Remove excess sealant from surfaces adjacent to joints.
  2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
  3. Provide concave joint configuration per Figure 5A in ASTM C 1193, unless otherwise indicated.



4. Provide flush joint configuration where indicated per Figure 5B in ASTM C 1193.
  5. Provide recessed joint configuration of recess depth and at locations indicated per Figure 5C in ASTM C 1193.
    - 1) Use masking tape to protect surfaces adjacent to recessed tooled joints.
- G. Installation of Preformed Silicone-Sealant System: Comply with the following requirements:
1. Apply masking tape to each side of joint, outside of area to be covered by sealant system.
  2. Apply silicone sealant to each side of joint to produce a bead of size complying with preformed silicone-sealant system manufacturer's written instructions and covering a bonding area of not less than three-eighths inch (3/8"). Hold edge of sealant bead one-fourth inch (1/4") inside masking tape.
  3. Within ten (10) minutes of sealant application, press silicone extrusion into sealant to wet extrusion and substrate. Use a roller to apply consistent pressure and ensure uniform contact between sealant and both extrusion and substrate.
  4. Complete installation of sealant system in horizontal joints before installing in vertical joints. Lap vertical joints over horizontal joints. At ends of joints, cut silicone extrusion with a razor knife.

### 3.04 FIELD QUALITY CONTROL

- A. Field-Adhesion Testing: Field test joint-sealant adhesion to joint substrates as follows:
1. Extent of Testing: Test completed elastomeric sealant joints as follows:
    - a) Perform 10 tests for the first 1,000 feet of joint length for each type of elastomeric sealant and joint substrate.
    - b) Perform 1 test for each 1,000 feet of joint length thereafter or 1 test per each floor per elevation.
  2. Test Method: Test joint sealants according to Method A, Field-Applied Sealant Joint Hand Pull Tab or Field-Applied Sealant Joint Hand Pull Flap in Appendix X1 in ASTM C 1193, as appropriate for type of joint-sealant application indicated.
    - a) For joints with dissimilar substrates, verify adhesion to each substrate separately; do this by extending cut along one side, verifying adhesion to opposite side. Repeat procedure for opposite side.
  3. Inspect joints for complete fill, for absence of voids, and for joint configuration complying with specified requirements. Record results in a field-adhesion-test log.
  4. Inspect tested joints and report on the following:
    - a) Whether sealants in joints connected to pulled-out portion failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each type of product and joint substrate. Compare these results to determine if adhesion passes sealant manufacturer's field-adhesion hand-pull test criteria.
    - b) Whether sealants filled joint cavities and are free of voids.
    - c) Whether sealant dimensions and configurations comply with specified requirements.
  5. Record test results in a field-adhesion-test log. Include dates when sealants were installed, names of persons who installed sealants, test dates, test locations, whether joints were primed, adhesion results and percent elongations, sealant fill, sealant configuration, and sealant dimensions.
  6. Repair sealants pulled from test area by applying new sealants following same procedures used originally to seal joints. Ensure that original sealant surfaces are clean and that new sealant contacts original sealant.

- B. Evaluation of Field Test Results: Sealants not evidencing adhesive failure from testing or noncompliance with other indicated requirements will be considered satisfactory. Remove sealants that fail to adhere to joint substrates during testing or to comply with other requirements. Retest failed applications until test results prove sealants comply with indicated requirements.

### 3.05 CLEANING

- A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

### 3.06 PROTECTION

- A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

### 3.07 JOINT-SEALANT SCHEDULE

- A. Joint-Sealant Application: Exterior vertical and horizontal joints between masonry units.
  - 1. Joint Sealant: Single-component nonsag urethane sealant.
  - 2. Joint-Sealant Color: As selected by Architect from manufacturer's full range.
- B. Joint-Sealant Application: Exterior perimeter joints between masonry surfaces and frames of doors, windows and louvers.
  - 1. Joint Sealant: Single-component neutral- and basic-curing silicone sealant.
  - 2. Joint-Sealant Color: As selected by Architect from manufacturer's full range.

**END OF SECTION 07 92 00**

**SECTION 15 15 00**  
**SANITARY WASTE AND VENT SPECIALTIES**  
**(Vent Pipe Extensions)**

**PART 1 - GENERAL**

1.01 SECTION INCLUDES

- A. Plumbing vent pipe extension fittings.

1.02 RELATED SECTIONS

- A. Division 07 Section "Preparation for Reroofing" for general requirements for preparation for building reroofing including coordination of related plumbing and mechanical work.
- B. Division 22 Section "Sanitary Waste and Vent Piping" for general requirements for waste and vent piping.

1.03 REFERENCES

- A. ASTM International (ASTM):
  - 1. ASTM C 920 Specification for Elastomeric Joint Sealants.
  - 2. ASTM D 2564 Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems.
  - 3. ASTM D 2665 Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Drain, Waste and Vent Pipe and Fittings.
  - 4. ASTM F 656 Standard Specification for Primers for Use in Solvent Cement Joints of Poly(Vinyl Chloride) (PVC) Plastic Pipe and Fittings
- B. International Association of Plumbing and Mechanical Officials (IAPMO):
  - 1. Universal Plumbing Code (cUPC US and Canada) approvals.
- C. National Roofing Contractors Association (NRCA):
  - 1. NRCA Roofing Manual, Latest Edition.
- D. NSF International (NSF):
  - 1. NSF/ANSI 14 – Plastics Piping Systems Components and Related Materials.

1.04 ACTION SUBMITTALS

- A. Product Data: For plumbing vent pipe extensions, indicating mounting and securing requirements and extended heights required.
- B. Shop Drawings: Submit annotated copy of roof plan indicating locations of plumbing vents requiring pipe extensions, based upon Contractor's field verification of existing conditions and requirements of applicable of plumbing code.
  - 1. Indicate details of completed roofing flashing configuration for all locations. Include reference to applicable NRCA plate number.

## 1.05 INFORMATION SUBMITTALS

- A. Manufacturer's Certificate: On roofing membrane manufacturer's letterhead, accepting use of proposed sealant in contact with roofing membrane.

## 1.06 QUALITY ASSURANCE

- A. Comply with NSF/ANSI 14, "Plastics Piping Systems Components and Related Materials," for plastic piping components.
- B. Comply with flashing requirements shown in NRCA Roofing Manual.

## **PART 2 - PRODUCTS**

### 2.01 MANUFACTURERS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide sanitary vent pipe extensions manufactured by Tubos, Inc., Clearwater, FL; Phone (727) 504-0633, [info@tubos.biz](mailto:info@tubos.biz).

### 2.02 MATERIALS

- A. Solid-Wall PVC Pipe: ASTM D 2665, drain, waste and vent.
- B. Sealant: Single-Component, Nonsag, Urethane Joint Sealant: ASTM C 920, Type S, Grade NS, Class 25, for Use NT, and acceptable to roofing membrane manufacturer.

### 2.03 PLUMBING VENT PIPE EXTENSION

- A. Roof Vent Pipe Extension: Solid-wall PVC fitting consisting of pipe and splice sleeve inserts, configured for insertion and sealing to existing plumbing vent piping, sized to fit inside diameter of plumbing vent piping, enabling extension of piping to field-determined height.

## **PART 3 - EXECUTION**

### 3.01 EXAMINATION

- A. Examine each plumbing vent piping location to determine required plumbing vent pipe extensions based upon minimum finished height requirements and measured existing conditions. Indicate plumbing vent pipe extensions on shop drawings.
  - 1. Examine existing plumbing vent piping conditions and determine whether flashing reuse is acceptable or whether replacement of flashing is required. Indicate flashing replacement locations on shop drawings.

### 3.02 PREPARATION

- A. Remove existing flashing from plumbing vent piping to extent required to enable installation of new plumbing vent pipe extensions and completion of flashings.

- B. Clean plumbing vent piping to ensure that joint surfaces are clean, dry and free from contamination including dirt, oils, grease, tar, wax, rust and other substances that may inhibit adhesive or sealant performance.

### 3.03 INSTALLATION OF PLUMBING VENT PIPE EXTENSIONS

- A. Insert end of plumbing vent pipe extension into existing plumbing vent piping.
  - 1. Verify circumference of existing plumbing vent piping and plumbing vent pipe extension are appropriate to achieve secure, rigid installation.
  - 2. Mark plumbing vent pipe extension at required height above finished roof surface level, and cut to required length.
  - 3. Apply adhesive or sealant to plumbing vent piping as appropriate to existing pipe material and plumbing vent pipe extension, and mate plumbing vent pipe extension to existing piping. Apply adequate adhesive or sealant to achieve secure, rigid installation.
- B. Flashing: Comply with primary roofing material manufacturer's published recommendations for installation of approved pipe flashings. Match existing flashing material unless otherwise directed.

### 3.04 CLEANING AND PROTECTION

- A. Repair or replace defective work, include loose plumbing vent extensions, or unsecured flashings or flashings that are not weathertight.

**END OF SECTION 15 15 00**



**TEXAS**  
Health and Human Services

# **Attachment G2**

## **Drawings**

# Project No. 18-002-BSH ROOF REPAIR & REPLACEMENT PROJECT

## Big Spring State Hospital

1901 North Hwy. 87, Big Spring, TX 79720

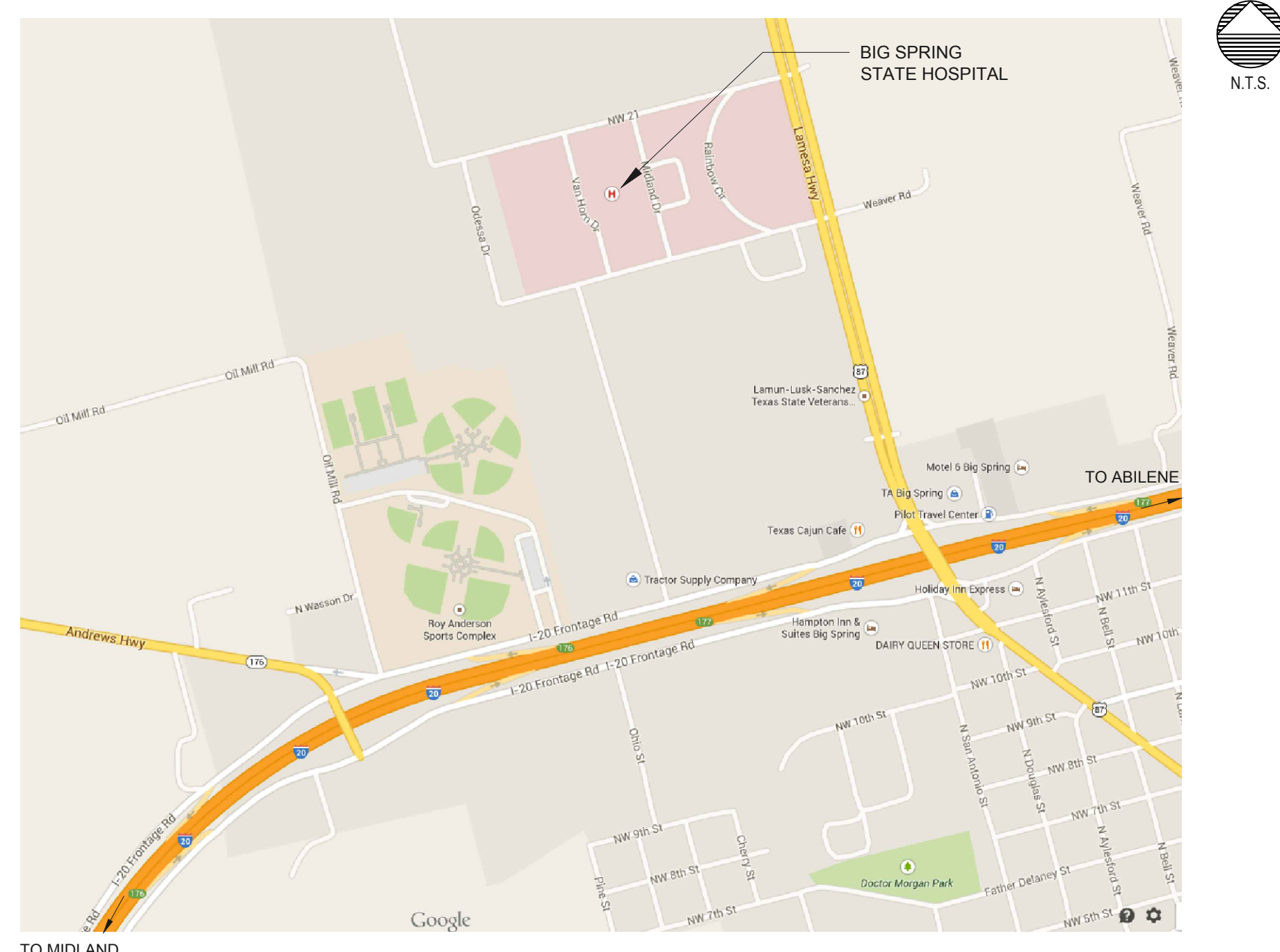
### DATE OF ISSUE

08/15/2018

### GENERAL NOTES

- ALL WORK IS NEW UNLESS OTHERWISE INDICATED TO BE "EXISTING" OR "REUSED" OR "RELOCATED".
- WHERE NEW WORK IS APPLICABLE TO PATIENT/CLIENT LIVING, USE, OR SUPPORT AREAS; CONTRACTOR SHALL OBTAIN AN APPROVED INFECTION CONTROL PERMIT PRIOR TO INITIATING ACTUAL WORK. PERMIT APPLICATION SHALL BE INITIATED WITH HIS MOBILIZATION SUBMITTAL. (SEE UGCS/SGCS ARTICLE 7.8.)
- EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO EXCAVATION OR TRENCHING. CONTRACTOR SHALL HAND DIG WITHIN 5 FEET EITHER SIDE OF POTENTIAL UTILITY CONFLICTS/INTERFERENCES UNTIL THE UTILITY IS PHYSICALLY EXPOSED PRIOR TO PERFORMING MECHANICAL TRENCHING OR EXCAVATING.
- CONTRACTOR SHALL FIELD VERIFY BY MEASUREMENT EXACT LOCATIONS DEPICTED AND ALL DIMENSIONS.
- PROSPECTIVE BIDDERS ARE HIGHLY ENCOURAGED TO ATTEND THE SCHEDULED PRE-BID SITE VISIT TO THOROUGHLY FAMILIARIZE THEMSELVES WITH ANY AND ALL EXISTING SITE AND PROJECT LOCATION CONDITIONS WHICH MAY AFFECT THE WORK UNDER THIS CONTRACT. THE OWNER AND ENGINEER WILL NOT BE RESPONSIBLE FOR CONTRACTOR ERRORS OR OMISSIONS WHICH COULD BE MADE REASONABLY KNOWN BY ATTENDING A SCHEDULED SITE VISIT.
- THE PLANS INDICATE THE EXTENT AND GENERAL REQUIREMENTS OF THE DEMOLITION, ALTERATIONS, RELOCATIONS, AND ADDITIONS, IF ANY DEPARTURES FROM THE DRAWINGS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND THE REASONS THEREFORE SHALL BE SUBMITTED AS SOON AS POSSIBLE TO THE ENGINEER AND OWNER FOR ACTION. NO SUCH DEPARTURES SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER AND OWNER.
- EVERY EFFORT HAS BEEN MADE TO CLEARLY AND FULLY DEPICT ALL KNOWN EXISTING CONDITIONS AND ITEMS REQUIRING REMOVAL, RELOCATION, DEMOLITION AND/OR ALTERATION. DUE TO THE SMALL SCALE OF THE DRAWINGS AND THE NATURE OF RENOVATION AND REHAB WORK, CERTAIN ITEMS SUCH AS THOSE CONCEALED BEHIND EQUIPMENT, FINISHES, OR STRUCTURAL MEMBERS AND THE LIKE, OR THOSE NOT ACCESSIBLE FOR INSPECTION OR IDENTIFIABLE AS ABANDONED OR TO BE ABANDONED WITHOUT DESTRUCTION, MAY NOT BE SPECIFICALLY AND/OR SEPARATELY DEFINED OR SHOWN. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED REMOVAL, RELOCATION, DEMOLITION, AND/OR ALTERATION OF SUCH ITEMS REASONABLY INHERENT WITH SUCH RENOVATION AND REHABILITATION WORK AT NO ADDITIONAL COST TO THE OWNER IN ACCORDANCE WITH THE BEST COMMERCIAL PRACTICES AND THESE CONTRACT DOCUMENTS TO PROVIDE A COMPLETE AND USEABLE FACILITY WITHIN THE SCOPE OF THE WORK TO BE PERFORMED. NO CONSIDERATION SHALL BE GIVEN TO THE NATURE OF THE MATERIALS, AND ALL DEMOLITION SHALL BE DESIGNATED AS UNCLASSIFIED DEMOLITION. DEMOLITION OF EVERY DESCRIPTION AND OF WHATEVER SUBSTANCES ENCOUNTERED SHALL BE PERFORMED TO THE DEGREE REQUIRED FOR THE INSTALLATION OF THE ITEMS/FINISHES REQUIRED HEREIN OR AS SPECIFIED.
- WHEREVER THE WORD(S) "PROVIDE", "FURNISH", "INSTALL" AND/OR THE LIKE IS/ARE USED; IT IS TO BE DEFINED AS AND UNDERSTOOD TO REQUIRE THAT THE CONTRACTOR SHALL PROVIDE THE ITEM(S)/SYSTEM(S) TOTALLY AND COMPLETELY FURNISHED, INSTALLED, AND FULLY OPERABLE AND USEABLE FOR ITS/THEIR INTENDED PURPOSE(S) UNLESS SPECIFICALLY NOTED OTHERWISE IN THE CONTRACT DOCUMENTS.

### VICINITY MAP



### PROJECT DIRECTORY

HHS Maintenance and Construction:  
Texas Health and Human Services Commission  
P. O. Box 12668 Mail Code 2064  
Austin, Texas 78711-2668  
(909 W. 45th Street, Bldg. 633, Austin, TX 78751)  
FAX (512) 206-5930

Austin Phone No.  
John Robert - Director (512) 206-5888  
Muhammad Ally - Assistant Director (512) 206-4649  
Tony Hackney - Manager, Construction Services (512) 206-5893

Project Manager Phone No.  
Mike Schultz, P.E. (325) 795-5596  
West Texas Office - Facilities Maintenance and Construction  
Texas Health and Human Services Commission  
4601 South 1st Street (Room G-123), Abilene, TX 79605 - Physical Address  
(PO Box 521, Abilene, TX 79604-0521 (Mail Code 0011)) - Mailing Address

Assistant Superintendent Phone No.  
George Oteiza (432) 268-7300  
(1901 North Highway 87, Big Spring, TX 79720)

PM  
Fernando Rodriguez (432) 268-7443  
(1901 North Highway 87, Big Spring, TX 79720)

Engineer Phone No.  
Brad Draper (Project Manager)  
Armko Industries, Inc. (972) 874-1388  
(1320 Spinks Rd., Flower Mound, TX 75028) (972) 874-1391  
www.Armko.com

### LIST OF DRAWINGS

C1.01	COVER SHEET
S1.01	OVERALL SITE PLAN
R1.01	OVERALL ROOF PLAN AND SPECIFIC NOTES - BUILDING # 502 (ADMINISTRATION), BUILDING # 503 (ENVIRONMENTAL SERVICES / NURSING DORM) & BUILDING # 508 (STEAM PLANT)
R1.02	OVERALL ROOF PLAN AND SPECIFIC NOTES - BUILDING # 528 (RESIDENCE), DEMO PLAN, RAFTER PLAN, NEW ROOF PLAN & ELEVATIONS.
R1.03	OVERALL ROOF PLAN AND SPECIFIC NOTES - BUILDING # 542 (CHAPEL) & BUILDING # 557 (ACTIVITY THERAPY)
R1.04	SECOND FLOOR PLAN - BUILDING # 502 (ADMINISTRATION) - FOR INFORMATIONAL PURPOSES
R1.05	FIRST FLOOR PLAN - BUILDING # 503 (ENVIRONMENTAL SERVICES / NURSING DORM) - FOR INFORMATIONAL PURPOSES
R1.06	SECOND FLOOR PLAN - BUILDING # 503 (ENVIRONMENTAL SERVICES / NURSING DORM) - FOR INFORMATIONAL PURPOSES
R1.07	FLOOR PLAN - BUILDING # 508 (STEAM PLANT) - FOR INFORMATIONAL PURPOSES
R1.08	FLOOR PLAN - BUILDING # 542 (CHAPEL) - FOR INFORMATIONAL PURPOSES
R1.09	FLOOR PLAN - BUILDING # 557 (ACTIVITY THERAPY) - FOR INFORMATIONAL PURPOSES
R2.01	ROOFING DETAILS
R2.02	ROOFING DETAILS
R2.03	ROOFING DETAILS

### SCOPE OF WORK

#### SCOPE OF WORK - BUILDING NO. 502 ADMINISTRATION

IT IS THE INTENT OF THESE DRAWINGS THAT THE NEW WORK WILL PROVIDE A WATERTIGHT FACILITY. THE ATTACHED SPECIFICATIONS DESCRIBE THE MINIMUM ACCEPTABLE STANDARDS OF CONSTRUCTION AND FINISH.

MASONRY RISE WALL ADJACENT TO ROOF AREA "B": WORK SHALL INCLUDE REMOVAL OF EXISTING SEALANT AND MORTAR AT VARIOUS ELEVATIONS IN THE STONE FAÇADE AS DESCRIBED IN THE PROJECT SPECIFICATIONS. CONTRACTOR SHALL REPAIR MASONRY WALL SYSTEM AS NEEDED TO MITIGATE LEAKS TO THE INTERIOR OF THE BUILDING. CONTRACTOR SHALL PROVIDE ALL SPECIFIED SEALANT AND REQUIRED ACCESSORIES AS PER THE PROJECT SPECIFICATIONS. CONTRACTOR SHALL PROVIDE OWNER WITH A TWO (2) YEAR LABOR AND MATERIALS WARRANTY.

METAL COPULA ON ROOF AREA "C": WORK SHALL INCLUDE REMOVAL OF EXISTING SEALANT AT VARIOUS ELEVATIONS IN THE METAL COPULA AS DESCRIBED IN THE PROJECT SPECIFICATIONS. CONTRACTOR SHALL REPAIR METAL COPULA AS NEEDED TO MITIGATE LEAKS TO THE INTERIOR OF THE BUILDING. CONTRACTOR SHALL PERFORM A WET SEAL ON ALL GLASS TO METAL JOINTS AND RESEAL ALL METAL TO METAL JOINTS AS SPECIFIED. CONTRACTOR SHALL PROVIDE OWNER WITH A FIVE (5) YEAR LABOR AND MATERIALS WARRANTY.

REPAIRS TO ROOF AREA "C": WORK SHALL INCLUDE REPAIR TO THE EXISTING VALLEY AREA AS NECESSARY TO MITIGATE LEAKS TO THE INTERIOR OF THE BUILDING. CONTRACTOR SHALL PROVIDE OWNER WITH A TWO (2) YEAR LABOR AND MATERIALS WARRANTY.

REPAIRS TO ROOF AREA "D": WORK SHALL INCLUDE REMOVAL OF EXISTING BASE FLASHING SYSTEM AND INSTALL NEW BASE FLASHINGS SYSTEM AS SPECIFIED. CONTRACTOR SHALL REPAIR THE MODIFIED BITUMEN SYSTEM AS NEEDED TO MITIGATE LEAKS TO THE INTERIOR OF THE BUILDING. CONTRACTOR SHALL PROVIDE OWNER WITH A TWO (2) YEAR LABOR AND MATERIALS WARRANTY.

REPAIR TO ROOF AREA "E": WORK SHALL INCLUDE REPAIR OF EXISTING BASE FLASHING AS NECESSARY TO MITIGATE LEAKS TO THE INTERIOR OF THE BUILDING. CONTRACTOR SHALL PROVIDE OWNER WITH A TWO (2) YEAR LABOR AND MATERIALS WARRANTY. CONTRACTOR SHALL PROVIDE OWNER WITH A TWO (2) YEAR LABOR AND MATERIALS WARRANTY.

SCOPE OF WORK - BUILDING NO. 503 ENVIRONMENTAL SERVICES / NURSING DORM  
IT IS THE INTENT OF THESE DRAWINGS THAT THE NEW WORK WILL PROVIDE A WATERTIGHT FACILITY. THE ATTACHED SPECIFICATIONS DESCRIBE THE MINIMUM ACCEPTABLE STANDARDS OF CONSTRUCTION AND FINISH.

LOW-SLOPED ROOFING ON OPEN AIR PLAZA DECKS UNDER AREAS "B & G": WORK SHALL INCLUDE TEAR OFF OF THE EXISTING ROOF SYSTEM AND PAVERS DOWN TO THE EXISTING SUBSTRATE, FULLY ADHERE A TWO-PLY VAPOR BARRIER AND FULLY ADHERE SPECIFIED INSULATION IN ADDITION TO A SUBSTRATE BOARD, FULLY ADHERE ONE PLY OF SBS MODIFIED BITUMEN BASE PLY, AND FULLY ADHERE ONE PLY OF SBS MODIFIED BITUMEN SMOOTH CAP SHEET. CONTRACTOR SHALL FINISH ROOFING SYSTEM WITH AN APPLICATION OF DECK COATING AS SPECIFIED. PROVIDE A TEN (10) YEAR MANUFACTURER'S WARRANTY AND A TWO (2) YEAR CONTRACTOR'S WARRANTY. WORK SHALL ALSO INCLUDE ALL HVAC AND ELECTRICAL, PIPING DISCONNECT AND RE-CONNECTION. INSTALLATION SHALL BE AS PER NRCA, SMACNA, ANSISPR, SPECIFICATIONS, DETAILS AND MANUFACTURER'S GUIDELINES.

SCOPE OF WORK - BUILDING NO. 508 STEAM PLANT  
SLOPED METAL ROOFING AREAS "B & G": WORK SHALL INCLUDE PERFORMING REMEDIAL REPAIRS TO THE EXISTING MODIFIED BITUMEN ROOF AS SPECIFIED. ALL WORK SHALL BE PERFORMED PER THESE SPECIFICATIONS AS FOLLOWS:  
• WALL  
• INSTALL NEW METAL COUNTER FLASHING SYSTEM AT MASONRY RISE

ROOF AREAS A AND E - RELOCATE EXISTING DOWNSPOUTS IN ORDER TO CLEAR THE PLY PENETRATIONS AT THE BASE OF THE WALL BY APPROXIMATELY 20 FEET.

#### SCOPE OF WORK - BUILDING NO. 508 STEAM PLANT

IT IS THE INTENT OF THESE DRAWINGS THAT THE NEW WORK WILL PROVIDE A WATERTIGHT FACILITY. THE ATTACHED SPECIFICATIONS DESCRIBE THE MINIMUM ACCEPTABLE STANDARDS OF CONSTRUCTION AND FINISH.

REPAIRS AT METAL ROOFING AREA "A": WORK SHALL INCLUDE REPLACE EXISTING METAL EDGE AND FASCIA TRIM. MATCH EXISTING FASCIA AND TRIM DETAIL.

REPAIRS AT METAL ROOFING AREA "E": WORK SHALL INCLUDE REPAIR OF METAL ROOFING SYSTEM AS NEEDED TO STOP WATER MIGRATION INTO THE INTERIOR OF THE BUILDING.

LOW-SLOPED ROOFING AREAS "A, B, C, D, E, F, & G": WORK SHALL INCLUDE PERFORMING REMEDIAL REPAIRS TO THE EXISTING URETHANE FOAM AND METAL ROOF ASSEMBLY AS SPECIFIED. WORK SHALL INCLUDE PROPER PREPARATION OF THE EXISTING ROOFING SYSTEM TO RECEIVE NEW ELASTOMERIC ROOF COATING SYSTEM. SUBSTRATE PREPARATION SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL FLASHING DETAILS AT HORIZONTAL AND VERTICAL SEAMS, PENETRATIONS, CURBS, AND FASTENERS. ALL WORK SHALL BE PERFORMED PER THESE SPECIFICATIONS. PROVIDE A TEN (10) YEAR MANUFACTURER'S WARRANTY AND A TWO (2) YEAR CONTRACTOR'S WARRANTY. WORK SHALL ALSO INCLUDE ALL HVAC AND ELECTRICAL, PIPING DISCONNECT AND RE-CONNECTION. INSTALLATION SHALL BE AS PER NRCA, SMACNA, ANSISPR, SPECIFICATIONS, DETAILS AND MANUFACTURER'S GUIDELINES.

#### SCOPE OF WORK - BUILDING NO. 528 RESIDENCE

IT IS THE INTENT OF THESE DRAWINGS THAT THE NEW WORK WILL PROVIDE A WATERTIGHT FACILITY. THE ATTACHED SPECIFICATIONS DESCRIBE THE MINIMUM ACCEPTABLE STANDARDS OF CONSTRUCTION AND FINISH.

LOW-SLOPED ROOFING AREA "A": WORK SHALL INCLUDE THE INSTALLATION OF A NEW RAFTER AND DECKING SYSTEM WITH 4/12' SLOPE AS SPECIFIED. RAISE ALL VENT STACKS AND MECHANICAL EQUIPMENT TO PENETRATE THE NEW ROOFING SYSTEM WITH EIGHT-INCH HEIGHT CLEARANCE FROM FINISHED ROOF SURFACE. INSTALL NEW THERMAL INSULATION AS SPECIFIED TO MEET AN R-25 WITH THE NEW METAL ROOFING SYSTEM. INSTALL A 24-GAUGE KYNAR FINISH (EVERGREEN) STANDING SEAM METAL ROOF SYSTEM. THE ROOF SHALL BE INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURES. CONTRACTOR SHALL PROVIDE A TWENTY (20) YEAR MANUFACTURER'S WARRANTY AND A TWO (2) YEAR CONTRACTOR'S WARRANTY. WORK SHALL ALSO INCLUDE ALL HVAC AND ELECTRICAL, PIPING DISCONNECT AND RE-CONNECTION. INSTALLATION SHALL BE AS PER NRCA, SMACNA, ANSISPR, SPECIFICATIONS, DETAILS AND MANUFACTURER'S GUIDELINES.  
STEP-SLOPED ROOFING AREA "B": WORK SHALL INCLUDE TEAR OFF OF THE EXISTING METAL ROOF SYSTEM. INSTALL NEW THERMAL INSULATION AS SPECIFIED TO MEET AN R-25 WITH THE NEW METAL ROOFING SYSTEM. INSTALL A 24-GAUGE KYNAR FINISH (EVERGREEN) STANDING SEAM METAL ROOF SYSTEM. THE UNDERLAYMENT SHALL BE A SELF-ADHERED MEMBRANE. THE ROOF SHALL BE INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURES. CONTRACTOR SHALL PROVIDE A TWENTY (20) YEAR MANUFACTURER'S WARRANTY AND A TWO (2) YEAR CONTRACTOR'S WARRANTY. WORK SHALL ALSO INCLUDE ALL HVAC AND ELECTRICAL, PIPING DISCONNECT AND RE-CONNECTION. INSTALLATION SHALL BE AS PER NRCA, SMACNA, ANSISPR, SPECIFICATIONS, DETAILS AND MANUFACTURER'S GUIDELINES.

#### SCOPE OF WORK - BUILDING NO. 542 CHAPEL

IT IS THE INTENT OF THESE DRAWINGS THAT THE NEW WORK WILL PROVIDE A WATERTIGHT FACILITY. THE ATTACHED SPECIFICATIONS DESCRIBE THE MINIMUM ACCEPTABLE STANDARDS OF CONSTRUCTION AND FINISH.

LOW-SLOPED ROOFING AREAS "A & C": WORK SHALL INCLUDE PERFORMING REMEDIAL REPAIRS TO THE EXISTING MODIFIED BITUMEN ROOF ASSEMBLY AS SPECIFIED. WORK SHALL INCLUDE PROPER PREPARATION OF THE EXISTING MODIFIED BITUMEN ROOFING SYSTEM TO RECEIVE NEW ELASTOMERIC ROOF COATING SYSTEM. SUBSTRATE PREPARATION SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL FLASHING DETAILS AT HORIZONTAL AND VERTICAL SEAMS, PENETRATIONS, CURBS, AND FASTENERS. ALL WORK SHALL BE PERFORMED PER THESE SPECIFICATIONS. PROVIDE A TEN (10) YEAR MANUFACTURER'S WARRANTY AND A TWO (2) YEAR CONTRACTOR'S WARRANTY. WORK SHALL ALSO INCLUDE ALL HVAC AND ELECTRICAL, PIPING DISCONNECT AND RE-CONNECTION. INSTALLATION SHALL BE AS PER NRCA, SMACNA, ANSISPR, SPECIFICATIONS, DETAILS AND MANUFACTURER'S GUIDELINES.

SIGN IN FRONT OF BUILDING: REMOVE EXISTING SHAKE SHINGLES AND REPLACE WITH R-PANEL PRE-FINISHED METAL PANELS AS SPECIFIED.

#### SCOPE OF WORK - BUILDING NO. 557 ACTIVITY THERAPY

IT IS THE INTENT OF THESE DRAWINGS THAT THE NEW WORK WILL PROVIDE A WATERTIGHT FACILITY. THE ATTACHED SPECIFICATIONS DESCRIBE THE MINIMUM ACCEPTABLE STANDARDS OF CONSTRUCTION AND FINISH.

LOW-SLOPED ROOFING AREAS "A, B, C, D, E, F, G, & H": WORK SHALL INCLUDE PERFORMING REMEDIAL REPAIRS TO THE EXISTING MODIFIED BITUMEN ROOF ASSEMBLY AS SPECIFIED. WORK SHALL INCLUDE PROPER PREPARATION OF THE EXISTING MODIFIED BITUMEN ROOFING SYSTEM TO RECEIVE NEW ELASTOMERIC ROOF COATING SYSTEM. SUBSTRATE PREPARATION SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL FLASHING DETAILS AT HORIZONTAL AND VERTICAL SEAMS, PENETRATIONS, CURBS, AND FASTENERS. ALL WORK SHALL BE PERFORMED PER THESE SPECIFICATIONS. PROVIDE A TEN (10) YEAR MANUFACTURER'S WARRANTY AND A TWO (2) YEAR CONTRACTOR'S WARRANTY. WORK SHALL ALSO INCLUDE ALL HVAC AND ELECTRICAL, PIPING DISCONNECT AND RE-CONNECTION. INSTALLATION SHALL BE AS PER NRCA, SMACNA, ANSISPR, SPECIFICATIONS, DETAILS AND MANUFACTURER'S GUIDELINES.

WET SEAL AT WIDOW WALL & CLERESTORY WINDOW SYSTEMS: WORK SHALL INCLUDE REMOVAL OF EXISTING SEALANT AT VARIOUS ELEVATIONS IN THE WINDOW WALL AND CLERESTORY SYSTEMS AS DESCRIBED IN THE PROJECT SPECIFICATIONS. CONTRACTOR SHALL INSTALL ALL SPECIFIED SEALANT AND REQUIRED ACCESSORIES AS PER THE PROJECT SPECIFICATIONS. CONTRACTOR SHALL PROVIDE OWNER WITH A FIVE (5) YEAR LABOR AND MATERIALS WARRANTY.

LOW SLOPED ROOFING AREA G - INSTALL NEW PRE-ENGINEERED LADDER AS SPECIFIED.

ALL ROOF AREAS: REPLACE ALL EXISTING PIPE STANDS WITH NEW PIPE STANDS AS SPECIFIED.

BUILDING INFORMATION MATRIX				
BUILDING NUMBER	BUILDING NAME	APPROXIMATE SQ. FOOTAGE	EXISTING ROOF TYPE	PROPOSED ROOF TYPE
502	ADMINISTRATION	2,266 FT <sup>2</sup> - LOW SLOPE 9,162 FT <sup>2</sup> - METAL	BUILT-UP ROOFING SYSTEM METAL ROOF SYSTEM	REPAIRS AS SPECIFIED IN SCOPE OF WORK
503	ENVIRONMENTAL SERVICES / NURSING DORM	896 FT <sup>2</sup> - LOW SLOPE 7,223 FT <sup>2</sup> - METAL	MODIFIED BITUMEN ROOFING SYSTEM OVER TAPERED INSULATION AND CONCRETE DECK AT OPEN AIR PLAZA METAL ROOF SYSTEM	SKID RESISTANCE MODIFIED BITUMEN ROOFING SYSTEM OVER TAPERED INSULATION SUBSTRATE BOARD AND CONCRETE DECK AS SPECIFIED IN SCOPE OF WORK
508	STEAM PLANT	4,793 FT <sup>2</sup> - LOW SLOPE 3,166 FT <sup>2</sup> - METAL	METAL ROOF SYSTEM AND URETHANE FOAM ROOF SYSTEM	REPAIRS AS SPECIFIED IN SCOPE OF WORK
542	CHAPEL	6,655 FT <sup>2</sup> - LOW SLOPE 4,065 FT <sup>2</sup> - METAL	MODIFIED BITUMEN ROOF AND METAL ROOF SYSTEM	REPAIRS AS SPECIFIED IN SCOPE OF WORK
557	ACTIVITY THERAPY	26,123 FT <sup>2</sup> - LOW SLOPE 3,841 FT <sup>2</sup> - METAL	MODIFIED BITUMEN ROOF AND METAL ROOF SYSTEM	REPAIRS AS SPECIFIED IN SCOPE OF WORK
528	RESIDENCE	4,065 FT <sup>2</sup> - SHINGLE 318 FT <sup>2</sup> - LOW SLOPE	BJR & SHINGLES	RETROFIT WITH RAFTERS AND METAL ROOFING SYSTEM AS SPECIFIED IN SCOPE OF WORK



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(806)833-6953



08/15/18

Contractor shall verify all substrates, dimensions, penetrations, curbs, etc. those shown are typical but may not be all inclusive.  
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### ISSUES

1 08/15/18  
100% ISSUE FOR CONSTRUCTION

PROJECT NO. 18-002-BSH  
ROOF REPAIR & REPLACEMENT PROJECT  
BIG SPRING STATE HOSPITAL  
1901 NORTH HWY. 87  
BIG SPRING, TX 79720

### COVER SHEET

JOB 18-1104-48  
DATE 08.15.18  
DRAWN BY: CB  
SHEET

C1.01





SCOPE OF WORK - BUILDING NO. 502 ADMINISTRATION

IT IS THE INTENT OF THESE DRAWINGS THAT THE NEW WORK WILL PROVIDE A WATERTIGHT FACILITY. THE ATTACHED SPECIFICATIONS DESCRIBE THE MINIMUM ACCEPTABLE STANDARDS OF CONSTRUCTION AND FINISH.

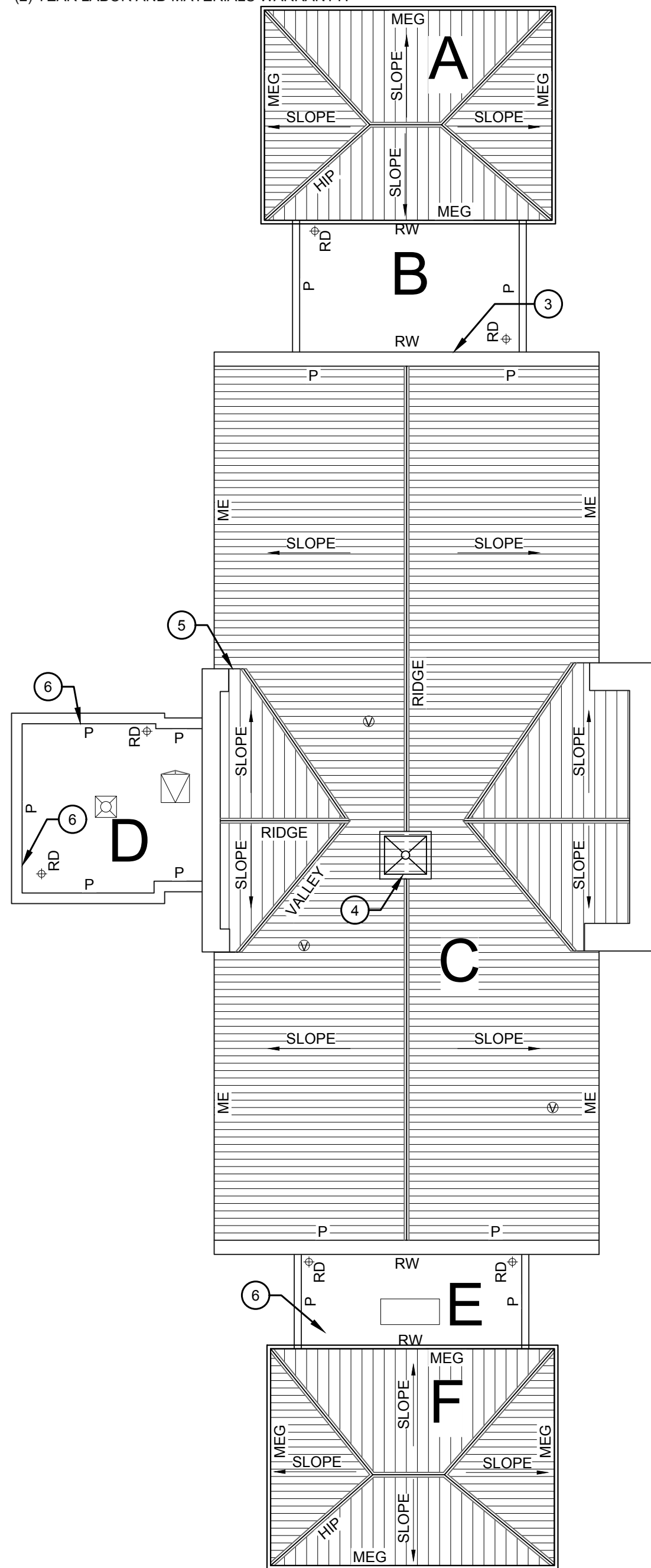
MASONRY RISE WALL ADJACENT TO ROOF AREA "B": WORK SHALL INCLUDE REMOVAL OF EXISTING SEALANT AND MORTAR AT VARIOUS ELEVATIONS IN THE STONE FAÇADE AS DESCRIBED IN THE PROJECT SPECIFICATIONS. CONTRACTOR SHALL REPAIR MASONRY WALL SYSTEM AS NEEDED TO MITIGATE LEAKS TO THE INTERIOR OF THE BUILDING. CONTRACTOR SHALL INSTALL ALL SPECIFIED SEALANT AND REQUIRED ACCESSORIES AS PER THE PROJECT SPECIFICATIONS. CONTRACTOR SHALL PROVIDE OWNER WITH A TWO (2) YEAR LABOR AND MATERIALS WARRANTY.

METAL COPULA ON ROOF AREA "C": WORK SHALL INCLUDE REMOVAL OF EXISTING SEALANT AT VARIOUS ELEVATIONS IN THE METAL COPULA AS DESCRIBED IN THE PROJECT SPECIFICATIONS. CONTRACTOR SHALL REPAIR METAL COPULA AS NEEDED TO MITIGATE LEAKS TO THE INTERIOR OF THE BUILDING. CONTRACTOR SHALL PERFORM A WET SEAL ON ALL GLASS TO METAL JOINTS AND RESEAL ALL METAL TO METAL JOINTS AS SPECIFIED. CONTRACTOR SHALL PROVIDE OWNER WITH A FIVE (5) YEAR LABOR AND MATERIALS WARRANTY.

REPAIRS TO ROOF AREA "C": WORK SHALL INCLUDE REPAIR TO THE EXISTING VALLEY AREA AS NECESSARY TO MITIGATE LEAKS TO THE INTERIOR OF THE BUILDING. CONTRACTOR SHALL PROVIDE OWNER WITH A TWO (2) YEAR LABOR AND MATERIALS WARRANTY.

REPAIRS TO ROOF AREA "D": WORK SHALL INCLUDE REMOVAL OF EXISTING BASE FLASHING SYSTEM AND INSTALL NEW BASE FLASHINGS SYSTEM AS SPECIFIED. CONTRACTOR SHALL REPAIR THE MODIFIED BITUMEN SYSTEM AS NEEDED TO MITIGATE LEAKS TO THE INTERIOR OF THE BUILDING. CONTRACTOR SHALL PROVIDE OWNER WITH A TWO (2) YEAR LABOR AND MATERIALS WARRANTY.

REPAIR TO ROOF AREA "E": WORK SHALL INCLUDE REPAIR OF EXISTING BASE FLASHING AS NECESSARY TO MITIGATE LEAKS TO THE INTERIOR OF THE BUILDING. CONTRACTOR SHALL PROVIDE OWNER WITH A TWO (2) YEAR LABOR AND MATERIALS WARRANTY. CONTRACTOR SHALL PROVIDE OWNER WITH A TWO (2) YEAR LABOR AND MATERIALS WARRANTY.



(ADMINISTRATION)  
OVERALL ROOF PLAN - BUILDING # 502



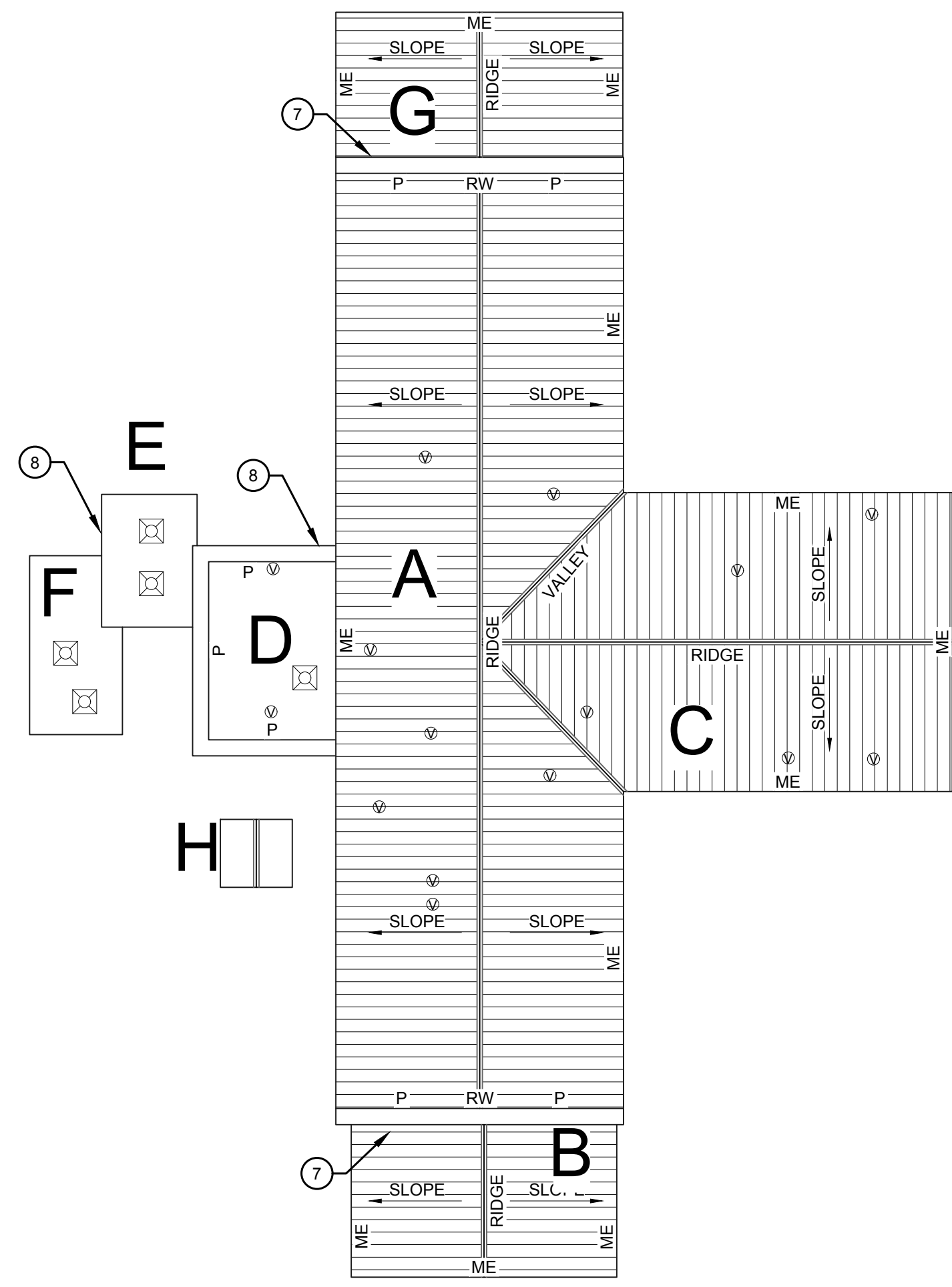
SCOPE OF WORK - BUILDING NO. 503 ENVIRONMENTAL SERVICES / NURSING DORM

IT IS THE INTENT OF THESE DRAWINGS THAT THE NEW WORK WILL PROVIDE A WATERTIGHT FACILITY. THE ATTACHED SPECIFICATIONS DESCRIBE THE MINIMUM ACCEPTABLE STANDARDS OF CONSTRUCTION AND FINISH.

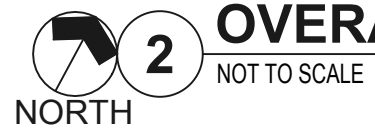
LOW-SLOPED ROOFING ON OPEN AIR PLAZA DECKS UNDER AREAS "B & G": WORK SHALL INCLUDE TEAR OFF OF THE EXISTING ROOF SYSTEM AND PAVERS DOWN TO THE EXISTING SUBSTRATE, FULLY ADHERE A TWO-PLY VAPOR BARRIER AND FULLY ADHERE SPECIFIED INSULATION IN ADDITION TO A SUBSTRATE BOARD, FULLY ADHERE ONE PLY OF SBS MODIFIED BITUMEN BASE PLY, AND FULLY ADHERE ONE PLY OF SBS MODIFIED BITUMEN SMOOTH CAP SHEET. CONTRACTOR SHALL FINISH ROOFING SYSTEM WITH AN APPLICATION OF DECK COATING AS SPECIFIED. PROVIDE A TEN (10) YEAR MANUFACTURER'S WARRANTY AND A TWO (2) YEAR CONTRACTOR'S WARRANTY. WORK SHALL ALSO INCLUDE ALL HVAC AND ELECTRICAL, PIPING DISCONNECT AND RE-CONNECTION. INSTALLATION SHALL BE AS PER NRCA, SMACNA, ANSI/SPRI, SPECIFICATIONS, DETAILS AND MANUFACTURER'S GUIDELINES.

SLOPED METAL ROOFING AREAS "B & G": WORK SHALL INCLUDE PERFORMING REMEDIAL REPAIRS TO THE EXISTING METAL ROOF ASSEMBLY AS SPECIFIED. ALL WORK SHALL BE PERFORMED PER THESE SPECIFICATIONS AS FOLLOWS:  
• INSTALL NEW METAL COUNTER FLASHING SYSTEM AT MASONRY RISE WALL.

ROOF AREAS A AND E - RELOCATE EXISTING DOWNSPOUTS IN ORDER TO CLEAR THE PIPE PENETRATIONS AT THE BASE OF THE WALL BY APPROXIMATELY 20' FEET.



(ENVIRONMENTAL SERVICES / NURSING DORM)  
OVERALL ROOF PLAN - BUILDING # 503



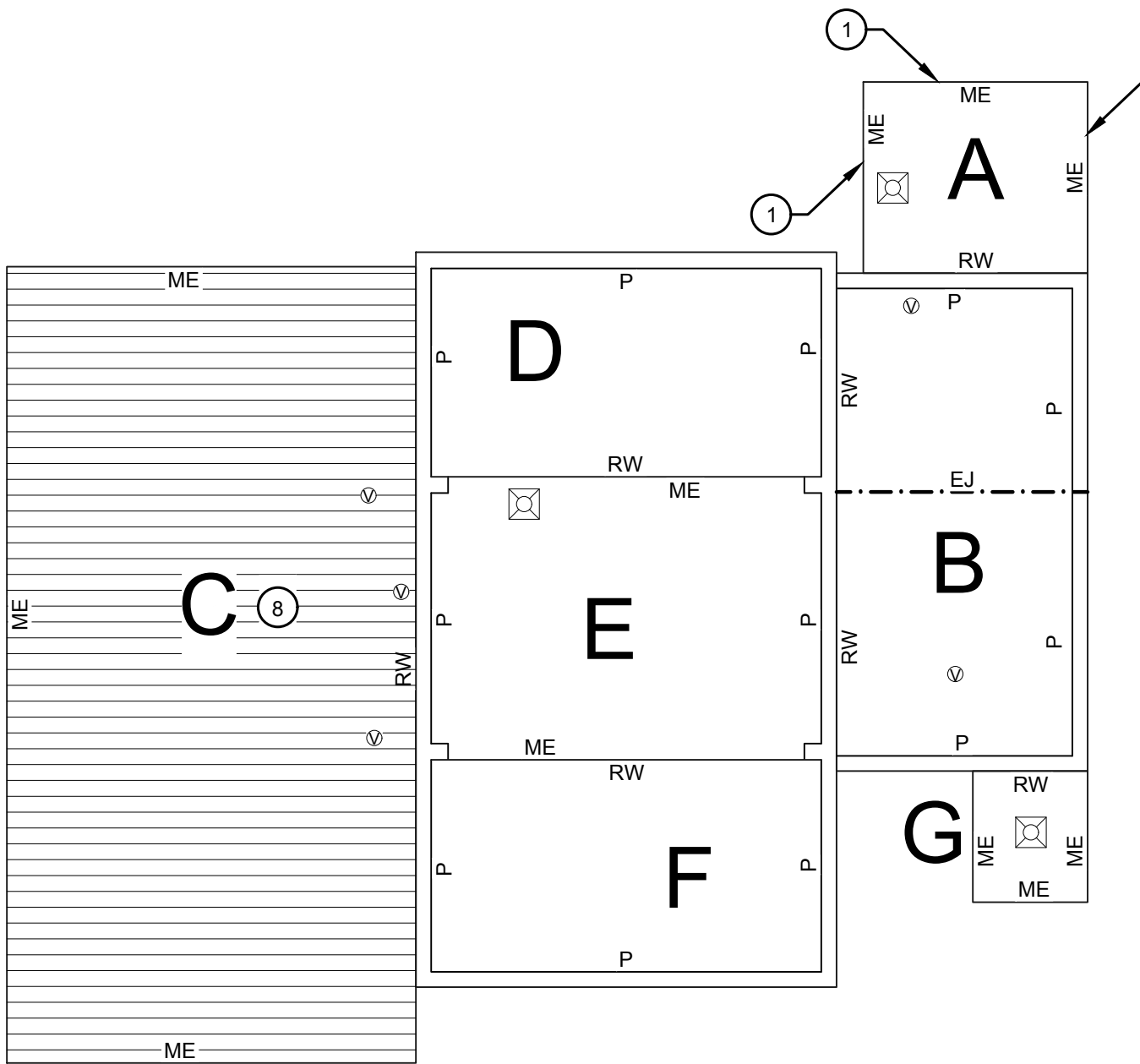
SCOPE OF WORK - BUILDING NO. 508 STEAM PLANT

IT IS THE INTENT OF THESE DRAWINGS THAT THE NEW WORK WILL PROVIDE A WATERTIGHT FACILITY. THE ATTACHED SPECIFICATIONS DESCRIBE THE MINIMUM ACCEPTABLE STANDARDS OF CONSTRUCTION AND FINISH.

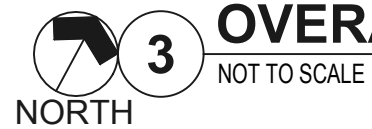
REPAIRS AT METAL ROOFING AREA "A": WORK SHALL INCLUDE REPLACE EXISTING METAL EDGE AND FASCIA TRIM. MATCH EXISTING FASCIA AND TRIM DETAIL.

REPAIRS AT METAL ROOFING AREA "C": WORK SHALL INCLUDE REPAIR OF METAL ROOFING SYSTEM AS NEEDED TO STOP WATER MIGRATION INTO THE INTERIOR OF THE BUILDING.

LOW-SLOPED ROOFING AREAS "A, B, C, D, E, F, & G": WORK SHALL INCLUDE PERFORMING REMEDIAL REPAIRS TO THE EXISTING URETHANE FOAM AND METAL ROOF ASSEMBLY AS SPECIFIED. WORK SHALL INCLUDE PROPER PREPARATION OF THE EXISTING ROOFING SYSTEM TO RECEIVE NEW ELASTOMERIC ROOF COATING SYSTEM. SUBSTRATE PREPARATION SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL FLASHING DETAILS AT HORIZONTAL AND VERTICAL SEAMS, PENETRATIONS, CURBS, AND FASTENERS. ALL WORK SHALL BE PERFORMED PER THESE SPECIFICATIONS. PROVIDE A TEN (10) YEAR MANUFACTURER'S WARRANTY AND A TWO (2) YEAR CONTRACTOR'S WARRANTY. WORK SHALL ALSO INCLUDE ALL HVAC AND ELECTRICAL, PIPING DISCONNECT AND RE-CONNECTION. INSTALLATION SHALL BE AS PER NRCA, SMACNA, ANSI/SPRI, SPECIFICATIONS, DETAILS AND MANUFACTURER'S GUIDELINES.



(STEAM PLANT)  
OVERALL ROOF PLAN - BUILDING # 508

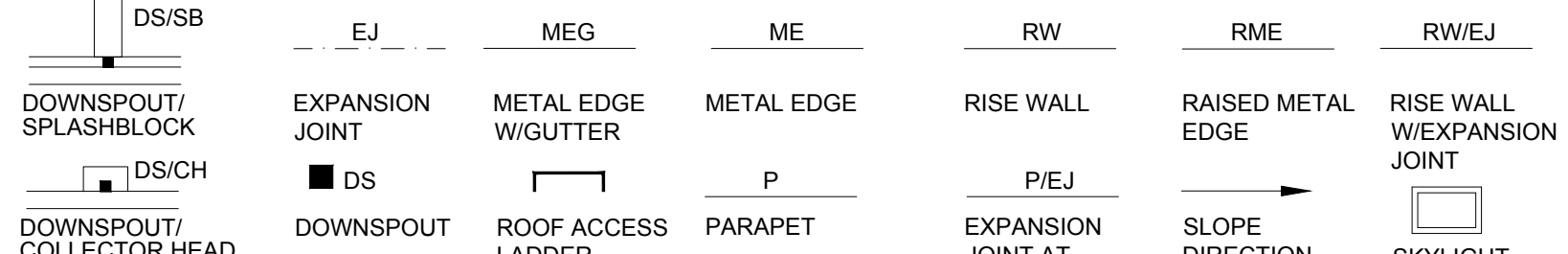
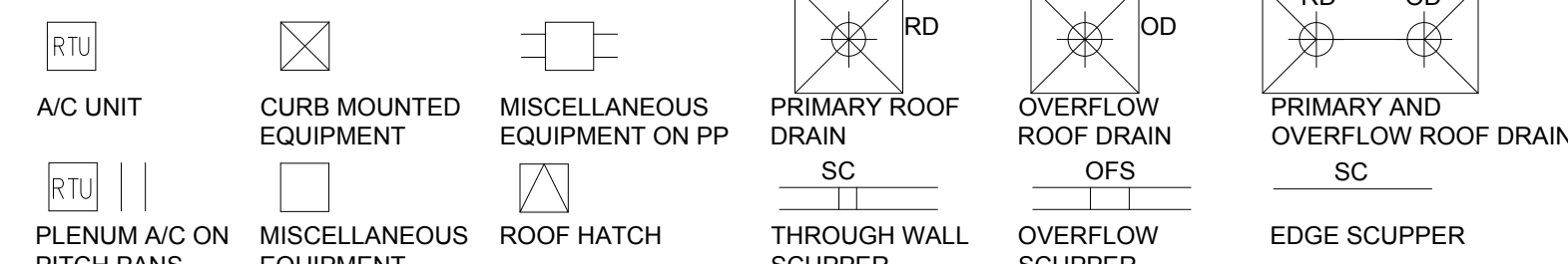
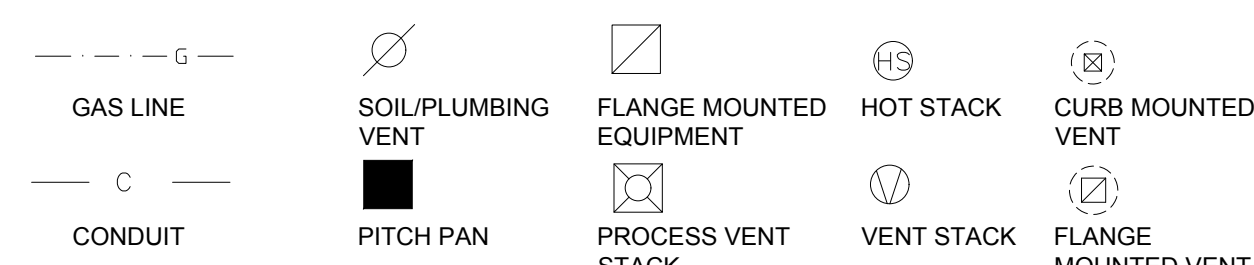


GENERAL ROOF NOTES

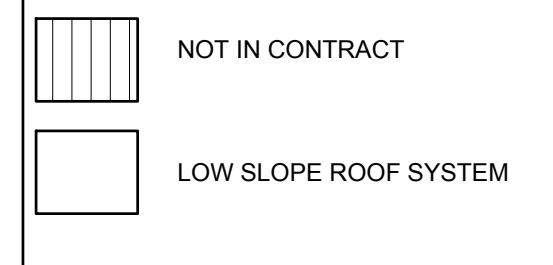
- A. PROVIDE ALL REQUIRED UTILITY / STRUCTURAL COMPONENTS AND/OR CONNECTIONS FOR THE FUNCTIONAL USE OF ALL CONTRACTOR SUPPLIED EQUIPMENT OR APPLIANCES, REGARDLESS OF ANY OMISSIONS OR INCONSISTENCIES ENCOUNTERED IN THE CONSTRUCTION DOCUMENTS.
- B. THE WORD "PROVIDE" SHALL MEAN "FURNISH AND INSTALL COMPLETE AND READY TO USE."
- C. IF DISCREPANCIES APPEAR BETWEEN THE DRAWINGS AND THE SPECIFICATIONS, THE HIGHER QUALITY, QUANTITY, AND PRICE SHALL SUPERSEDE.
- D. THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL BECOME FAMILIAR WITH THE PROJECT AND THE ON-SITE / OFF-SITE CONDITIONS PRIOR TO BIDDING OR COMMENCING WORK.
- E. ROOF SLOPES SHOWN ON DRAWING ARE GENERAL AND CONCEPTUAL ONLY. PROVIDE POSITIVE DRAINAGE TO ALL ROOF DRAINS. VERIFY TAPER IN SHOP DRAWINGS.
- F. PROVIDE TAPERED INSULATION CRICKETS (1/2" FT. MIN. SLOPE) AT HIGH SIDE OF ALL MECHANICAL UNITS SMOKE VENTS, ROOF HATCHES & OTHER MISC. ROOF PENETRATIONS, TO SHED WATER AROUND & TO ENSURE POSITIVE ROOF DRAINAGE.
- G. PROVIDE ADDITIONAL FULLY ADHERED MEMBRANES AS PROTECTION AT "SERVICE SIDE" OF ALL MECH. EQUIPMENT - FIELD VERIFY LOCATIONS, AS WELL AS PROTECTION AT "ACCESS SIDE" OF ALL ROOF HATCHES AND ROOF ACCESS LADDERS FIELD VERIFY LOCATIONS AND AT DOWNSPOUT LOCATIONS.
- H. ALL WOOD BLOCKING AT ROOF EDGES ARE TO BE FABRICATED FROM CONT. 2X6 BOARDS. PROVIDE LARGER 2X AS REQUIRED PER DIMENSIONED DETAILED OR AS FIELD CONDITIONS DICTATE. ALL COPING TO BE SLOPED TOWARD THE INTERIOR.
- I. ALL EXPOSED FLASHING, COPING (IF APPLICABLE) AND THEIR ACCESSORIES SHALL BE AS SPECIFIED.
- J. HEIGHT OF ALL NAILERS SHALL BE FLUSH WITH NEW INSULATION THICKNESS.
- K. ALL PITCH PANS SHALL BE DOUBLE SOLDERED STAINLESS STEEL AND RECEIVE EITHER MECHANICALLY ATTACHED GOOSENECK OR METAL BONNETS. METAL BONNETS SHALL BE SECURED WITH CLAMPING RING AND SEALANT. SPECIAL CARE GIVEN TO WASH ALL METAL PRIOR TO INSTALLATION.
- L. ALL INFIELD EXPANSION JOINTS SHALL HAVE LOW SLOPED STANDING SEAM JOINTS AND SHALL BE CHAMFERED AT TERMINATION AT ROOF EDGE TO MEET PROFILE OF PERIMETER.
- M. ANY CRACKS OR VOIDS IN RISE WALLS ABOVE COUNTER FLASHING SHALL BE REPAIRED WITH COMPATIBLE SEALANT.
- N. ALL VERTICAL MEMBRANE FLASHING SHALL BE MECHANICALLY FASTENED AND INSTALLED WITH NEW METAL COUNTER FLASHING UTILIZING A CONTINUOUS CLIP. SLIDE METAL COVER PLATE DOWN OVER VERTICAL CLIP AND SEAL.
- O. PROVIDE NEW CONCRETE SPLASH BLOCKS ON ROOF ELEVATION SUPPORTED BY A WALK PAD WHERE DOWNSPOUTS OCCUR.
- P. ALL PIPE AND CONDUIT SHALL RECEIVE PIPE SUPPORTS AND RELATED SHIMS, AND SHALL BE PLACED ON AN ADDITIONAL FULLY ADHERED ROOF MEMBRANE UNDER SPECIFIED WALK PAD PRIOR TO SURFACE APPLICATION. SUPPORTS TO OCCUR AT 10'-0" O.C. AND WITHIN 2'-0" OF ALL SLOPES, TEES AND CORNERS. ALL PIPE TO BE PAINTED PER BUILDING CODE REQUIREMENTS.
- Q. ALL METAL FLASHING SHALL EXTEND BEYOND ROOF EDGE MIN. 8" WHERE FLASHING ABUTS VERTICAL WALL SURFACE AS DETAILED. ALL FLASHING SHALL BE INSTALLED IN SHINGLE FASHION. FIELD FABRICATE THERMOPLASTIC BOOT TO BE INSTALLED OVER NEW ROOFING, COMPLETELY OVERLAYING THE TRANSITIONS OF ALL ROOF TO WALL, ELEVATIONS, INSIDE / OUTSIDE 90'S ETC. PRIOR TO METAL INSTALLATION.
- S. ALL EQUIPMENT CURBS TO BE RAISED AS NECESSARY TO MAINTAIN 10" MINIMUM HEIGHT ABOVE FINISHED ROOF SURFACE.
- T. MECHANICAL, ELECTRICAL, AND PLUMBING ROOF EQUIPMENT SHOWN ON THIS PLAN IS FOR GENERAL ARCHITECTURAL INFORMATION ONLY.
- U. FLASHING AND STRIPPING MATERIALS, BASE PLY SHEETS, MEMBRANES, INSULATION, AND ACCESSORIES SHOULD BE RECOMMENDED BY THE ROOFING SYSTEM MANUFACTURER FOR INTENDED USE AND COMPATIBILITY WITH THE MEMBRANE ROOFING SYSTEM.
- V. WHERE WOOD BLOCKING EXCEEDS 6" IN VERTICAL THICKNESS AT TAPERED INSULATION, PROVIDE STEM WALL CONSTRUCTED OF 6" GALVANIZED COLD FORMED METAL FRAMING AT 16" O.C. WITH CON. TRACK AT TOP AND BOTTOM AND WITH 3/4" FR-EXT GRADE PLYWOOD AT EACH SIDE, TOP TO SLOPE WITH TAPERED INSULATION.
- W. PROVIDE STEP FLASHING AND COVER PLATE AT SLOPED ROOF HI/LOW CONDITIONS.
- X. GUTTERS SHALL BE PRE-FINISHED GALVANIZED STEEL, SIZE PER ROOF PLAN, UNO. PROVIDE PRE-FINISHED 1/4"x1 1/2" GALVANIZED STEEL BENT PLATE BRACKETS AND PRE-FINISHED 1" GALVANIZED STEEL SPACERS AT 36" O.C. MAX, STAGGER WITH EACH OTHER AT 18" O.C.
- Y. PROVIDE PRE-FINISHED GUTTER EJS 30'-0" O.C. MAX.
- Z. DOWNSPOUTS SHALL BE 5"x6" PRE-FINISHED GALVANIZED STEEL UNO AS INDICATED ON ROOF PLAN. PROVIDE PRE-FINISHED 2" GALVANIZED STEEL HANGERS AT 36" O.C. PROVIDE VANDAL PROOF STAINLESS STEEL STRAINERS AT EACH OUTLET. COORDINATE LOCATION WITH ARCHITECT PRIOR TO INSTALLATION.
- AA. VERIFY ELEVATION OF ROOF DRAIN RELATIVE TO OVERFLOW SCUPPER PRIOR TO INSTALLATION OF SCUPPERS.
- AB. ROOF PLAN SHOWS TAPERED INSULATION CONCEPTUALLY AND FOR INTENT ONLY. TAPERED INSULATION IS NOT SHOWN TO SCALE AND IS SHOWN AS GRAPHIC REPRESENTATION ONLY IN ORDER TO SHOW SLOPE AND APPROXIMATE LOCATIONS OF MATERIAL. VERIFY INSULATION REQUIRED TO MAINTAIN SLOPE PRIOR TO INSTALLATION. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

SPECIFIC ROOF NOTES:

1. REPLACE EXISTING METAL FASCIA AND TRIM. MATCH EXISTING FASCIA AND TRIM DETAIL.
2. REMOVE EXISTING MORTAR IN STONE FAÇADE, METAL TO STONE JOINTS AND WOOD TO STONE JOINTS. INSTALL BACKER ROD AND SEALANT AS SPECIFIED.
3. REMOVE ALL EXISTING SEALANT JOINTS ON METAL COPULA AND ALL GLASS TO METAL JOINTS. PERFORM A WET SEAL ON ALL GLASS TO METAL JOINTS AND RESEAL ALL METAL TO METAL JOINTS AS SPECIFIED.
4. REPAIR METAL VALLEY SYSTEM OF EXISTING STANDING SEAM METAL ROOF SYSTEM AS NEEDED TO STOP THE WATER MIGRATION INTO THE INTERIOR OF THE BUILDING.
5. REMOVE AND REPLACE THE EXISTING MODIFIED BITUMEN BASE FLASHING SYSTEM AS SPECIFIED.
6. INSTALL NEW COUNTER FLASHING SYSTEM AT MASONRY RISE WALL ON EXISTING METAL ROOFING SYSTEM.
7. RELOCATE EXISTING DOWNSPOUTS IN ORDER TO CLEAR THE PIPE PENETRATIONS AT THE BASE OF THE WALL BY APPROXIMATELY 20' FEET.



ROOF LEGEND



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08/15/18

Contractor shall verify all substrates, dimensions, penetrations, curbs, etc. those shown are typical but may not be all inclusive. Copyright 2018 by Armko Industries

ISSUES

1 08/15/18  
100% ISSUE FOR CONSTRUCTION

PROJECT NO. 18-002-BSH  
ROOF REPAIR & REPLACEMENT PROJECT  
BIG SPRING STATE HOSPITAL  
1901 NORTH HWY. 87  
BIG SPRING, TX 79720

OVERALL ROOF PLANS AND GENERAL NOTES  
JOB 18-1104-48  
DATE 08.15.18  
DRAWN BY: CB  
SHEET

R1.01



SCOPE OF WORK - BUILDING NO. 542 CHAPEL

IT IS THE INTENT OF THESE DRAWINGS THAT THE NEW WORK WILL PROVIDE A WATERTIGHT FACILITY. THE ATTACHED SPECIFICATIONS DESCRIBE THE MINIMUM ACCEPTABLE STANDARDS OF CONSTRUCTION AND FINISH.

LOW-SLOPED ROOFING AREAS 'A & C': WORK SHALL INCLUDE PERFORMING REMEDIAL REPAIRS TO THE EXISTING MODIFIED BITUMEN ROOF ASSEMBLY AS SPECIFIED. WORK SHALL INCLUDE PROPER PREPARATION OF THE EXISTING MODIFIED BITUMEN ROOFING SYSTEM TO RECEIVE NEW ELASTOMERIC ROOF COATING SYSTEM. SUBSTRATE PREPARATION SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL FLASHING DETAILS AT HORIZONTAL AND VERTICAL SEAMS, PENETRATIONS, CURBS, AND FASTENERS. ALL WORK SHALL BE PERFORMED PER THESE SPECIFICATIONS. PROVIDE A TEN (10) YEAR MANUFACTURER'S WARRANTY AND A TWO (2) YEAR CONTRACTOR'S WARRANTY. WORK SHALL ALSO INCLUDE ALL HVAC AND ELECTRICAL, PIPING DISCONNECTION AND RE-CONNECTION. INSTALLATION SHALL BE AS PER NRCA, SMACNA, ANSIS/SPRI, SPECIFICATIONS, DETAILS AND MANUFACTURER'S GUIDELINES.

SIGN IN FRONT OF BUILDING: REMOVE EXISTING SHAKE SHINGLES AND REPLACE WITH R-PANEL PRE-FINISHED METAL PANELS AS SPECIFIED.

SCOPE OF WORK - BUILDING NO. 557 ACTIVITY THERAPY

IT IS THE INTENT OF THESE DRAWINGS THAT THE NEW WORK WILL PROVIDE A WATERTIGHT FACILITY. THE ATTACHED SPECIFICATIONS DESCRIBE THE MINIMUM ACCEPTABLE STANDARDS OF CONSTRUCTION AND FINISH.

LOW-SLOPED ROOFING AREAS 'A, B, C, D, E, F, G, & H': WORK SHALL INCLUDE PERFORMING REMEDIAL REPAIRS TO THE EXISTING MODIFIED BITUMEN ROOF ASSEMBLY AS SPECIFIED. WORK SHALL INCLUDE PROPER PREPARATION OF THE EXISTING MODIFIED BITUMEN ROOFING SYSTEM TO RECEIVE NEW ELASTOMERIC ROOF COATING SYSTEM. SUBSTRATE PREPARATION SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL FLASHING DETAILS AT HORIZONTAL AND VERTICAL SEAMS, PENETRATIONS, CURBS, AND FASTENERS. ALL WORK SHALL BE PERFORMED PER THESE SPECIFICATIONS. PROVIDE A TEN (10) YEAR MANUFACTURER'S WARRANTY AND A TWO (2) YEAR CONTRACTOR'S WARRANTY. WORK SHALL ALSO INCLUDE ALL HVAC AND ELECTRICAL, PIPING DISCONNECTION AND RE-CONNECTION. INSTALLATION SHALL BE AS PER NRCA, SMACNA, ANSIS/SPRI, SPECIFICATIONS, DETAILS AND MANUFACTURER'S GUIDELINES.

WET SEAL AT WIDOW WALL & CLERESTORY WINDOW SYSTEMS: WORK SHALL INCLUDE REMOVAL OF EXISTING SEALANT AT VARIOUS ELEVATIONS IN THE WINDOW WALL AND CLERESTORY SYSTEMS AS DESCRIBED IN THE PROJECT SPECIFICATIONS. CONTRACTOR SHALL INSTALL ALL SPECIFIED SEALANT AND REQUIRED ACCESSORIES AS PER THE PROJECT SPECIFICATIONS. CONTRACTOR SHALL PROVIDE OWNER WITH A FIVE (5) YEAR LABOR AND MATERIALS WARRANTY.

LOW SLOPED ROOFING AREA G - INSTALL NEW PRE-ENGINEERED LADDER AS SPECIFIED.

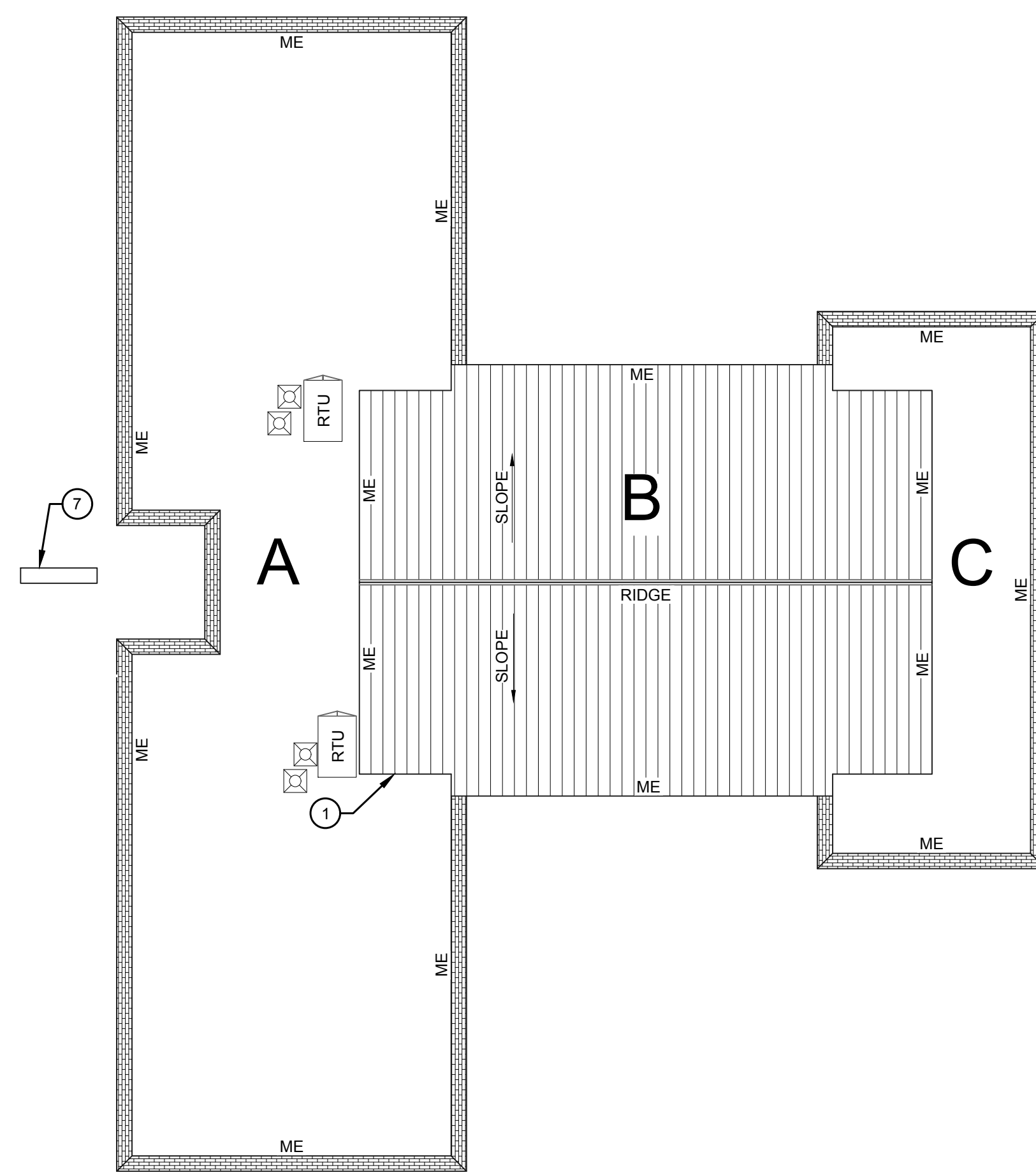
ALL ROOF AREAS: REPLACE ALL EXISTING PIPE STANDS WITH NEW PIPE STANDS AS SPECIFIED.

GENERAL ROOF NOTES

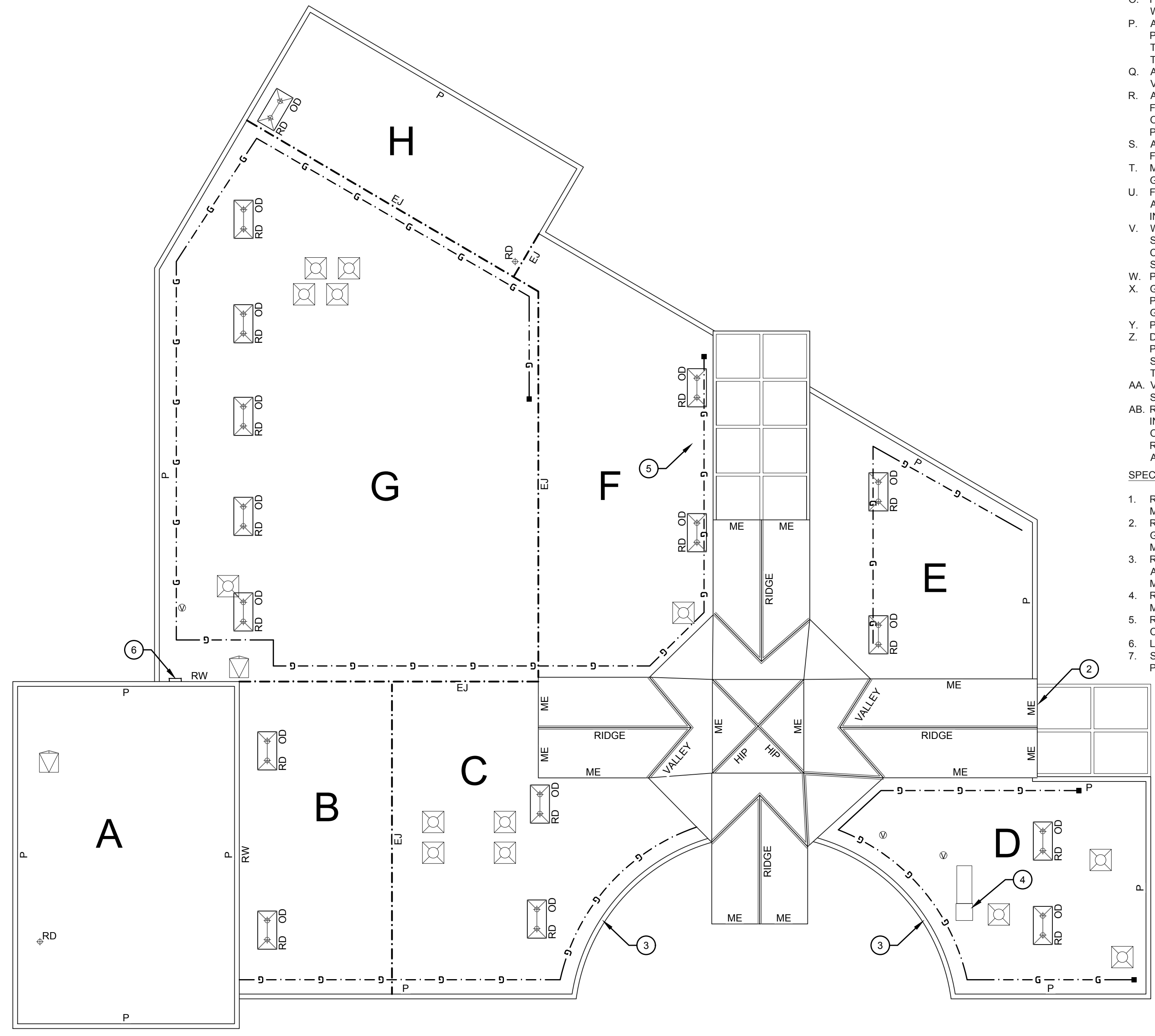
- A. PROVIDE ALL REQUIRED UTILITY / STRUCTURAL COMPONENTS AND/OR CONNECTIONS FOR THE FUNCTIONAL USE OF ALL CONTRACTOR SUPPLIED EQUIPMENT OR APPLIANCES, REGARDLESS OF ANY OMISSIONS OR INCONSISTENCIES ENCOUNTERED IN THE CONSTRUCTION DOCUMENTS.
- B. THE WORD 'PROVIDE' SHALL MEAN 'FURNISH AND INSTALL COMPLETE AND READY TO USE.'
- C. IF DISCREPANCIES APPEAR BETWEEN THE DRAWINGS AND THE SPECIFICATIONS, THE HIGHER QUALITY, QUANTITY, AND PRICE SHALL SUPERSEDE.
- D. THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL BECOME FAMILIAR WITH THE PROJECT AND THE ON-SITE / OFF-SITE CONDITIONS PRIOR TO BIDDING OR COMMENCING WORK.
- E. ROOF SLOPES SHOWN ON DRAWING ARE GENERAL AND CONCEPTUAL ONLY. PROVIDE POSITIVE DRAINAGE TO ALL ROOF DRAINS. VERIFY TAPER IN SHOP DRAWINGS.
- F. PROVIDE TAPERED INSULATION CRICKETS (1/2" FT. MIN. SLOPE) AT HIGH SIDE OF ALL MECHANICAL UNITS SMOKE VENTS, ROOF HATCHES & OTHER MISC. ROOF PENETRATIONS, TO SHED WATER AROUND & TO ENSURE POSITIVE ROOF DRAINAGE.
- G. PROVIDE ADDITIONAL FULLY ADHERED MEMBRANES AS PROTECTION AT 'SERVICE SIDE' OF ALL MECH. EQUIPMENT PENETRATIONS, AS WELL AS PROTECTION AT 'ACCESS SIDE' OF ALL ROOF HATCHES AND ROOF ACCESS LADDERS FIELD VERIFY LOCATIONS AND AT DOWNSPOUT LOCATIONS.
- H. ALL WOOD BLOCKING AT ROOF EDGES ARE TO BE FABRICATED FROM CONT. 2X6 BOARDS. PROVIDE LARGER 2X AS REQUIRED PER DIMENSIONED DETAILED OR AS FIELD CONDITIONS DICTATE. ALL COPING TO BE SLOPED TOWARD THE INTERIOR.
- I. ALL EXPOSED FLASHING, COPING (IF APPLICABLE) AND THEIR ACCESSORIES SHALL BE AS SPECIFIED.
- J. HEIGHT OF ALL NAILERS SHALL BE FLUSH WITH NEW INSULATION THICKNESS.
- K. ALL PITCH PANS SHALL BE DOUBLE SOLDERED STAINLESS STEEL AND RECEIVE EITHER MECHANICALLY ATTACHED GOOSENECK OR METAL BONNETS. METAL BONNETS SHALL BE SECURED WITH CLAMPING RING AND SEALANT. SPECIAL CARE GIVEN TO WASH ALL METAL PRIOR TO INSTALLATION.
- L. ALL INFIELD EXPANSION JOINTS SHALL HAVE LOW SLOPED STANDING SEAM JOINTS AND SHALL BE CHAMFERED AT TERMINATION AT ROOF EDGE TO MEET PROFILE OF PERIMETER.
- M. ANY CRACKS OR VOIDS IN RISE WALLS ABOVE COUNTER FLASHING SHALL BE REPAIRED WITH COMPATIBLE SEALANT.
- N. ALL VERTICAL MEMBRANE FLASHING SHALL BE MECHANICALLY FASTENED AND INSTALLED WITH NEW METAL COUNTER FLASHING UTILIZING A CONTINUOUS CLIP. SLIDE METAL COVER PLATE DOWN OVER VERTICAL CLIP AND SEAL.
- O. PROVIDE NEW CONCRETE SPLASH BLOCKS ON ROOF ELEVATION SUPPORTED BY A WALK PAD WHERE DOWNSPOUTS OCCUR.
- P. ALL PIPE AND CONDUIT SHALL RECEIVE PIPE SUPPORTS AND RELATED SHIMS, AND SHALL BE PLACED ON AN ADDITIONAL FULLY ADHERED ROOF MEMBRANE UNDER SPECIFIED WALK PAD PRIOR TO SURFACE APPLICATION. SUPPORTS TO OCCUR AT 10'-0" O.C. AND WITHIN 2'-0" OF ALL SLOPES, TEES AND CORNERS. ALL PIPE TO BE PAINTED PER BUILDING CODE REQUIREMENTS.
- Q. ALL METAL FLASHING SHALL EXTEND BEYOND ROOF EDGE MIN. 8" WHERE FLASHING ABUTS VERTICAL WALL SURFACE AS DETAILED. ALL FLASHING SHALL BE INSTALLED IN SHINGLE FASHION.
- R. AT ALL LOCATIONS WHERE CONVERGENCE OF MULTIPLE PLANE OF ROOFING TO WALL OCCURS, FIELD FABRICATE THERMOPLASTIC BOOT TO BE INSTALLED OVER NEW ROOFING, COMPLETELY OVERLAYING THE TRANSITIONS OF ALL ROOF TO WALL, ELEVATIONS, INSIDE / OUTSIDE 90'S ETC. PRIOR TO METAL INSTALLATION.
- S. ALL EQUIPMENT CURBS TO BE RAISED AS NECESSARY TO MAINTAIN 10" MINIMUM HEIGHT ABOVE FINISHED ROOF SURFACE.
- T. MECHANICAL, ELECTRICAL, AND PLUMBING ROOF EQUIPMENT SHOWN ON THIS PLAN IS FOR GENERAL ARCHITECTURAL INFORMATION ONLY.
- U. FLASHING AND STRIPPING MATERIALS, BASE PLY SHEETS, MEMBRANES, INSULATION, AND ACCESSORIES SHOULD BE RECOMMENDED BY THE ROOFING SYSTEM MANUFACTURER FOR INTENDED USE AND COMPATIBILITY WITH THE MEMBRANE ROOFING SYSTEM.
- V. WHERE WOOD BLOCKING EXCEEDS 6" IN VERTICAL THICKNESS AT TAPERED INSULATION, PROVIDE STEM WALL CONSTRUCTED OF 6" GALVANIZED COLD FORMED METAL FRAMING AT 16" O.C. WITH CON. TRACK AT TOP AND BOTTOM AND WITH 3/4" FR-EXT GRADE PLYWOOD AT EACH SIDE. TOP TO SLOPE WITH TAPERED INSULATION.
- W. PROVIDE STEP FLASHING AND COVER PLATE AT SLOPED ROOF HI/LOW CONDITIONS.
- X. GUTTERS SHALL BE PRE-FINISHED GALVANIZED STEEL. SIZE PER ROOF PLAN. UNO. PROVIDE PRE-FINISHED 1/4"x1 1/2" GALVANIZED STEEL BENT PLATE BRACKETS AND PRE-FINISHED 1" GALVANIZED STEEL SPACERS AT 36" O.C. MAX. STAGGER WITH EACH OTHER AT 18" O.C.
- Y. PROVIDE PRE-FINISHED GUTTER E.J'S 30'-0" O.C. MAX.
- Z. DOWNSPOUTS SHALL BE 5"x6" PRE-FINISHED GALVANIZED STEEL UNO AS INDICATED ON ROOF PLAN. PROVIDE PRE-FINISHED 2" GALVANIZED STEEL HANGERS AT 36" O.C. PROVIDE VANDAL PROOF STAINLESS STEEL STRAINERS AT EACH OUTLET. COORDINATE LOCATION WITH ARCHITECT PRIOR TO INSTALLATION.
- AA. VERIFY ELEVATION OF ROOF DRAIN RELATIVE TO OVERFLOW SCUPPER PRIOR TO INSTALLATION OF SCUPPERS.
- AB. ROOF PLAN SHOWS TAPERED INSULATION CONCEPTUALLY AND FOR INTENT ONLY. TAPERED INSULATION IS NOT SHOWN TO SCALE AND IS SHOWN AS GRAPHIC REPRESENTATION ONLY IN ORDER TO SHOW SLOPE AND APPROXIMATE LOCATIONS OF MATERIAL. VERIFY INSULATION REQUIRED TO MAINTAIN SLOPE PRIOR TO INSTALLATION. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

SPECIFIC ROOF NOTES:

1. REPAIR FLASHING ON MODIFIED BITUMEN ROOFING SYSTEM AS NECESSARY TO STOP WATER MIGRATION INTO THE INTERIOR OF THE BUILDING.
2. REMOVE ALL EXISTING SEALANT JOINTS ON CLERESTORY, GLASS TO MASONRY JOINTS AND ALL GLASS TO METAL JOINTS. PERFORM A WET SEAL ON ALL GLASS TO METAL JOINTS, METAL TO MASONRY JOINTS AND RESEAL ALL METAL TO METAL JOINTS AS SPECIFIED.
3. REMOVE ALL EXISTING SEALANT JOINTS ON WINDOW SYSTEM, GLASS TO MASONRY JOINTS AND ALL GLASS TO METAL JOINTS. PERFORM A WET SEAL ON ALL GLASS TO METAL JOINTS, METAL TO MASONRY JOINTS AND RESEAL ALL METAL TO METAL JOINTS AS SPECIFIED.
4. REPAIR EXISTING FLASHINGS AT THE MECHANICAL CURB DETAIL AS NEEDED TO STOP WATER MIGRATION INTO THE INTERIOR OF THE BUILDING.
5. REMOVE CRUSHED INSULATION AND BUILT UP WITH MATERIALS TO MATCH EXISTING PRIOR TO COATING ROOF AREA.
6. LOW SLOPED ROOFING AREA G - INSTALL NEW PRE-ENGINEERED LADDER AS SPECIFIED.
7. SIGN IN FRONT OF BUILDING: REMOVE EXISTING SHAKE SHINGLES AND REPLACE WITH R-PANEL PRE-FINISHED METAL PANELS AS SPECIFIED.



1 OVERALL ROOF PLAN - BUILDING # 542 (CHAPEL)  
NOT TO SCALE  
NORTH



2 OVERALL ROOF PLAN - BUILDING # 557 (ACTIVITY THERAPY)  
NOT TO SCALE  
NORTH

ROOF LEGEND

- METAL ROOF SYSTEM
- LOW SLOPE ROOF SYSTEM
- SHINGLE ROOF SYSTEM

- GAS LINE
- CONDUIT
- SOIL/PLUMBING VENT
- PITCH PAN
- FLANGE MOUNTED EQUIPMENT
- PROCESS VENT STACK
- HOT STACK
- VENT STACK
- CURB MOUNTED VENT
- FLANGE MOUNTED VENT
- A/C UNIT
- PLENUM A/C ON PITCH PANS
- CURB MOUNTED EQUIPMENT
- MISCELLANEOUS EQUIPMENT
- MISCELLANEOUS EQUIPMENT ON PP
- ROOF HATCH
- PRIMARY ROOF DRAIN
- THROUGH WALL SCUPPER
- OVERFLOW ROOF DRAIN
- OVERFLOW SCUPPER
- PRIMARY AND OVERFLOW ROOF DRAIN
- EDGE SCUPPER
- DOWNSPOUT/SPLASHBLOCK
- DOWNSPOUT/ COLLECTOR HEAD
- EXPANSION JOINT
- DOWNSPOUT
- METAL EDGE W/GUTTER
- ROOF ACCESS LADDER
- METAL EDGE
- PARAPET
- RISE WALL
- EXPANSION JOINT AT PARAPET
- RAISED METAL EDGE
- SLOPE DIRECTION
- RISE WALL W/EXPANSION JOINT
- SKYLIGHT



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Lubbock, TX  
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08/15/18

Contractor shall verify all substrates, dimensions, penetrations, curbs, etc. those shown are typical but may not be all inclusive.  
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ISSUES

1 08/15/18  
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1901 NORTH HWY. 87  
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OVERALL ROOF PLANS AND GENERAL NOTES

JOB 18-1104-48  
DATE 08.15.18  
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R1.03



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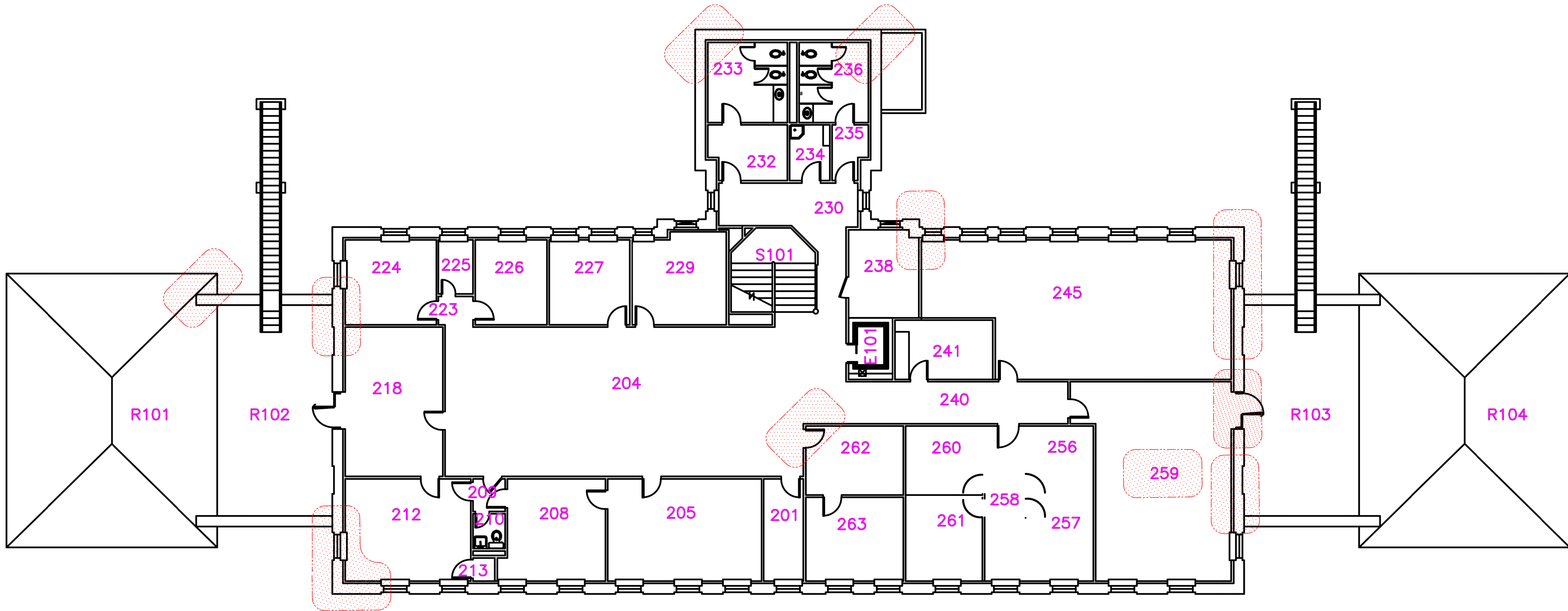
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**FLOOR PLAN AND NOTES**

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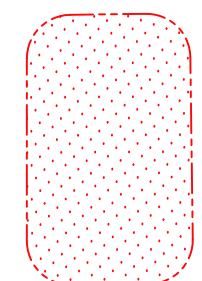
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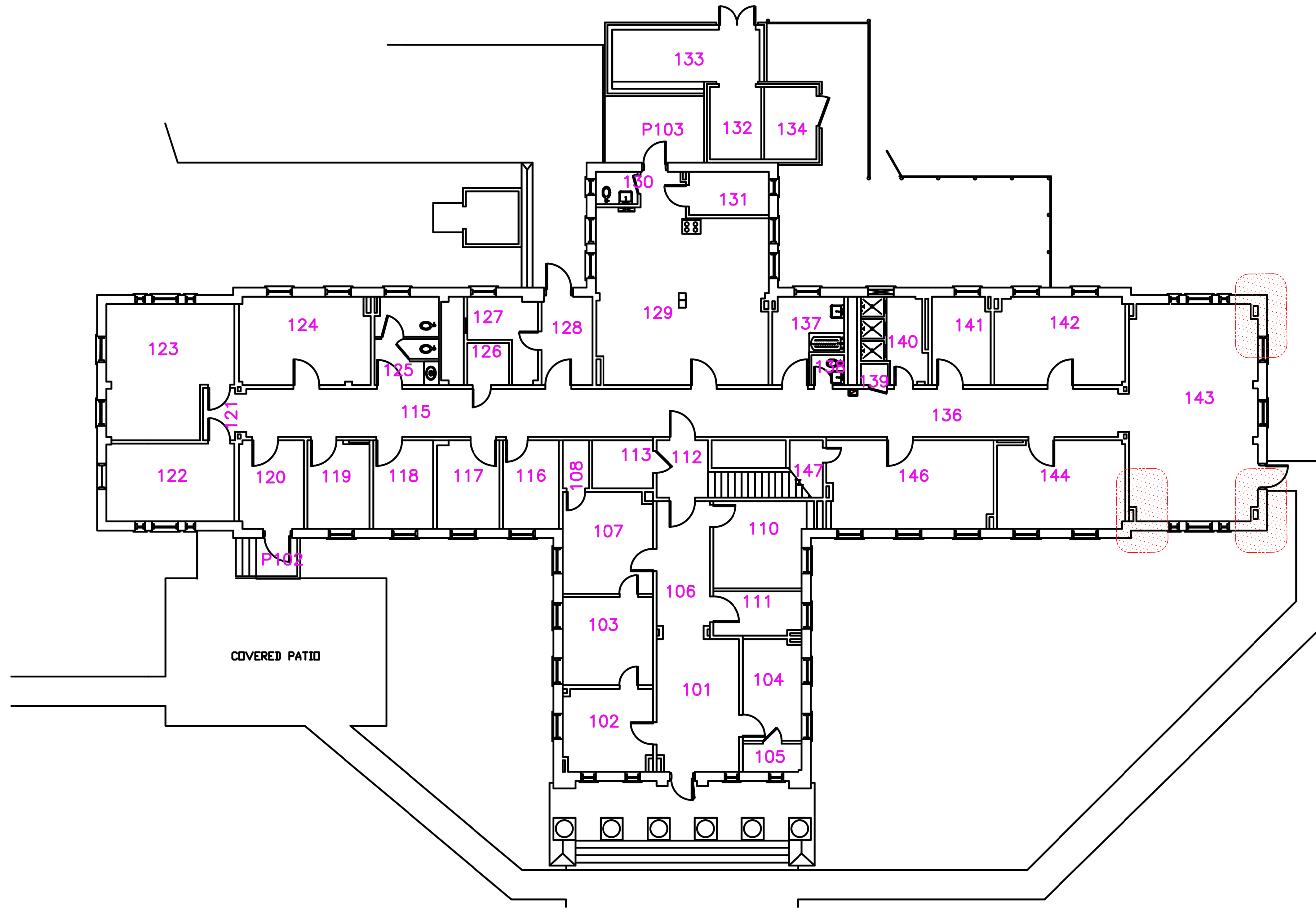


**1 SECOND FLOOR PLAN - BUILDING # 502 (ADMINISTRATION)**

NOT TO SCALE

APPROXIMATE AREAS OF LEAKS

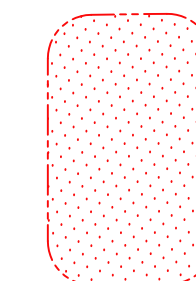




**FIRST FLOOR PLAN - BUILDING # 503 (ENVIRONMENTAL SERVICES / NURSING DORM)**

NOT TO SCALE

APPROXIMATE AREAS OF LEAKS



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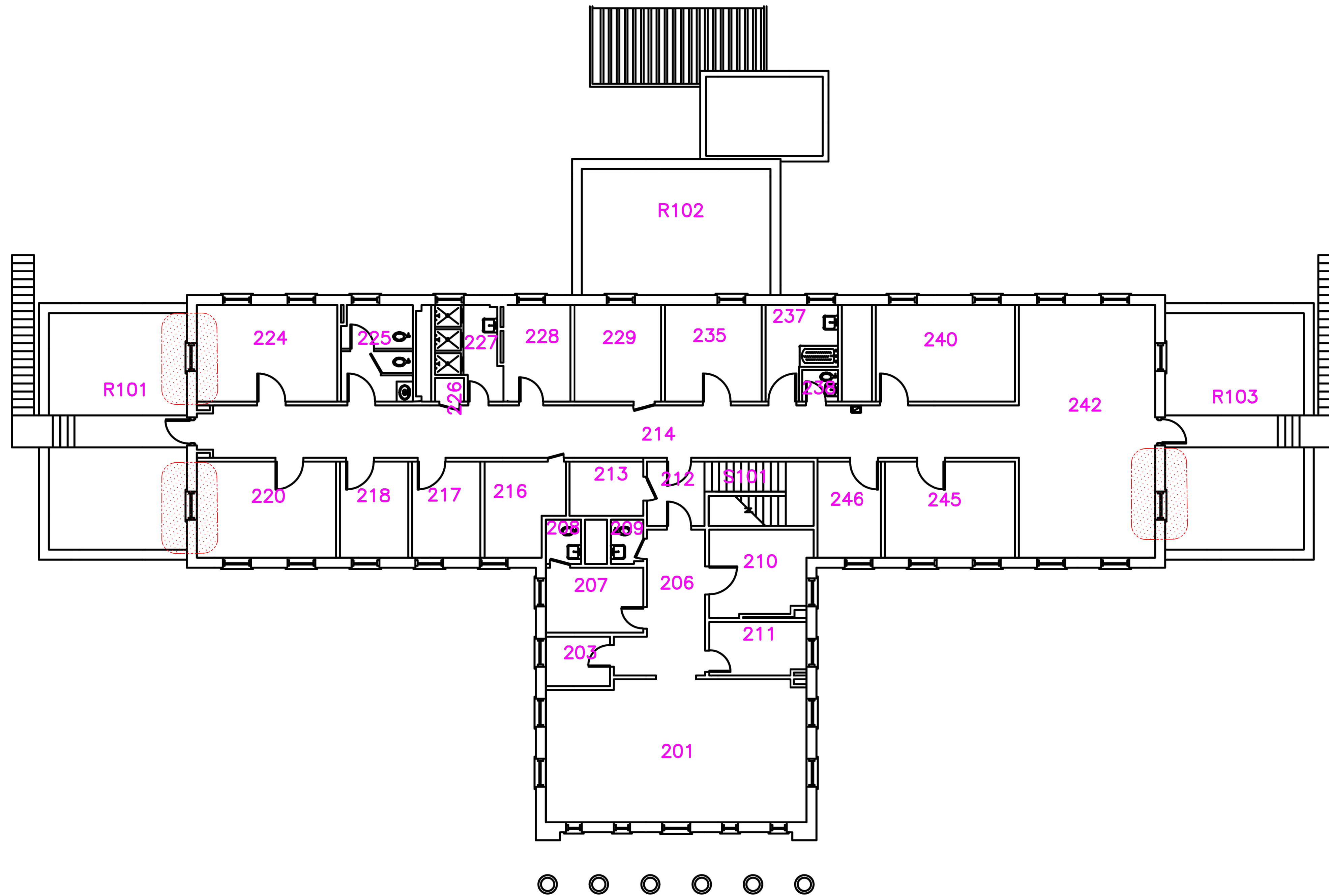
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**FLOOR PLAN  
AND NOTES**

**JOB 18-1104-48  
DATE 08.15.18  
DRAWN BY: CB  
SHEET**

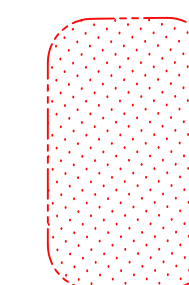
**R1.05**



**1** SECOND FLOOR PLAN - BUILDING # 503 (ENVIRONMENTAL SERVICES / NURSING DORM)

NOT TO SCALE

APPROXIMATE AREAS OF LEAKS



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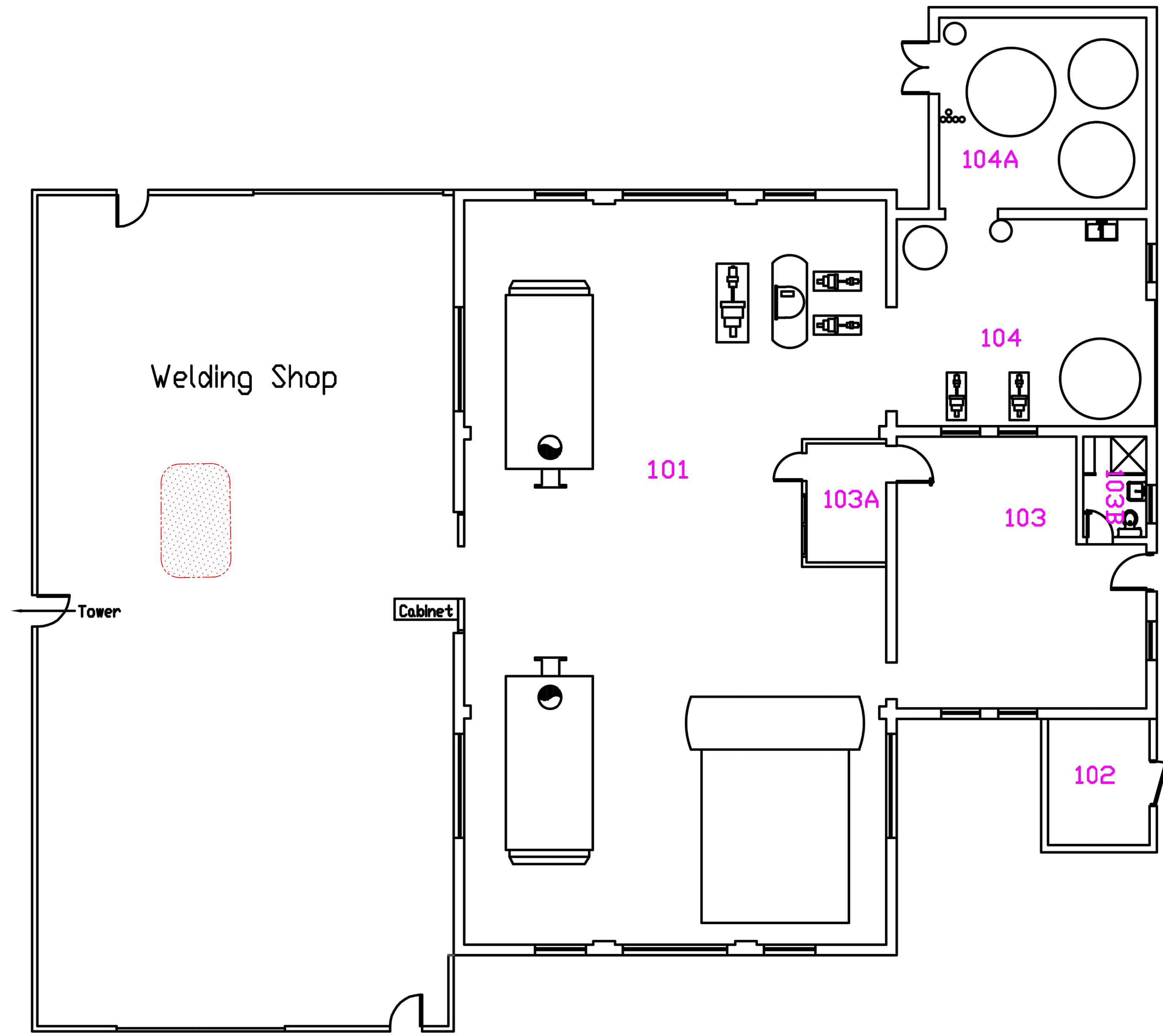
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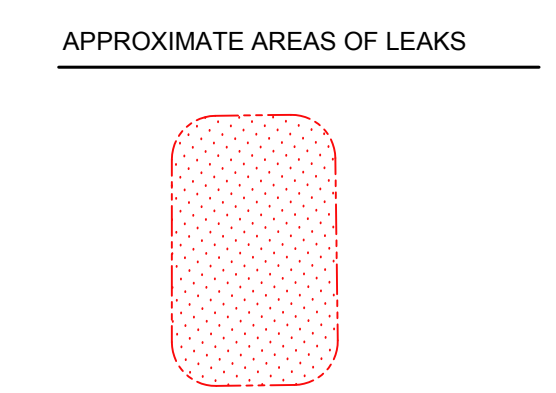
FLOOR PLAN  
AND NOTES

JOB 18-1104-48  
DATE 08.15.18  
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SHEET

**R1.06**



**1** SECOND FLOOR PLAN - BUILDING # 508 (STEAM PLANT)  
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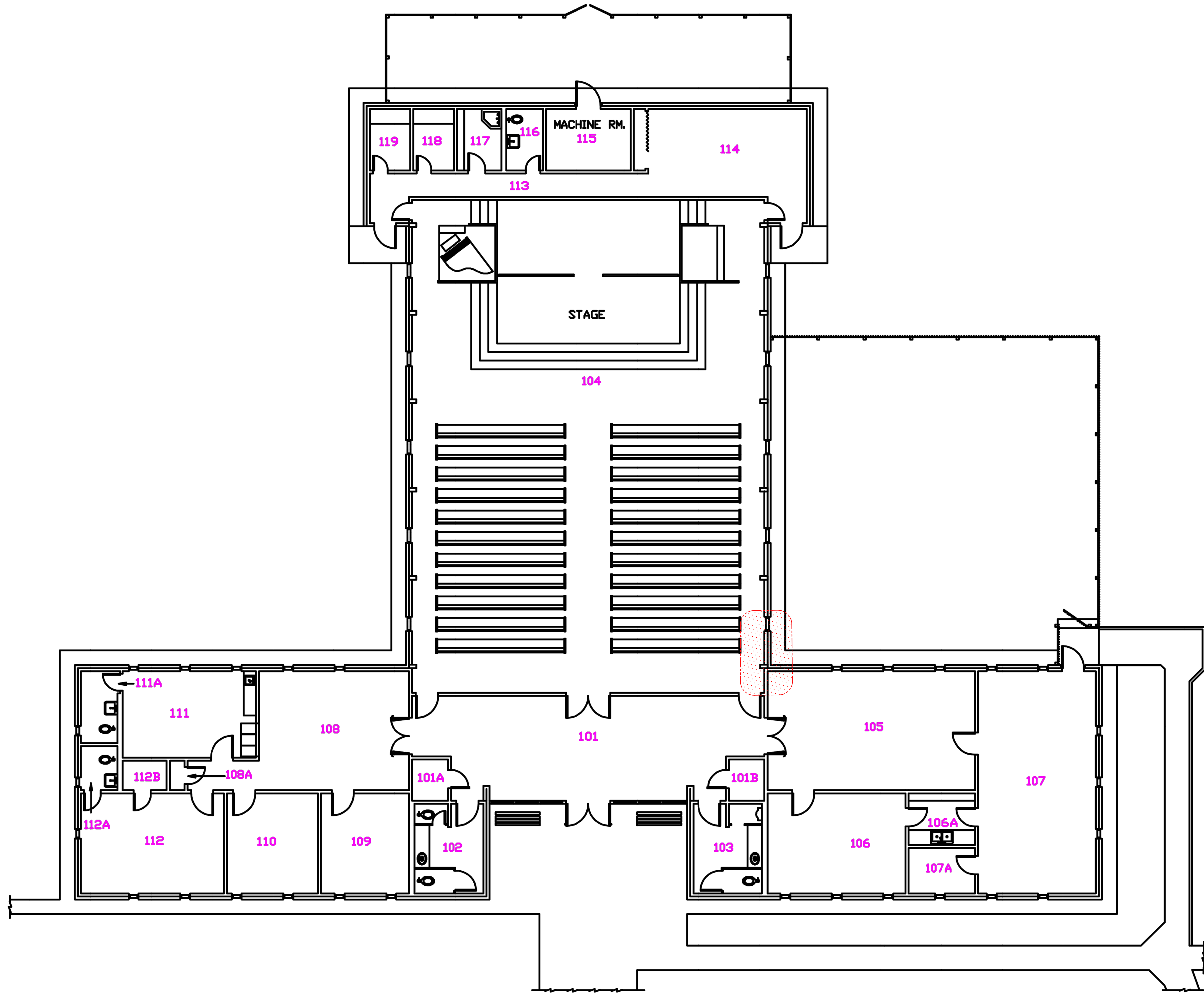
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 BIG SPRING STATE HOSPITAL  
 1901 NORTH HWY. 87  
 BIG SPRING, TX 79720**

**FLOOR PLAN AND NOTES**

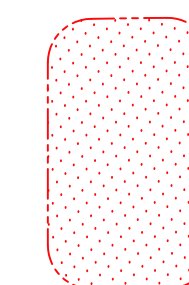
**JOB** 18-1104-48  
**DATE** 08.15.18  
**DRAWN BY:** CB  
**SHEET**

**R1.07**



**1** SECOND FLOOR PLAN - BUILDING # 542 (CHAPEL)  
 NORTH NOT TO SCALE

APPROXIMATE AREAS OF LEAKS



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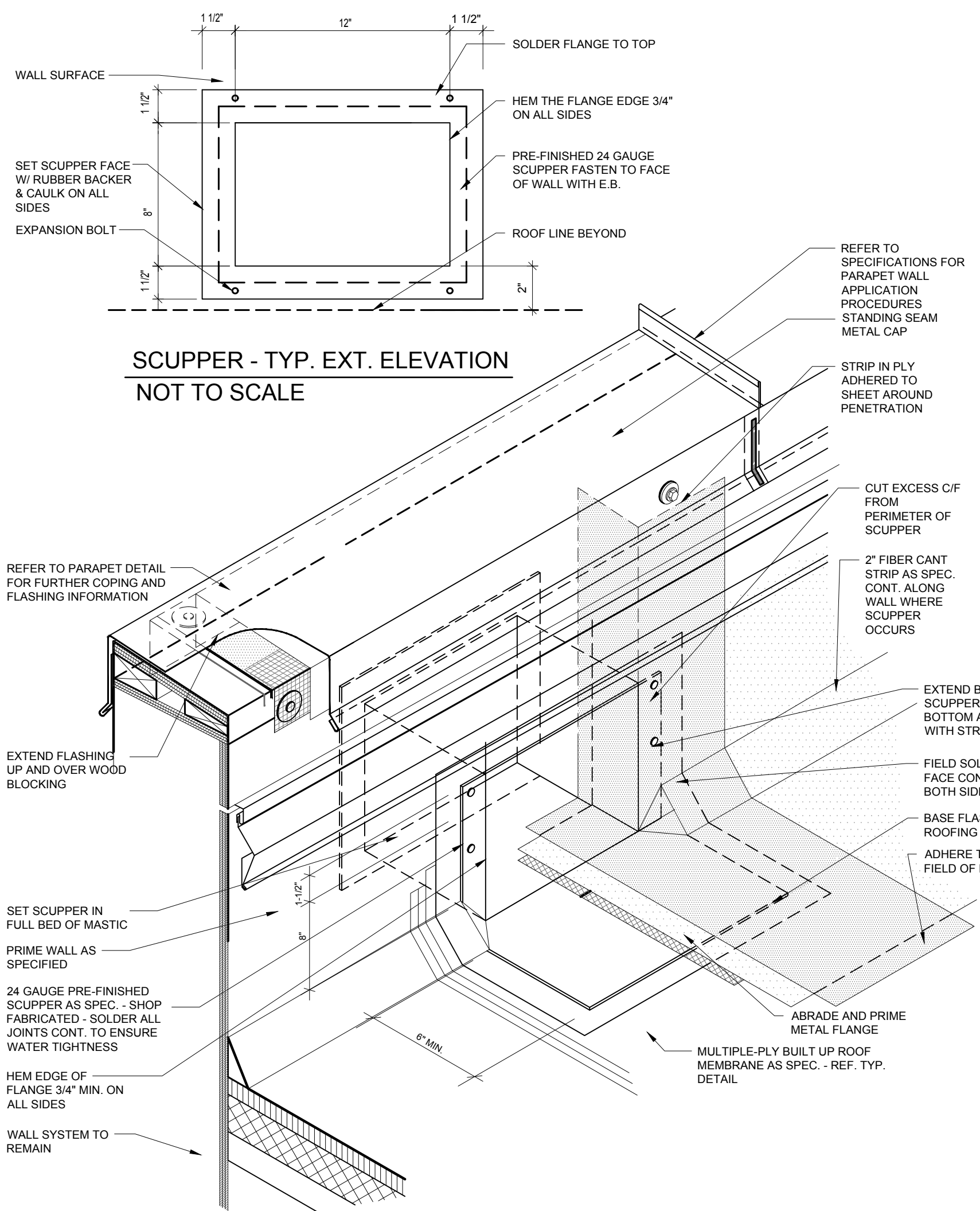
**FLOOR PLAN AND NOTES**

JOB 18-1104-48  
 DATE 08.15.18  
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**R1.08**



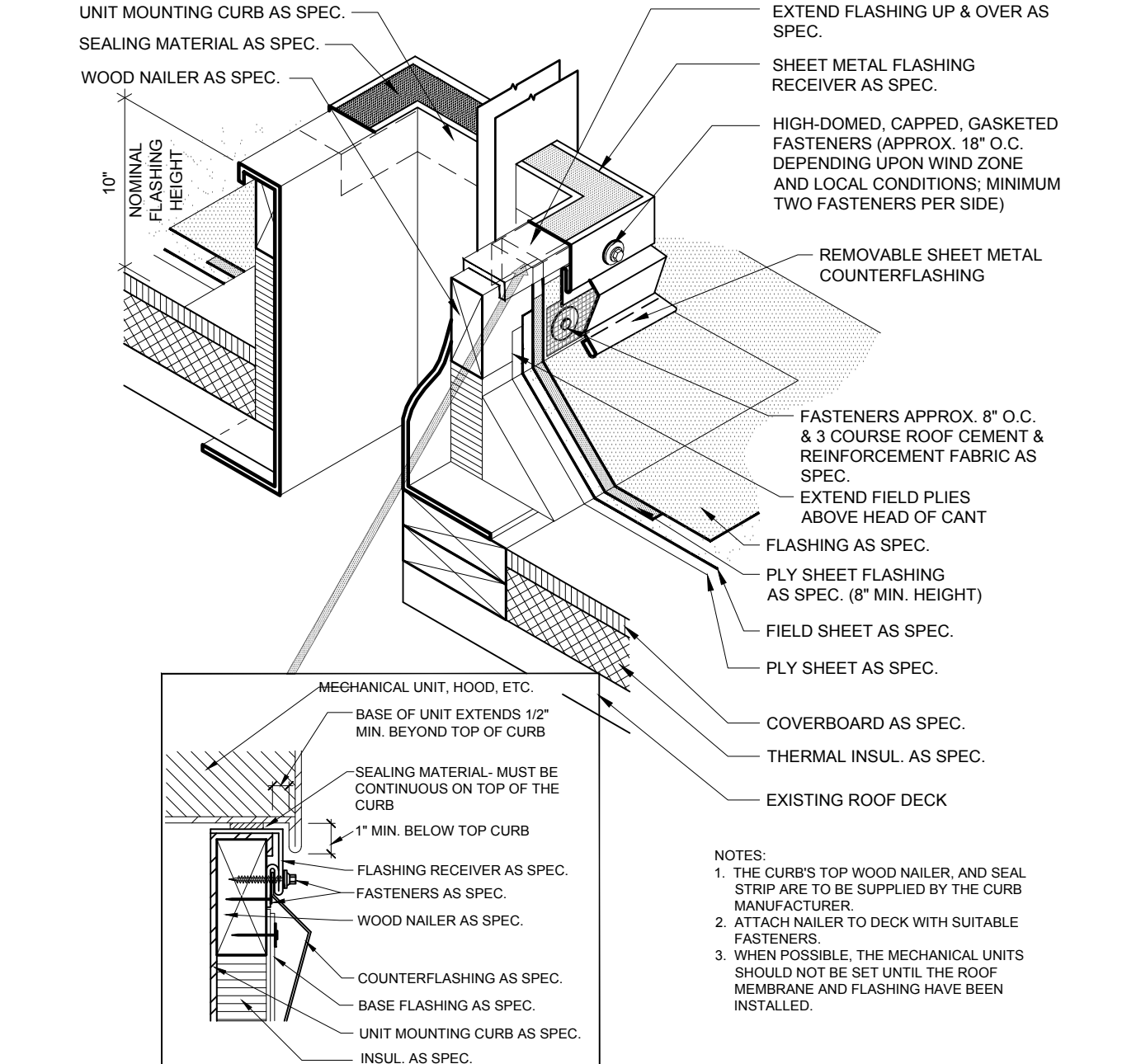




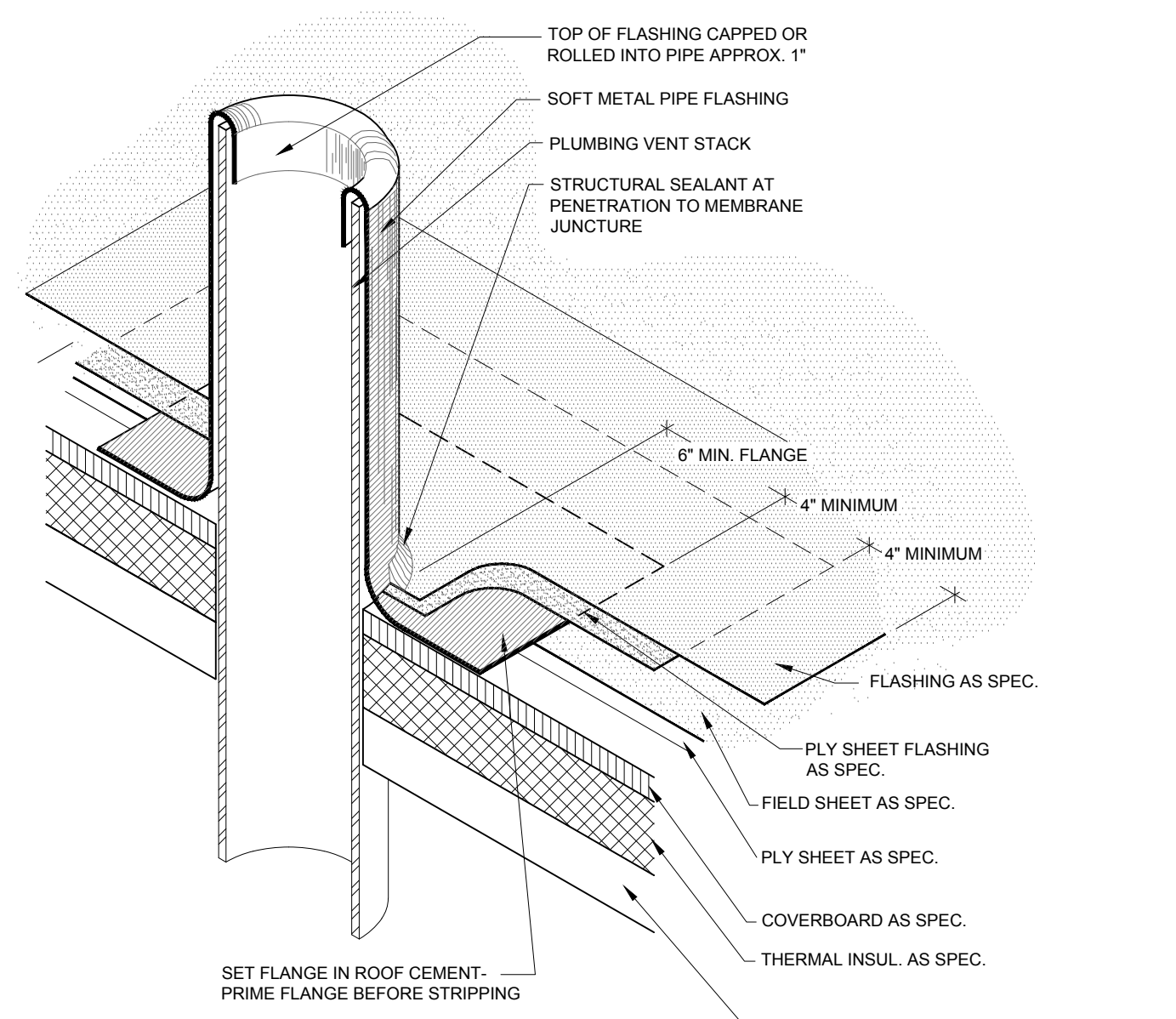
**SCUPPER - TYP. EXT. ELEVATION**  
NOT TO SCALE



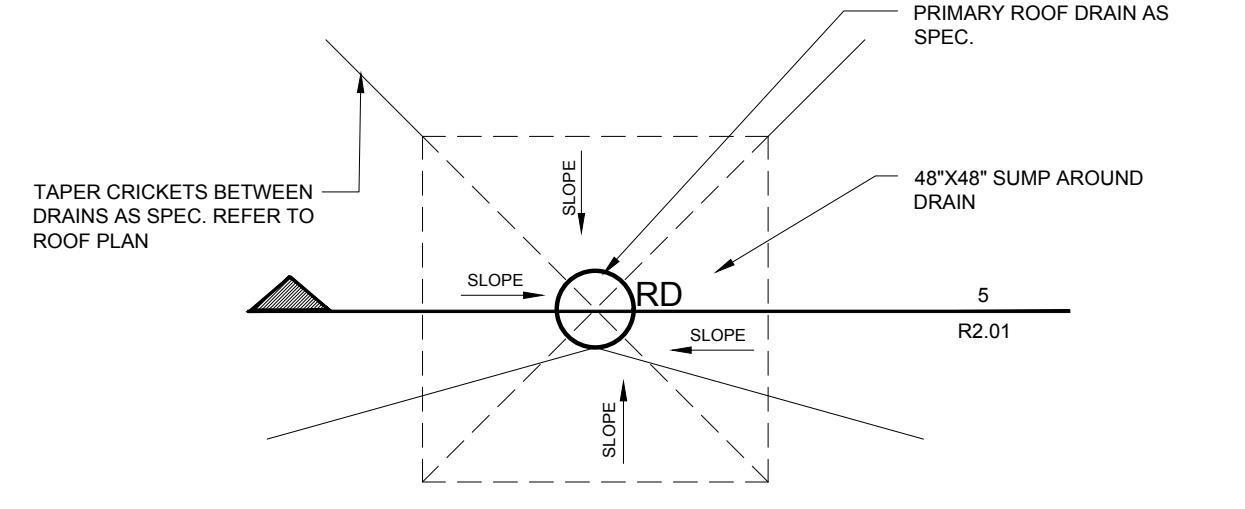
**7 OVERFLOW SCUPPER DETAIL**  
NOT TO SCALE



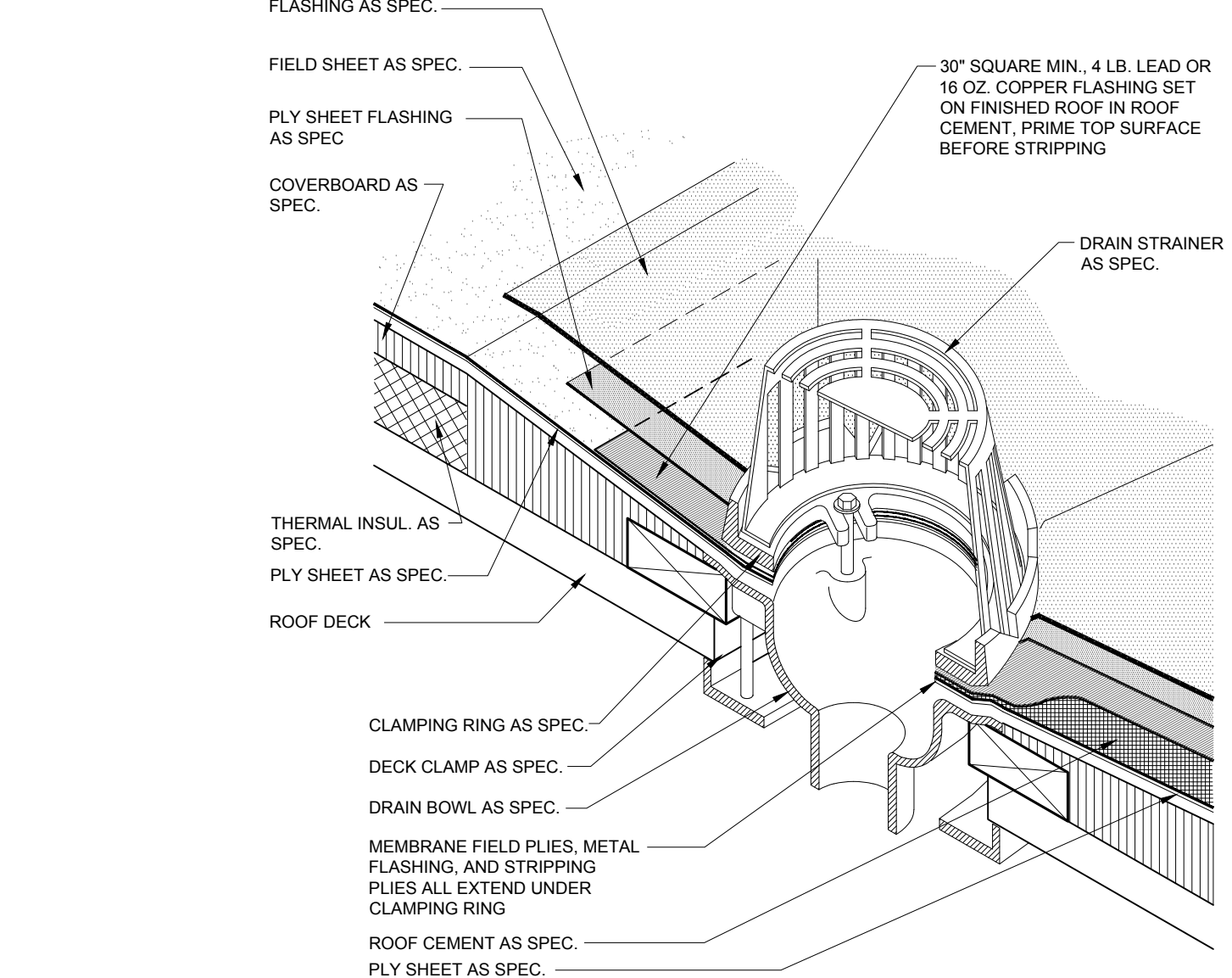
**9 CURB STACK DETAIL**  
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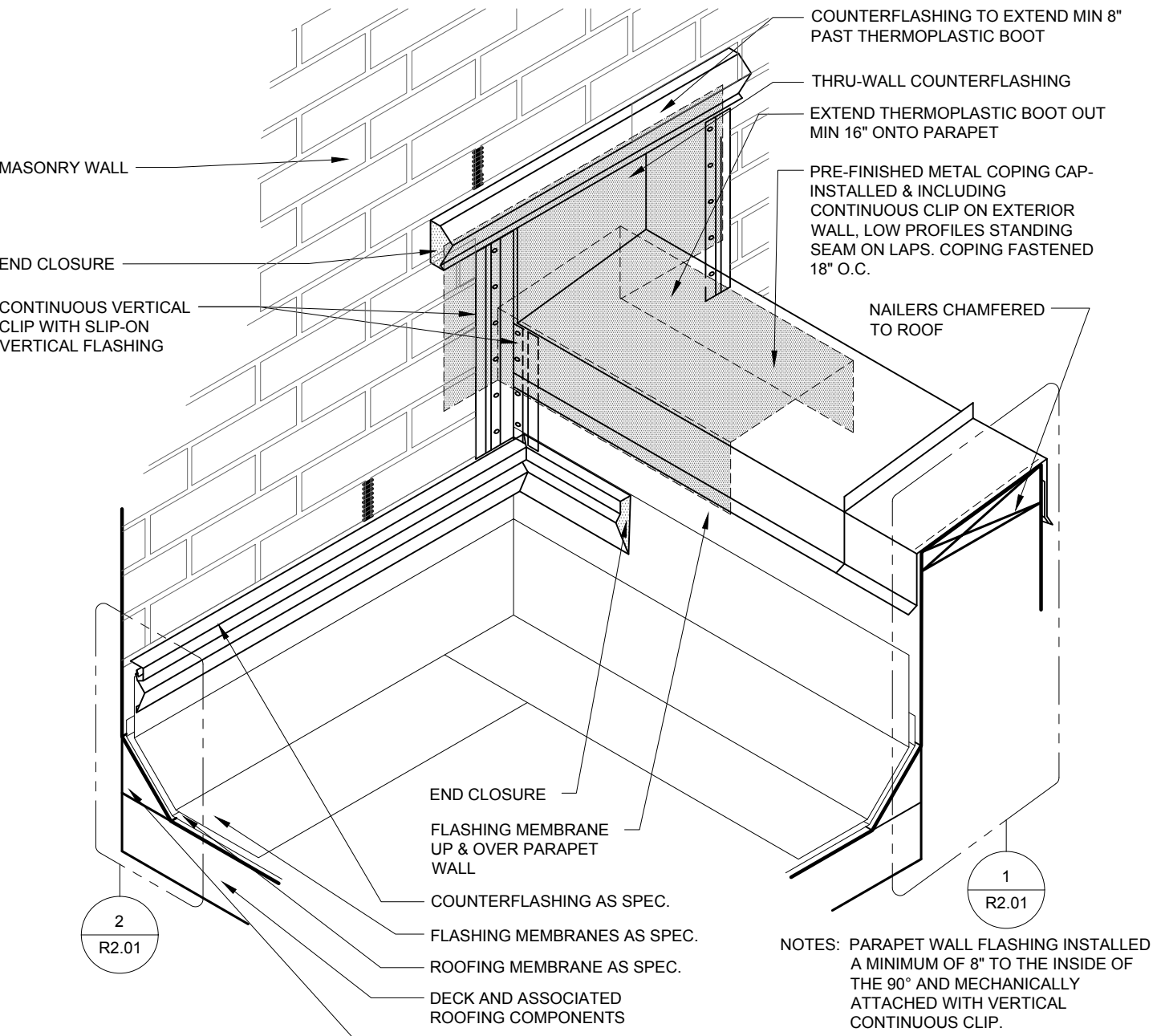
**8 VENT STACK DETAIL**  
NOT TO SCALE



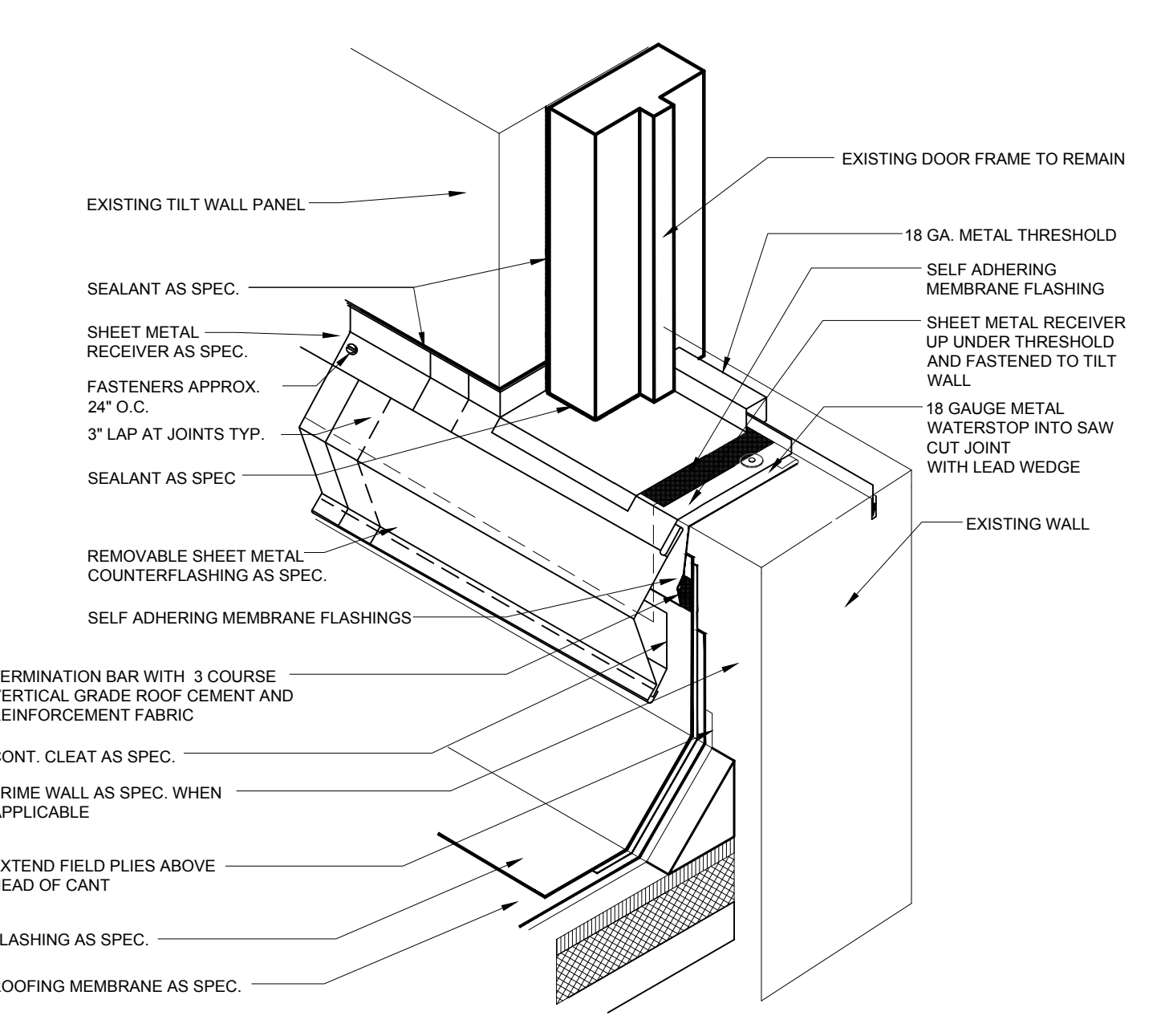
**6 ROOF DRAIN LAYOUT**  
NOT TO SCALE



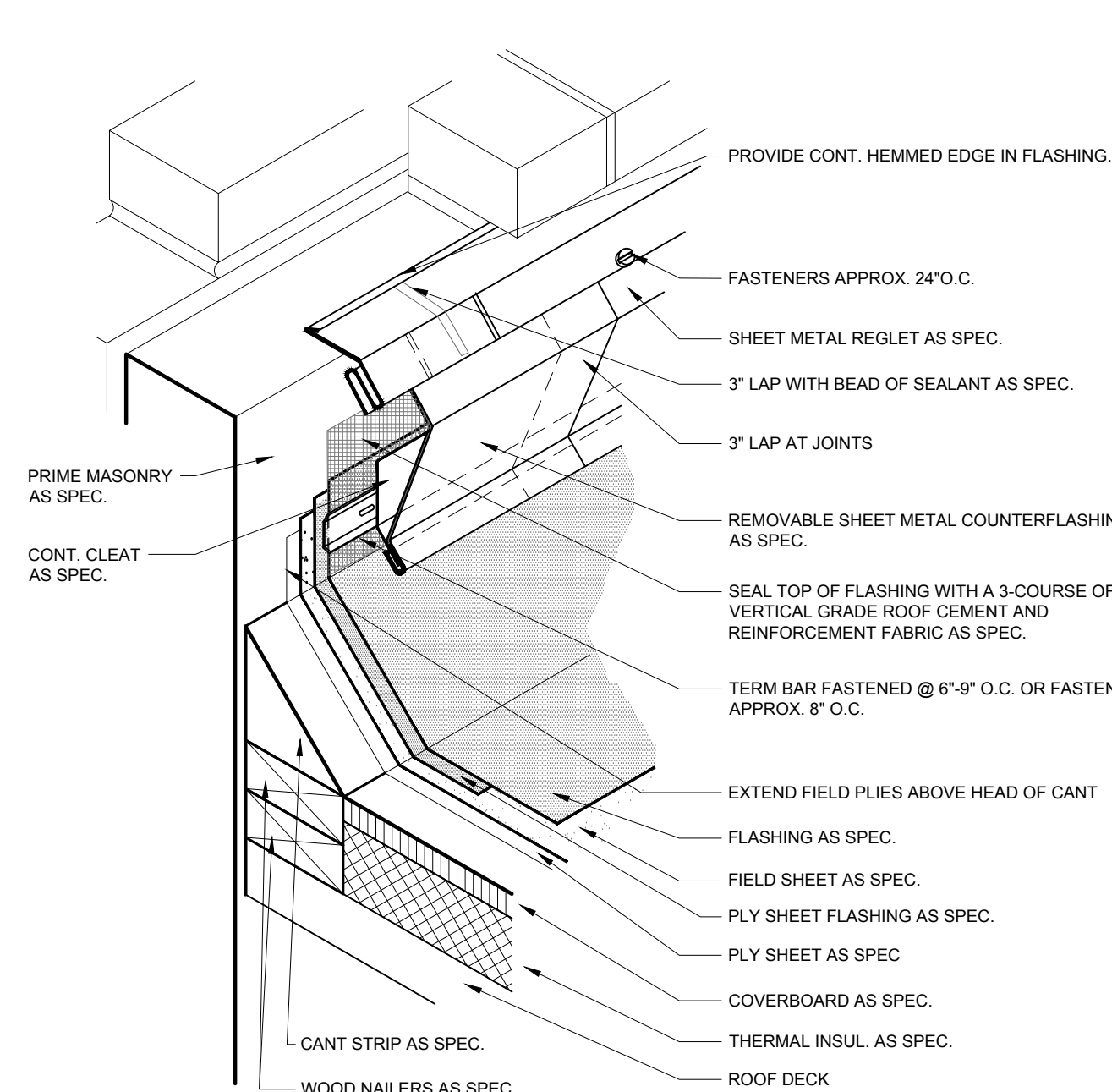
**5 MAIN ROOF DRAIN**  
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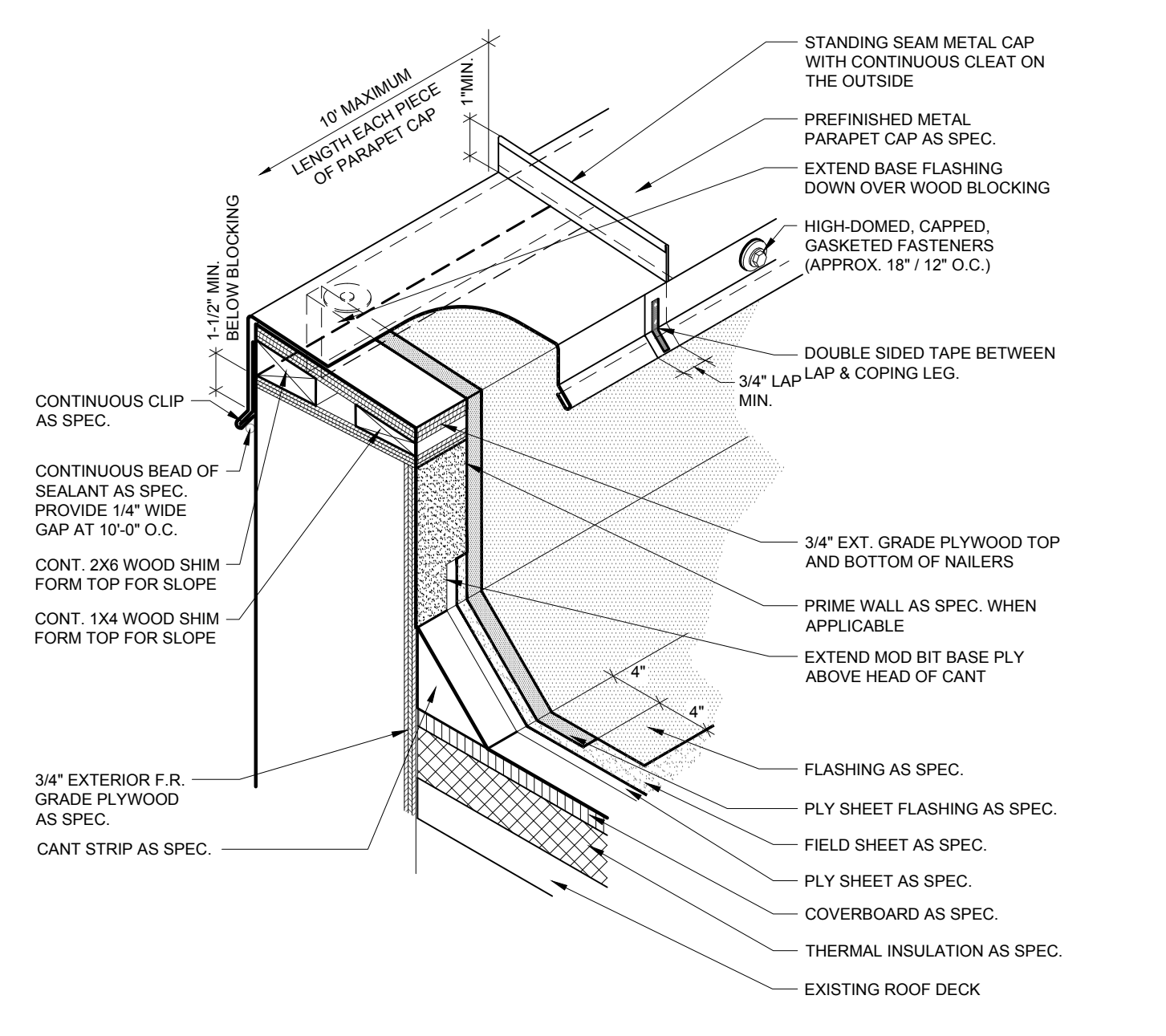
**4 PARAPET AT RISE WALL**  
NOT TO SCALE



**3 RISE WALL AT DOOR THRESHOLD DETAIL**  
NOT TO SCALE



**2 RISE WALL DETAIL**  
NOT TO SCALE



**1 LOW PARAPET**  
NOT TO SCALE



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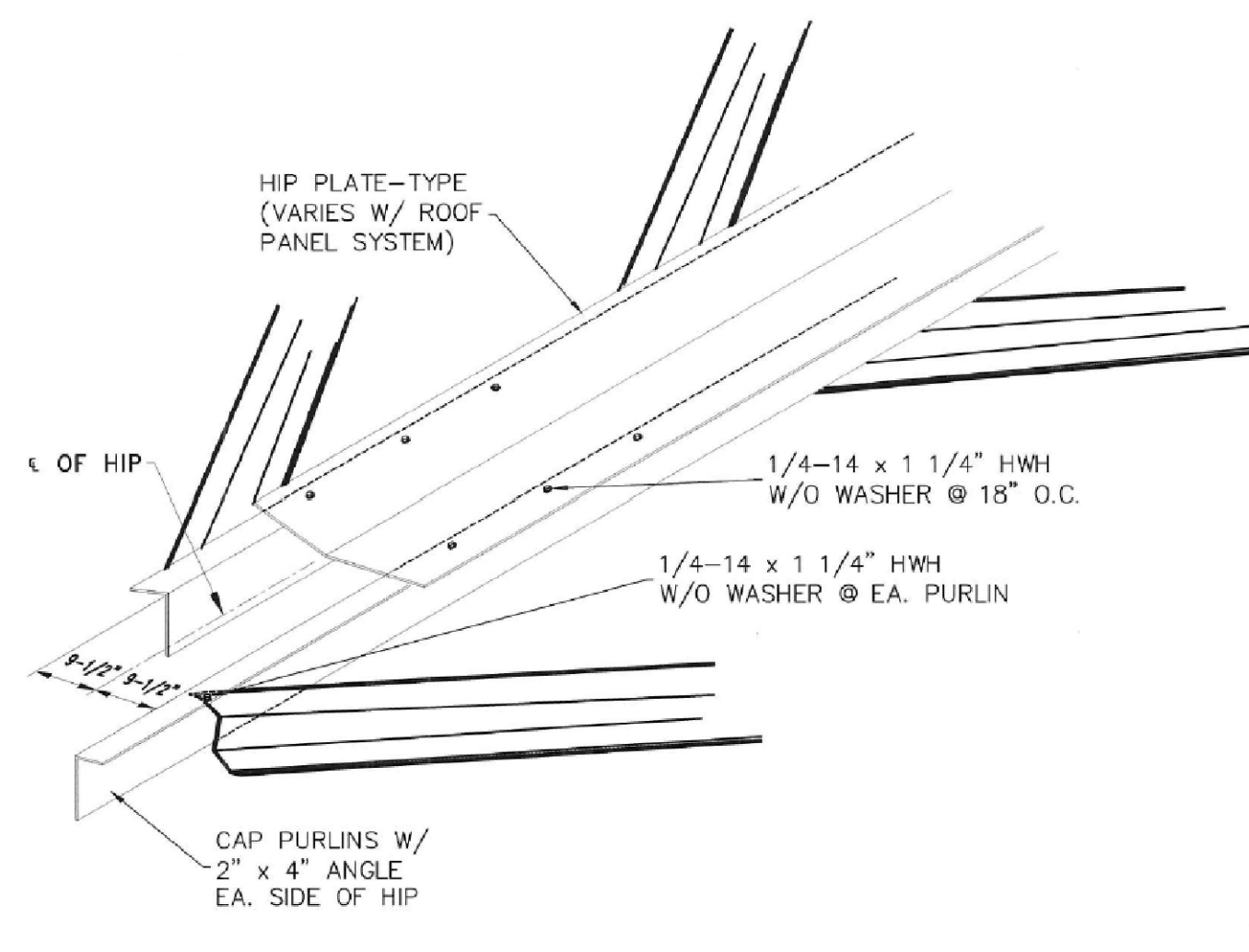
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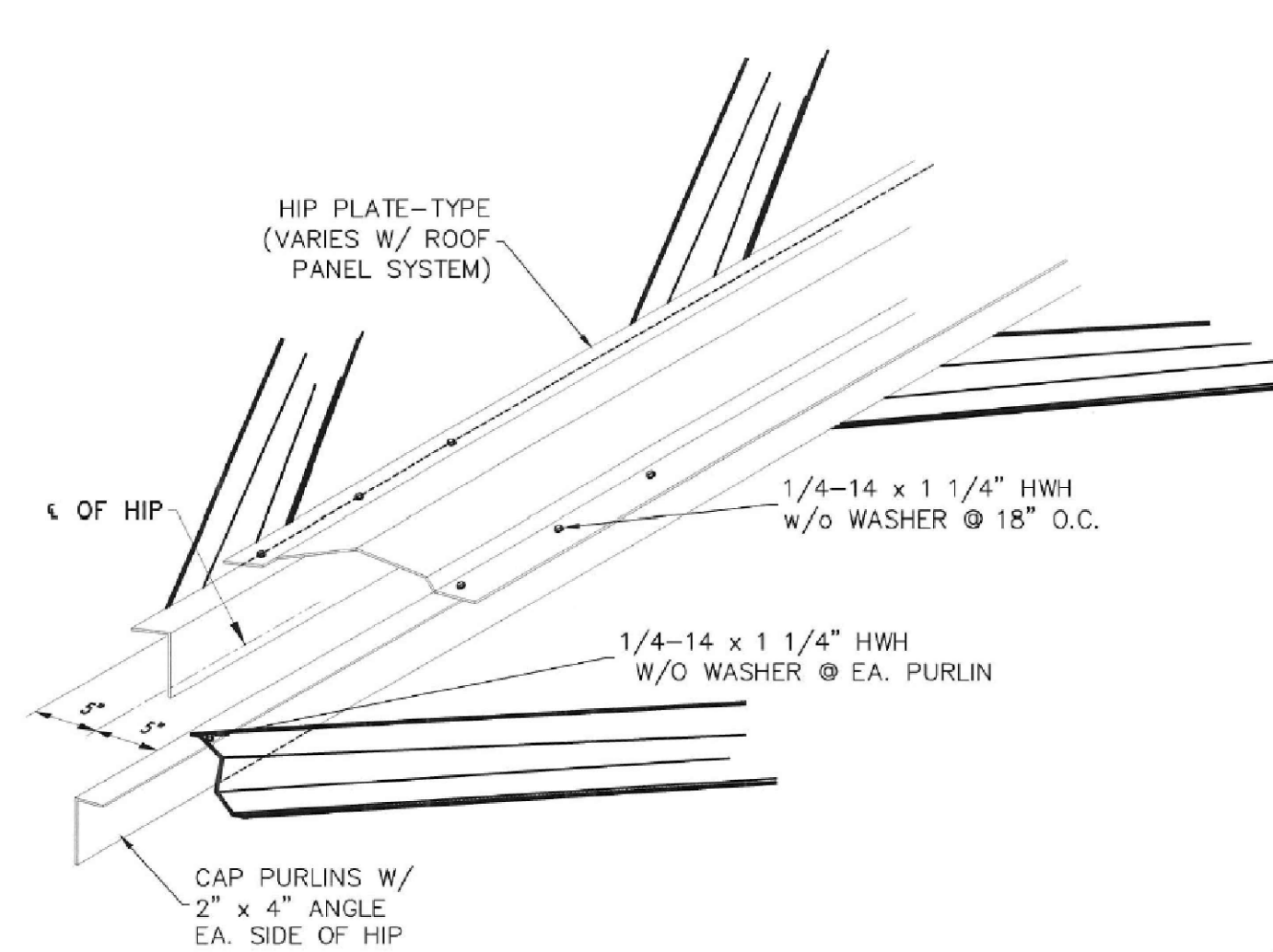
**ROOF DETAILS**

JOB 18-1104-48  
DATE 08.15.18  
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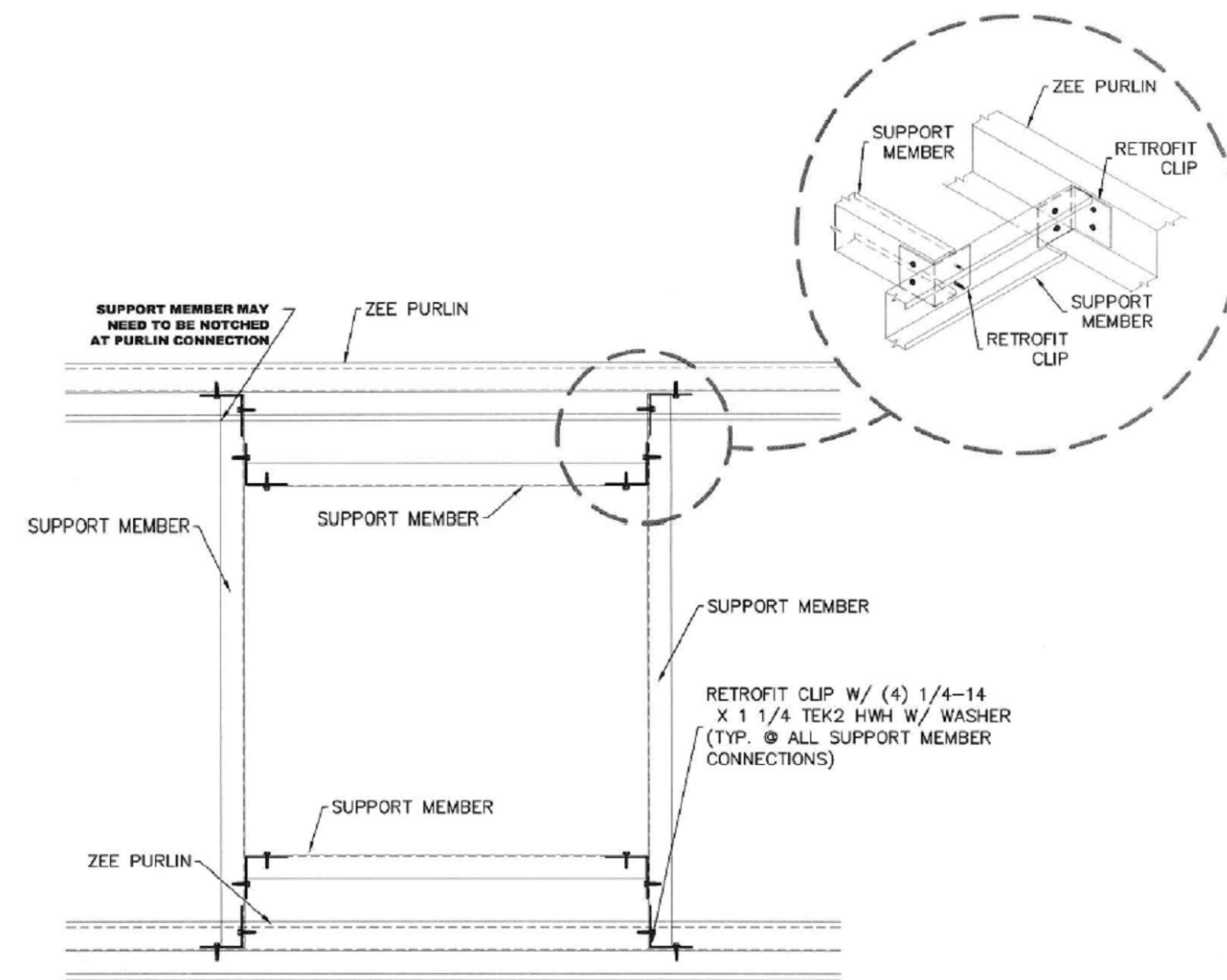
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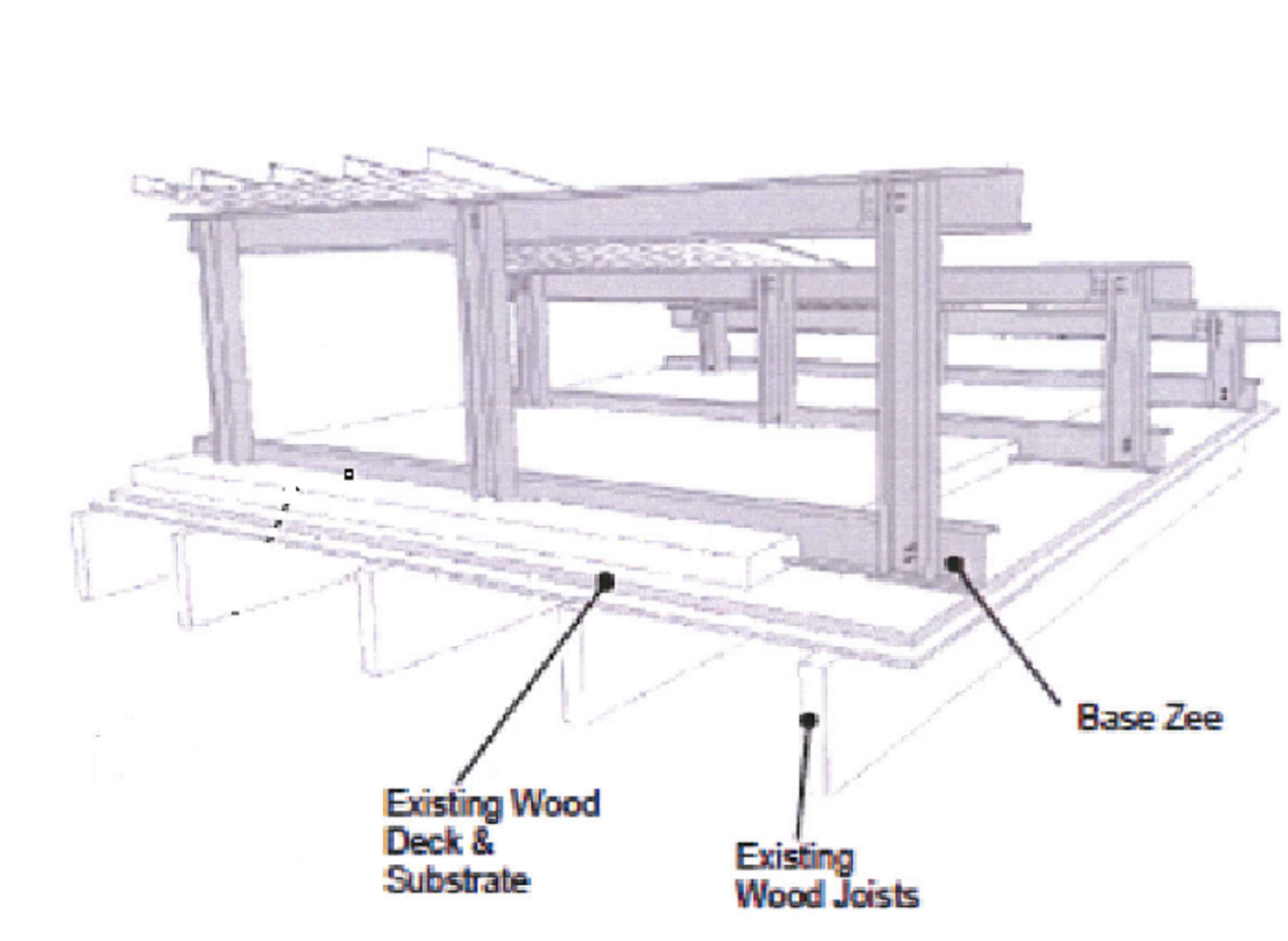
**12 VALLEY FRAMING**  
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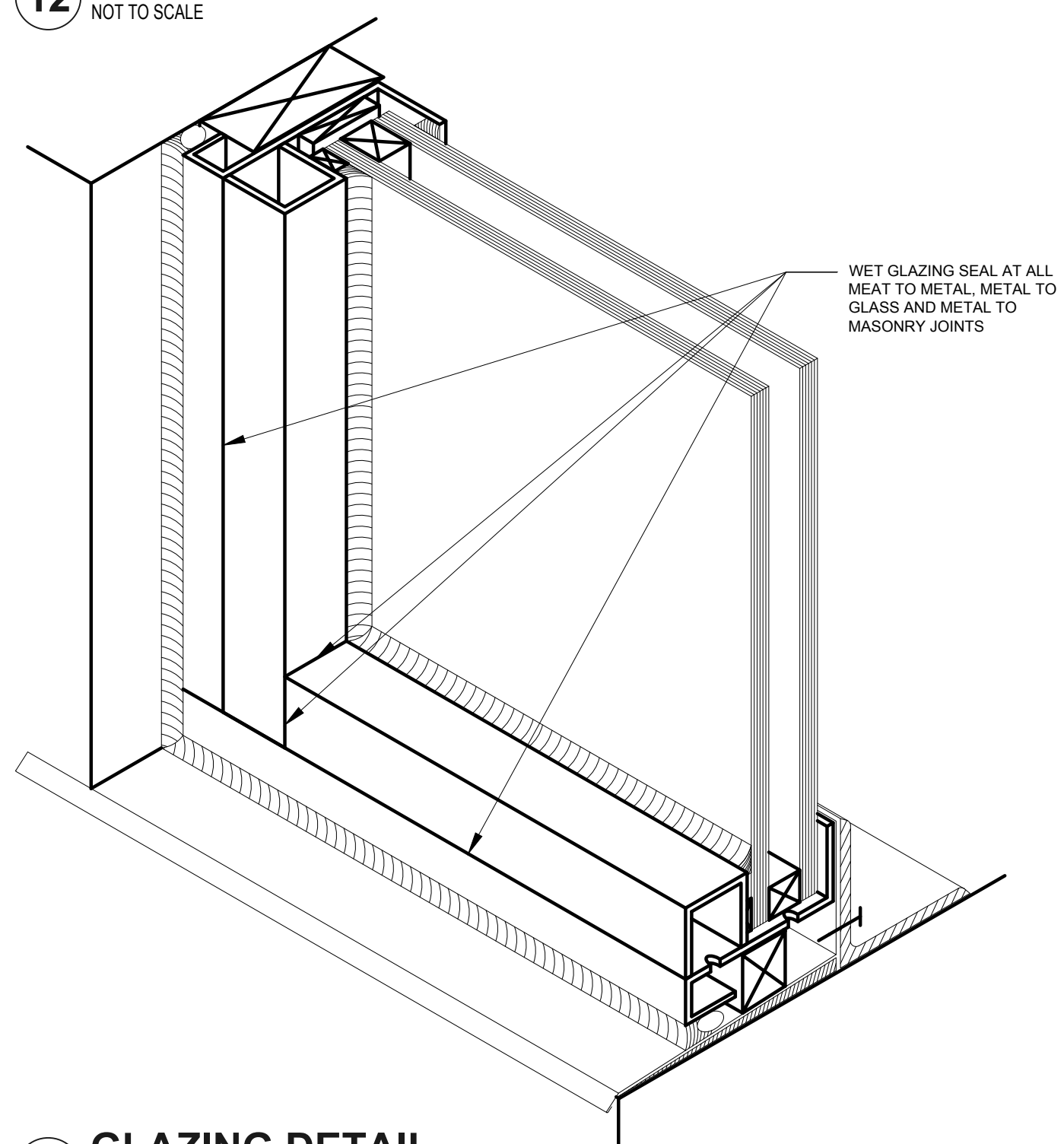
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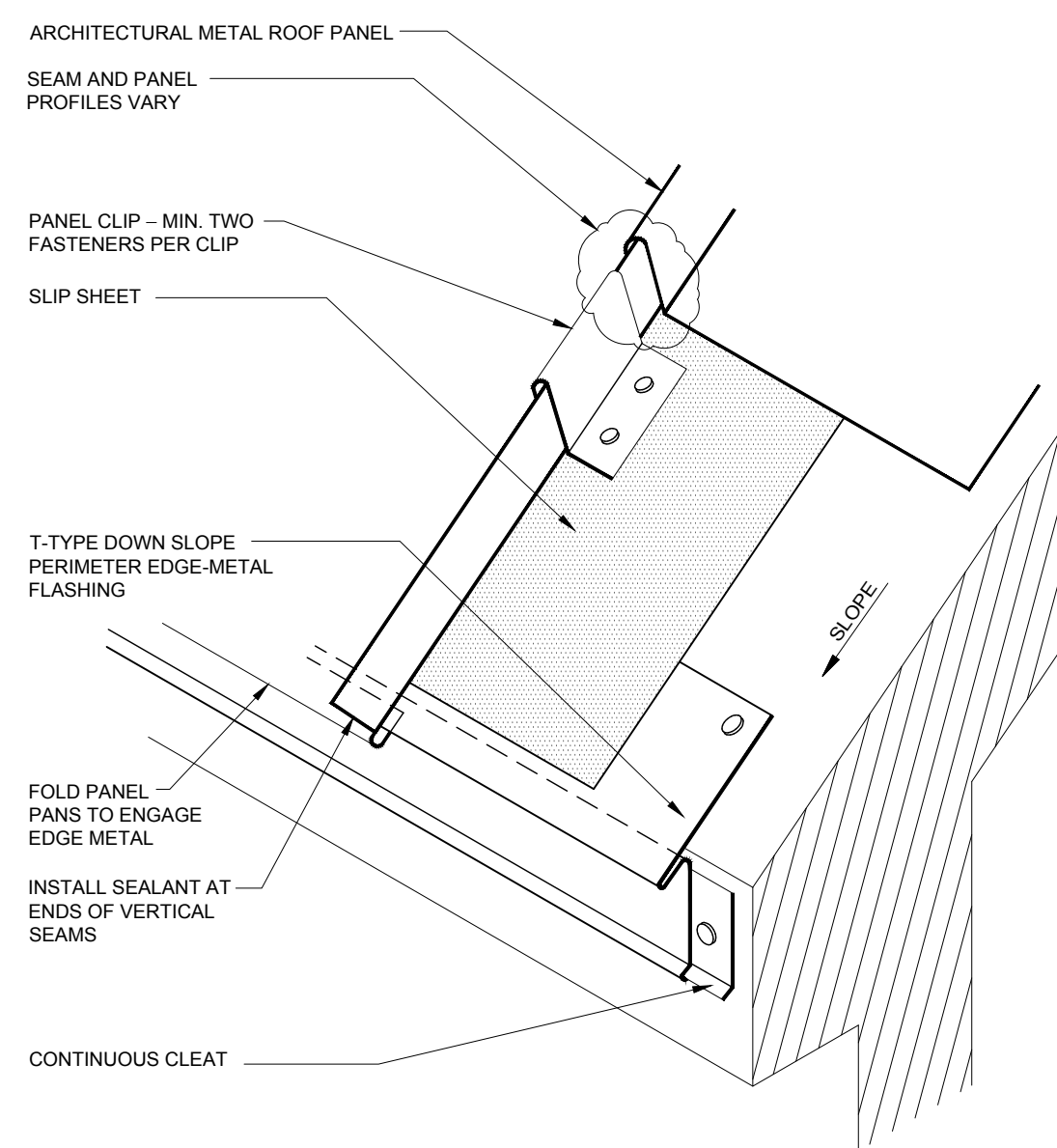
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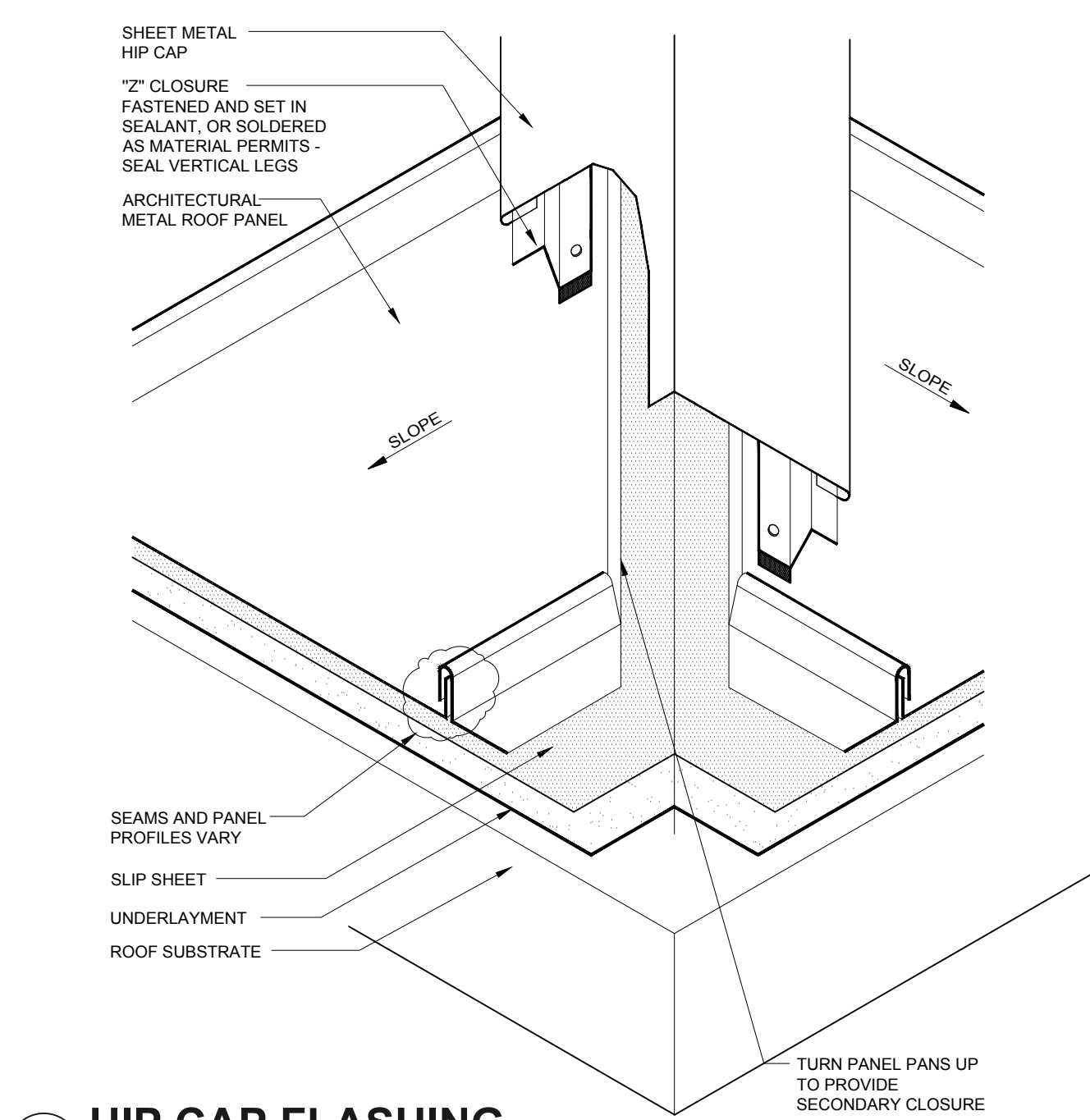
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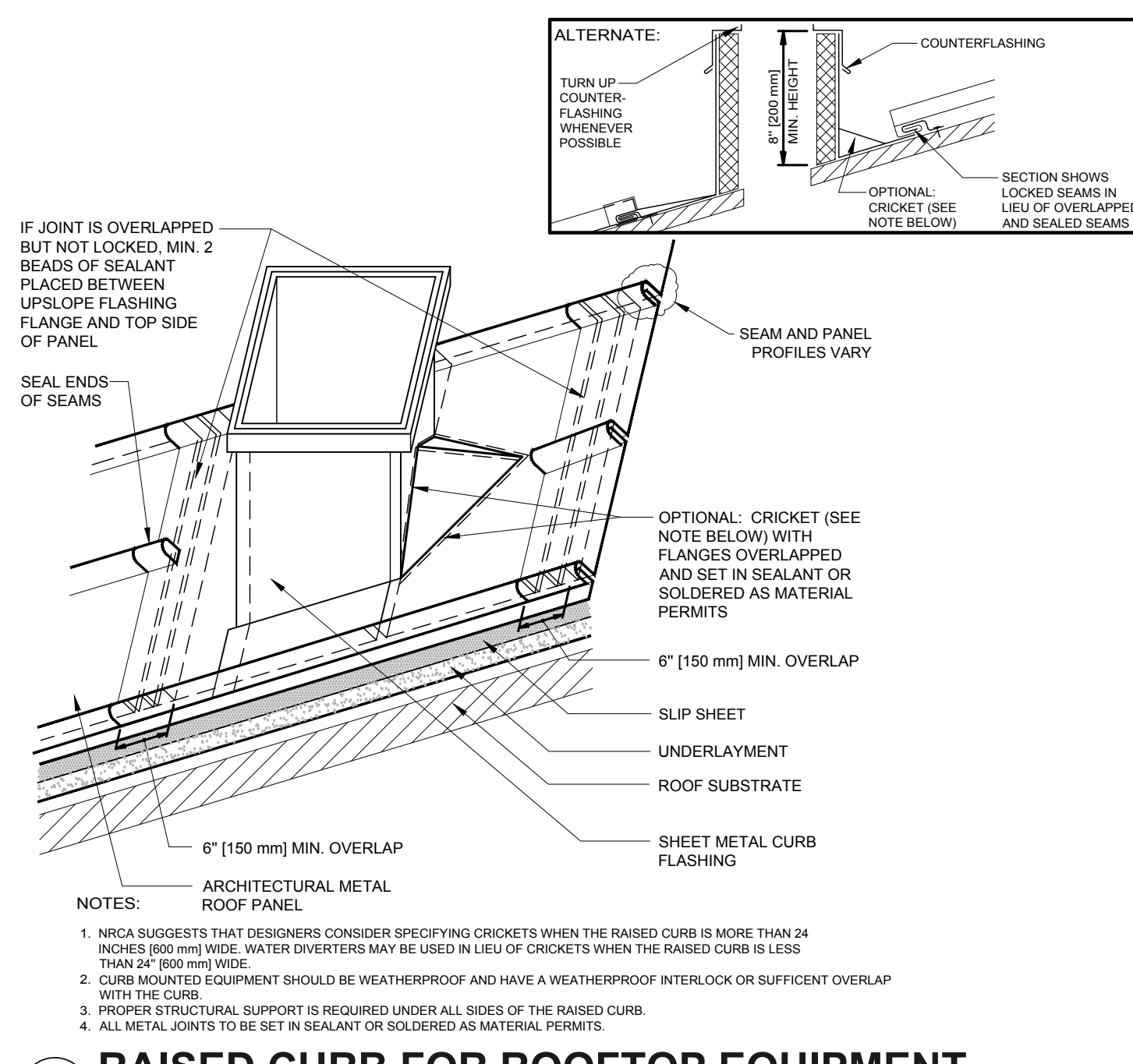
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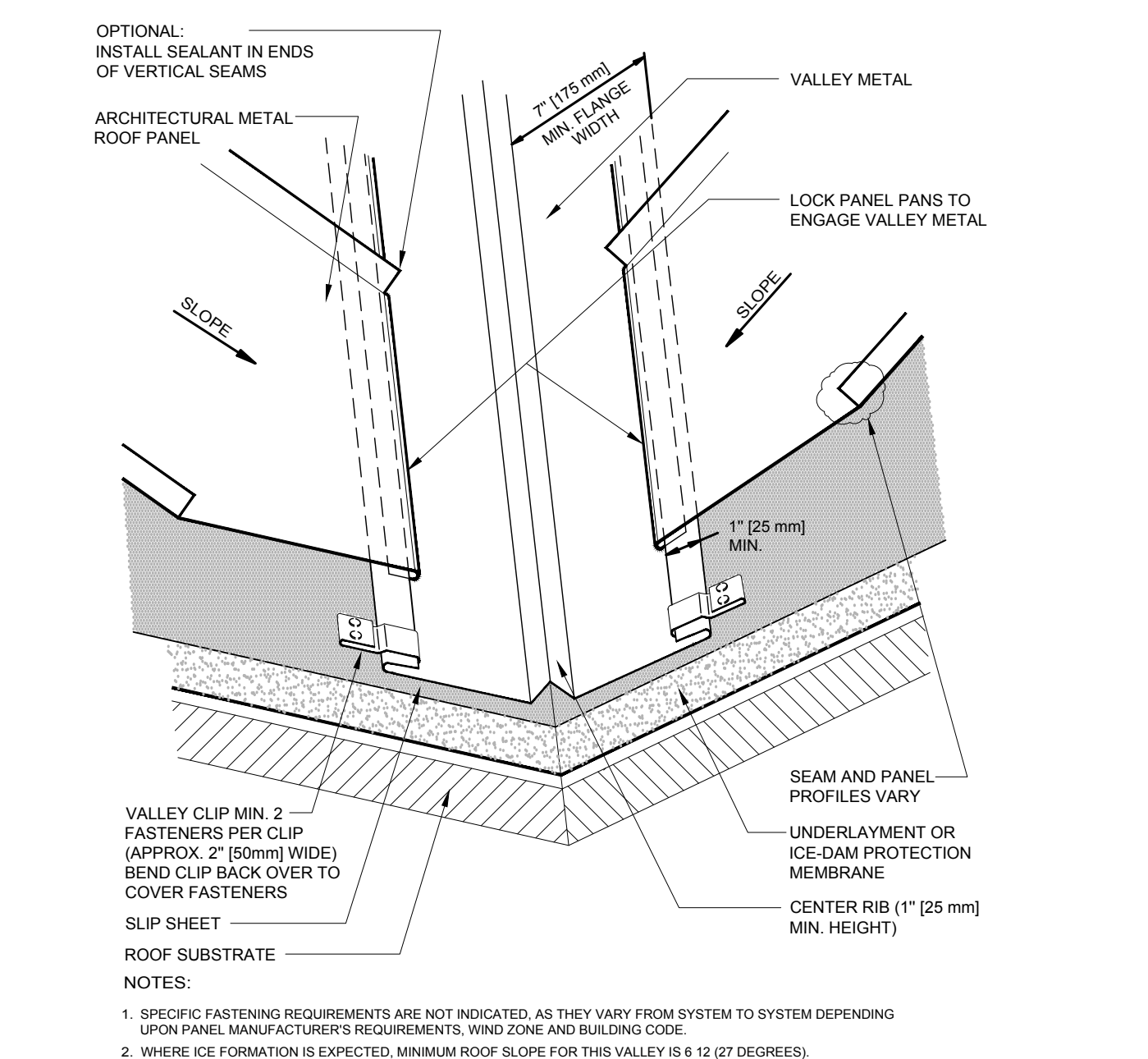
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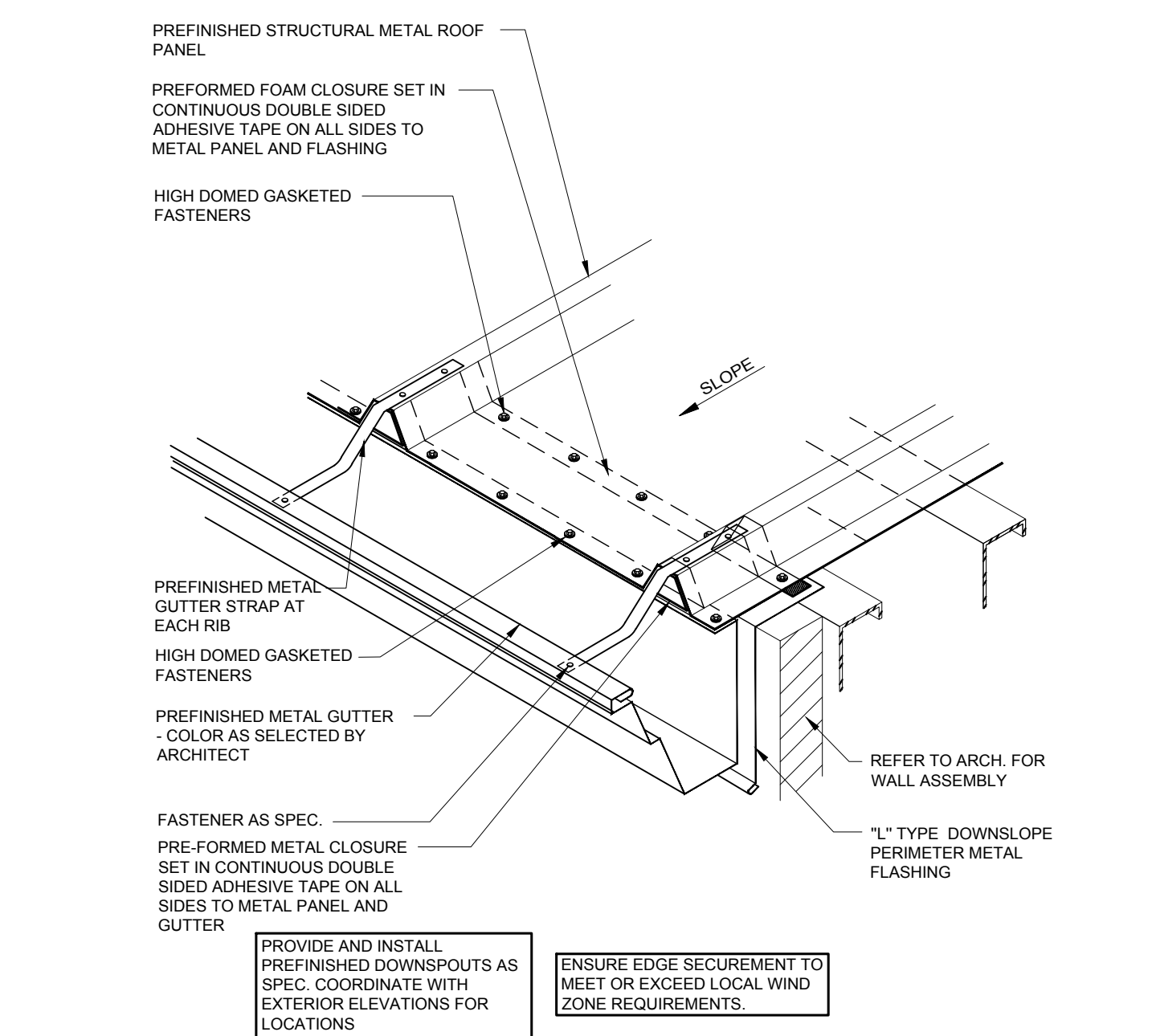
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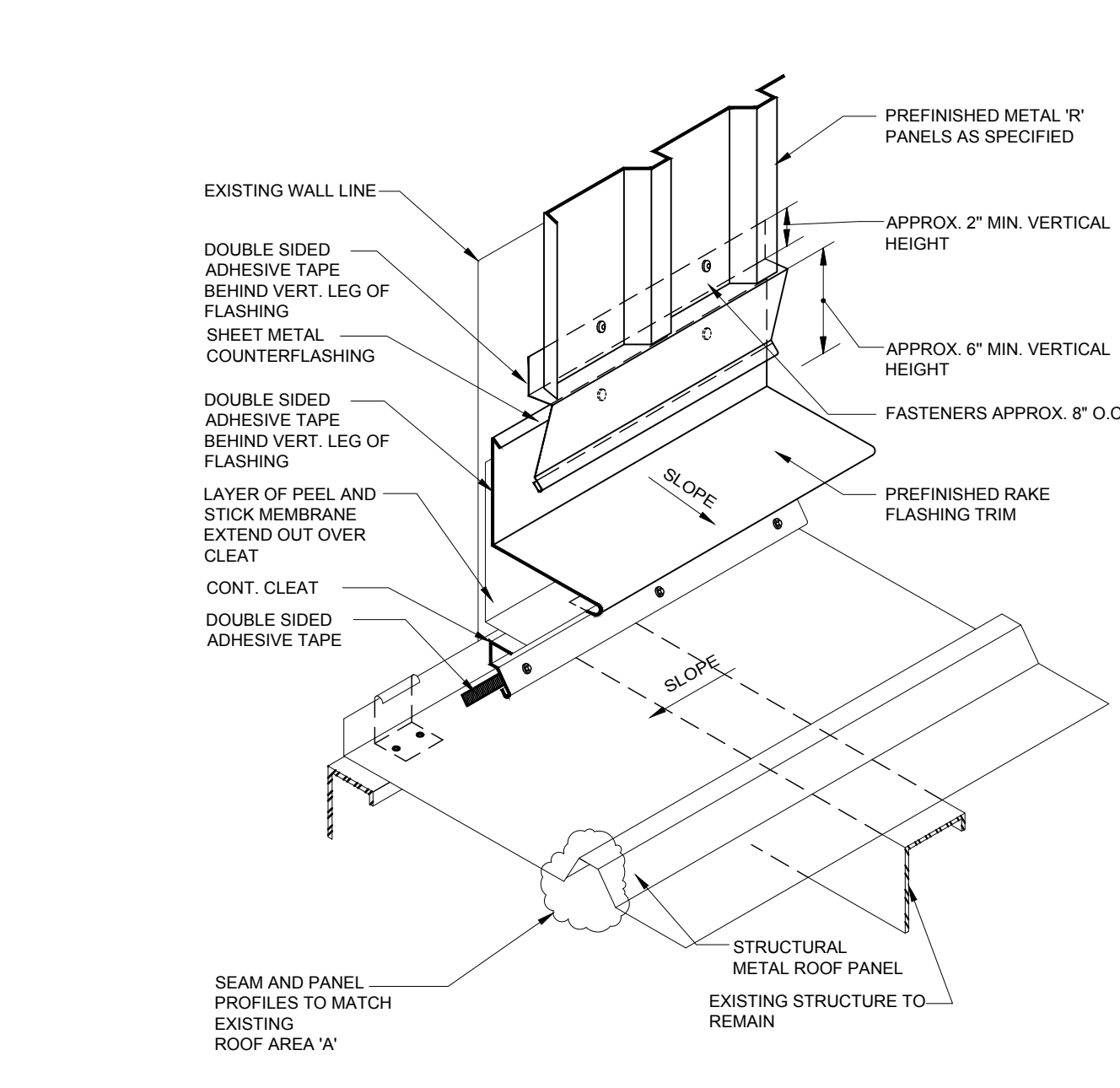
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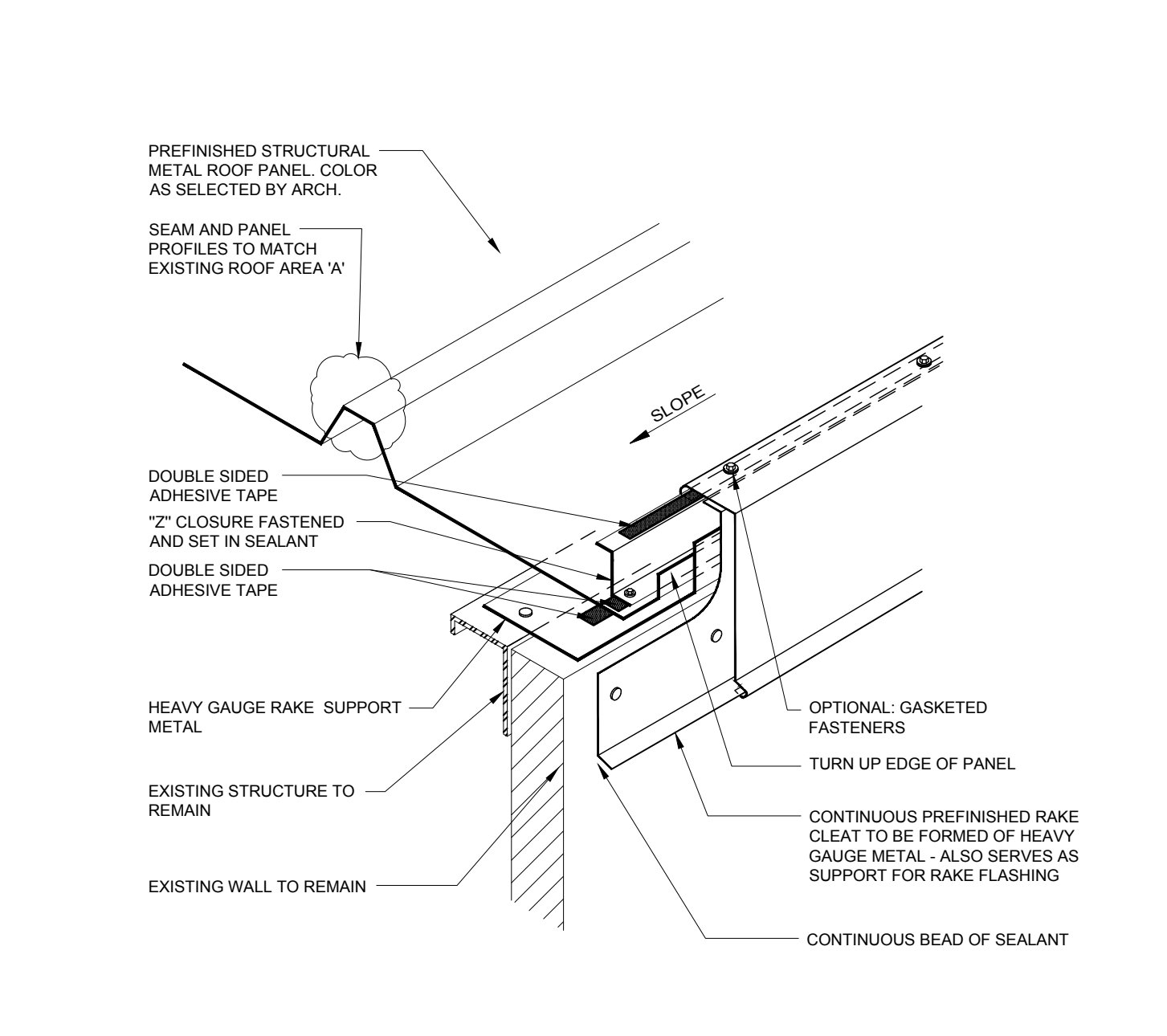
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**3 METAL EDGE WITH GUTTER FLASHING**  
NOT TO SCALE



**2 RISEWALL FLASHING**  
NOT TO SCALE



**1 RAKE FLASHING**  
NOT TO SCALE



Texas Registered  
Engineering Firm F-6498  
6310 Genoa Ave, Suite G  
Lubbock, TX  
(806)833-6953



08/15/18

Contractor shall verify all substrates, dimensions, penetrations, curbs, etc. those shown are typical but may not be all inclusive.  
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**ISSUES**

1 08/15/18  
100% ISSUE FOR CONSTRUCTION

PROJECT NO. 18-002-BSH  
ROOF REPAIR & REPLACEMENT PROJECT  
BIG SPRING STATE HOSPITAL  
1901 NORTH HWY. 87  
BIG SPRING, TX 79720

**ROOF DETAILS**

JOB 18-1104-48  
DATE 08.15.18  
DRAWN BY: CB  
SHEET

**R2.02**



Texas Registered  
Engineering Firm F-6498  
6310 Genoa Ave, Suite G  
Lubbock, TX  
(806)833-6953



08/15/18

Contractor shall verify all substrates, dimensions, penetrations, curbs, etc. those shown are typical but may not be all inclusive.  
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**ISSUES**

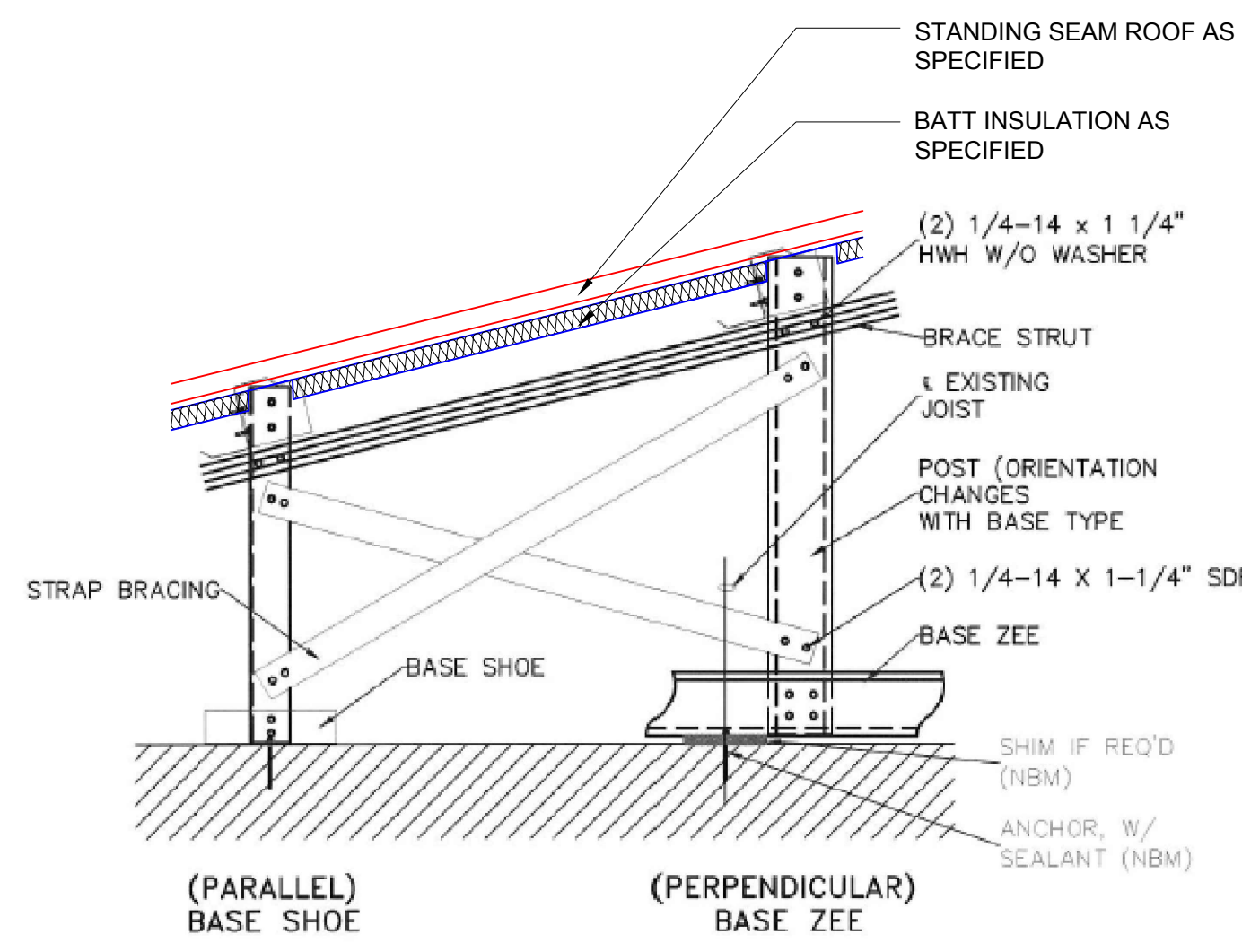
1	08/15/18	100% ISSUE FOR CONSTRUCTION

**PROJECT NO. 18-002-BSH**  
**ROOF REPAIR & REPLACEMENT PROJECT**  
**BIG SPRING STATE HOSPITAL**  
**1901 NORTH HWY. 87**  
**BIG SPRING, TX 79720**

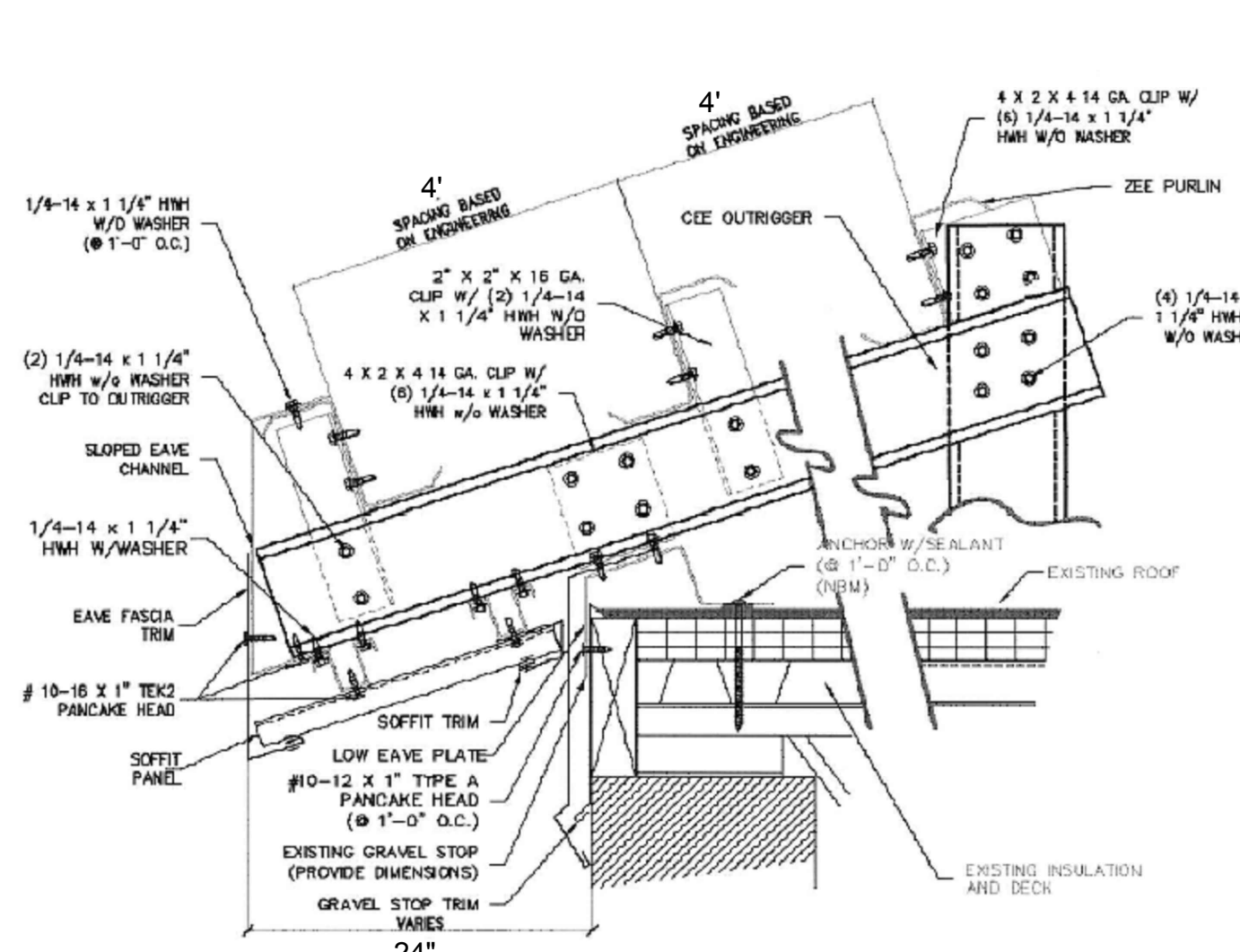
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JOB 18-1104-48  
DATE 08.15.18  
DRAWN BY: CB  
SHEET

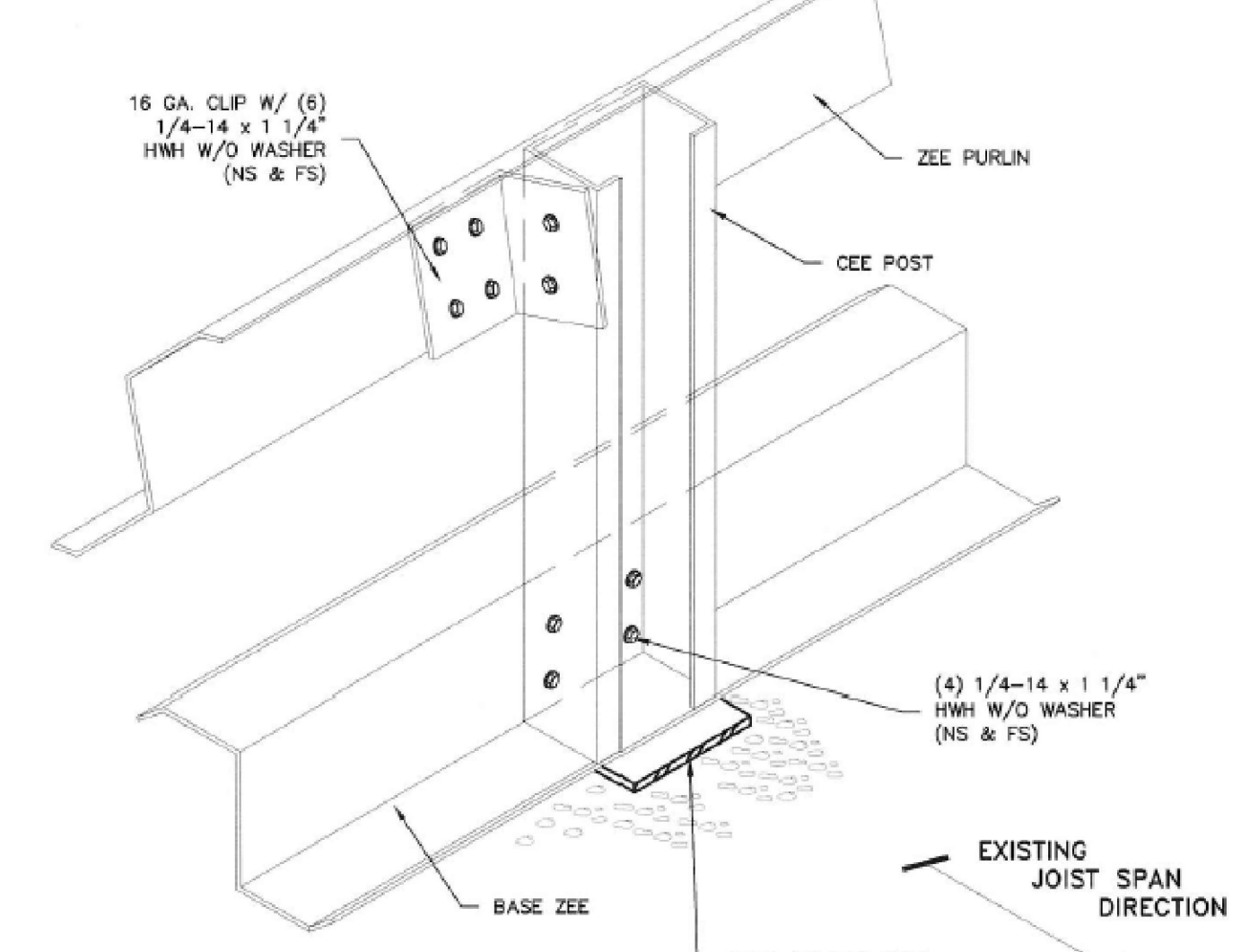
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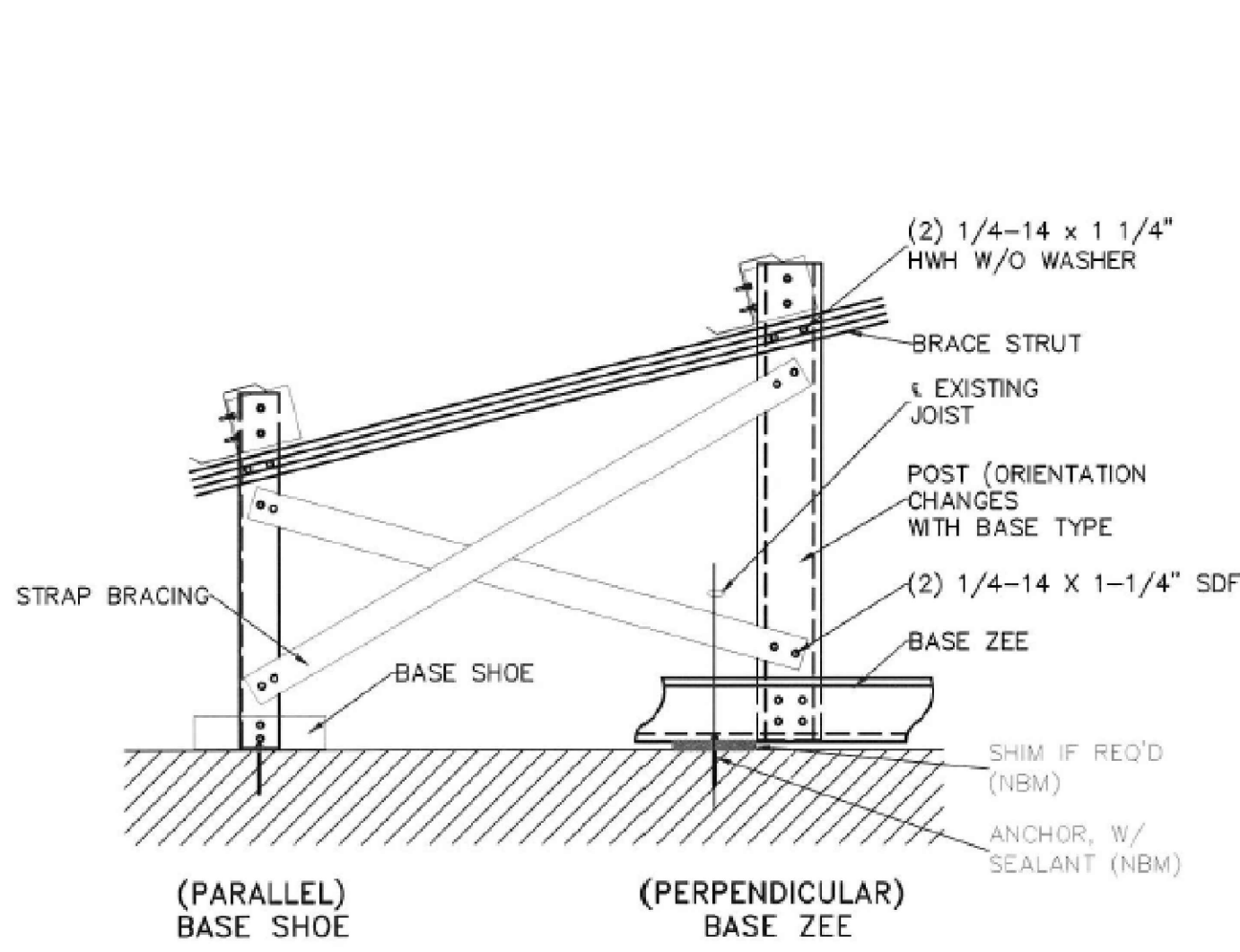
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NOT TO SCALE



**2 POST WITH BASE ZEE**  
NOT TO SCALE



**1 TRANSVERSE ANGLE & STRAP BRACING**  
NOT TO SCALE



**TEXAS**  
Health and Human Services

## **Exhibit A**

**Affirmations and Solicitation Acceptance for State  
Architectural/Engineering and Construction Projects**

## Exhibit A

### **Affirmations and Solicitation Acceptance for State Architectural/Engineering and Construction Projects**

In this document, the following terms: Respondent, Contractor, Applicant, Vendor, Bidder, Architect/Engineer, General Contractor, Construction Manager-Agent, Construction Manager-at-Risk, or Design-Build Firm, when referring to certifications, representations, or warranties, each refers to the Respondent, as applicable to the Solicitation.

Respondent affirms, without exception, as follows:

1. **Parties to the Affirmations and Acceptance.** Respondent represents and warrants that all certifications, representations, warranties, and other provisions in this Affirmations and Solicitation Acceptance apply to Respondent and all of Respondent's principals, officers, directors, shareholders, partners, owners, agents, employees, subcontractors, independent contractors, and any other representatives who may provide services under, who have a financial interest in, or otherwise are interested in this Solicitation or any contract resulting from this Solicitation.
2. **Public Information Act.** Respondent understands that the Owner is subject to and will comply with the Texas Public Information Act (Chapter 552 of the Texas Government Code) as interpreted by judicial rulings and opinions of the Attorney General of the State of Texas. Information, documentation, and other material prepared and submitted in connection with this Solicitation or any resulting contract may be subject to public disclosure pursuant to the Texas Public Information Act. In accordance with Section 2252.907 of the Texas Government Code, Respondent is required to make any information created or exchanged with the State pursuant to the contract, and not otherwise excepted from disclosure under the Texas Public Information Act, available in a format that is accessible by the public at no additional charge to the State.
3. **Confidential or Proprietary Information.** Respondent acknowledges its obligation to specifically identify information it contends to be confidential or proprietary and, if Respondent designated substantial portions of its Proposal or its entire Proposal as confidential or proprietary, the Proposal is subject to being disqualified.
4. **Binding Proposal.** Respondent's Proposal will remain a firm and binding offer for 240 days from the date the Solicitation Proposal is due.
5. **Acceptance of Solicitation Terms.** Respondent accepts the Solicitation terms and conditions unless specifically noted by exceptions advanced in the form and manner directed in the Solicitation. Respondent agrees that all exceptions to the Solicitation are rejected unless expressly accepted by the Owner.
6. **Distribution and Disclosure.** Respondent agrees that the Owner has the right to use, produce, and distribute copies of and to disclose to the Owner's employees, agents, and contractors and other governmental entities all or part of Respondent's Proposal as the Owner deems necessary to complete the procurement process or comply with state or federal laws.

7. **Third-Party Information.** Respondent generally releases from liability and waives all claims against any party providing information about the Respondent at the request of the Owner.
8. **Addenda and Amendments.** Respondent acknowledges all addenda and amendments to the Solicitation.
9. **Preference to Texas and United States Products and Texas Services.** Respondent certifies that if a Texas address is shown as the address of Respondent on this Proposal, Respondent qualifies as a Texas Bidder as defined in Section 2155.444(c) of the Texas Government Code.
10. **Purchasing Preferences.** Respondent represents and warrants that it qualifies for all preferences claimed under 34 Texas Administrative Code, Section 20.306 or Chapter 2155, Subchapter H of the Texas Government Code as indicated below (check applicable boxes):
  - Goods produced or offered by a Texas bidder that is owned by a Texas resident service-disabled veteran
  - Goods produced in Texas or offered by a Texas bidder that is not owned by a Texas resident service-disabled veteran
  - Agricultural products grown in Texas
  - Agricultural products offered by a Texas bidder
  - Services offered by a Texas bidder that is owned by a Texas resident service-disabled veteran
  - Services offered by a Texas bidder that is not owned by a Texas resident service-disabled veteran
  - Texas Vegetation Native to the Region
  - USA-produced supplies, materials or equipment
  - Products of persons with mental or physical disabilities
  - Products made of recycled, remanufactured, or environmentally sensitive materials including recycled steel
  - Energy efficient products
  - Rubberized asphalt paving material
  - Recycled motor oil and lubricants
  - Products produced at facilities located on formerly contaminated property
  - Products and services from economically depressed or blighted areas
  - Vendors that meet or exceed air quality standards
  - Recycled or reused computer equipment of other manufacturers
  - Foods of higher nutritional value
  - Commercial production company or advertising agency located in Texas
11. **Dealings with Public Servants.** Respondent has not given, has not offered to give, and does not intend to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with this Proposal, this Solicitation, or any contract resulting from this Solicitation.
12. **Financial Participation Prohibited.** Under Section 2155.004, Texas Government Code (relating to financial participation in preparing solicitations), Respondent certifies that the individual or business entity named in this Proposal or contract is not ineligible to receive the specified contract and acknowledges that this contract may be terminated and payment withheld if this certification is inaccurate.

13. **Prior Disaster Relief.** Under Sections 2155.006 and 2261.053 of the Texas Government Code (relating to convictions and penalties regarding Hurricane Rita, Hurricane Katrina, and other disasters), the Respondent certifies that the individual or business entity named in this bid or contract is not ineligible to receive the specified contract and acknowledges that this contract may be terminated and payment withheld if this certification is inaccurate.
14. **Child Support Obligation.** Under Section 231.006(d) of the Texas Family Code regarding child support, Respondent certifies that the individual or business entity named in this Proposal is not ineligible to receive the specified payment and acknowledges that the contract may be terminated and payment may be withheld if this certification is inaccurate. Furthermore, any Respondent subject to Section 231.006 of the Texas Family Code must include in the Proposal the names and social security numbers (SSNs) of each person with at least 25% ownership of the business entity submitting the Proposal:

Name: \_\_\_\_\_ SSN: \_\_\_\_\_  
 Name: \_\_\_\_\_ SSN: \_\_\_\_\_  
 Name: \_\_\_\_\_ SSN: \_\_\_\_\_  
 Name: \_\_\_\_\_ SSN: \_\_\_\_\_

**FEDERAL PRIVACY ACT NOTICE:** This notice is given pursuant to the Federal Privacy Act. Disclosure of requested SSNs is required under Section 231.006(c) and Section 231.302(c)(2), Texas Family Code. The SSNs will be used to identify persons that may owe child support. The SSNs will be kept confidential to the fullest extent permitted by law.

If submitted by email, Proposals containing SSNs must be encrypted. Failure by a Respondent to provide or encrypt the SSNs as required may result in disqualification of the Respondent's Proposal.

15. **Suspension and Debarment.** Respondent certifies that it and its principals are not suspended or debarred from doing business with the state or federal government as listed on the State of Texas Debarred Vendor List maintained by the Texas Comptroller of Public Accounts and the System for Award Management (SAM) maintained by the General Services Administration. This certification is made pursuant to the regulations implementing Executive Order 12549 and Executive Order 12689, Debarment and Suspension, 2 C.F.R. Part 376, and any relevant regulations promulgated by the Department or Agency funding this project. This provision shall be included in its entirety in Respondent's subcontracts, if any, if payment in whole or in part is from federal funds.
16. **Excluded Parties.** Respondent certifies that it is not listed on the federal government's terrorism watch list as described in Executive Order 13224.
17. **Foreign Terrorist Organizations.** Respondent represents and warrants that it is not engaged in business with Iran, Sudan, or a foreign terrorist organization, as prohibited by Section 2252.152 of the Texas Government Code.
18. **Executive Head of a State Agency.** In accordance with Section 669.003 of the Texas Government Code, relating to contracting with the executive head of a state agency, Respondent certifies that it is not (1) the executive head of a Texas Health and Human Services agency, (2) a person who at any time during the four years before the date of the



contract was the executive head of a Texas Health and Human Services agency, or (3) a person who employs a current or former executive head of a Texas Health and Human Services agency.

19. **Franchise Tax Certification.** Respondent represents and warrants that it is not currently delinquent in the payment of any franchise taxes owed the State of Texas under Chapter 171 of the Texas Tax Code.
20. **Debts and Delinquencies.** Respondent agrees that any payments due under any contract resulting from this Solicitation shall be applied towards any debt or delinquency that is owed to the State of Texas.
21. **Lobbying Prohibition.** Respondent represents and warrants that payments to Respondent and Respondent's receipt of appropriated or other funds under any contract resulting from this Solicitation are not prohibited by Sections 556.005, 556.0055, or 556.008 of the Texas Government Code (relating to use of appropriated money or state funds to employ or pay lobbyists, lobbying expenses, or influence legislation).
22. **Buy Texas.** Respondent agrees to comply with Section 2155.4441 of the Texas Government Code, requiring the purchase of products and materials produced in the State of Texas in performing service contracts.
23. **Disaster Recovery Plan.** Respondent agrees that upon request of the Owner, Respondent shall provide copies of its most recent business continuity and disaster recovery plans.
24. **Former Agency Employees.** Should Respondent be awarded a contract resulting from this Solicitation, Respondent represents and warrants, during the twelve (12) month period immediately prior to the date of the execution of the contract, none of its employees including, but not limited to those who will provide services under the contract, were employees of a Texas Health and Human Services agency.
25. **Restricted Employment for Certain State Personnel.** Respondent acknowledges that, pursuant to Section 572.069 of the Texas Government Code, a former state officer or employee of a state agency who during the period of state service or employment participated on behalf of a state agency in a procurement or contract negotiation involving Respondent may not accept employment from Respondent before the second anniversary of the date the contract is signed or the procurement is terminated or withdrawn.
26. **No Conflicts of Interest.** Respondent represents and warrants that it has no actual or potential conflicts of interest in providing the requested goods or services to the Owner under this Solicitation and any resulting contract and that Respondent's provision of the requested goods and/or services under this Solicitation and any resulting contract will not constitute an actual or potential conflict of interest or reasonably create an appearance of impropriety.
27. **Fraud and Reporting.** Respondent understands that the Owner does not tolerate any type of fraud. The agency's policy is to promote consistent, legal, and ethical organizational behavior by assigning responsibilities and providing guidelines to enforce controls. Violations of law, agency policies, or standards of ethical conduct will be investigated, and appropriate actions will be taken. All employees or contractors who suspect fraud, waste or abuse (including employee misconduct that would constitute fraud, waste, or abuse) are

required to immediately report the questionable activity to both the Health and Human Services Commission's Office of the Inspector General at 1-800-436-6184 and the State Auditor's Office. Respondent agrees to comply with all applicable laws, rules, regulations, and Owner policies regarding fraud.

28. **Antitrust.** The undersigned affirms under penalty of perjury of the laws of the State of Texas that (a) in connection with this Proposal, neither I nor any representative of the Respondent has violated any provision of the Texas Free Enterprise and Antitrust Act, Tex. Bus. & Comm. Code Chapter 15; (b) in connection with this Proposal, neither I nor any representative of the Respondent has violated any federal antitrust law; and (c) neither I nor any representative of the Respondent has directly or indirectly communicated any of the contents of this Proposal to a competitor of the Respondent or any other company, corporation, firm, partnership or individual engaged in the same line of business as the Respondent.
29. **Legal and Regulatory Actions.** Respondent represents and warrants that it is not aware of and has received no notice of any court or governmental agency proceeding, investigation, or other action pending or threatened against Respondent or any of the individuals or entities included in numbered **paragraph 1** of this Affirmations and Solicitation Acceptance within the five (5) calendar years immediately preceding the submission of this Solicitation response that would or could impair Respondent's performance under any contract resulting from this Solicitation, relate to the contracted or similar goods or services, or otherwise be relevant to the Owner's consideration of entering into a contract. If Respondent is unable to make the preceding representation and warranty, then Respondent instead represents and warrants that it has provided to the Owner a complete, detailed disclosure of any such court or governmental agency proceeding, investigation, or other action that would or could impair Respondent's performance under a contract awarded as a result of this Solicitation, relate to the contracted or similar goods or services, or otherwise be relevant to the Owner's consideration of entering into a contract. In addition, Respondent acknowledges this is a continuing disclosure requirement. Respondent represents and warrants that, if awarded a contract as a result of this Solicitation, Respondent shall notify the Owner in writing within five (5) business days of any changes to the representations or warranties in this clause and understands that failure to so timely update the Owner shall constitute breach of contract and may result in immediate contract termination.
30. **Certification Regarding Boycotting Israel.** Respondent represents and warrants that, pursuant to Section 2270.002 of the Texas Government Code, Respondent does not boycott Israel and will not boycott Israel during the term of any contract resulting from this Solicitation.
31. **E-Verify.** Respondent certifies that for contracts for services, Respondent shall utilize the U.S. Department of Homeland Security's E-Verify system during the term of the contract to determine the eligibility of:
- (a) all persons employed by Respondent to perform duties within Texas; and
  - (b) all persons, including subcontractors, assigned by Respondent to perform work pursuant to the contract within the United States of America.
32. **False Representations.** Respondent understands, acknowledges, and agrees that any false representation or any failure to comply with a representation, warranty, or certification made

by Respondent is subject to all civil and criminal consequences provided at law or in equity including, but not limited to, immediate termination of any contract resulting from this Solicitation.

33. **All Applicable Laws.** Respondent represents and warrants that it will comply with all applicable laws and maintain all permits and licenses required by applicable city, county, state, and federal rules, regulations, statutes, codes, and other laws that pertain to any contract resulting from this Solicitation.
34. **False Statements.** Respondent represents and warrants that all statements and information prepared and submitted in this document are current, complete, true, and accurate. Submitting a Proposal with a false statement or material misrepresentations made during the performance of a contract is a material breach of contract and may void the submitted Proposal and any resulting contract.
35. **Signature Authority.** By submitting this Proposal, Respondent represents and warrants that the individual submitting this document and the documents made part of this Proposal is authorized to sign such documents on behalf of the Respondent and to bind the Respondent under any contract that may result from the submission of this Proposal.

**Authorized representative on behalf of Respondent must complete and sign the following:**

**Legal Name of Respondent:** \_\_\_\_\_

\_\_\_\_\_  
**Signature of Authorized Representative**

\_\_\_\_\_  
**Date Signed**

\_\_\_\_\_  
**Printed Name and Title of Authorized Representative**

\_\_\_\_\_  
**Phone Number**

\_\_\_\_\_  
**Federal Employer Identification Number**

\_\_\_\_\_  
**Fax Number**

\_\_\_\_\_  
**DUNS Number**

\_\_\_\_\_  
**Email Address**

\_\_\_\_\_  
**Physical Street Address**

\_\_\_\_\_  
**City, State, Zip Code**

\_\_\_\_\_  
**Mailing Address, if different**

\_\_\_\_\_  
**City, State, Zip Code**

**EXHIBIT B**

**HUB PARTICIPATION REQUIREMENTS**

# Exhibit B

## Table of Contents

1. Exhibit B HUB Participation Requirements
2. Quick Check List
3. HUB Subcontracting Plan Form

## 1 Historically Underutilized Business Participation

It is the policy of the Health and Human Services' (HHS) HUB Program Office to include the HUB Subcontracting Plan (HSP), when subcontracting opportunities are probable and a contract has an expected value of \$100,000 or more over and the HSP is applicable for the life of the contract, which will also be applicable to any subsequent amendments and renewals after award of the contract as related to the original HSP.

In addition to, and in accordance with, [Texas Administrative Code Title 34, Part 1, Chapter 20, Subchapter D, Rule §20.285](#), when the contractor is selected and decides to subcontract any part of the contract after the award, as a provision of the contract, the contractor must comply with the HSP provisions relating to developing and submitting a revised HSP before any modifications or performance in the awarded contract involving subcontracting can be authorized by the state agency.

HHSC has determined that subcontracting opportunities are probable for this RFP. As a result, the respondent must submit an HSP with its proposal. The HSP is required whether a respondent intends to subcontract or not.

In accordance with Texas Government Code [Chapter 2161, Subchapter F, §2161.252\(b\)](#) a proposal that does not contain a HUB Subcontracting Plan (HSP) is non-responsive; and in accordance with [Texas Administrative Code §20.285\(b\)\(3\)](#) Responses that do not include a completed HUB subcontracting plan in accordance with this subsection shall be rejected without further evaluation. In addition, **if HHSC determines that the HSP was not developed in good faith, it will reject the proposal for failing to comply with material RFP specifications.**

### 1.1 Introduction

#### **The sole point of contact for HUB inquires:**

**Texas Health and Human Services Commission**  
**Stella Roland, CTCM - HUB Assistant Manager**  
**Phone: (512) 406-2534**  
**E-mail: [stella.roland@hhsc.state.tx.us](mailto:stella.roland@hhsc.state.tx.us)**

HHSC is committed to promoting full and equal business opportunities for businesses in state contracting in accordance with the goals specified in the State of Texas Disparity Study. HHSC encourages the use of Historically Underutilized Businesses (HUBs) through race, ethnic and gender-neutral means. HHSC has adopted administrative rules relating to HUBs and a Policy on the Utilization of HUBs which is located on HHSC's website.

Pursuant to Texas Government Code [§2161.181](#) and [§2161.182](#) and HHSC's HUB policy and rules, HHSC is required to make a good faith effort to increase HUB participation in its contracts. HHSC may accomplish the goal of increased HUB participation by contracting directly with HUBs or indirectly through subcontracting opportunities.

## 1.2 Administrative Rules

HHSC has adopted the Texas Comptroller of Public Accounts (CPA) HUB rules as its own. The CPA rules are located in [Texas Administrative Code Title 34, Part 1, Chapter 20, Subchapter D, Division 1](#). If there are any discrepancies between CPA administrative rules and this RFP, the rules shall take priority.

## 1.3 Statewide Annual HUB Utilization Goal

The CPA has established **statewide annual HUB utilization goals** for different categories of contracts in Texas Administrative Code [Title 34, Part 1, Chapter 20, Subchapter D, §20.284](#) of the HUB rules. In order to meet or exceed the **statewide annual HUB utilization goal**, HHSC encourages outreach to certified HUBs. Contractors shall make a good faith effort to include certified HUBs in the procurement process.

This procurement is classified as an **RFP** procurement under the CPA rule and therefore has a **statewide annual HUB utilization goal** of **32.9%** per fiscal year.

## 1.4 Required HUB Subcontracting Plan

**Respondent must submit one (1) copy of the HSP, in accordance with the RFP, in a separate sealed envelope, with the RFP submission, labeled "HUB Subcontracting Plan (HSP)", and include all supporting documentation in accordance with the HSP.**

***Respondent must also submit one (1) electronic copy of the HSP and supporting documentation in Adobe PDF format on a USB flash drive.***

In the HSP, a Respondent must indicate whether it is a Texas certified HUB. Being a certified HUB does not exempt a Respondent from completing the HSP requirement.

HHSC shall review the documentation submitted by the Respondent to determine if a good faith effort has been made in accordance with solicitation and HSP requirements. During the good faith effort evaluation, HHSC may, at its discretion, allow revisions necessary to clarify and enhance information submitted in the original HSP.

If HHSC determines that the Respondent's HSP was not developed in good faith, the HSP will be considered non-responsive and will be rejected as a material failure to comply with advertised specifications. The reasons for rejection shall be recorded in the procurement file.

## 1.5 CPA Centralized Master Bidders List HUB Directory

Respondents may search for HUB subcontractors in the CPA's Centralized Master Bidders List (CMBL) HUB Directory, which is located on the CPA's website at <https://mycpa.cpa.state.tx.us/tpasscmbsearch/tpasscmbsearch.do>. For this procurement, HHSC has identified the following class and item codes for potential subcontracting opportunities:

### 1.5.1 National Institute of Governmental Purchasing (NIGP) Class/Item Code(s):

- Class 910 - Item 47: Lead Abatement Services
- Class 870 - Item 70: Vertical blinds, all types
- Class 910 - Item 06: Carpentry Main./Repr. Services
- Class 981 - Item 36: Fencing Rental or Leasing
- Class 210 - Item 15: Bricks, Concrete
- Class 912 - Item 40: Demolition Services
- Class 914 - Item 38: Electrical
- Class 962 - Item 39: Hauling Services
- Class 914 - Item 50: HVAC
- Class 910 - Item 51: Masonry, Concrete & Stucco Maint. Finishing and Repr.
- Class 031 - Item 33: Duct Fabricated Metal
- Class 287 - Item 36: Metal items, boxes, cabinets, chassis, panels, racks, etc.
- Class 958 - Item 96: Waste Management Services

Respondents are not required to use, nor limited to using, the class and item codes identified above, and may identify other areas for subcontracting.

HHSC does not endorse, recommend nor attest to the capabilities of any company or individual listed on the CPA's CMBL HUB Directory. The list of certified HUBs is subject to change, so Respondents are encouraged to refer to the CMBL HUB Directory often to find the most current listing of HUBs.

## **1.6 HUB Subcontracting Procedures – If a Respondent Intends to Subcontract**

An HSP must demonstrate that the Respondent made a good faith effort to comply with HHSC's HUB policies and procedures. The following subparts outline the items that HHSC will review in determining whether an HSP meets the good faith effort standard. A Respondent that intends to subcontract must complete the HSP to document its good faith efforts.

### **1.6.1 Identify Subcontracting Areas and Divide Them into Reasonable Lots**

A Respondent should first identify each area of the contract work it intends to subcontract. Then, to maximize HUB participation, it should divide the contract work into reasonable lots or portions, to the extent consistent with prudent industry practices.

### **1.6.2 Notify Potential HUB Subcontractors**

The HSP must demonstrate that the Respondent made a good faith effort to subcontract with HUBs. The Respondent's good faith efforts shall be shown through utilization of all methods in conformance with the development and submission of the HSP and by complying with the following steps:



Divide the contract work into reasonable lots or portions to the extent consistent with prudent industry practices. The Respondent must determine which portions of work, including goods and services, will be subcontracted.

Use the appropriate method(s) to demonstrate good faith effort. The Respondent can use either method(s) 1, 2, 3, 4 or 5:

**1.6.2.1 Method 1: Respondent Intends to Subcontract with only HUBs:**

The Respondent must identify in the HSP the HUBs that will be utilized and submit written documentation that confirms 100% of all available subcontracting opportunities will be performed by one or more HUBs; **or**,

**1.6.2.2 Method 2: Respondent Intends to Subcontract with HUB Protégé(s):**

The Respondent must identify in the HSP the HUB Protégé(s) that will be utilized and should:

- include a fully executed copy of the Mentor Protégé Agreement, which must be registered with the CPA prior to submission to HHSC, and
- identify areas of the HSP that will be performed by the Protégé.

HHSC will accept a Mentor Protégé Agreement that has been entered into by a Respondent (Mentor) and a certified HUB (Protégé) in accordance with Texas Government Code [§2161.065](#). When a Respondent proposes to subcontract with a Protégé(s), it does not need to provide notice to three (3) HUB vendors for that subcontracted area.

Participation in the Mentor Protégé Program, along with the submission of a Protégé as a subcontractor in an HSP, constitutes a good faith effort for the particular area subcontracted to the protégé; **or**,

**1.6.2.3 Method 3: Respondent Intends to Subcontract with HUBs and Non-HUBs (Meet or Exceed the Goal):**

The Respondent must identify in the HSP and submit written documentation that one or more HUB subcontractors will be utilized and that the aggregate expected percentage of subcontracts with HUBs will meet or exceed the goal specified in this solicitation. When utilizing this method, only HUB subcontractors that have existing contracts with the Respondent for five years or less may be used to comply with the good faith effort requirements.

When the aggregate expected percentage of subcontracts with HUBs meets or exceeds the goal specified in this solicitation, Respondents may also use non-HUB subcontractors; **or**,

#### **1.6.2.4 Method 4: Respondent Intends to Subcontract with HUBs and Non-HUBs (Does Not Meet or Exceed the Goal):**

The Respondent must identify in the HSP and submit documentation regarding both of the following requirements:

- Written notification to trade organizations or development centers that serve members of groups (e.g., Black Americans, Hispanic Americans, American Women, Asian Pacific Americans, Native Americans, and Veterans as defined by 38 U.S.C. Section 101[2]) to assist in identifying potential HUBs by disseminating subcontracting opportunities to their membership/participants of the subcontracting opportunities the Respondent intends to subcontract.

Respondents must give trade organizations and/or development centers at least seven (7) working days prior to submission of the Respondent's response for dissemination of the subcontracting opportunities to their members. The date the notification is sent is day "zero" and does not count in the required seven (7) working days. A list of trade organizations and/or development centers is located on CPA's website under the [Small, Minority and Women Business Trade Organizations and Development Centers](#).

- Written notification to at least three (3) HUB businesses of the subcontracting opportunities that the Respondent intends to subcontract. The written notification must be sent to potential HUB subcontractors prior to submitting proposals and must include:
  - a description of the scope of work to be subcontracted;
  - information regarding the location to review project plans or specifications;
  - information about bonding and insurance requirements;
  - required qualifications and other contract requirements; and
  - a description of how the subcontractor can contact the Respondent.
- Respondents must give potential HUB subcontractors a reasonable amount of time to respond to the notice, at least seven (7) working days prior to submission of the Respondent's response to respond to the notification. The date the notification is sent is day "zero" and does not count in the required seven (7) working days.
- Respondents must also use the CMBL, the HUB Directory, and Internet resources when searching for HUB subcontractors. Respondents may rely on the services of contractor groups, local, state and federal business assistance offices, and other organizations that provide assistance in identifying qualified applicants for the HUB program.

#### **1.6.3 Written Justification of the Selection Process**

HHSC will make a determination if a good faith effort was made by the Respondent in the development of the required HSP. One or more of the methods identified in the previous sections may be applicable to the Respondent's good faith efforts in developing and submission of the HSP. HHSC may require the Respondent to submit additional documentation explaining how the Respondent made a good faith effort in accordance with the solicitation.

A Respondent must provide written justification of its selection process if it chooses a non-HUB subcontractor. The justification should demonstrate that the Respondent negotiated in good faith with qualified HUB bidders and did not reject qualified HUBs who were the best value responsive bidders.

### **1.7 Method 5: Respondent Does Not Intend to Subcontract**

When the Respondent plans to complete all contract requirements with its own equipment, supplies, materials and/or employees, it is still required to complete an HSP.

The Respondent must complete the "Self Performance Justification" portion of the HSP, and attest that it does not intend to subcontract for any goods or services, including the class and item codes identified in Subsection 1.5.1. In addition, the Respondent must identify the sections of the proposal that describe how it will complete the Scope of Work using its own resources or provide a statement explaining how it will complete the Scope of Work using its own resources. The Respondent must agree to comply with the following if requested by HHSC:

- provide evidence of sufficient Respondent staffing to meet the RFP requirements;
- provide monthly payroll records showing the Respondent staff fully dedicated to the contract;
- allow HHSC to conduct an on-site review of company headquarters or work site where services are to be performed and,
- provide documentation proving employment of qualified personnel holding the necessary licenses and certificates required to perform the Scope of Work.

### **1.8 Post-award HSP Requirements**

The HSP shall be reviewed and evaluated prior to contract award and, if accepted, the HSP will become a provision of the contract with the successful Respondent(s).

After contract award, HHSC will coordinate a post-award meeting with the successful Respondent to discuss HSP reporting requirements. The contractor must maintain business records documenting compliance with the HSP and must submit monthly subcontract reports to HHSC by completing the HUB HSP Prime Contractor Progress Assessment Report.

This monthly report is required as a condition for payment to report to the agency the identity and the amount paid to all subcontractors. Note: the PAR does not have to be returned with respondent's proposal.

As a condition of award, the Contractor is required to send notification to all selected subcontractors as identified in the accepted/approved HSP. In addition, a copy of the notification must be provided to the agency's Contract Manager and/or HUB Program Office within ten (10) days of the contract award.

During the term of the contract, if the parties in the contract amend the contract to include a change to the scope of work or add additional funding, HHSC will evaluate to determine the

probability of additional subcontracting opportunities. When applicable, the Contractor must submit an HSP change request for HHSC review. The requirements for an HSP change request will be covered in the post-award meeting.

When making a change to an HSP, the Contractor will obtain prior written approval from HHSC before making any changes to the HSP. Proposed changes must comply with the HUB Program good faith effort requirements relating to the development and submission of a HSP.

If the Contractor decides to subcontract any part of the contract after the award, it must follow the good faith effort procedures outlined in Section 1.6 of this Exhibit (e.g., divide work into reasonable lots, notify at least three (3) vendors per subcontracted area, provide written justification of the selection process, and/or participate in the Mentor Protégé Program).

For this reason, HHSC encourages Respondents to identify, as part of their HSP, multiple subcontractors who are able to perform the work in each area the Respondent plans to subcontract. Selecting additional subcontractors may help the selected contractor make changes to its original HSP, when needed, and will allow HHSC to approve any necessary changes expeditiously.

Failure to meet the HSP and post-award requirements will constitute a breach of contract and will be subject to remedial actions. HHSC may also report noncompliance to the CPA in accordance with the provisions of the Vendor Performance and Debarment Program.



# HUB Subcontracting Plan (HSP) Quick Checklist

While this HSP Quick Checklist is being provided to merely assist you in readily identifying the sections of the HSP form that you will need to complete, it is very important that you adhere to the instructions in the HSP form and instructions provided by the contracting agency.

1. **If you will be awarding all of the subcontracting work you have to offer under the contract to only Texas certified HUB vendors, complete:**
  - Section 1 - Respondent and Requisition Information
  - Section 2 a. – Yes, I will be subcontracting portions of the contract
  - Section 2 b. – List all the portions of work you will subcontract, and indicate the percentage of the contract you expect to award to Texas certified HUB vendors.
  - Section 2 c. – Yes
  - Section 4 – Affirmation
  - GFE Method A (Attachment A) – Complete an Attachment A for each of the subcontracting opportunities you listed in Section 2b.
  
2. **If any of your subcontracting opportunities will be performed using HUB protégés, complete:**
  - Section 1 - Respondent and Requisition Information
  - Section 2 a. – Yes, I will be subcontracting portions of the contract
  - Section 2 b. – List all the portions of work you will subcontract, and indicated the percentage of the contract you expect to award to HUB protégés (Skip Section 2c and 2d)
  - Section 4 – Affirmation
  - HSP GFE Method B (Attachment B) - Complete Section B-1, Section B-2, and B-4 only for each HUB Protégé
  
3. **If any of your subcontracting any portion of the contract to Texas certified HUB vendors and Non-HUB vendors, and the aggregated percentage of all the subcontracting work you will be awarding to the Texas certified HUB vendors with which you **do not** have a continuous contract\* in place for more than five (5) years meets or exceeds the HUB Goal the contracting Agency identified in the "Agency Special Instructions/Additional Requirements", complete :**
  - Section 1 - Respondent and Requisition Information
  - Section 2 a. – Yes, I will be subcontracting portions of the contract
  - Section 2 b. – List all the portions of work you will subcontract, and indicate the percentage of the contract you expect to award to Texas certified HUB vendors and Non-HUB vendors.
  - Section 2 c. – No
  - Section 2 d. – Yes
  - Section 4 – Affirmation
  - GFE Method A (Attachment A) – Complete an Attachment A for each of the subcontracting opportunities you listed in Section 2b.
  
4. **If you are subcontracting any portion of the contract to Texas certified HUB vendors and Non-HUB vendors or only to Non-HUB vendors, and the aggregate percentage of all the subcontracting work you will be awarding to the Texas certified HUB vendors with which you **do not** have a continuous contract \* in place for more than five (5) years **does not meet or exceed** the HUB Goal the contracting agency identified in the "Agency Special Instructions/Additional Requirements", complete:**
  - Section 1 - Respondent and Requisition Information
  - Section 2 a. – Yes, I will be subcontracting portions of the contract
  - Section 2 b. – List all the portions of work you will subcontract, and indicated the percentage of the contract you expect to award to Texas certified HUB vendors and Non HUB vendors.



# HUB Subcontracting Plan (HSP) Quick Checklist

- Section 2 c. – No
- Section 2 d. – No
- Section 4 – Affirmation
- HSP GFE Method B (Attachment B) – Complete an Attachment B for each of the subcontracting opportunities you listed in Section 2b.

5. **If you will not be subcontracting any portion of the contract and will be fulfilling the entire contract with your own resources (i.e., employees, supplies, materials and/or equipment, including transportation and delivery, complete:**

- Section 1 – Respondent and Requisition Information
- Section 2 a. – No, I will not be subcontracting any portion of the contract, and I will be fulfilling the entire contract with my own resources
- Section 3 – Self Performing Justification
- Section 4 – Affirmation

***\*Continuous Contract: Any existing written agreement (including any renewals that are exercised) between a prime contractor and a HUB vendor, where the HUB vendor provides contractor with goods or services, to include under the same contract for a specified period of time. The frequency the HUB vendor is utilized or paid during the term of the contract is not relevant to whether the contract is considered continuous. Two or more contracts that run concurrently or overlap one another for different periods of time are considered by CPA to be individual contracts rather than renewals or extensions to the original contract. In such situations the prime contractor and HUB vendor are entering (have entered) into "new" contracts.***



# HUB Subcontracting Plan (HSP)

In accordance with Texas Gov't Code §2161.252, the contracting agency has determined that subcontracting opportunities are probable under this contract. Therefore, all respondents, including State of Texas certified Historically Underutilized Businesses (HUBs) must complete and submit this State of Texas HUB Subcontracting Plan (HSP) with their response to the bid requisition (solicitation).

**NOTE:** Responses that do not include a completed HSP shall be rejected pursuant to Texas Gov't Code §2161.252(b).

The HUB Program promotes equal business opportunities for economically disadvantaged persons to contract with the State of Texas in accordance with the goals specified in the 2009 State of Texas Disparity Study. The statewide HUB goals defined in 34 Texas Administrative Code (TAC) §20.284 are:

- **11.2 percent for heavy construction other than building contracts,**
- **21.1 percent for all building construction, including general contractors and operative builders' contracts,**
- **32.9 percent for all special trade construction contracts,**
- **23.7 percent for professional services contracts,**
- **26.0 percent for all other services contracts, and**
- **21.1 percent for commodities contracts.**

**- - Agency Special Instructions/Additional Requirements - -**

*In accordance with 34 TAC §20.285(d)(1)(D)(iii), a respondent (prime contractor) may demonstrate good faith effort to utilize Texas certified HUBs for its subcontracting opportunities if the total value of the respondent's subcontracts with Texas certified HUBs meets or exceeds the statewide HUB goal or the agency specific HUB goal, whichever is higher. When a respondent uses this method to demonstrate good faith effort, the respondent must identify the HUBs with which it will subcontract. If using existing contracts with Texas certified HUBs to satisfy this requirement, only the aggregate percentage of the contracts expected to be subcontracted to HUBs with which the respondent **does not** have a **continuous contract\*** in place for **more than five (5) years** shall qualify for meeting the HUB goal. This limitation is designed to encourage vendor rotation as recommended by the 2009 Texas Disparity Study.*

The HUB Goal for this solicitation is 32.9% - Special Trade Construction contracts.

- > Respondents shall submit a completed HUB Subcontracting Plan (HSP) to be considered responsive. Failure to submit a completed HSP shall result in the bid, proposal, or other expression of interest to be considered non-responsive.
- > Respondents using Method Option 4 must complete the HSP Good Faith Effort - Method B (Attachment B) for EACH subcontracting opportunity identified in Section 2 of the HSP.
- > Please note: (Section B-3: Notification of Subcontracting Opportunity) of Attachment B requires respondent to provide notice to three (3) or more Texas certified HUBs AND two (2) or more Texas trade organizations and development centers for EACH subcontracting opportunity identified in Section 2.
- > These notification must be done at least seven (7) working days prior to submitting your bid response to the contracting agency to allow time for the potential subcontractor to respond. \*\*\*Seven (7) working days shall be defined as business days of HHSC, not including weekends or HHSC observed holidays. The first working days shall be the day following the day that the notice was sent, and the 7th day is the day that the response is due.
- > Provide along with all documentation (i.e., certified letter, fax, e-mail) and a copy of the CMBL/HUB Vendor Detail page. This is to ensure that the Texas certified HUB that is listed is an Active Bidder.

See SAMPLE CMBL/HUB Vendor Detail in the HUB Exhibit.

**SECTION 1: RESPONDENT AND REQUISITION INFORMATION**

- a. Respondent (Company) Name: \_\_\_\_\_ State of Texas VID #: \_\_\_\_\_  
 Point of Contact: \_\_\_\_\_ Phone #: \_\_\_\_\_  
 E-mail Address: \_\_\_\_\_ Fax #: \_\_\_\_\_
- b. Is your company a State of Texas certified HUB?  - Yes  - No
- c. Requisition #: \_\_\_\_\_ Bid Open Date: \_\_\_\_\_

(mm/dd/yyyy)

Enter your company's name here: \_\_\_\_\_ Requisition #: \_\_\_\_\_

**SECTION 2: RESPONDENT'S SUBCONTRACTING INTENTIONS**

After dividing the contract work into reasonable lots or portions to the extent consistent with prudent industry practices, and taking into consideration the scope of work to be performed under the proposed contract, including all potential subcontracting opportunities, the respondent must determine what portions of work, **including contracted staffing, goods and services will be subcontracted**. Note: In accordance with 34 TAC §20.282, a "Subcontractor" means a person who contracts with a prime contractor to work, to supply commodities, or to contribute toward completing work for a governmental entity.

a. Check the appropriate box (Yes or No) that identifies your subcontracting intentions:

- *Yes*, I will be subcontracting portions of the contract. (If *Yes*, complete Item b of this SECTION and continue to Item c of this SECTION.)
- *No*, I will not be subcontracting any portion of the contract, and I will be fulfilling the entire contract with my own resources, including employees, goods and services. (If *No*, continue to SECTION 3 and SECTION 4.)

b. List all the portions of work (subcontracting opportunities) you will subcontract. Also, based on the total value of the contract, identify the percentages of the contract you expect to award to Texas certified HUBs, and the percentage of the contract you expect to award to vendors that are not a Texas certified HUB (i.e., Non-HUB).

Item #	Subcontracting Opportunity Description	HUBs		Non-HUBs
		Percentage of the contract expected to be subcontracted to HUBs with which you <b>do not</b> have a <b>continuous contract*</b> in place for <b>more than five (5) years</b> .	Percentage of the contract expected to be subcontracted to HUBs with which you have a <b>continuous contract*</b> in place for <b>more than five (5) years</b> .	Percentage of the contract expected to be subcontracted to non-HUBs.
1		%	%	%
2		%	%	%
3		%	%	%
4		%	%	%
5		%	%	%
6		%	%	%
7		%	%	%
8		%	%	%
9		%	%	%
10		%	%	%
11		%	%	%
12		%	%	%
13		%	%	%
14		%	%	%
15		%	%	%
Aggregate percentages of the contract expected to be subcontracted:		%	%	%

(Note: If you have more than fifteen subcontracting opportunities, a continuation sheet is available online at <https://www.comptroller.texas.gov/purchasing/vendor/hub/forms.php>.)

c. Check the appropriate box (Yes or No) that indicates whether you will be using **only** Texas certified HUBs to perform **all** of the subcontracting opportunities you listed in SECTION 2, Item b.

- *Yes* (If *Yes*, continue to SECTION 4 and complete an "HSP Good Faith Effort - Method A (Attachment A)" for **each** of the subcontracting opportunities you listed.)
- *No* (If *No*, continue to Item d, of this SECTION.)

d. Check the appropriate box (Yes or No) that indicates whether the aggregate expected percentage of the contract you will subcontract **with Texas certified HUBs** with which you **do not** have a **continuous contract\*** in place with for **more than five (5) years**, **meets or exceeds** the HUB goal the contracting agency identified on page 1 in the "Agency Special Instructions/Additional Requirements."

- *Yes* (If *Yes*, continue to SECTION 4 and complete an "HSP Good Faith Effort - Method A (Attachment A)" for **each** of the subcontracting opportunities you listed.)
- *No* (If *No*, continue to SECTION 4 and complete an "HSP Good Faith Effort - Method B (Attachment B)" for **each** of the subcontracting opportunities you listed.)

**\*Continuous Contract:** Any existing written agreement (including any renewals that are exercised) between a prime contractor and a HUB vendor, where the HUB vendor provides the prime contractor with goods or service under the same contract for a specified period of time. The frequency the HUB vendor is utilized or paid during the term of the contract is not relevant to whether the contract is considered continuous. Two or more contracts that run concurrently or overlap one another for different periods of time are considered by CPA to be individual contracts rather than renewals or extensions to the original contract. In such situations the prime contractor and HUB vendor are entering (have entered) into "new" contracts.



Enter your company's name here: \_\_\_\_\_ Requisition #: \_\_\_\_\_

**SECTION 2: RESPONDENT'S SUBCONTRACTING INTENTIONS (CONTINUATION SHEET)**

This page can be used as a continuation sheet to the HSP Form's page 2, Section 2, Item b. Continue listing the portions of work (subcontracting opportunities) you will subcontract. Also, based on the total value of the contract, identify the percentages of the contract you expect to award to Texas certified HUBs, and the percentage of the contract you expect to award to vendors that are not a Texas certified HUB (i.e., Non-HUB).

Item #	Subcontracting Opportunity Description	HUBs		Non-HUBs
		Percentage of the contract expected to be subcontracted to HUBs with which you <b>do not</b> have a <b>continuous contract*</b> in place for <b>more than five (5) years</b> .	Percentage of the contract expected to be subcontracted to HUBs with which you have a <b>continuous contract*</b> in place for <b>more than five (5) years</b> .	Percentage of the contract expected to be subcontracted to non-HUBs.
16		%	%	%
17		%	%	%
18		%	%	%
19		%	%	%
20		%	%	%
21		%	%	%
22		%	%	%
23		%	%	%
24		%	%	%
25		%	%	%
26		%	%	%
27		%	%	%
28		%	%	%
29		%	%	%
30		%	%	%
31		%	%	%
32		%	%	%
33		%	%	%
34		%	%	%
35		%	%	%
36		%	%	%
37		%	%	%
38		%	%	%
39		%	%	%
40		%	%	%
41		%	%	%
42		%	%	%
43		%	%	%
Aggregate percentages of the contract expected to be subcontracted:		%	%	%

**\*Continuous Contract:** Any existing written agreement (including any renewals that are exercised) between a prime contractor and a HUB vendor, where the HUB vendor provides the prime contractor with goods or service under the same contract for a specified period of time. The frequency the HUB vendor is utilized or paid during the term of the contract is not relevant to whether the contract is considered continuous. Two or more contracts that run concurrently or overlap one another for different periods of time are considered by CPA to be individual contracts rather than renewals or extensions to the original contract. In such situations the prime contractor and HUB vendor are entering (have entered) into "new" contracts.

Enter your company's name here: \_\_\_\_\_ Requisition #: \_\_\_\_\_

**SECTION 3: SELF PERFORMING JUSTIFICATION** (If you responded "No" to SECTION 2, Item a, you must complete this SECTION and continue to SECTION 4.) If you responded "No" to SECTION 2, Item a, in the space provided below **explain how** your company will perform the entire contract with its own employees, supplies, materials and/or equipment.

**SECTION 4: AFFIRMATION**

As evidenced by my signature below, I affirm that I am an authorized representative of the respondent listed in SECTION 1, and that the information and supporting documentation submitted with the HSP is true and correct. Respondent understands and agrees that, if awarded any portion of the requisition:

- The respondent will provide notice as soon as practical to all the subcontractors (HUBs and Non-HUBs) of their selection as a subcontractor for the awarded contract. The notice must specify at a minimum the contracting agency's name and its point of contact for the contract, the contract award number, the subcontracting opportunity they (the subcontractor) will perform, the approximate dollar value of the subcontracting opportunity and the expected percentage of the total contract that the subcontracting opportunity represents. A copy of the notice required by this section must also be provided to the contracting agency's point of contact for the contract no later than ten (10) working days after the contract is awarded.
- The respondent must submit monthly compliance reports (Prime Contractor Progress Assessment Report – PAR) to the contracting agency, verifying its compliance with the HSP, including the use of and expenditures made to its subcontractors (HUBs and Non-HUBs). (The PAR is available at <https://www.comptroller.texas.gov/purchasing/docs/hub-forms/ProgressAssessmentReportForm.xls>).
- The respondent must seek approval from the contracting agency prior to making any modifications to its HSP, including the hiring of additional or different subcontractors and the termination of a subcontractor the respondent identified in its HSP. If the HSP is modified without the contracting agency's prior approval, respondent may be subject to any and all enforcement remedies available under the contract or otherwise available by law, up to and including debarment from all state contracting.
- The respondent must, upon request, allow the contracting agency to perform on-site reviews of the company's headquarters and/or work-site where services are being performed and must provide documentation regarding staffing and other resources.

Signature	Printed Name	Title	Date (mm/dd/yyyy)
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**Reminder:**

- If you responded "Yes" to SECTION 2, Items c or d, you must complete an "HSP Good Faith Effort - Method A (Attachment A)" for each of the subcontracting opportunities you listed in SECTION 2, Item b.
- If you responded "No" SECTION 2, Items c and d, you must complete an "HSP Good Faith Effort - Method B (Attachment B)" for each of the subcontracting opportunities you listed in SECTION 2, Item b.



# HSP Good Faith Effort - Method B (Attachment B)

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Enter your company's name here: _____	Requisition #: _____
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**IMPORTANT:** If you responded “No” to **SECTION 2, Items c and d** of the completed HSP form, you must submit a completed “HSP Good Faith Effort - Method B (Attachment B)” for **each** of the subcontracting opportunities you listed in **SECTION 2, Item b** of the completed HSP form. You may photo-copy this page or download the form at <https://www.comptroller.texas.gov/purchasing/docs/hub-forms/hub-sbcont-plan-gfe-achm-b.pdf>.

## SECTION B-1: SUBCONTRACTING OPPORTUNITY

Enter the item number and description of the subcontracting opportunity you listed in SECTION 2, Item b, of the completed HSP form for which you are completing the attachment.

Item Number: \_\_\_\_\_ Description: \_\_\_\_\_

## SECTION B-2: MENTOR PROTÉGÉ PROGRAM

If respondent is participating as a Mentor in a State of Texas Mentor Protégé Program, submitting its Protégé (Protégé must be a State of Texas certified HUB) as a subcontractor to perform the subcontracting opportunity listed in **SECTION B-1**, constitutes a good faith effort to subcontract with a Texas certified HUB towards that specific portion of work.

Check the appropriate box (Yes or No) that indicates whether you will be subcontracting the portion of work you listed in SECTION B-1 to your Protégé.

- Yes (If *Yes*, continue to SECTION B-4.)
- No / Not Applicable (If *No* or *Not Applicable*, continue to SECTION B-3 and SECTION B-4.)

## SECTION B-3: NOTIFICATION OF SUBCONTRACTING OPPORTUNITY

When completing this section you **MUST** comply with items **a, b, c and d**, thereby demonstrating your Good Faith Effort of having notified Texas certified HUBs and trade organizations or development centers about the subcontracting opportunity you listed in SECTION B-1. Your notice should include the scope of work, information regarding the location to review plans and specifications, bonding and insurance requirements, required qualifications, and identify a contact person. When sending notice of your subcontracting opportunity, you are encouraged to use the attached HUB Subcontracting Opportunity Notice form, which is also available online at <https://www.comptroller.texas.gov/purchasing/docs/hub-forms/HUBSubcontractingOpportunityNotificationForm.pdf>.

Retain supporting documentation (i.e., certified letter, fax, e-mail) demonstrating evidence of your good faith effort to notify the Texas certified HUBs and trade organizations or development centers. Also, be mindful that a working day is considered a normal business day of a state agency, not including weekends, federal or state holidays, or days the agency is declared closed by its executive officer. The initial day the subcontracting opportunity notice is sent/provided to the HUBs and to the trade organizations or development centers is considered to be “day zero” and does not count as one of the seven (7) working days.

- a.** Provide written notification of the subcontracting opportunity you listed in SECTION B-1, to three (3) or more Texas certified HUBs. Unless the contracting agency specified a different time period, you must allow the HUBs at least seven (7) working days to respond to the notice prior to you submitting your bid response to the contracting agency. When searching for Texas certified HUBs and verifying their HUB status, ensure that you use the State of Texas’ Centralized Master Bidders List (CMBL) - Historically Underutilized Business (HUB) Directory Search located at <http://mycpa.cpa.state.tx.us/tpasscmbsearch/index.jsp>. HUB status code “A” signifies that the company is a Texas certified HUB.
- b.** List the **three (3) Texas certified HUBs** you notified regarding the subcontracting opportunity you listed in SECTION B-1. Include the company’s Texas Vendor Identification (VID) Number, the date you sent notice to that company, and indicate whether it was responsive or non-responsive to your subcontracting opportunity notice.

Company Name	Texas VID <small>(Do not enter Social Security Numbers.)</small>	Date Notice Sent <small>(mm/dd/yyyy)</small>	Did the HUB Respond? <input type="checkbox"/> - Yes <input type="checkbox"/> - No
			<input type="checkbox"/> - Yes <input type="checkbox"/> - No
			<input type="checkbox"/> - Yes <input type="checkbox"/> - No
			<input type="checkbox"/> - Yes <input type="checkbox"/> - No

- c.** Provide written notification of the subcontracting opportunity you listed in SECTION B-1 to **two (2)** or more trade organizations or development centers in Texas to assist in identifying potential HUBs by disseminating the subcontracting opportunity to their members/participants. Unless the contracting agency specified a different time period, you must provide your subcontracting opportunity notice to trade organizations or development centers at least seven (7) working days prior to submitting your bid response to the contracting agency. A list of trade organizations and development centers that have expressed an interest in receiving notices of subcontracting opportunities is available on the Statewide HUB Program’s webpage at <https://www.comptroller.texas.gov/purchasing/vendor/hub/resources.php>.

- d.** List **two (2) trade organizations or development centers** you notified regarding the subcontracting opportunity you listed in SECTION B-1. Include the date when you sent notice to it and indicate if it accepted or rejected your notice.

Trade Organizations or Development Centers	Date Notice Sent <small>(mm/dd/yyyy)</small>	Was the Notice Accepted? <input type="checkbox"/> - Yes <input type="checkbox"/> - No
		<input type="checkbox"/> - Yes <input type="checkbox"/> - No
		<input type="checkbox"/> - Yes <input type="checkbox"/> - No

# HSP Good Faith Effort - Method B (Attachment B) Cont.

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Enter your company's name here: \_\_\_\_\_ Requisition #: \_\_\_\_\_

**SECTION B-4: SUBCONTRACTOR SELECTION**

Enter the item number and description of the subcontracting opportunity you listed in **SECTION 2, Item b**, of the completed HSP form for which you are completing the attachment.

- a. Enter the item number and description of the subcontracting opportunity for which you are completing this Attachment B continuation page.

Item Number: \_\_\_\_\_ Description: \_\_\_\_\_

- b. List the subcontractor(s) you selected to perform the subcontracting opportunity you listed in **SECTION B-1**. Also identify whether they are a Texas certified HUB and their Texas Vendor Identification (VID) Number or federal Employer Identification Number (EIN), the approximate dollar value of the work to be subcontracted, and the expected percentage of work to be subcontracted. When searching for Texas certified HUBs and verifying their HUB status, ensure that you use the State of Texas' Centralized Master Bidders List (CMBL) - Historically Underutilized Business (HUB) Directory Search located at <http://mycpa.cpa.state.tx.us/passcmbsearch/index.jsp>. HUB status code "A" signifies that the company is a Texas certified HUB.

Company Name	Texas certified HUB	Texas VID or federal EIN <small>Do not enter Social Security Numbers. If you do not know their VID / EIN, leave their VID / EIN field blank.</small>	Approximate Dollar Amount	Expected Percentage of Contract
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%

- c. If any of the subcontractors you have selected to perform the subcontracting opportunity you listed in **SECTION B-1** is **not** a Texas certified HUB, provide written justification for your selection process (attach additional page if necessary):

**REMINDER:** As specified in SECTION 4 of the completed HSP form, if you (respondent) are awarded any portion of the requisition, you are required to provide notice as soon as practical to **all** the subcontractors (HUBs and Non-HUBs) of their selection as a subcontractor. The notice must specify at a minimum the contracting agency's name and its point of contact for the contract, the contract award number, the subcontracting opportunity it (the subcontractor) will perform, the approximate dollar value of the subcontracting opportunity and the expected percentage of the total contract that the subcontracting opportunity represents. A copy of the notice required by this section must also be provided to the contracting agency's point of contact for the contract no later than ten (10) working days after the contract is awarded.



# HUB Subcontracting Opportunity Notification Form

In accordance with Texas Gov't Code, Chapter 2161, each state agency that considers entering into a contract with an expected value of \$100,000 or more shall, before the agency solicits bids, proposals, offers, or other applicable expressions of interest, determine whether subcontracting opportunities are probable under the contract. The state agency I have identified below in Section B has determined that subcontracting opportunities are probable under the requisition to which my company will be responding.

34 Texas Administrative Code, §20.285 requires all respondents (prime contractors) bidding on the contract to provide notice of each of their subcontracting opportunities to at least three (3) Texas certified HUBs (who work within the respective industry applicable to the subcontracting opportunity), and allow the HUBs at least seven (7) working days to respond to the notice prior to the respondent submitting its bid response to the contracting agency. In addition, at least seven (7) working days prior to submitting its bid response to the contracting agency, the respondent must provide notice of each of its subcontracting opportunities to two (2) or more trade organizations or development centers (in Texas) that serves members of groups (i.e., Asian Pacific American, Black American, Hispanic American, Native American, Woman, Service Disabled Veteran) identified in Texas Administrative Code §20.282(19)(C).

We respectfully request that vendors interested in bidding on the subcontracting opportunity scope of work identified in Section C, Item 2, reply no later than the date and time identified in Section C, Item 1. Submit your response to the point-of-contact referenced in Section A.

**SECTION A: PRIME CONTRACTOR'S INFORMATION**

Company Name: \_\_\_\_\_ State of Texas VID #: \_\_\_\_\_  
 Point-of-Contact: \_\_\_\_\_ Phone #: \_\_\_\_\_  
 E-mail Address: \_\_\_\_\_ Fax #: \_\_\_\_\_

**SECTION B: CONTRACTING STATE AGENCY AND REQUISITION INFORMATION**

Agency Name: \_\_\_\_\_  
 Point-of-Contact: \_\_\_\_\_ Phone #: \_\_\_\_\_  
 Requisition #: \_\_\_\_\_ Bid Open Date: \_\_\_\_\_  
(mm/dd/yyyy)

**SECTION C: SUBCONTRACTING OPPORTUNITY RESPONSE DUE DATE, DESCRIPTION, REQUIREMENTS AND RELATED INFORMATION**

**1. Potential Subcontractor's Bid Response Due Date:**

If you would like for our company to consider your company's bid for the subcontracting opportunity identified below in Item 2,  
 we must receive your bid response no later than \_\_\_\_\_ on \_\_\_\_\_  
Central Time Date (mm/dd/yyyy)

*In accordance with 34 TAC §20.285, each notice of subcontracting opportunity shall be provided to at least three (3) Texas certified HUBs, and allow the HUBs at least seven (7) working days to respond to the notice prior to submitting our bid response to the contracting agency. In addition, at least seven (7) working days prior to us submitting our bid response to the contracting agency, we must provide notice of each of our subcontracting opportunities to two (2) or more trade organizations or development centers (in Texas) that serves members of groups (i.e., Asian Pacific American, Black American, Hispanic American, Native American, Woman, Service Disabled Veteran) identified in Texas Administrative Code, §20.282(19)(C).*

*(A working day is considered a normal business day of a state agency, not including weekends, federal or state holidays, or days the agency is declared closed by its executive officer. The initial day the subcontracting opportunity notice is sent/provided to the HUBs and to the trade organizations or development centers is considered to be "day zero" and does not count as one of the seven (7) working days.)*

**2. Subcontracting Opportunity Scope of Work:**



**3. Required Qualifications:**  - Not Applicable

**4. Bonding/Insurance Requirements:**  - Not Applicable

**5. Location to review plans/specifications:**  - Not Applicable

## Sample CMBL - HUB Vendor Detail

**Note:** The CMBL/HUB Vendor Detail page must be attached with all of the required documentation for the submittal of the HSP Plan.

CMBL/HUB Vendor Detail	
Vendor ID / Vendor Number	
Vendor Name	
Vendor Address	
county	
Contact	
Phone/Fax	 , 
Email Address	
Website	
Business Description	Vendor of medical merchandise, non-narcotic pharmaceutical drugs as well as medical equipment servicing Emergency Medical Services (EMS), Fire Departments, Law Enforcement agencies, Educational facilities, and Hospitals.
Business Category	<a href="#">Medical Services (09)</a>
Small Business	<a href="#">Y</a>
Service Disabled Veteran	<a href="#">No</a>
CMBL Status	<a href="#">Active Bidder</a>
CMBL Expires	25-MAY-2019
HUB Status	<a href="#">Active Bidder ( A-Approved; Active Texas certified HUB )</a>
HUB Expires	05-JUL-2022
HUB Eligibility	<a href="#">HI ( Hispanic American )</a>
HUB Gender	<a href="#">F</a>
	Commodity items shown above are available for district(s) 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25



**TEXAS**  
Health and Human Services

# Exhibit C

**Draft General Construction Services Contract**



**Texas Health and Human Services**  
**General Construction Services Contract**  
(General Contractor for <Construction, Rehabilitation, Alteration, or Repair>)

**1. Purpose**

The State of Texas, acting by and through the **Health And Human Services Commission** (“HHSC” or “Owner”), an administrative agency within the executive branch of the State of Texas and having its principal office at 4900 North Lamar Boulevard, Austin, Texas 78751, and <Full Legal Name of Contractor including any “dba”> (“Contractor”), having its principal office at <Full Mailing Address>, each a “Party” and collectively “the Parties,” enter into the following Contract for <Enter Type of Services> (the “Contract”) for the <Enter Title of Project> (the “Project”).

**2. Legal Authority**

This Contract is authorized by and in compliance with the provisions of *Texas Government Code* Chapter 531 and *Texas Government Code* Chapter 2269.

**3. Duration**

The Contract is effective upon the signature date of the latter of the Parties to sign (the “Effective Date”), and will terminate upon completion of the Project as described in **Section 4**, unless extended or terminated pursuant to the terms and conditions of this Contract. The term of this Contract cannot extend past <Date>, unless extended in writing by both Parties. At the sole option of Owner, this Contract may also be extended beyond the original term as necessary to complete the mission of the solicitation or as otherwise determined by Owner to serve the best interests of the state of Texas, subject to the terms and conditions mutually agreeable to the Parties.

**4. Scope of Work**

Contractor has overall responsibility for and shall provide and furnish all materials, equipment, tools, and labor as necessary or reasonably inferable to complete the Work, or any phase of the Work, in accordance with Owner’s requirements and the terms of the Contract, which are more fully set forth within **Attachments G and H**.

**5. The Contract Sum**

- 5.1 The Owner shall pay the sum of \$<Insert Amount> to the Contractor for performance of the Contract, including the Base Proposal and all Alternate Proposals (if any) accepted by the Owner and described in the Project Scope of Work. Payments shall be made as provided in the UGCs.
- 5.2 If, at any time during the term of this Contract, Contractor reduces the comparable price of any article or service covered by the Contract to customers other than Owner, the prices charged to Owner for such articles or services shall also be reduced proportionately. Such reduction shall be effective at the same time and in the same manner as the reduction in

price to customers other than Owner. In addition to invoicing at the reduced prices, Contractor shall furnish promptly to Owner complete information regarding the reduction.

## **6. Liquidated Damages**

6.1 Owner is entitled to full and beneficial occupancy and use of the completed Work. If Contractor fails to meet Substantial Completion of any portion of the Work in accordance with the approved Work schedule, Owner will sustain actual damages as a result of such failure.

6.1.1 Contractor agrees that:

- (1) establishing the precise measure of damages in the event of default by the Contractor may be (i) costly, (ii) time consuming, or (iii) difficult or impossible to calculate;
- (2) the liquidated damage assessments in this section represent a good faith effort to quantify the damages that could reasonably be anticipated at the time of execution of the Contract;
- (3) the liquidated damages in this section are just and reasonable and are not a penalty;
- (4) nothing contained in this section shall be construed as relieving the Contractor from performing all Contract requirements whether or not said requirements are set forth herein; and
- (5) All assessments of damages shall be within the sole discretion of the Owner.

6.1.2 Liquidated Damages Assessment. Once the Owner has determined that liquidated damages are to be assessed, the Owner shall notify the Contractor of the assessment(s). Failure to notify does not impact the Owner's assessment of damage and is not a condition precedent thereto. The Owner will withhold liquidated damages from payments to the Contractor, or, if no payments have been made, the Owner will make demand of payment of liquidated damages. The Contractor must make payment within 30 days of the Owner's demand. In the event the Contractor fails to pay within the 30 day period, the Owner may make a claim for payment against the performance bond, with or without notice to the Contractor. In the alternative and at Owner's sole discretion, the Owner may deduct liquidated damages from the Contract Sum payable to Contractor as stated in the Supplementary General Conditions or Special Conditions.

6.1.3 Failure to Assess Liquidated Damages. The failure of the Owner to assess liquidated damages in any instance where the Owner is entitled to liquidated damages pursuant to the terms of this Contract shall not constitute waiver in any fashion of the Owner's rights to assessment of liquidated damages.

6.1.4 Severability of Individual Liquidated Damages Clauses. If any portion of this liquidated damages provision is determined to be unenforceable, the other portions of this provision shall remain in full force and effect.

6.1.5 Failure to Meet Substantial Completion Date. The Contractor hereby agrees that, from the compensation otherwise to be paid, the Owner may retain the sum of \$<Amount> for each calendar day after the Substantial Completion Date that the

work remains incomplete, which sum is agreed upon as the proper measure of liquidated damages which the Owner will sustain per diem by the failure of the Contractor to complete the work at the time stipulated in the Contract. This sum is not construed in any sense as a penalty.

## **7. No Felony Criminal Convictions; Background Checks**

- 7.1 Contractor represents that neither Contractor nor any of its employees, agents, or representatives, including any subcontractors and employees, agents, or representatives of such subcontractors, has been convicted of a felony criminal offense, or that if such a conviction has occurred, Contractor has fully advised Owner as to the facts and circumstances surrounding the conviction.
- 7.2 Contractor personnel who will complete any Work on-site at a State of Texas-owned property may be subject to a criminal background check, as set forth in **Attachment C**.

## **8. Miscellaneous Provisions**

- 8.1 **Assignment.** The Owner and the Contractor, respectively, bind themselves, their partners, successors, assigns and legal representatives to the other party to this Contract and to the partners, permitted successors, assigns and legal representatives of such other Party with respect to all covenants of this Contract. Pursuant to this Contract, duties hereunder and/or fees due hereunder may not be assigned or delegated to a third Party without the written approval of the Owner. The benefits and burdens of this Contract are, however, assignable by Owner.
- 8.2 **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
- 8.3 **Records Retention.** All records relevant to this Contract shall be retained by Contractor for a minimum of 7 years. This retention period runs from the date of payment for the relevant goods or services by Owner, or from the date of termination of the Contract, whichever is later. Retention time shall be extended when an audit is scheduled or in progress for a period reasonably necessary to complete an audit and/or to complete any administrative proceeding or litigation which may ensue.
- 8.4 **Limitation on Authority and No Other Obligations.** Contractor shall have no authority to act for or on behalf of Owner or the State of Texas except as expressly provided for in this Contract; no other authority, power, or use is granted or implied. Owner hereby expressly reserves the right from time to time to designate by written notice to Contractor to act partially or wholly for Owner in connection with the performance of Owner's obligations hereunder. Contractor may not incur any debts, obligations, expenses, or liabilities of any kind on behalf of Owner or the State of Texas.
- 8.5 **Contract Representatives.** The following will act as the representative authorized to administer activities under this Contract on behalf of their respective Party. The Contractor's designated representative may be referred to as its "Project Manager," and the

Owner's designated representative may be referred to as its "ODR." The designated Project Manager and ODR are as follows:

**Project Manger**

<Representative's Full Name>  
<Address>  
<Telephone Number>  
<Fax Number>  
<Email Address>

**ODR**

<Project Manager's Full Name>  
909 West 45<sup>th</sup> Street; Mail Code: 2064  
Austin, Texas 78751  
<Telephone Number>  
<Fax Number>  
<Email Address>

***with copy to:***

John Robert, Architect/HHSC Director  
909 West 45<sup>th</sup> Street; Mail Code: 2064  
Austin, Texas 78751  
(512) 206-5888  
(512) 206-4802 fax  
[john.robert@hhsc.state.tx.us](mailto:john.robert@hhsc.state.tx.us)

Either Party may change its designated representative by providing written notice to the other Party.

- 8.6 **Legal Notices.** Any legal notice required under this Contract shall be deemed delivered when deposited by Owner either in the United States mail, postage paid, certified, return receipt requested; or with a common carrier, overnight, signature required, to the appropriate address below:

**Contractor**

<Full Legal name of Design Firm>  
Attn: <Representative's Full Name>  
<Address>  
<City, State, Zip Code>

**Owner**

Health and Human Services Commission  
Attn: Office of Chief Counsel  
4900 N. Lamar Boulevard; MC 1100  
Austin, Texas 78751

Legal notice given by Contractor shall be deemed effective when received by Owner. Either Party may change its address for notice by written notice to the other Party.

- 8.7 **Severability.** If any provision contained in this Contract is held to be unenforceable by a court of law or equity, this Contract will be construed as if such provision did not exist and the non-enforceability of such provision will not be held to render any other provision or provisions of this Contract unenforceable.
- 8.8 **Survivability.** Termination or expiration of this Contract or a Contract for any reason will not release either party from any liabilities or obligations in this Contract that the parties have expressly agreed will survive any such termination or expiration, remain to be performed, or by their nature would be intended to be applicable following any such termination or expiration, including maintaining confidentiality of information and records retention.

- 8.9 **Captions.** The captions of sections in this Contract are for convenience only and shall not be considered or referred to in resolving questions of interpretation or construction.
- 8.10 **Counterparts.** This Contract may be executed in multiple counterparts, each of which shall be deemed, construed and considered to be an original, but all of which shall constitute one and the same instrument.
- 8.11 **Extent of Contract.** This Contract supersedes all prior Contracts concerning this Project, written or oral, between Contractor and Owner and shall constitute the entire Contract and understanding between the parties with respect to the subject matter hereof. This Contract and each of its provisions shall be binding upon the parties and may not be waived, modified, amended or altered except by a writing signed by Owner and Contractor.
- 8.12 **Entire Contract.** This Contract is intended as a complete and exclusive statement of the promises, representations, negotiations, discussions, and other agreements may have been made in connection with the subject matter hereof. Any additional or conflicting terms in any future document incorporated into the Contract will be harmonized with this Contract to the extent possible by Owner.

BY SIGNING BELOW, the Parties have executed and bound themselves to this Contract as of the Effective Date.

**Health and Human Services  
Commission**

< Full Legal Name of Contractor >

By: \_\_\_\_\_  
<Full Name>  
<Title with Division>

By: \_\_\_\_\_  
Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date of execution: \_\_\_\_\_

Date of execution: \_\_\_\_\_

**The following attachments to this Contract are hereby attached and incorporated by reference**

- Attachment A - Contract Affirmations for State Architectural/Engineering and Construction Projects (Version 1.0)**
- Attachment B - Texas Uniform Terms and Conditions for Construction Contracts with HHSC Supplementary General Conditions (Version 2.2)**
- Attachment C - Facility Specific Policies and Procedures**
- Attachment D - Prevailing Wage Rates**
- Attachment E - Respondent's Signed Pricing and Delivery Proposal**
- Attachment F - Respondent's Historically Underutilized Businesses Subcontracting Plan (if applicable)**
- Attachment G - Project Scope of Work**
- <Attachment H - Project Special Requirements>**



**TEXAS**  
Health and Human Services

# Exhibit D

## Exceptions Form





**TEXAS**  
Health and Human Services

## **Exhibit E**

### **Respondent's Information and Disclosures Form**



**Exhibit E**

<p>1. Person Signing the Contract:</p> <p>Name: _____</p> <p>Title: _____</p> <p>Mailing Address: _____</p> <p>Telephone: _____</p> <p>Fax: _____</p> <p>E-mail: _____</p>	<p>2. Primary Contact for Proposal Questions:</p> <p>Name: _____</p> <p>Title: _____</p> <p>Mailing Address: _____</p> <p>Telephone: _____</p> <p>Fax: _____</p> <p>E-mail: _____</p>
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**Part 3: Subcontractor Information. Provide the following information for each proposed subcontractor. Attach additional pages if necessary.**

1. Organization's Legal Name: \_\_\_\_\_

2. Doing Business As: \_\_\_\_\_

3. Physical Address: \_\_\_\_\_

4. Mailing Address: \_\_\_\_\_

5. Taxpayer Identification Number: \_\_\_\_\_

6. Legal Status (check one):       For Profit Entity                       Non- Profit Entity

7. Business Structure (check one):  Corporation                       Limited (Liability) Company

Partnership                               Limited (Liability) Partnership

Joint Venture                               Sole Proprietorship

Other (Specify)

8. State of Incorporation (If Applicable): \_\_\_\_\_

9. Name of the Parent Entity (If Applicable) \_\_\_\_\_

10.State of Incorporation, If Applicable:

11.Name of Parent Entity, If Applicable:

12. HUB Status (check one):     State of Texas Certified

    Entity     Non-HUB Entity

   Have you attached additional pages for Part 3?       Yes       No

**Part 4: Former Employees of a State Agency.** *Identify all respondent or subcontractor personnel who have worked for HHSC or another Texas health and human services agency in the past two years. Attach additional pages if necessary.*

1. Name of former state employee: \_\_\_\_\_
2. Job title at termination of state employment: \_\_\_\_\_
3. Date of termination of state employment: \_\_\_\_\_
4. Annual rate of compensation at termination: \_\_\_\_\_
5. Description of job responsibilities while state employee: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
6. If the former state employee worked on matters relating to the RFQ, describe those matters:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Have you attached additional pages for Part 4?  Yes  No

**Part 5: Conflicts of Interest.** *Describe all facts or circumstances that may give rise to a potential conflict of interest, and describe all measures the respondent and its subcontractors will take to ensure that these facts or circumstances do not create an actual conflict of interest. Attach additional pages if necessary.*

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Have you attached additional pages for Part 5?  Yes  No

**Part 6: Litigation.** *Disclose all pending, resolved, or completed litigation, mediation, arbitration, or other alternative dispute resolution procedure involving the respondent within the past 36 months. Include the cause number, court, parties' names, subject matter, relief sought, amount in controversy, and final disposition or status. Provide the same information for all subcontractors. Attach additional pages if necessary.*

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Have you attached additional pages for Part 6?  Yes  No

**Part 7: Texas Public Information Act (PIA):** *Complete this part if you assert one or more parts of the proposal are excepted from disclosure under the PIA. Attach additional pages if necessary.*

1. Proposal Section: \_\_\_\_\_

2. PIA Exception\*: \_\_\_\_\_

3. Explanation of Why the Exception Applies: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Have you attached additional pages for Part 7?      Yes      No

*\* The most commonly asserted exception is Texas Government Code §552.110 (trade secret, or commercial or financial information confidential by law).*



**TEXAS**  
Health and Human Services

## **Exhibit F**

### **Respondent's Pricing and Delivery Proposal Form**

Exhibit F

**Respondent's Pricing and Delivery Proposal**

RFP No.: HHS0003789  
Project Name: Roof Repairs & Replacement (Project No. 18-002-BSH)  
To: Health and Human Services Commission ("Owner")  
From: Respondent's Name:  
Mailing Address:  
City, State, Zip Code:  
Phone:

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The Respondent having carefully examined the Texas Uniform General Conditions for Construction Contracts with HHSC Supplementary General Conditions ("UGC's"), the Drawings and Specifications, and any addenda thereto, as prepared by the Owner, the Project Architect/Engineer for this Project, as well as the premises and all the conditions affecting the work, if applicable to this Project, does hereby propose to furnish all supervision, labor, materials, equipment, and tooling necessary to achieve Substantial Completion of the work in accordance with the Contract Documents for the following sum: *(Amount shall be shown in both written and figure form. In case of discrepancy between the written amount and the figure, the written amount will govern.)*

1. **Proposal Cost:** \$
  
2. **Construction Milestone Schedule:** The undersigned agrees, if awarded the Contract, to achieve Substantial Completion of the Work as described in the UGCs, the Drawings and Specifications, and any addenda thereto.
  - 2.1 Owner anticipates the Notice to Proceed for construction to be issued within 2 weeks of the Contract being executed.
  - 2.2 Contractor will mobilize within 7 calendar days after receiving the Notice to Proceed.
  - 2.3 Owner anticipates the Substantial Completion by the Contractor will be within **180 Days** of the Notice to Proceed being issued.
  
3. **RFP Addenda:** The Respondent hereby acknowledges receipt of the following RFP addenda issued by the Owner: *(initial all that are applicable.)*

RFP No. 1 \_\_\_\_ RFP No. 2 \_\_\_\_ RFP No. 3 \_\_\_\_ RFP No. 4 \_\_\_\_ RFP No. 5 \_\_\_\_
  
4. **Bid Bonds:** The Respondent shall include, with its Proposal, a bid security in the form of a cashier's check, certified check, or original bid bond payable to the Health and Human Services Commission, in an amount not less than **5%** of the largest possible total proposed cost,

including consideration of alternates, to be left in escrow with the Owner’s Maintenance and Construction Department. No other form of security will be accepted. Should the Respondent fail, neglect, or refuse to begin performance of the Contract after receiving the award, the security will be forfeited to the Owner. Performance shall be considered begun based upon Respondent’s acknowledgment of the Contract award and furnishing of all required security bonds and insurance coverage within 10 calendar days of written notification of the award.

5. **Payment and Performance Bonds:** The Respondent agrees to execute the performance and payment bonds within 10 calendar days, in the amount of **100%** of the Contract price, after notification that the Respondent has been identified by the Owner as the Respondent with the “best value” Proposal. The bonds shall be in the full contract amount. **(Performance Bond and Payment Bond Forms are attached to this Exhibit F as Attachment A.)**
  
6. **Award of Contract and Commencement of Work:** The Respondent agrees to execute the Contract within 10 calendar days after notification that the Respondent has been identified by the Owner as the Respondent with the “best value” Proposal, and to commence work on or before the commencement date stated by the Owner in a Notice to Proceed; such commencement date shall be 10 or more calendar days after the date of the Notice to Proceed. In addition, the Respondent agrees to execute and deliver to the Owner a Certification of Franchise Tax Payment and further agrees to obtain from each subcontractor and supplier - and hold for redelivery to the Owner if requested - a certification of franchise tax status of each subcontractor or supplier.
  
7. **Owner’s Right:** It is understood that the Owner reserves the right to accept or reject any and all Proposals and to waive proposal irregularities.
  
8. The Respondent must complete, sign and return this Pricing and Delivery Proposal Form with its Proposal. This form must be signed by an officer or agent of the Respondent with authority to contractually bind the Respondent. Failure of a Respondent to sign and return this form may result in disqualification of its Proposal.

<b>Respondent’s Name:</b>	
<b>Respondent’s State of Texas Tax Account No.:</b> <i>(This 11 digit number is mandatory)</i>	
<b><i>If a Corporation:</i></b>	
Respondent’s State of Incorporation:	
Respondent’s Charter No.:	
<b>Identify each person who owns at least 25% of the Respondent’s business entity:</b>	
Name:	
Name:	
Name:	
Name:	

***This Respondent's Pricing and Delivery Proposal is Submitted and Certified by:***

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



**Respondent's Execution of Offer**  
*(See additional signature lines at end of this section)*

**THIS EXECUTION OF OFFER MUST BE COMPLETED, SIGNED, AND RETURNED WITH THE RESPONDENT'S PROPOSALS. FAILURE TO COMPLETE, SIGN, AND RETURN THIS EXECUTION OF OFFER WITH THE PROPOSALS WILL RESULT IN REJECTION OF THE PROPOSALS.**

**SIGNING A FALSE STATEMENT MAY VOID THE SUBMITTED PROPOSALS OR ANY CONTRACTS OR OTHER CONTRACTUAL ARRANGEMENTS, WHICH MAY RESULT FROM THE SUBMISSION OF RESPONDENT'S PROPOSALS, AND THE RESPONDENT MAY BE REMOVED FROM ALL PROPOSER LISTS. A FALSE CERTIFICATION SHALL BE DEEMED A MATERIAL BREACH OF CONTRACT AND, AT OWNER'S OPTION, MAY RESULT IN TERMINATION OF ANY RESULTING CONTRACT OR PURCHASE ORDER.**

1. By signature hereon, Respondent acknowledges and agrees that:
  - a. this Request for Competitive Sealed Proposals is a solicitation for Proposals and is not a contract or an offer to contract;
  - b. the submission of Proposals by Respondent in response to this Request for Competitive Sealed Proposals will not create a contract between the Owner and Respondent;
  - c. the Owner has made no representation or warranty, written or oral, that one or more contracts with the Owner will be awarded under this Request for Competitive Sealed Proposals; and
  - d. Respondent shall bear, as its sole risk and responsibility, any cost which arises from Respondent's preparation of a response to this Request for Competitive Sealed Proposals.
  
2. By signature hereon, Respondent offers and agrees to furnish to the Owner the products and/or services more particularly described in its Proposals, and to comply with all terms, conditions and requirements set forth in the Request for Competitive Sealed Proposals documents and contained herein.
  
3. By signature hereon, Respondent represents and warrants that:
  - a. Respondent is a reputable company regularly engaged in providing products and/or services necessary to meet the terms, conditions and requirements of the Request for Competitive Sealed Proposals;
  - b. Respondent has the necessary experience, knowledge, abilities, skills, and resources to satisfactorily perform the terms, conditions and requirements of the Request for Competitive Sealed Proposals;
  - c. Respondent is aware of, is fully informed about, and is in full compliance with all applicable federal, state and local laws, rules, regulations and ordinances;
  - d. Respondent understands (i) the requirements and specifications set forth in this Request for Competitive Sealed Proposals and (ii) the terms and conditions set forth in the Contract under which Respondent will be required to operate;
  - e. Respondent, if selected by the Owner, will maintain insurance as required by the Contract;
  - f. All statements, information and representations prepared and submitted in response to this Request for Competitive Sealed Proposals are current, complete, true, and accurate. Respondent acknowledges that the Owner will rely on such statements, information, and representations in selecting the successful Respondent. If selected by the Owner as the successful Respondent,

Respondent will notify the Owner immediately of any material change in any matters with regard to which Respondent has made a statement or representation or provided information.

- g. By signature hereon, Respondent certifies that the individual signing this document and the documents made part of the Request for Competitive Sealed Proposals is authorized to sign such documents on behalf of the company and to bind the company under any agreements or other contractual arrangements, which may result from the submission of Respondent's Proposals.

4. By signature hereon, Respondent certifies as follows:

- a. Respondent represents and warrants that all articles and services quoted in response to this Request for Competitive Sealed Proposals meet or exceed the safety standards established and promulgated under the Federal Occupational Safety and Health Law (Public Law 91-596) and its regulations in effect or proposed as of the date of this solicitation.
- b. By signature hereon, Respondent signifies his compliance with all federal laws and regulations pertaining to Equal Employment Opportunities and Affirmative Action.
- c. By signature hereon, Respondent agrees to defend, indemnify, and hold harmless the State of Texas, the Owner, all of its officers, agents and employees from and against all claims, actions, suits, demands, proceedings, costs, damages, and liabilities, arising out of, connected with, or resulting from any acts or omissions of Respondent or any agent, employee, subcontractor, or supplier of Respondent in the execution or performance of any contract or other contractual arrangements which may result from the submission of Respondent's Proposals.
- d. By signature hereon, Respondent agrees that any payments that may become due under any contract or other contractual arrangements, which may result from the submission of Respondent's Proposals, will be applied towards any debt including, but not limited to, delinquent taxes and child support that is owed to the State of Texas.

5. Disclosure of Interested Parties Statute. In its Proposal, the Respondent must agree to comply with *Texas Government Code* Section 2252.908 ("Disclosure of Interested Parties Statute") and 1 *Texas Administration Code* Part 2, Chapter 46, Sections 46.1-46.3 ("Disclosure of Interested Parties Regulations") as implemented by the Texas Ethics Commission ("TEC"), including, among other things, providing the TEC and the Owner with the information required by the Disclosure of Interested Parties Statute and the Disclosure of Interested Parties Regulations on the form promulgated by the TEC. The form will be required to be submitted to Owner prior to the countersigning of the final contract and not submitted with this RFP.

6. The Respondent must complete, sign and return this Execution of Offer as part of their Proposal. The Respondent's company official(s) who are authorized to commit to such a submittal must sign submittals. Failure to sign and return this form will subject the submittal to disqualification.

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Attachment A

Performance and Payment Bond Forms

PAYMENT BOND

STATE OF TEXAS
COUNTY OF \_\_\_\_\_

LET IT BE KNOWN BY THIS INSTRUMENT:

That we, \_\_\_\_\_ as principal
and we, \_\_\_\_\_ a corporation
duly authorized to do business in this State, as Surety(s), are this date held and firmly
bound unto the State of Texas in the amount of

\_\_\_\_\_
\_\_\_\_\_ Dollars \$ \_\_\_\_\_

for payment of which indemnity the said Principal and Surety, by this declaration, do firmly bind
themselves, their heirs, executors, administrators, successors and assigns, jointly and individually.

Since a Contract, which by reference is made a part hereof, exists between Principal and the State of
Texas, acting by the through the Texas Health and Human Services Commission, and dated
\_\_\_\_\_ for the \_\_\_\_\_

The conditions of this obligation are, therefore, such that it shall remain in full force and effect unless
and until the Principal shall faithfully perform the Contract in accordance with the Contract
Documents.

The liabilities, rights, limitations, and remedies concerning this Bond shall be determined in
accordance with the provisions of Chapter 2253 of the Texas Government Code, pursuant to which
this Bond is executed.

IN WITNESS TO THIS DECLARATION, the said Principal and Surety(s) have signed and sealed this
instrument.

this \_\_\_\_\_ day of \_\_\_\_\_.

PRINCIPAL

SURETY

By \_\_\_\_\_

By \_\_\_\_\_

Bond Identification No. \_\_\_\_\_

Address of Attorney-In-Fact \_\_\_\_\_

Telephone No. of Attorney-In-Fact \_\_\_\_\_

(Use of this form for the purposes indicated has been approved by the Attorney General of Texas)

# PERFORMANCE BOND

STATE OF TEXAS  
COUNTY OF \_\_\_\_\_

LET IT BE KNOWN BY THIS INSTRUMENT:

That we, \_\_\_\_\_ as principal  
and we, \_\_\_\_\_ a corporation  
duly authorized to do business in this State, as Surety(s), are this date held and firmly  
bound unto the State of Texas in the amount of

\_\_\_\_\_ Dollars \$ \_\_\_\_\_  
for payment of which indemnity the said Principal and Surety, by this declaration, do firmly bind  
themselves, their heirs, executors, administrators, successors and assigns, jointly and individually.

Since a Contract, which by reference is made a part hereof, exists between Principal and the State of  
Texas, acting by the through the Texas Health and Human Services Commission, and dated  
\_\_\_\_\_ for the \_\_\_\_\_

The conditions of this obligation are, therefore, such that it shall remain in full force and effect unless  
and until the Principal shall faithfully perform the Contract in accordance with the Contract  
Documents.

In the event of Principal's failure, as defined by the Contract Documents, to faithfully perform the  
Contract, Surety(s) will within fifteen (15) days of determination of default, assume full responsibility  
for completion of said Contract and become entitled to payment of the balance of the Contract  
amount.

The liabilities, rights, limitations, and remedies concerning this Bond shall be determined in  
accordance with the provisions of Chapter 2253 of the Texas Government Code, pursuant to which  
this Bond is executed.

IN WITNESS TO THIS DECLARATION, the said Principal and Surety(s) have signed and sealed this  
instrument.

this \_\_\_\_\_ day of \_\_\_\_\_.

PRINCIPAL

SURETY

By \_\_\_\_\_

By \_\_\_\_\_

Bond Identification No. \_\_\_\_\_

Address of Attorney-In-Fact \_\_\_\_\_

Telephone No. of Attorney-In-Fact \_\_\_\_\_

(Use of this form for the purposes indicated has been approved by the Attorney General of Texas)

**Performance and Payment Bond Attachment**

As per Section 5.1.1 of the Texas Uniform General Conditions for Construction Contracts with Supplementary General Conditions, each bond shall show the name, address and telephone number of the Texas representative of the corporate surety or corporate sureties. Therefore, please provide the following information and return this form with the executed Payment Bond.

**Surety Company:**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_

**Texas Representative:** *(Agency through which bond is issued)*

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_



**TEXAS**  
Health and Human Services

# Exhibit G

## Evaluation Criteria and Tool

< Enter Procurement/Solicitation Name >		
< Enter Procurement Number >		
Evaluation Scoring Guide		
Score	Level	Description
Unacceptable	1	Response does not address requirement. Response is completely unacceptable.
Unacceptable	2	Response mentions requirement, but is not responsive to the elements of the requirement.
Unacceptable	3	Response addresses requirement, but response described does not allow HHSC to fulfill mission.
Marginal. Fails to meet evaluation standards but failures are correctable.	4	Response meets fundamental requirements, however could not be implemented as described (would require both HHSC and Vendor to make significant changes not currently anticipated).
Marginal. Fails to meet evaluation standards but failures are correctable.	5	Response meets fundamental requirements, however could not be implemented as described (implementation would require both HHSC and Vendor to make minor changes not currently anticipated).
Marginal. Fails to meet evaluation standards but failures are correctable.	6	Response meets fundamental requirements, however could not be implemented as described (implementation would require changes to be made by Vendor only).
Acceptable	7	Response clearly satisfies requirement but has some minor weaknesses.
Acceptable	8	Response clearly satisfies requirement.
Acceptable	9	Response satisfies requirements and has some benefits above requirement.
Exceptional	10	Response far exceeds all aspects of requirement.

< Enter Procurement/Solicitation Name >

< Enter Procurement Number >

No.	Best Value Criteria	Weight
1	Respondent's Ability to Provide Construction Services	15%
2	Availability	5%
3	Financial Stability and Risk	25%
4	Repondent's Project Planning and Scheduling for this Project	15%
5	Respondent's Pricing and Delivery Method	40%
	<b>GRAND TOTAL</b>	<b>100%</b>



< Enter Procurement/Solicitation Name >  
**Criteria, Sub-criteria Sheet**  
 < Enter Procurement Number >

Evaluator				
Respondent				
#	Criteria	Weight	Score	Comments
<b>1</b>	<b>Respondent's Ability to Provide Construction Services</b>			
1.1	Briefly describe your overall construction project experience including a narrative describing the Respondent's unique abilities as they pertain to this particular Project.	6%		
1.2	Identify and describe the Respondent's past experience for completed construction projects that are most related to this project. List the projects in order of priority, with the most relevant project listed first. Include project name, owner, location, description and final construction cost.	9%		
<b>Sub Total</b>		<b>15%</b>		
<b>2</b>	<b>Availability</b>			
2.1	Provide a brief statement on the experience and availability of the Respondent and assigned project manager and project superintendent to undertake this Project.	4%		
2.2	Provide number of days required for mobilization after receiving executed contract.	1%		
<b>Sub Total</b>		<b>5%</b>		
<b>3</b>	<b>Financial Stability and Risk</b>			
3.1	Briefly describe the financial stability of the Respondent's company.	10%		
3.2	Please provide relevant details regarding the following risk: <ul style="list-style-type: none"> <li>• Is your company currently for sale?</li> <li>• Is your company involve in any transaction to expand or become acquired by another business entity?</li> <li>• Does your company have any pending litigation?</li> <li>• Has your company resolved any litigation within the last 2 years?</li> <li>• Is your company currently in default?</li> <li>• Has a bonding company been required to finance completion of a project?</li> <li>• Has your company experienced claims on its payment or performance bonds in the last 2 years?</li> <li>• Has your company had any job site incidents in the last 2 years that resulted in death?</li> </ul>	15%		
<b>Sub Total</b>		<b>25%</b>		
<b>4</b>	<b>Respondent's Project Planning and Scheduling for this Project</b>			
4.1	Describe your approach to this Project. Please include a brief proposed timeline to successfully completing the Project. Briefly describe the major critical path items necessary for completing this timeline.	15%		
<b>Sub Total</b>		<b>15%</b>		
<b>5</b>	<b>Respondent's Pricing and Delivery Proposal</b>			
5.1	Complete the "Respondent's Pricing and Delivery Proposal", attached to this RFP as Exhibit F	40%		
<b>Sub Total</b>		<b>40%</b>		
<b>TOTAL (%)</b>		<b>100%</b>		

< Enter Procurement/Solicitation Name >  
**Costing Sheet**  
 < Enter Procurement Number >

Respondent	Respondent's Cost	Low Cost Response	High Cost Response	Total Points Available	Score	1 to 10 Conversion
<Enter Respondent Name>	<Enter Total Amount>	\$ -	\$ -	<Enter Total>	#VALUE!	#VALUE!
		\$ -	\$ -		#DIV/0!	#DIV/0!
		\$ -	\$ -		#DIV/0!	#DIV/0!
		\$ -	\$ -		#DIV/0!	#DIV/0!
		\$ -	\$ -		#DIV/0!	#DIV/0!
		\$ -	\$ -		#DIV/0!	#DIV/0!
		\$ -	\$ -		#DIV/0!	#DIV/0!
		\$ -	\$ -		#DIV/0!	#DIV/0!

**Directions**

1. Add the name of each **Respondent** starting on cell A5.
2. Add the total Cost/Pricing for each Respondent in the cells under **Respondent's Cost**.
3. Add the Total Cost Weight in the **Total Points Available** Column for each Respondent..
4. The **1 to 10 Conversion** column will let you know which score to give each Respondent.



**TEXAS**  
Health and Human Services

# **Exhibit H**

## **Regional Plan Rooms (Region 1)**

Exhibit H

**Region 1 Plan Rooms**

**Wichita Falls AGC Plan Room**

2014 Kell W. Blvd., Suite C  
Wichita Falls, Texas 79301  
(940) 322-0100

[wichitafalls@wtagc.org](mailto:wichitafalls@wtagc.org)

**El Paso Community College**

Attn: Paul Armendariz  
Contract Opportunities Center  
1359 Lomaland, Room 521  
El Paso, Texas 79935  
Phone: (915) 831-7747  
Fax: (915) 831-7755

[coc@epcc.edu](mailto:coc@epcc.edu)

**El Paso Hispanic Chamber of Commerce**

Attn: Cindy Ramos-Davidson  
201 E. Main Ste. 100  
El Paso, Texas 79901  
Phone: (915) 566-4066  
Fax: (915) 566-9714

[lescobar@ephcc.org](mailto:lescobar@ephcc.org)

**West Texas AGC Plan Room**

4500 W Illinois Ave # 201  
Midland, Texas 79703  
(432) 520-2220

[midland@wtagc.org](mailto:midland@wtagc.org)

**Abilene AGC Plan Room**

3125 S. 27<sup>th</sup> Street  
Abilene, TX 79605  
(325) 676-7447

[abilene@wtagc.org](mailto:abilene@wtagc.org)

**Lubbock AGC Plan Room**

3004-B 50<sup>th</sup> Street  
Lubbock, TX 79413  
(806) 797-8898

[lubbock@wtagc.org](mailto:lubbock@wtagc.org)

**D/FW Minority Business Development Council, Inc.**

Attn: Sharon Richardson  
1000 Stemmons Tower South  
2720 Stemmons Freeway  
Dallas, Texas 75207-2212  
Phone: (214) 630-0747  
Fax: (214) 637-2241

[construction@dfwmsdc.com](mailto:construction@dfwmsdc.com)