

**SUBMIT BID TO:**  
PROCUREMENT SERVICES  
UNIVERSITY OF FLORIDA  
971 ELMORE DRIVE  
GAINESVILLE, FL 32611

Phone: (352) 392-1331 - FAX: (352) 392-8837

Web Address: <https://procurement.ufl.edu/>



# INVITATION TO BID

## Construction Acknowledgment Form

Page 1 of 101 pages		BID WILL BE OPENED: <b>June 13, 2019 at 3:00 PM</b> local time and may not be withdrawn within 90 days after such date and time. Mandatory Pre-bid Meeting <b>May 21, 2019 at 1:30 PM</b> local time at the site.		BID NO.: <b>ITB19KO-130</b>	
DATE: <b>5/10/19</b>		PROCUREMENT AGENT: <b>KO/jh</b>		BID TITLE: <b>Sid Martin Biotech Reroof</b>	
VENDOR NAME					
VENDOR MAILING ADDRESS		REASON FOR NOT SUBMITTING BID			
CITY - STATE - ZIP CODE		<b>POSTING OF BID TABULATIONS</b>			
AREA CODE	TELEPHONE NO.	Bid tabulations with intended award(s) will be posted electronically for review by interested parties at <a href="https://procurement.ufl.edu/">https://procurement.ufl.edu/</a> and will remain posted for a period of 72 hours excluding Saturdays, Sundays, or state holidays. Failure to file a protest in accordance with Board of Governors (BOG) Regulation 18.002 or failure to post the bond or other security as required in the BOG regulations 18.002 and 18.003(3), shall constitute a waiver of protest proceedings.			
	FAX NO.				
	WEB ADDRESS				
	EMAIL ADDRESS				

*I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm or person submitting a bid for the same materials, supplies, or equipment and is in all respects fair and without collusion or fraud. I agree to abide by all conditions of this bid and certify that I am authorized to sign this bid for the vendor and that the vendor is in compliance with all the requirements of the Invitation to Bid, including but not limited to, certification requirements. In submitting a bid on behalf of the Board of Trustees, hereinafter known as the University, the vendor offers and agrees that if the bid is accepted the vendor will convey, sell, assign, or transfer to the University all rights, title and interest in and to all causes of action it may now or hereafter acquire under the Anti-trust laws of the United States and the University for price fixing relating to the particular commodities or services purchased or acquired by the University. At the University's discretion, such assignment shall be made and become effective at the time the purchasing agency tenders final payment to the vendor.*

\_\_\_\_\_  
AUTHORIZED SIGNATURE (MANUAL)

\_\_\_\_\_  
NAME AND TITLE (TYPED)

### GENERAL CONDITIONS

**SEALED BIDS:** All bid sheets and this form must be executed and submitted in a sealed envelope. (DO NOT INCLUDE MORE THAN ONE BID PER ENVELOPE.) The face of the envelope shall contain, in addition to the above address, the date, and time of the bid opening and the bid number. Bids not submitted on the attached bid form shall be rejected. All bids are subject to the conditions specified herein. Those which do not comply with these conditions are subject to rejection.

1. **EXECUTION OF BID:** Bid must contain an original manual signature of authorized representative in the space provided above. Bid must be typed or printed in ink. Use of erasable ink is not permitted. All corrections to prices made by vendor must be initialed.

2. **NO BID:** If not submitting a bid, respond by returning only this vendor acknowledgment form, marking it "NO BID", and explain the reason in the space provided above. Failure to respond to a procurement solicitation without giving justifiable reason for such failure, nonconformance to contract conditions, or other pertinent factors deemed reasonable and valid shall be cause for removal of the supplier's name from the bid mailing list. NOTE: To qualify as a respondent, vendor must submit a "NO BID", and it must be received no later than the stated bid opening date and hour.

3. **BID OPENING:** Shall be public, on the date, location and the time specified on the bid form. It is the vendor's responsibility to assure that the bid is delivered at the proper time and place of the bid opening. Bids which for any reason are not so delivered will not be considered. A bid may not be altered after opening of the bids. NOTE: Bid tabulations will be posted electronically at <https://procurement.ufl.edu/>. Bid tabulations will not be provided by telephone.

4. **PRICES, TERMS AND PAYMENT:** Firm prices shall be bid and will include all packing, handling, shipping charges, and delivery to the destination shown herein.

(a) **TAXES:** The University does not pay Federal Excise and Sales taxes on direct purchases of tangible personal property or services. The Florida Tax Exempt Number is 11-06-024056-57C. This exemption does not apply to purchases of tangible personal property or services made by vendors who use the tangible personal property or services in the performance of contracts for the improvement of University-owned real property as defined in Chapter 192, F.S.

(b) **DISCOUNTS:** Vendors are encouraged to reflect trade discounts in the unit prices quoted; however, vendors may offer a discount for prompt payment. Prompt payment discounts will not be considered in the bid award. However, every effort will be made to take the discount within the time offered.

(c) **MISTAKES:** Vendors are expected to examine the specifications, delivery schedule, bid prices, extensions, and all instructions pertaining to supplies and

services. Failure to do so will be at vendor's risk. In case of a mistake in extensions the unit price will govern.

(d) **INVOICING AND PAYMENT:** Payment will be made by the University of Florida after the items awarded to a vendor have been received, inspected, and found to comply with award specifications, free of damage or defect and properly invoiced. All invoices shall bear the purchase order number. Payment for partial shipments shall not be made unless specified. An original invoice shall be submitted. Failure to follow these instructions may result in delay in processing invoices for payment. Payment shall be made in accordance with Section 215.422 (1) (2) F.S. **VENDOR OMBUDSMAN:** The University's vendor ombudsman, whose duties include acting as an advocate for vendors may be experiencing problems in obtaining payment from the University, may be contacted at 352-392-1241.

(e) **ANNUAL APPROPRIATIONS:** The University's performance and obligation to pay under any contract awarded is contingent upon an annual appropriation by the Legislature.

(f) **CONDITION AND PACKAGING:** It is understood and agreed that any item offered or shipped as a result of this bid shall be a new, current standard production model available at the time of this bid. All containers shall be suitable for storage or shipment, and all prices shall include standard commercial packaging.

(g) **SAFETY STANDARDS:** Unless otherwise stipulated in the bid, all manufactured items and fabricated assemblies shall comply with applicable requirements of Occupational Safety and Health Act and any standards hereunder.

5. **CONFLICT OF INTEREST:** The award hereunder is subject to the provisions of Chapter 112, F.S. All vendors must disclose with their bid the name of any officer, director, or agent who is also an employee of the University of Florida. Further, all vendors must disclose the name of any University employee who owns, directly or indirectly, an interest of five percent (5%) or more in the vendor's firm or any of its branches.

6. **AWARDS:** As the best interest of the University may require, the right is reserved to make award(s) by individual item, group of items, all or none or a combination thereof; to reject any and all bids or waive any minor irregularity or technicality in bids received. When it is determined there is no competition to the lowest responsible vendor, evaluation of other bids are not required. Vendors are cautioned to make no assumptions unless their bid has been evaluated as being responsive.

7. **INTERPRETATIONS/DISPUTES:** Any questions concerning conditions or specifications shall be directed in writing to Procurement Services. Inquiries must reference the date of bid opening and bid number. No interpretations shall be considered binding unless provided in writing by the University in response to requests in full compliance with this provision.

**8. NOTICE OF BID PROTEST BONDING REQUIREMENT:** Any person or entity who files an action protesting a decision or an intended decision pertaining to a competitive solicitation shall at the time of filing the formal protest, post with the University a bond payable to the University in an amount equal to: 10% of the estimated value of the protestor's bid or proposal; 10% of the estimated expenditure during the contract term; \$10,000.00; or whichever is less. The bond shall be conditioned upon the payment of all costs which may be adjudged against the person or entity filing the protest action. In lieu of a bond, the University may accept a cashier's check, bank official check or money order in the amount of the bond. **FAILURE OF THE PROTESTING PERSON OR ENTITY TO FILE THE REQUIRED BOND, CASHIER'S CHECK, BANK OFFICIAL CHECK OR MONEY ORDER AT THE TIME OF THE FILING THE FORMAL PROTEST SHALL RESULT IN DENIAL OF THE PROTEST.**

**9. GOVERNMENTAL RESTRICTIONS:** In the event any governmental restrictions may be imposed which would necessitate alteration of the material, quality, workmanship or performance of the items offered in this bid prior to their delivery, it shall be the responsibility of the successful vendor to notify the purchaser at once, indicating in writing the specific regulation which requires an alteration. The University reserves the right to accept any such alteration, including any price adjustments occasioned thereby, or to cancel the contract at no expense to the University.

**10. LEGAL REQUIREMENTS:** Applicable provision of all Federal, State, county and local laws, and of all ordinances, rules and regulations shall govern development, submittal and evaluation of all bids received in response hereto and shall govern any and all claims and disputes which may arise between person(s) submitting a bid response hereto and the University, by and through its officers, employees and authorized representatives, or any other person, natural or otherwise: and lack of knowledge by any vendor shall not constitute a cognizable defense against the legal effect thereof.

**11. LOBBYING:** Vendor is prohibited from using funds provided under any contract or purchase order for the purpose of lobbying the Legislature or any official, officer, commission, board, authority, council, committee, or department of the executive branch or the judicial branch of state government.

**12. ADVERTISING:** In submitting a bid, the vendor agrees not to use the results therefrom as a part of any commercial advertising. Vendor may not use the names, logos, or trademarks of the University, its employees, or affiliates without the prior written consent of the University.

**13. ASSIGNMENT:** Any contract or purchase order issued pursuant to this Invitation to Bid and the monies which may become due hereunder are not assignable except with the prior written approval of the purchaser.

**14. LIABILITY:** The vendor agrees to indemnify and save the University of Florida, the State of Florida and the Florida Board of Governors, their officers, agents, and employees harmless from any and all judgments, orders, awards, costs and expenses, including attorney's fees, and also all claims on account of damages to property, including loss of use thereof, or bodily injury (including death) which may be hereafter sustained by the vendor, its employees, its subcontractors, or the University of Florida, the State of Florida and the Florida Board of Governors, their officers, agents, or employees, or third persons, arising out of or in connection with any contract awarded and which are the result of the vendor's breach of contract or of the negligent acts of the vendor, its officers, agents, and employees. This clause does not apply to contracts between government agencies.

**15. FACILITIES:** The University reserves the right to inspect the vendor's facilities at any time with prior notice.

**16. ADDITIONAL QUANTITIES:** For a period not exceeding ninety (90) days from the date of acceptance of any offer by the University of Florida, the right is reserved to acquire additional quantities up to but not exceeding those shown on bid or the bid level at the prices bid in this invitation. If additional quantities are not acceptable, the bid sheets must be noted "BID IS FOR SPECIFIED QUANTITY ONLY".

**17. SERVICE AND WARRANTY:** Unless otherwise specified, the vendor shall define any warranty service and replacements that will be provided during and subsequent to this contract. Vendors must explain on an attached sheet to what extent warranty and service facilities are provided.

**18. SAMPLES:** Samples of items, when called for, must be furnished free of expense, on or before bid opening time and date, and if not destroyed, may upon request, be returned at the vendor's expense. Each individual sample must be labeled with vendor's name, manufacturer's brand name and number, bid number and item reference. Request for return of samples shall be accompanied by instructions which include shipping authorization and name of carrier and must be received with the bid. If instructions are not received within this time, the commodities shall be disposed of by the University.

**19. INSPECTION, ACCEPTANCE AND TITLE:** Inspection and acceptance will be at destination unless otherwise provided. Title and risk of loss or damage of all items shall be the responsibility of the contract supplier until accepted by the University, unless loss or damage results from negligence by the University. The contract supplier shall be responsible for filing, processing and collecting all damage claims. However, to assist him in the expeditious handling of damage claims, the University will:

(a) Record any evidence of visible damage on all copies of the delivering carrier's Bill of Lading.

- (b) Report damage (Visible or Concealed) to the carrier and contract supplier confirming such reports in writing within 15 days of delivery, requesting that the carrier inspect the damaged merchandise.
- (c) Retain the item and its shipping container, including inner packing material until inspection is performed by the carrier, and disposition given by the contract supplier.
- (d) Provide the contract supplier with a copy of the carrier's Bill of Lading and damage inspection report.

**20. PATENTS, COPYRIGHTS, TRADEMARKS, ROYALTIES** and other Intellectual Property: The vendor, without exception, shall indemnify and save harmless the University and its employees from liability of any nature or kind, including cost and expenses for or on account of any copyrighted, patented, or unpatented invention, process, or article manufactured or used in the performance of the contract, including its use by the University of Florida. If the vendor uses any design, device, or materials covered by letters, patent or copyright, it is mutually agreed and understood without exception that the bid prices shall include all royalties or costs arising from the use of such design, device, or materials in any way involved in the work.

**21. CONFLICT BETWEEN DOCUMENTS:** If any terms and conditions contained within the documents that are a part of this ITB or resulting contract are in conflict with any other terms and conditions contained therein, then the various documents comprising this ITB or resulting contract, as applicable, shall govern in the following order of precedence: change order, purchase order, addenda, special conditions, general conditions, specifications, departmental description of work, and bid.

**22. MANUFACTURERS' NAMES AND APPROVED EQUIVALENTS:** Any manufacturer's names, trade names, brand names, information and/or catalog numbers listed in a specification are for information and not intended to limit competition. If bids are based on equivalent products, indicate on the bid form the manufacturer's name and number. Vendor shall submit with the bid, cuts, sketches, and descriptive literature, and/or complete specifications. Reference to literature submitted with a previous bid will not satisfy this provision. The vendor shall also explain in detail the reasons why the proposed equivalent will meet the specifications and not be considered an exception thereto. The University of Florida reserves the right to determine acceptance of item(s) as an approved equivalent. Bids which do not comply with these requirements are subject to rejection. Bids lacking any written indication of intent to quote an alternate brand will be received and considered in complete compliance with the specifications as listed on the bid form.

**23. NONCONFORMANCE TO CONTRACT CONDITIONS:** Items may be tested and/or inspected for compliance with specifications by any appropriate testing facilities. Should the items fail, the University may require the vendor to reimburse the University for costs incurred by the University in connection with the examination or testing. The data derived from any tests for compliance with specifications are public records and open to examination thereto in accordance with Chapter 119, F.S. Items delivered not conforming to specifications may be rejected and returned at vendor's expense. These items and items not delivered as per delivery data in bid and/or purchase order may result in vendor being found in default in which event any and all procurement costs may be charged against the defaulting vendor. Any violation of these conditions may also result in the vendor's name being removed from the University of Florida's vendor file.

**24. PUBLIC RECORDS:** Any material submitted in response to this Invitation to Bid will become a public document pursuant to Section 119.07 F.S. This includes material which the responding vendor might consider to be confidential or a trade secret. Any claim of confidentiality is waived upon submission, effective after opening pursuant to Section 119.07 F.S.

**25. DELIVERY:** Unless actual date of delivery is specified (or if specified delivery cannot be met), show number of days required to make delivery after receipt of purchase order in space provided. Delivery time may become a basis for making an award (see Special Conditions). Delivery shall be within the normal working hours of the University of Florida, Monday through Friday, unless otherwise specified.

**26. PUBLIC PRINTING - PREFERENCE GIVEN PRINTING WITHIN THE STATE:** The University of Florida shall give preference to vendors located within the state when awarding contracts to have materials printed, whenever such printing can be done at no greater expense than, and at a level of quality comparable to, that obtainable from a vendor located outside of the state.

(a) **CONTRACTS NOT TO BE SUBLET:** In accordance with Class B Printing Laws and Regulations "Printing shall be awarded only to printing firms. No contract shall be awarded to any broker, agent, or independent contractor offering printing manufactured by other firms or persons."

(b) **DISQUALIFICATION OF VENDOR:** Reasonable grounds for believing that a vendor is involved in more than one bid for the same work will be cause for rejection of all bids in which such vendors are believed to be involved. Any or all bids will be rejected if there is reason to believe that collusion exists between vendors. Bids in which the prices obviously are unbalanced will be subject to rejection.

(c) **TRADE CUSTOMS:** Current trade customs of the printing industry are recognized unless accepted by Special Conditions or Specifications herein.

(d) **COMMUNICATIONS:** It is expected that all materials and proofs will be picked up and delivered by the printer or his representative, unless otherwise specified. Upon request, materials will be forwarded by registered mail.

(e) **RETURN OF MATERIAL:** All copy, photos, artwork, and other materials supplied by the University of Florida must be handled carefully and returned in good condition upon completion of the job. Such return is a condition of the contract and payment will not be made until return is affected.

## END OF SECTION

**Bid Number: ITB19KO-130**

**Title: Sid Martin Biotech Reroof**

**UF Project Number: MP04676**



## **AUTHORIZED REPRESENTATIVES AND CONTACT INFO:**

### **UF PLANNING DESIGN AND CONSTRUCTION**

Joe Garcia, AIA, Architect  
245 Gale Lemerand Drive  
Gainesville, FL 32611-5050  
352-273-4009  
[jagarcia@ufl.edu](mailto:jagarcia@ufl.edu)

### **UF PROCUREMENT SERVICES**

Karen Olitsky  
971 Elmore Drive / PO Box 115250  
Gainesville, FL 32611-5250  
(352) 294-1163  
[kolitsk@ufl.edu](mailto:kolitsk@ufl.edu)

# **NON-TECHNICAL SPECIFICATIONS**

## **TABLE OF CONTENTS**

### **I. Bidding Conditions**

00020 Invitation to Bid  
00100 Instruction to Bidders  
00310 Bid Form  
00430 List of Subcontractors

### **II. General Terms and Conditions**

<http://facilities.ufl.edu/forms/contracts/GTC.pdf>

### **III. Division 0 Non-Technical Specifications**

<http://facilities.ufl.edu/forms/contracts/Div0NonTechSpecs.pdf>

### **IV. Division 1 Non-Technical Specifications**

[http://facilities.ufl.edu/forms/contracts/Div1\\_NonTech\\_Specs\\_JULY\\_2017.pdf](http://facilities.ufl.edu/forms/contracts/Div1_NonTech_Specs_JULY_2017.pdf)

### **V. Standards, Policies, Regulations, Forms, Guides, Inspection & Closeout and References**

<http://facilities.ufl.edu/forms.html>

#### **a. Other Forms**

- Dig Permit: <https://www.facilityservices.ufl.edu/departments/utilities/dig-permits/>
- EH&S Inspection Request Form: <http://www.ehs.ufl.edu/programs/buildcode/>
- State Fire Marshal Inspection Request Form:  
<http://www.ehs.ufl.edu/programs/buildcode/>

## **00020 - INVITATION TO BID**

The Invitation to Bid shall be in accordance with the University of Florida, Procurement Services "Invitation to Bid Acknowledgement Form" with all relevant information provided therein.

END OF SECTION

## **00100 - INSTRUCTIONS TO BIDDERS**

### **1.1 RELATED SECTIONS**

- A. Documents affecting the work of this Section include, but are not necessarily limited to, the General Terms & Conditions and other Sections in Divisions 0 and 1 of these Specifications.

### **1.2 THE WORK**

PROJECT TITLE: **ITB19KO-130, Sid Martin Biotech Reroof**

### **1.3 SECURING DOCUMENTS**

Copies of the proposed Contract Documents may be obtained from:

University of Florida Procurement Services website.  
<https://procurement.ufl.edu/vendors/schedule-of-bids/>

### **1.4 BID FORM**

In order to be considered responsive and responsible, make bids in strict accordance with the following:

- A. Make bids upon the forms provided, properly signed and with all items completed. Do not change the wording of the bid form and do not otherwise alter or add words to the bid form. Unauthorized conditions, limitations, or provisions attached to the bid may be cause for rejection of the bid.
- B. Include with bid a completed and signed Invitation to Bid Construction Acknowledgment Form.
- C. Include completed Section 00310 - Bid Form.
- D. Include list of subcontractors as described in Section 00430 - Subcontractor Listing.
- E. **Bids must be submitted no later than June 13, 2019 at 3:00 PM, local time.** No bids received after the time fixed for receiving them will be considered. Late bids will be returned to the bidder unopened.
- F. Address bids to Karen Olitsky, Procurement Agent III, and deliver to:

University of Florida  
Procurement Services  
971 Elmore Drive / PO Box 115250  
Gainesville, FL 32611-5250

Submit bid in a sealed envelope that includes the bid number, contractor name and date and time of the bid opening on the outside of the envelope. Submit one (1) original bid and one (1) electronic copy on flash drive or CD/DVD. It is the sole responsibility of the bidder to see that bids are received on time. Faxed and/or emailed bids will not be accepted.

### **1.5 PROOF OF COMPETENCY OF BIDDER**

A bidder may be required to furnish evidence, satisfactory to the Owner, that the bidder and the bidder's proposed subcontractors have sufficient means and experience in the types of work required to assure completion of the Contract in a satisfactory manner.

## **1.6 WITHDRAWAL OF BIDS**

- A. A bidder may withdraw his bid, either personally or by written request, at any time prior to the scheduled time for opening bids.
- B. No bidder may withdraw his bid for a period of forty-five calendar days after the date set for opening thereof, and bids shall be subject to acceptance by the Owner during this period.

## **1.7 QUALIFICATION OF BIDDERS**

- A. A contract will be awarded only to a responsible bidder, qualified by experience and in a financial position to perform the work specified.
- B. If the bidder has not been pre-qualified with UF Procurement Services within the fiscal year (July 1 through June 30), the bidder may be required to submit the following evidence of eligibility:
  - 1. Evidence that bidder is licensed by the appropriate government agency to perform the work specified.
  - 2. Experience record showing bidder's training and experience in similar work.
  - 3. List a brief description of projects of similar size and/or complexity satisfactorily completed, with location, dates of contracts, names of contracts, and names and addresses of owners.

## **1.8 SUBCONTRACTS**

If the Bidder intends to subcontract any of the Work:

- A. A list of all proposed subcontractors shall be provided with the bid for scopes/packages in excess of \$10,000. See Section 00430 - Subcontractor Listing.
- B. Each subcontractor performing work in excess of \$10,000 must present evidence of being qualified in and licensed for the applicable trade. Such proof of subcontractor licensure shall be provided by the successful bidder after award, but prior to commencement of Work.

## **1.9 PERFORMANCE AND PAYMENT BONDS**

See General Terms & Conditions, Article 20.

## **1.10 BID DEPOSIT**

Not required.

## **1.11 AWARD OR REJECTION OF BIDS**

The Contract, if awarded, will be awarded to the responsible and responsive bidder who has proposed the lowest Contract Sum, subject to the owner's right to reject any or all bids and to waive informality and irregularity in the bids and in the bidding.



#### **1.12 MANDATORY PRE-BID CONFERENCE:**

A mandatory Pre-bid Conference will be held prior to the scheduled bid opening for the purpose of considering questions posed by bidders. The conference will be open to interested bidders, prospective subcontractors, and any other interested parties. This conference will be held **May 21, 2019 at 1:30 PM local time in Room 109 at Sid Martin Biotechnology Facility, 12085 Research Drive, Alachua, FL, 32615.**

#### **1.13 EXECUTION OF AGREEMENT**

- A. A Purchase Order (PO) will be issued for purposes of fiscal encumbrance and payment. The PO itself serves as the form of contract.
- B. Upon notice of Bid Award, the bidder to whom the Contract is awarded shall deliver to UF those Certificates of Insurance and Payment & Performance Bonds required by the Contract Documents.
- C. Bonds and Certificates of Insurance shall be approved by UF before the successful bidder may proceed with the Work.

#### **1.14 INTERPRETATION OF CONTRACT DOCUMENTS PRIOR TO BIDDING**

- A. If any person contemplating submitting a bid for construction of the Work is in doubt as to the true meaning of any part of the Contract Documents, or finds discrepancies in or omissions from any part of the Contract Documents, they may submit a written request for interpretation thereof no later than **May 30, 2019 at 5:00PM**, local time, to Karen Olitsky, Procurement Agent III at [kolitsk@ufl.edu](mailto:kolitsk@ufl.edu). The person submitting the request shall be responsible for its prompt delivery.
- B. Interpretations or corrections of proposed Contract Documents will be made only by Addendum and will be available on the Procurement Services "Schedule of Bids" webpage <https://procurement.ufl.edu/vendors/schedule-of-bids/>. The Owner will not be responsible for any other explanations or interpretations of the proposed Contract Documents.

#### **1.15 TIME OF COMPLETION:**

- A. Date of beginning, rate of progress and time for completion of Work for this Project are ESSENTIAL CONDITIONS of Contract. Successful Bidder hereby agrees that Work required by this Contract shall be commenced within ten (10) calendar days after issuance date of written Notice to Proceed; that all insurance and permits will be obtained; that all documents and notices will be filed; that all requirements as specified will be met; and that Work shall be prosecuted regularly, diligently and uninterruptedly at such rate of progress as will insure Substantial Completion of entire Project within 90 calendar days after receipt of Notice to Proceed, and shall be finally completed within 14 days after the date of Substantial Completion.

END OF SECTION

## **00310 - BID FORMS**

### **BID PROPOSAL**

FROM:

\_\_\_\_\_  
(Name of Bidder)

TO:

UNIVERSITY OF FLORIDA  
PROCUREMENT SERVICES  
971 Elmore Drive  
P.O. Box 115250  
Gainesville, Florida 32611-5250

The undersigned, hereinafter called "Bidder", having reviewed the Contract Documents for the Project entitled **ITB19KO-130, Sid Martin Biotech Reroof** and having visited and thoroughly inspected the site of the proposed Project and familiarized himself/herself with all conditions affecting and governing the construction of said Project, hereby proposes to furnish all labor, materials, equipment and other items, facilities and services for the proper execution and completion of the Project, in strict compliance with the Contract Documents, Addenda, and all other Documents relating thereto on file in Procurement Services, and, if awarded the Contract, to complete the said Work within the time limits called for in the Documents and as stated herein, for the sums as enumerated on this and the following pages:

#### **BASE BID:**

\_\_\_\_\_ Dollars

Figures: \$ \_\_\_\_\_

#### **ADD OR DEDUCT (CIRCLE ONE)**

##### **ALTERNATE #1:**

\_\_\_\_\_ Dollars

Figures: \$ \_\_\_\_\_

#### **ADDENDA:**

Receipt of the following Addenda to the Construction Documents is acknowledged:

ADDENDUM # \_\_\_\_\_ Dated \_\_\_\_\_

ADDENDUM # \_\_\_\_\_ Dated \_\_\_\_\_

ADDENDUM # \_\_\_\_\_ Dated \_\_\_\_\_

**COMPLETION DATE:**

All Work covered by the Bidding Documents and the foregoing Base Bid shall be completed and ready for Owner's occupancy as specified in the contract documents.

**SIGNATURE:**

I hereby certify that for all statements and amounts herein made on behalf of

\_\_\_\_\_  
(Name of Bidder)

a (Corporation) (Partnership) (Individual) organized and existing under the laws of the State of Florida, I have carefully prepared this Bid Proposal from Contract Documents described hereinbefore, I have examined Contract Documents and local conditions affecting execution of Work before submitting this Bid Proposal, I have full authority to make the statements and commitment herein and submit this Bid Proposal in (its) (their) behalf, and all statements are true and correct.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 2018.

\_\_\_\_\_  
(Signature of Bidder)

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Title)

**WITNESS:**

\_\_\_\_\_  
(Signature of Witness)

\_\_\_\_\_  
(Print Name)

Address: \_\_\_\_\_

\_\_\_\_\_  
(City)

\_\_\_\_\_  
(State)

\_\_\_\_\_  
(Zip Code)

END OF SECTION

## **00430 - SUBCONTRACTOR LISTING**

### **1.1 RELATED SECTIONS**

- A. Documents affecting the work of this Section include, but are not necessarily limited to, the General Terms & Conditions and other Sections in Divisions 0 and 1 of these Specifications.

### **1.2 SUBCONTRACTOR LISTS**

- A. Each bidder shall furnish with its bid a list of all subcontractors for subcontracted scopes/packages of work valued at more than \$10,000.
- B. This list shall identify – for each subcontracted package in excess of \$10,000 – the name and address of the proposed subcontractor and the approximate value of the subcontract.
- C. If the bidder does not intend to subcontract portions of the Work in amounts greater than \$10,000, then a statement to that affect shall be furnished with the bid.
- D. See Section 00100 - Instruction to Bidders regarding subcontractor licensure requirements.

END OF SECTION

**CONTRACT DOCUMENTS  
FOR**

**MP 04676**

**SID MARTIN BIOTECH REROOF  
ALACHUA, FLORIDA  
BUILDING 1041**

**UNIVERSITY OF FLORIDA**

**SVM PROJECT NO. 1460-25**

100% CDs

DATE ISSUED: 04/26/2019



"All information contained herein is confidential"

Any knowing violation of Chapter 119, Florida Statutes, may be sufficient grounds for immediate termination of the Contract by the Department of Management Services.

**SVM** | P. 352.378.4400 | 1628 NW 6TH STREET  
F. 352.377.5378 | GAINESVILLE FL 32609  
**SKINNER VIGNOLA McLEAN, INC.** | FL CERTIFICATE AA3478



To the best of my knowledge, the plans, specifications, and addenda comply with the applicable minimum building codes.

# TECHNICAL SPECIFICATIONS

FOR

SID MARTIN BIOTECH REROOF  
ALACHUA, FL

MP04676

## TABLE OF CONTENTS

---

### DIVISION 1 GENERAL

01000	SCOPE OF THE WORK
01014	BUILDER'S USE OF THE PREMISES
01070	CUTTING AND PATCHING
01085	APPLICABLE STANDARDS
01100	ALTERNATIVES
01 26 13	REQUESTS FOR INFORMATION
01340	SUBMITTALS AND SUBSTITUTIONS
01410	TESTING LABORATORY
01520	CONSTRUCTION AIDS
01530	BARRIERS
01600	MATERIAL AND EQUIPMENT
01640	PRODUCT HANDLING
01710	CLEANING
01 88 13	CONSTRUCTION TOLERANCES

### DIVISION 2 SITEWORK

02070	SELECTIVE DEMOLITION
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### DIVISION 3 CONCRETE

NOT USED

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<b>SVM</b>	P. 352.378.4400	1628 NW 6TH STREET
	F. 352.377.5378	GAINESVILLE FL 32609
<b>SKINNER VIGNOLA McLEAN, INC.</b>		FL CERTIFICATE AA3478

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**DIVISION 4    MASONRY**

NOT USED

**DIVISION 5    METALS**

055133.13                      VERTICAL METAL LADDERS

**DIVISION 6    CARPENTRY**

NOT USED

**DIVISION 7    THERMAL AND MOISTURE BARRIER**

075491                      ADHERED PVC ROOFING

07624                      FLASHING AND SHEET METAL (ALUMINUM)

07900                      CAULKING AND SEALANTS

**DIVISION 8    DOORS AND WINDOWS**

084523                      SKYLIGHTS

**DIVISION 10   SPECIALTIES**

NOT USED

**DIVISION 11   EQUIPMENT**

NOT USED

**DIVISION 12   FURNISHINGS**

NOT USED

**DIVISION 13   SPECIAL CONSTRUCTION**

NOT USED

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**DIVISION 14 CONVEYING SYSTEMS**

NOT USED

**DIVISION 15 MECHANICAL**

NOT USED

**DIVISION 16 ELECTRICAL**

NOT USED

**END OF SECTION**

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<b>SVM</b>	P. 352.378.4400	1628 NW 6TH STREET
	F. 352.377.5378	GAINESVILLE FL 32609

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<b>SKINNER VIGNOLA McLEAN, INC.</b>	FL CERTIFICATE AA3478
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## 01000 SCOPE OF THE WORK

### 1. GENERAL

#### A. Description

1. Work Included: Work includes but is not necessarily limited to the following:

##### Existing Roof Demolition:

- a. Prepare roof deck and parapet walls as required for new roofing membrane.
- b. Provide thermal scan to verify no moisture exists in roofing insulation. Remove and replace all moisture-laden insulation and replace. Prepare surface of installation as required for installation of proposed membrane roofing.
- c. Remove all existing debris.
- d. Remove existing aggregate with power broom, vacuum or other suitable means as required for preparation of the adhered membrane roofing.
- e. Remove existing parapet coping and save for reinstallation.
- f. Remove and replace existing vent boots, roof drains, parapet scuppers, eave and curb flashing and the like as required for the installation.

##### Re-Roof:

- a. Install proposed membrane system on prepared and cleaned existing roofing.

- b. Reinstall parapet coping and seal all joints.
  - c. Install flashing/nailers and counter flashing on prepared cants, curbs, structural bases, junctions at parapet walls, eaves and other vertical transitions.
  - d. Install proposed ladders. All mounted fixtures or equipment shall be securely anchored to adjacent finish surface with appropriate anchorage devices in accordance with manufacturer's directions.
  - e. Install walkways from penthouse doors to and around all roof-top equipment.
3. Install proposed fall protection system furnished by Owner.

2. Alternate Work:

- a. Remove and replace existing skylights with proposed Kallwall Skylight assemblies. Repair any damaged interior finishes and patch and paint as needed to achieve a "like new" appearance.

3. Related Work:

- a. Contractor and all trades shall be required to coordinate work with drawings and/or specifications of equipment suppliers and other consultants as related to this project. It is the Contractor's responsibility to ensure proper inclusion and location of electrical, mechanical and plumbing connections and other features as required for a complete job.
- b. All utility connections (e.g. electrical, plumbing, etc.) to equipment shall be performed by the Contractor of that specific trade, unless noted otherwise on the Drawings.

4. Owner's Responsibilities:

- a. Provision of, and locations of Fall Protection system. All roof surfaces where a fall of six feet or more is possible must include OSHA-compliant fall protection in the form of guardrails, parapet walls, or anchor points for personal fall arrest systems (PFAS).
- b. Guardrails shall comply with OSHA requirements as defined in 29 CFR 1910.29.

- c. Parapet walls shall be 39 inches or higher.
- d. Anchor points must be spaced and oriented such that all roof areas and equipment are accessible without interfering with the PFAS lanyard.
- e. The quantity of anchor points must be sufficient to accommodate the number of workers/employees required to service the roof and/or roof-mounted equipment.

**END OF SECTION**

## **01014 Builder's Use of the Premises**

### **PART 1 – GENERAL**

#### **1.1 RELATED SECTIONS**

- A. Documents affecting the work of this Section include other elements of the Contract for Construction, including the Owner/Builder Agreement or Owner/Design-Builder Agreement, the General Terms & Conditions, other sections of the Division 0 and Division 1 non-technical specifications, and the technical plans and specifications.
- B. Refer to section 01016 for information regarding utility outages and dig permits.
- C. Refer to section 01310 for requirements regarding the coordination of work with the University of Florida Schedule.
- D. Refer to section 01500 for requirements related to Temporary Facilities & Controls.

#### **1.2 DESCRIPTION OF WORK INCLUDED**

This Section applies to situations in which the Builder or his representatives including, but not necessarily limited to, suppliers, subcontractors, employees, and field engineers, enter upon the Owner's property.

#### **1.3 QUALITY ASSURANCE**

- A. Promptly upon award of the Contract, notify all pertinent personnel regarding requirements of this Section.
- B. Require that all personnel who will enter upon the University's property certify their awareness of and familiarity with the requirements of this Section.
- C. Builder shall strictly enforce the University's **Tobacco Free** policy.

#### **1.4 TRANSPORTATION FACILITIES**

- A. See section 01500 for information on the maintenance of safe and accessible paths of travel in and around the job site.
- B. Builder's Vehicles:
  - 1. Builder's vehicles, vehicles belonging to employees or subcontractors of the Builder, and all other vehicles entering the Owner's property in performance of the Work shall only use agreed-upon access route(s).

2. All vehicles parked on campus (including construction sites) must have a valid parking permit issued through Transportation and Parking Services in accordance with University of Florida Police Department (UFPD) requirements. Permits – for remote/offsite worker parking, onsite staff parking, and remote/offsite storage containers – shall be requested through the University Project Manager.
  - (a) Remote/offsite worker parking and space for trailer/storage containers is provided at a paved lot near the Hilton on SW 34<sup>th</sup> Street. See map on the “Forms & Standards” page of the Planning Design & Construction website ([www.facilities.ufl.edu](http://www.facilities.ufl.edu)).
  - (b) Trailer/storage containers in the remote/offsite lot shall be clearly marked with the following information: Project Number, Project Name, Company Name, and Phone Number.
  - (c) Remote parking and trailer/storage container area must be kept clean and free of debris.
  - (d) See part 1.10 of this Specification regarding home football game weekends.
  - (e) Vehicles not following this policy may be ticketed or towed.
3. Within the University approved fenced-in construction site area, the Builder shall manage all site use, including parking by construction staff and employees (if approved). Do not permit vehicles to park on any street or other area of the Owner's property except in areas designated by the University.
4. Outside the designated construction site area, all University regulations regarding parking and accommodations for pedestrian use shall be strictly enforced.
5. Exceptions for temporary parking for construction delivery and construction access on curb side, walkways, vehicular parking, roadways and service drives that restricts or impedes normal traffic flow or use must be obtained from UF Transportation & Parking Services through the University Project Manager. This exception is granted only for construction vehicles, not for private passenger vehicles. Any temporary use of pedestrian pathways that exceeds 24 hours duration will require provision for equal alternate pathways around the impediments and UFPD review. In addition, any temporary use of the site (exceeding 24 hours duration) that impedes building occupant egress must be reviewed by UF Environmental Health & Safety (EH&S).
6. The University Project Managers shall not seek waivers of any sort for ticketed and towed vehicles in violation of the University parking regulations. Knowledge of the University Parking Regulations is the personal responsibility every individual who commutes to and works on campus.

7. Provide adequate protection for curbs and sidewalks over which trucks and equipment must pass to reach the job site.

## 1.5 INSPECTIONS and TESTS

- A. Physical Plant Division (PPD) inspections shall be requested 48 hours in advance through PPD Operations Engineering. The inspection request form and supporting checklists can be found on the “Forms & Standards” page of the Planning Design & Construction website ([www.facilities.ufl.edu](http://www.facilities.ufl.edu)). Inspection checklists shall be tailored by the Owner and Builder to the specific requirements of the project.
- B. Environmental Health & Safety (EH&S) inspections shall be requested 24 hours in advance. Also see section 01060.
- C. Office of Information Technology (OIT): Contact Telecommunications and Infrastructure (TNI) 24-48 hours in advance to request inspections for all telecom, cabling, and network infrastructure work. The inspection checklist – with notification timeframes and contact information – can be found on the “Forms & Standards” page of the Planning Design & Construction website ([www.facilities.ufl.edu](http://www.facilities.ufl.edu)).
- D. HealthNet: For Health Science Center projects only, contact HealthNet 24-48 hours in advance to request inspections for all telecom, cabling, and network infrastructure work. The inspection checklist – with notification timeframes and contact information – can be found on the “Forms & Standards” page of the Planning Design & Construction website ([www.facilities.ufl.edu](http://www.facilities.ufl.edu)).
- E. Office of Academic Technology (OAT): Where applicable, contact OAT 48 hours or more in advance to request inspections for all work related to classroom audio/visual systems. The inspection checklist – with notification timeframes and contact information – can be found on the “Forms & Standards” page of the Planning Design & Construction website ([www.facilities.ufl.edu](http://www.facilities.ufl.edu)).
- F. University of Florida Police Department (UFPD): UFPD must verify construction fencing, exterior lighting, landscaping, and other items during construction and closeout.
- G. State Elevator Inspector inspections – see technical specification ([insert 14xxx section number](#)).
- H. Architect / Engineer inspections – ([to be completed by A/E](#))
- I. Tests

1. The Builder shall notify PPD and EH&S of all scheduled tests at least 48 hours in advance.
2. Properly completed test reports shall be provided at the conclusion of each test. It is the responsibility of the Builder to maintain such reports through Final Completion, at which point they shall be submitted with other closeout materials, such as Operation & Maintenance manuals.

## 1.6 SECURITY

- A. Construction sites located on the University of Florida campus fall under the jurisdiction of the UFPD. Any incident requiring police service should be immediately reported to the UFPD at (352) 392-1111.
- B. Builders and employees are to obey all laws and rules of the State of Florida and the University of Florida when on University property.
- C. Students, faculty, and staff shall not be harassed, disturbed, or in any way disrupted in their lawful pursuits. Sexual harassment shall be reported to the University's Title IX Coordinator and Deputy Title IX Coordinator for Students as per the following policy: [www.hr.ufl.edu/prevent](http://www.hr.ufl.edu/prevent)
- D. Restrict the access of all persons entering upon the Owner's property in connection with the Work to the access route and to the actual site of the Work. Employees are not permitted to enter University buildings unless such entry is directly related to their job duties.
- E. Restrict activities of employees to authorized areas. Employees shall not be allowed to mingle in student or public areas.
- F. Builders and employees shall secure all property to reduce theft or damage to equipment or property. Builders shall work with the UFPD as necessary and participate in crime prevention efforts.
- G. The Builder shall at all times guard against damage or loss to the property of the University or other vendors or contractors and shall be held responsible for replacing or repairing any such loss or damage. The University may withhold payment or make such deductions as deemed necessary to insure reimbursement or replacement for loss or damaged property through negligence of the successful bidder or his agents. Replace any trees, shrubs, lawns, or plantings damaged by Builder or its subcontractors or vendors during work of this project within two (2) weeks of occurrence. Grassed areas generally have irrigation systems below grade; verify location of these systems and all underground utilities in work or staging areas prior to start of construction. Repair utilities damaged by work of this project.

- H. The Builder shall provide identification badges for all personnel working on the site and shall require continuous use (wearing) of same at all times. Badge shall display photograph, name of employee, and company for which employee works.
- I. The Builder shall keep a daily log of all employees, visitors, and other personnel that enter the Project site. Said log shall be accessible to UFPD upon request.

## 1.7 PERSONNEL SCREENING

The following requirements are to be met by Builders and their subcontractors and vendors while engaged in construction projects at the University of Florida:

- A. A criminal history check shall be performed on all jobsite personnel, including subcontractors and temporary day laborers, at least once every two years. Prior to personnel entering the Project site, an initial criminal history background check shall be submitted to and performed by a private company trained to perform employment screening. The results of each criminal history check shall be reported to the Builder, which shall screen the results for the following disqualifying offenses to determine a person's eligibility to work on the University of Florida campus.
  - 1. Drug distribution activity or felony drug possession
  - 2. Sexual offenses, including, but not limited to, indecent exposure and voyeurism
  - 3. Crimes of violence involving physical injury to another person
  - 4. Murder
  - 5. Kidnapping
  - 6. Felony theft
- B. The following searches shall be performed to document types of convictions listed above that will render an individual ineligible to perform work on campus unless a waiver is granted:
  - 1. SSN Trace plus address history
  - 2. Sexual Offender database check
  - 3. National Criminal Database search
  - 4. 7-year County Court Check in the employee's County of residence
- C. Entities seeking to use an employee with one or more revealed convictions must apply for a written waiver from the UFPD Chief at (352) 392-1111 or [upinfo@admin.ufl.edu](mailto:upinfo@admin.ufl.edu).
- D. The UFPD Chief will consider the following factors when determining whether or not a waiver will be granted:
  - 1. The nature and gravity of any criminal offense(s);
  - 2. The individual's age at the time of the offense(s);



3. The number and type of offense (felony, misdemeanor, traffic violations, etc.);
  4. The sentence or sanction for the offense and compliance with the sanction(s);
  5. The amount of time that has passed since the offense and/or completion of the sentence(s);
  6. Whether there is a pattern of offenses;
  7. Whether the offense arose in connection with the individual's prior employment or volunteer activities;
  8. Information supplied by the individual about the offense(s);
  9. Work record and references after the offense(s);
  10. Subsequent criminal activity; and
  11. Truthfulness of the individual in disclosing the offense(s).
- E. Builders shall certify that all personnel have been subject to a criminal background check and shall continuously track, monitor, and re-certify throughout construction as new trades and personnel begin work.
- F. The cost of the criminal background check shall be borne by the Builder, but is compensable as a General Conditions expense for CMs and D/Bs.
- G. The Builder shall maintain copies of background checks at their home office, with background checks electronically accessible at the Project site. The names and pertinent information of all screened and approved employees shall be posted to the PD&C Sharepoint site at:  
<https://uflorida.sharepoint.com/sites/pdc/prj/Lists/Background%20Checks/AllItems.aspx>

## 1.8 WORK HOURS

- A. Regular work hours shall be between 7:00 AM and 5:00 PM, Monday through Friday, excluding holidays.
- B. Work outside these hours must be requested in writing and approved by the Owner.
- C. [other project-specific direction on work hours](#)

## 1.9 UNMANNED AIRCRAFT

- A. The use of unmanned aircraft systems (e.g., drones or model aircraft) over University property is prohibited without the written approval of UF EH&S.
- B. For a complete explanation of the policy, procedures, and requirements, see [www.ehs.ufl.edu/programs/rm/uas\\_procedures](http://www.ehs.ufl.edu/programs/rm/uas_procedures).

## 1.10 HOME FOOTBALL GAME WEEKENDS

- A. Approximately 100,000 people converge upon the campus on each of 6-7 Fall weekends for Gator football games. To safeguard both the public and the Work,

jobsites on campus shall be secured, left clean, and free of safety hazards by 4:00 PM Friday on such weekends, with no work taking place on or around the site until Monday morning.

- B. Likewise, remove all vehicles parked at the paved remote lot near the 34<sup>th</sup> Street Hilton by 4:00 PM Friday on such weekends and do not permit parking there again until Monday morning. Approved trailer/storage containers may remain.
- C. See [www.gatorzone.com](http://www.gatorzone.com) for the football game schedule and incorporate these dates into the construction schedule.
- D. The Builder may request special exceptions to this policy with written justification at least one week in advance, but the Owner is under no obligation to approve such requests.

#### 1.11 PRE-CONSTRUCTION MEETING

- A. Prior to commencing Work at the site, the Builder shall attend a pre-construction conference with the University Project Manager, the Design Professional(s), other UF officials, and external agency representatives, if applicable (such the District Engineer on a Federally-funded project).
- B. Builder attendees shall include all field staff (project manager, superintendent(s), project engineer(s), and clerical assistants), plus major trade subcontractors as directed by the University Project Manager.
- C. The parties will discuss the administrative, logistic, fiscal, and procedural requirements for the Work, and for work in general at the University of Florida.
- D. The template agenda for the meeting shall be provided by the University Project Manager, who shall also arrange for attendance by other UF officials and outside agencies, if any. The Builder shall record and distribute minutes.

**END OF SECTION**

## 01070 CUTTING AND PATCHING

### 1. GENERAL

#### A. Description

1. Work included: This Section establishes general requirements pertaining to cutting (including excavating), fitting, and patching of the Work required to:
  - a. Make the several parts fit properly.
  - b. Uncover Work to provide for installation, inspection, or both, of ill-timed Work.
  - c. Remove and replace Work not conforming to requirements of the Contract Documents.
  - d. Remove and replace defective Work.
2. Related Work described elsewhere:
  - a. In addition to other requirements specified, upon the Architect/ Engineer's request, uncover Work to provide for inspection by the Architect/Engineer of covered Work, and remove samples of installed materials for testing.
  - b. Do not cut or alter work performed under separate contract without the Architect/Engineer's written permission.

#### B. Quality Assurance

Perform all cutting and patching in strict accordance with pertinent requirements of these Specifications and, in the event no such requirements are determined, in conformance with the Architect/Engineer's written direction.

#### C. Submittals

1. Request for the Architect/Engineer's consent:
  - a. Prior to cutting which affects structural safety, submit written request to the Architect/Engineer for permission to proceed with cutting.

- b. Should conditions of the Work, or schedule, indicate a required change of materials or methods for cutting and patching, so notify the Architect/Engineer and secure his written permission prior to proceeding.

2. Notices to the Architect/Engineer:

- a. Prior to unanticipated cutting and patching performed pursuant to the Architect/Engineer's instructions, submit cost estimate to the Architect/Engineer. Secure the Architect/Engineer's approval of cost estimates and type of cost reimbursement before proceeding with cutting and patching.
- b. Submit written notice to the Architect/Engineer designating time the Work will be uncovered, to provide for the Architect/Engineer's observation.

2. PRODUCTS

A. Materials

For replacement of Work removed, use materials which comply with the pertinent Sections of these Specifications.

B. Payment for Costs

The Owner will reimburse the Contractor for unanticipated cutting and patching performed pursuant to the Architect/Engineer's written request after claim for such reimbursement is submitted by the Contractor. Perform all other cutting and patching needed to comply with the Contract Documents at no additional cost to the Owner.

3. EXECUTION

A. Conditions

1. Inspection:

- a. Inspect existing conditions, including elements subject to movement or damage during cutting, excavating, backfilling, and patching.
- b. After uncovering the Work, inspect conditions affecting installation of new Work.

2. Discrepancies:

- a. If uncovered conditions are not as anticipated, immediately notify the Architect/Engineer and secure needed directions.
- b. Do not proceed in areas of discrepancy until all such discrepancies have been fully resolved.

B. Preparation prior to Cutting

Provide all required protection including, but not necessarily limited to, shoring, bracing, and support to maintain structural integrity of the Work.

C. Performance

1. Perform all required excavating and backfilling as required under pertinent Sections of these Specifications. Perform cutting and demolition by methods which will prevent damage to other portions of the Work and will provide proper surfaces to receive installation of repair and new work. Perform fitting and adjustment of products to provide finished installation complying with the specified tolerances and finishes.
2. Contractor shall remove all walls indicated on the Plan to be removed. Patch floors and ceilings where walls once were. Relocate any existing light fixtures, air supply diffusers, electrical or signal outlets or switches, and plumbing as required to accommodate the new wall layout.

**END OF SECTION**

01085     APPLICABLE STANDARDS

1.     GENERAL

A.     Description

1.     Work Included:

- a.     Comply with all applicable codes and laws as prescribed by the Authorities Having Jurisdiction (AHJ) including the University of Florida Department of Environmental Health and Safety and as may be listed below or elsewhere in these documents.
- b.     Comply with UF Design and Construction Standards, most recent edition.
- c.     Throughout the Contract Documents, reference is made to codes and standards which establish qualities and types of workmanship and materials, and which establish methods for testing and reporting on the pertinent characteristics.
- d.     Where materials or workmanship are required by these Contract Documents to meet or exceed the specifically named code or standard, it is the Contractor's responsibility to provide materials and workmanship which meet or exceed the specifically named code or standard.
- e.     It is also the Contractor's responsibility, when so required by the Contract Documents or by written request from the Architect/ Engineer, to deliver to the Architect/Engineer all required proof that the materials or workmanship, or both, meet or exceed the requirements of the specifically named code or standard. Such proof shall be in the form requested in writing by the Architect/Engineer, and generally will be required to be copies of a certified report of tests conducted by a testing agency approved for that purpose by the Architect/Engineer.

2.     Related work described elsewhere: Specific naming of codes or standards occurs on the Drawings and in other Sections of these Specifications.

B.     Quality Assurance

1.     Familiarity with Pertinent Codes and Standards: In procuring all items used in this Work, it is the Contractor's responsibility to verify the detailed requirements of the specifically named codes

and standards and to verify that the items procured for use in this Work meet or exceed the specified requirements.

2. Rejection of Noncomplying Items: The Architect/Engineer reserves the right to reject items incorporated into the Work which fail to meet the specified minimum requirements. The Architect/Engineer further reserves the right, and without prejudice to other recourse the Architect/Engineer may take, to accept noncomplying items subject to an adjustment in the Contract Amount as approved by the Architect/Engineer and the Owner.
3. Applicable Standards listed in these Specifications include, but are not necessarily limited to, standards promulgated by the following agencies and organizations:

AASHTO	=	American Association of State Highway and Transportation Officials, 341 National Press Building, Washington, D.C. 20004.
ACI	=	American Concrete Institute, Box 19150, Redford Station, Detroit, MI 48129.
AISC	=	American Institute of Steel Construction, Inc., 1221 Avenue of the Americas, New York, NY 10020.
ANSI	=	American National Standards Institute (successor to USASI and ASA), 1430 Broadway, New York, NY 10018.
APA	=	American Plywood Association.
ASCE	=	American Society of Civil Engineering
ASTM	=	American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.
AWS	=	American Welding Society, Inc., 2501 N.W. 7th Street, Miami, FL 33125.
AWWA	=	American Water Works Association, Inc., 6666 West Quincy Avenue, Denver, CO 80235.
CRSI	=	Concrete Reinforcing Steel Institute, 228 North LaSalle Street, Chicago, IL 60610.
ECC	=	Energy Conservation Code, Rule 13D-10, and Section 255.251, Florida Statutes, Florida Energy Conservation Act of 1974.

ELEVATORS = *FBC-B* Chapter 30, Chapter 11, and Chapter 7

*DBPR* Chapter 399 FS

*Florida Administrative Code* Section 61C-5

Comply with ASME A17.2.1, including ASME A17.2.1a, Addenda and ASME A17.2.1b, Addenda.

Comply with National Fire Protection Association, NFPA-70, National Electrical Code, 2014 edition.

Comply with the Uniform Fire Safety Standards for Elevators, Chapter 4A-47, Florida Administrative Code

*Safety Code for Elevators and Escalators* ASME

And those codes referenced therein.

FBC-B = Florida Building Code-Building, 2017 edition

FBC-E = Florida Building Code-Existing, 2017 edition

FBC-A = Florida Building Code- Accessibility, 2017 edition

FBC-P = Florida Building Code-Plumbing, 2017 edition

FBC-M = Florida Building Code-Mechanical, 2017 edition

FBC-FG = Florida Building Code-Fuel Gas, 2017 edition

FBC-EC = Florida Building Code-Energy Conservation, 2017 edition

FGMA = Flat Glass Marketing Association, 3310 Harrison, Topeka, KS 66611.

FM = Factory Mutual

GC = Glass Code, Chapter 553 Florida Statutes, Part III.

NAAMM = National Association of Architectural Metal Manufacturers, 1033 South Boulevard, Oak Park, IL 60302.



NEC	=	<i>National Electrical Code</i> (see NFPA), NFPA 70 - local adopted edition.
NEMA	=	National Electrical Manufacturers Association, 155 East 44th Street, New York, NY 10017.
NFPA	=	National Fire Protection Association, 470 Atlantic Avenue, Boston, Massachusetts, 02210, NFPA 101, <i>Life Safety Code</i> , local adopted edition, and NFPA 1 the <i>Fire Prevention Code</i> , local adopted edition.
SDI	=	Steel Deck Institute, 135 Addison Avenue, Elmhurst, IL 60125.
SSPC	=	Steel Structures Painting Council, 4400 5th Avenue, Pittsburgh, PA 15213.
TCA	=	Tile Council of America, Inc., Post Office Box 326, Princeton, NJ 08540.
UL	=	Underwriters' Laboratories, Inc., 207 East Ohio Street, Chicago, IL 60600.

#### FED SPECS AND FED STANDARDS:

Specifications Sales (3FRI), Bldg. 197, Washington Navy Yard, General Services Administration, Washington, D.C. 20402.

#### MIL-SPECS:

Military Specifications, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

#### OTHER:

- Chapter 10D-28, Florida Administrative Code (FAC), Hospital Licensure
- Chapter 10D-38, Florida Administrative Code (FAC), Intermediate Care Facilities for the Developmentally Disabled
- Chapter 64E-6 (formerly 10D-6), Florida Administrative Code (FAC), Standards for On Site Sewage Treatment and Disposal Systems
- Chapter 17-761, Florida Administrative Code (FAC), Underground Storage Tank Systems

- Chapter 61C-4, Florida Administrative Code (FAC), Public Food Services Establishments
- Chapter 509, Part I, Florida Statutes (FS), Lodging and Food Service Establishments
- Chapter 33-8, Florida Administrative Code (FAC), County and Municipal Detention Facilities
- Chapter 10D-7, Florida Administrative Code (FAC), State and Local Detention Facilities
- American Correctional Association (ACA) Standards, Revised 1996
- Chapter 6A-2, Florida Administrative Code (FAC), Educational Facilities, 1994 and adopted publication "State Requirements for Educational Facilities," 1994, and Supplemental 92-4, Part III, Section A.
- Chapter 10D-9, Florida Administrative Code (FAC), Plumbing
- Chapter 40C-4, Florida Administrative Code (FAC), Environmental Resource Permits: Surface Water Management Systems
- Chapter 65C-22, Florida Administrative Code (FAC), Child care Standards

**END OF SECTION**

## 01100 ALTERNATIVES

### 1. GENERAL

#### A. Description

1. Work included: Provide alternative bid proposals as described in this Section and/or on the Drawings.
2. Related Work:
  - a. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
  - b. Some of the items mentioned in this Section are described further in pertinent other Sections of these Specifications.
  - c. Work completed under this section shall comply with sustainability requirements specified under Section **01000 SCOPE OF THE WORK** and **01000 - APPENDIX, SUSTAINABILITY CHECKLIST**.
3. Procedures:
  - a. Provide alternative bids to be added to or deducted from the amounts of the Base Bid if the corresponding change in scope is accepted by the Owner.
  - b. Include within the alternative bid prices all costs, including materials, installations, and fees.
  - c. Show the proposed alternative amounts opposite their proper description on the Bid Form.
  - d. Upon Owner's acceptance of any proposed alternative(s), provide or deduct the said work and their related costs.

#### B. Specific Alternatives

For specific alternative descriptions and order of bidding, see Drawings and/or Non-Technical Specifications.

**END OF SECTION**

1. GENERAL:

- A. Requests for information (aka - RFI's) may be on the General Contractor's own form, but shall include the following minimum information:
1. Contractor Info: (company name, address, phone and email)
  2. From: (person's name)
  3. To: (company Architect or Engineer/Consultant)
  4. Attn: (Architect or Engineer/Consultant's name)
  5. Copies to: (lines for names)
  6. Project Number: (Owner's number)
  7. Project Number: (Architect's number)
  8. Project Number: (Contractor's number)
  9. Project Name:
  10. Project Address:
  11. Contractor PM: (name)
  12. Superintendent: (name)
  13. RFI #: (Number sequentially in order that electronic files will sort in order).
  14. RFI Name/Subject:
  15. Date Issued: (In order that electronic files will sort in chronological order, date files as yy\_mmdd [i.e. 15\_0823 = 23rd of August 2015]).
  16. Date Response (☐ Required / ☐ Requested):
  17. RFI will result in:

Cost Change	<input type="checkbox"/> Yes <input type="checkbox"/> No
Time Change	<input type="checkbox"/> Yes <input type="checkbox"/> No
No cost change	<input type="checkbox"/>
No time change	<input type="checkbox"/>
Not known at this time	<input type="checkbox"/>
  18. Reference spec number/paragraph and or drawing sheet number, detail number, etc:
  19. Reason: ☐ RFI, or ☐ Proposed Design Modification
  20. REQUEST (question):
  21. PROPOSED SOLUTION (If Applicable): with signature and date to be signed by Contractor PM or Superintendent
    - a. Signature and Date area
  22. RESPONSE with signature and date to be signed by Architect
    - a. Signature and Date area

- b. Note: This reply is not an authorization to proceed with work involving additional cost, time or both. If any response requires a change to the Contract Documents, a Change Order (CO), Construction Change Directive (CCD), or an Order for Minor Changes in the Work [aka Field Order (FO) or (MCW)], it must be executed in accordance with the Contract Documents.

## 2. PRODUCTS

- A. There are no products required for this Section.

## 3. EXECUTION

- A. Submit Copy of Proposed Form for Architect's Approval prior to Issuing RFI's.
- B. RFI's should only be issued by the Contractor when information is either missing from the Construction Documents or is ambiguous. RFI should be submitted only after the Construction Documents and field conditions have been thoroughly reviewed by the Contractor.

1. **The Contractor may, after exercising due diligence to locate required information, request from the Consultant clarification or interpretation of the requirements of the Construction Documents. The Consultant shall, with reasonable promptness, respond to the Contractor's request for clarification or interpretation. However, if the information requested by the Contractor is apparent from field observations, is contained in the Contract Documents or is reasonably inferable from them, the Contractor shall be responsible to the Client for all reasonable costs charged by the Consultant to the Client for the Additional Services required to provide such information.**

**END OF SECTION**

01340     SUBMITTALS AND SUBSTITUTIONS

1.    GENERAL

A.    Description

1.    Work Included: Make submittals required by the Contract Documents, and revise and resubmit as necessary to establish compliance with the specified requirements.
2.    Related Work
  - a.    Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
  - b.    Individual requirements for submittals also may be described in pertinent Sections of these Specifications.
3.    Work Not Included
  - a.    **UNREQUIRED SUBMITTALS WILL NOT BE REVIEWED BY THE ARCHITECT/ENGINEER.**
  - b.    The Contractor may require his subcontractors to provide drawings, setting diagrams, and similar information to help coordinate the Work, but such data shall remain between the Contractor and his subcontractors and will not be reviewed by the Architect/Engineer.

B.    Quality Assurance

1.    Coordination of Submittals
  - a.    Prior to each submittal, carefully review and coordinate all aspects of each item being submitted.
  - b.    Verify that each item and the submittal for it conform in all respects with the specified requirements.

c. **The Contractor's signature, date and stamped approval to each submittal, shall certify that this coordination has been performed.**

i. **The architect will return all submittals not properly reviewed and stamped by the Contractor.**

2. Substitutions

a. The Contract is based on the standards of quality established in the Contract Documents. Substitutions will be considered only when submitted with required data within 45 calendar days after award of the Contract. **IF SUBSTITUTIONS ARE PROPOSED, CONTRACTOR SHALL FURNISH INFORMATION STATING:**

i. **EVIDENCE THAT THE PROPOSED ITEM IS CONSIDERED EQUIVALENT.**

ii. **ONE (1) COPY OF ORIGINAL ITEM FOR COMPARISON.**

iii. **WHAT BENEFITS THERE ARE TO THE OWNER, INCLUDING BUT NOT LIMITED TO:**

1. **A BETTER PRODUCT FOR NO ADDITIONAL COST.**

2. **SAVINGS THAT CAN BE ACHIEVED FOR THE OWNER (SUBMITTAL MUST BE ACCOMPANIED BY A CHANGE ORDER PROPOSAL SHOWING DECREASED COST TO OWNER).**

3. **PRODUCT DURABILITY**

4. **PRODUCT AVAILABILITY:**

a. **ORDERING TIME WOULD NOT DELAY THE PROJECT IF THERE ARE DELAYS WITH**



**THE ORIGINAL SPECIFIED  
ITEM.**

- b. Do not substitute materials, equipment, or methods unless such substitution has been specifically approved in writing for this Work by the Architect/Engineer.
- 3. "Or Equivalent":
  - a. Where the phrase "or equivalent" or "or equivalent as approved by the Architect/Engineer," occurs in the Contract Documents, do not assume that the materials, equipment, or methods will be approved as equivalent unless the item has been specifically so approved for this Work by the Architect/Engineer.
  - b. The decision of the Architect/Engineer shall be final.

**C. Submittals**

- 1. Make submittals of Shop Drawings, Samples, substitution requests, and other items in accordance with the provisions of this Section, and appropriate Sections of the non-technical and technical specifications.

**2. PRODUCTS**

**A. Manufacturers Literature / Product Data**

- 1. Where contents of submitted literature from manufacturers include data not pertinent to the submittal, clearly show which portions of the contents are being submitted for review.
- 2. Submit the number of copies which are required to be returned, plus three (3) copies which will be retained by the Architect/Engineer and the Owner.

**B. Shop Drawings**

- 1. Scale and Measurements: Make Shop Drawings accurately to a scale sufficiently large to show all pertinent aspects of the item and its method of connection to the Work.

**SECTION-01340-3**

2. Submittals: Comply with pertinent Sections of the non-technical and technical specifications regarding submittal of Shop Drawings.

#### C. Samples

1. Provide Sample or Samples identical to the precise article proposed to be provided. Identify as described under "Identification of Submittals" below.
2. Number of Samples Required
  - a. Unless otherwise specified, submit Samples in the quantity which is required to be returned, plus two (2) which will be retained by the Architect/Engineer and the Owner.
  - b. By prearrangement in specific cases, a single Sample may be submitted for review and, when approved, be installed in the Work at a location agreed upon by the Architect/Engineer.

#### D. Colors and Patterns

1. Unless the precise color and pattern is specifically called out in the Contract Documents, and whenever a choice of color or pattern is available in the specified products, submit accurate color and pattern charts to the Architect/Engineer for selection.

### 3. EXECUTION

#### A. Identification of Submittals

1. Consecutively number all submittals according to CSI Section number. (Number sequentially in order that electronic files will sort in order).

EXAMPLE:

08410.01 - Aluminum Entrances & Storefront - Product Data

08410.02 - Aluminum Entrances & Storefront – Shop drawings

- a. When material is resubmitted for any reason, transmit under a new letter of transmittal and with a new transmittal number.

### SECTION-01340-4

- drawings
- EXAMPLE:
- 08410.02-R1 - Aluminum Entrances & Storefront – Shop
- b. On resubmittals, cite the original submittal number for reference.
  - c. The ENTIRE re-submittal MUST be resubmitted in it's entirety. Individuatld sheets will be returned.
- 2. Accompany each submittal with a letter of transmittal showing all information required for identification and checking.
  - 3. On at least the first page of each submittal, and elsewhere as required for positive identification, show the submittal number in which the item was included.
  - 4. Maintain an accurate submittal log for the duration of the Work, showing current status of all submittals at all times. Make the submittal log available to the Architect/Engineer for his review upon request.
- B. Grouping of Submittals
- 1. Unless otherwise specified, make submittals in groups containing all associated items to assure that information is available for checking each item when it is received.
    - a. Partial submittals may be rejected as not complying with the provisions of the Contract.
    - b. The Contractor may be held liable for delays so occasioned.
- C. Timing of Submittals
- 1. Make submittals far enough in advance of scheduled dates for installation to provide time required for reviews, for securing necessary approvals, for possible revisions and resubmittals, and for placing orders and securing delivery.
  - 2. In scheduling, allow at least 10 working days for review by the Architect/Engineer following his receipt of the submittal.
- D. Architect/Engineer's Review

SECTION-01340-5

1. Review by the Architect/Engineer does not relieve the Contractor from responsibility for errors which may exist in the submitted data.
2. Revisions
  - a. Make revisions required by the Architect/Engineer.
  - b. If the Contractor considers any required revision to be a change, he shall so notify the Architect/Engineer as provided for in Paragraph 12.3 of the General Conditions.
  - c. Make only those revisions directed or approved by the Architect/ Engineer.

**END OF SECTION**

**SECTION-01340-6**

## 01410     TESTING LABORATORY

### 1.     GENERAL

#### A.     Description

1.     Work included:
  - a.     Provide other testing and inspecting as specified to be furnished by the Contractor in this section and/or elsewhere in these Specifications as required for determining moisture content in existing roof insulation.

#### B.     Quality Assurance

1.     Qualifications of testing laboratory: The testing laboratory will be qualified to the Architect/Engineer's approval in accordance with ASTM E329.
2.     Codes and Standards: Testing, when required will be in accordance with pertinent codes and regulations and with selected standards of the American Society for Testing and Materials.
3.     Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this section.

#### C.     Product Handling

Promptly process and distribute required copies of test reports and related instructions to ensure necessary retesting and replacement of materials with the least possible delay in the progress of the work.

### 2.     CODE COMPLIANCE TESTING

Inspection and tests required by codes or ordinances, or by a plan approval authority, and which are made by legally constituted authority, shall be the responsibility of and shall be paid for by the Contractor, unless otherwise provided in the Contract Documents.

**END OF SECTION**

01520     CONSTRUCTION AIDS

1. GENERAL

- A. Conditions of the Contract and Division 1 apply.
- B. Work includes:
  - 1. Furnish, install, and maintain required construction aids, and remove on completion of work.
- C. Comply with UF Department of Environmental Health and Safety, applicable federal, state, and local codes and regulations.
- D. Maintain all facilities and equipment in a first-class condition.

2. PRODUCTS

- A. Products may be new or used, suitable for the intended purpose.
- B. Construction aids and equipment: scaffolds, staging, ladders, stairs, ramps, runways, platforms, railings, hoists, cranes, chutes, and other facilities and equipment.

3. EXECUTION

- A. Review site conditions and factors which affect construction procedures and construction aids including adjacent properties and public facilities which may be affected by execution of the work.
- B. Comply with applicable requirements specified in other Sections.
- C. Relocate construction aids as required by progress of construction, by storage or work requirements, and to accommodate legitimate requirements of Owner and other Contractors employed at the site.
- D. Completely remove construction aids upon completion of work.
- E. Repair damage caused by installation and use of construction aids.

**END OF SECTION**

01530     BARRIERS

1. GENERAL

- A. Conditions of the Contract and Division 1 apply.
- B. Furnish, install, and maintain suitable barriers as required to prevent public and unauthorized persons entry to the work and construction staging areas and as required to protect existing facilities, landscaping site improvements, and private property from damage caused by construction activities; remove when no longer needed or at completion of work. Barriers should be used to isolate the ground beneath the roof areas being worked on as well as work equipment including asphalt kettles, etc. The Contractor shall as much as practical limit the sizes of these areas and relocate the barriers as the work progresses.
- C. Comply with applicable federal, state, and local codes and regulations.
- D. Comply with UF Department of Environmental Health and Safety.

2. PRODUCTS

- A. Products may be new or used, suitable for the intended purpose.

3. EXECUTION

- A. Install barriers in a neat and reasonably uniform appearance.
- B. Maintain barriers during the entire construction period.
- C. Relocate barriers as required by progress of construction.
- D. Removal
  - 1. Completely remove barricades, including their foundations, when construction has progressed to the point that they are no longer needed and when approved by the Project Architect/Engineer.
  - 2. Clean and repair damage caused by the installation of barriers.

**END OF SECTION**



01600     MATERIAL AND EQUIPMENT

1.     GENERAL

A.     Conditions of the Contract and Division 1 apply.

B.     Manufacturer's Instructions

1.     When the Contract Documents require that installation of work shall comply with manufacturer's printed instructions, obtain and distribute copies of such instructions to parties involved in the installation including one (1) copy to the Project Architect/Engineer.

a.     Maintain one (1) set of complete instructions at the job site during installation and until completion.

2.     Perform work in accordance with manufacturer's instructions. Do not omit preparatory steps or installation procedures unless specifically modified or exempted by Contract Documents.

a.     Should job conditions or specified requirements conflict with manufacturer's instructions, consult with Project Architect/Engineer for clarification.

b.     Do not proceed with work without clear instructions.

C.     Transportation and Handling

1.     Arrange deliveries of products in accordance with construction schedules; coordinate to avoid conflict with work and conditions at the site.

a.     Deliver products in undamaged condition, in manufacturer's original containers of packaging, with identifying labels intact and legible.

b.     Immediately on delivery, inspect shipments to assure compliance with requirements of Contract Documents and approved submittals, and that products are properly protected and undamaged.

2.     Provide equipment and personnel to handle products by methods to prevent soiling or damage to products or packaging.

#### D. Packaging

1. Deliver products to the job site in their manufacturer's original container, with labels intact and legible.
  - a. Maintain packaged materials with seals unbroken and labels intact until time of use.
  - b. Promptly remove damaged material and unsuitable items from the job site, and promptly replace with material meeting the specified requirements, at no additional cost to the Owner.
2. The Architect/Engineer may reject as non-complying such material and products that do not bear identification satisfactory to the Architect/ Engineer as to manufacturer, grade, quality, and other pertinent information.

#### E. Storage and Protection

1. Store products in accordance with manufacturer's instructions, with seals and labels intact and legible.
  - a. Store products subject to damage by elements in weathertight enclosure.
  - b. Maintain temperature and humidity within the range required by manufacturer's instructions.
2. Exterior Storage
  - a. Store fabricated products above the ground on blocking or skids; prevent soiling or staining. Cover products which are subject to deterioration with impervious sheet coverings, and provide adequate ventilation to avoid condensation.
  - b. Store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter.
3. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored products to

assure that products are maintained under specific conditions and free from damage or deterioration.

F. Protection After Installation

1. Provide substantial coverings as necessary to protect installed products from damage from traffic and subsequent construction operations. Remove when no longer needed.

G. Repairs and Replacements

1. In event of damage, promptly make replacements and repairs to the approval of the Architect/Engineer and at no additional cost to the Owner.
2. Additional time required to secure replacements and to make repairs will not be considered by the Architect/Engineer to justify an extension in the Contract Time of Completion.

**END OF SECTION**

01640      PRODUCT HANDLING

1.      GENERAL

A.      Description

1.      Work included: Protect products scheduled for use in the Work by means including, but not necessarily limited to, those described in this Section.
2.      Related work:
  - a.      Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
  - b.      Additional procedures also may be prescribed in other Sections of these Specifications.

B.      Quality Assurance

1.      Include within the Contractor's quality assurance program such procedures as are required to assure full protection of work and materials.

C.      Manufacturer's Recommendations

1.      Except as otherwise approved by the Architect/Engineer, determine and comply with manufacturer's recommendations on product handling, storage, and protection.

D.      Packaging

1.      Deliver products to the job site in their manufacturer's original container, with labels intact and legible.
  - a.      Maintain packaged materials with seals unbroken and labels intact until time of use.
  - b.      Promptly remove damaged material and unsuitable items from the job site, and promptly replace with material meeting the specified requirements, at no additional cost to the Owner.

2. The Architect/Engineer may reject as non-complying such material and products that do not bear identification satisfactory to the Architect/ Engineer as to manufacturer, grade, quality, and other pertinent information.

E. Protection

1. Protect finished surfaces, including jambs and soffits of openings used as passageways, through which equipment and materials are handled.
2. Provide protection for paving, walkways and finished floor surfaces in traffic areas prior to allowing equipment or materials to be moved over such surfaces.
3. Maintain finished surfaces clean, unmarred, and suitably protected until accepted by the Owner.

F. Repairs and Replacements

1. In event of damage, promptly make replacements and repairs to the approval of the Architect/Engineer and at no additional cost to the Owner.
2. Additional time required to secure replacements and to make repairs will not be considered by the Architect/Engineer to justify an extension in the Contract Time of Completion.

**END OF SECTION**

SECTION-01640-2

## 01710 CLEANING

### 1. GENERAL

#### A. Description

1. Work included: Throughout the construction period, maintain the building site in a standard of cleanliness as described in this Section.
2. Related work described elsewhere: In addition to standards described in this Section, comply with all requirements for cleaning up as described in various other Sections in these Specifications.

#### B. Quality Assurance

1. Inspection: Conduct daily inspection, and more often if necessary, to verify that requirements of cleanliness are being met.
2. Codes and standards: In addition to the standards described in this Section, comply with all pertinent requirements of governmental agencies having jurisdiction.

### 2. PRODUCTS

#### A. Cleaning Materials and Equipment

Provide all required personnel, equipment, and materials needed to maintain the specified standards of cleanliness.

#### B. Compatibility

Use only the cleaning materials and equipment which are compatible with the surface being cleaned, as recommended by the manufacturer of the material or as provided by the Architect/Engineer.

### 3. EXECUTION

#### A. Progress Cleaning

1. General

- a. Retain all stored items in an orderly arrangement allowing maximum access, not impeding drainage or traffic, and providing the required protection of materials.
- b. Do not allow the accumulation of scrap, debris, waste material, and other items not required for construction of this Work.
- c. At least once a day, and more often if necessary, completely remove all scrap, debris, and waste material from the job site. "Clean" shall be interpreted as meaning free from dust and other material capable of being removed by use of reasonable effort and handheld broom
- d. Provide adequate storage for all items awaiting removal from the job site, observing all requirements for fire protection and protection of the ecology.
- e. As required preparatory to installation of succeeding materials, clean the structures or pertinent portions thereof to the degree of cleanliness recommended by the manufacturer of the succeeding material, using all equipment and materials required to achieve the required cleanliness.
- f. Following the installation of finish floor materials, clean the finish floor daily (and more often if necessary) at all times while work is being performed in the space in which finish materials have been installed. "Clean", for the purpose of this subparagraph, shall be interpreted as meaning free from all foreign material which, in the opinion of the Architect/Engineer, may be injurious to the finish floor material.

B. Final Cleaning

- 1. Definition: Except otherwise specifically provided, "clean" (for the purpose of this Article) shall be interpreted as meaning the level of cleanliness generally provided by skilled cleaners using commercial quality building maintenance equipment and materials.

2. General: Prior to completion of the Work, remove from the job site all tools, surplus materials equipment, scrap, debris, and waste. Conduct final progress cleaning as described in Article 3.A. above.
  - a. Interior: Visually inspect all interior surfaces and remove all traces of soil, waste material, smudges, and other foreign matter. Remove all traces of splashed materials from adjacent surfaces. Remove all paint droppings, spots, stains, and dirt from finished surfaces. Use only the specified cleaning materials and equipment.
  - b. Polished surfaces: To all surfaces requiring the routine application of buffed polish, apply the polish recommended by the manufacturer of the material being polished.
  - c. Timing: Schedule final cleaning as approved by the Architect/Engineer to enable the Owner to accept a completely clean project.

C. Cleaning during Owner's Occupancy

Should the Owner occupy the Work or any portion thereof prior to its completion by the Contractor and acceptance by the Owner, responsibilities for interim and final cleaning of the occupied spaces shall be as determined by the Architect/Engineer in accordance with the General Conditions of the Contract.

**END OF SECTION**



01 88 13     CONSTRUCTION TOLERANCES

1.     GENERAL:

- A.     In the case of any conflicts or discrepancies among the codes, laws, standards and guidelines compared to the drawings:
  - 1.     Upon discovery and prior to construction (whichever comes first), Contractor shall immediately report (via RFI) to the Architect such conflict or discrepancy.
  - 2.     Accessibly “code” compliance will generally overrule a “guideline” or a “standard”, but confirm with the Architect by submitting an RFI.
- B.     Unless specified in another section, comply with the following general construction tolerances.
  - 1.     Asphalt Paving (except for Accessible parking spaces, access aisles, Curb Ramps and other similar areas regulated by ADAAG, FBC-A or UFAS):
    - a.     Standard: +/- 1/8 inch in 6 feet.
    - b.     Reference: FDOT Standard Specifications for Road and Bridge Construction
  - 2.     Concrete Paving:
    - a.     Standard: +/- 1/4 inch in 10 feet for drives, parking surfaces, sidewalks and other site paving.
    - b.     Reference: ACI 117-90.
  - 3.     Themed Paving: (and “like” hardened trails)
    - a.     Standard: 1/4 inch in 12 inches for patterned deformations. Joints or depressed patterns may be 1/2 inch deep where the upper 1/4 inch is beveled at no more than 1 unit vertical for every 2 units horizontal.
    - b.     Reference: ADAAG 4.5.2
  - 4.     Interior Concrete Slabs for Flatness and Straightness:
    - a.     Standard: Bull float slab is +/- 1/2" in 10 feet.
    - b.     Reference: ACI 117-90 and ASTM E1155-87
  - 5.     Cast-in-Place Concrete Walls:
    - a.     Standard: Plumb is 1/4 inch in 10 feet.
    - b.     Reference: ACI 117-90

SECTION-01 88 13 - 1

6. Concrete Masonry Unit and Masonry Construction:
  - a. Standard: 1/4 inch in 10 feet vertical or horizontal.
  - b. Reference: ACI 117-90
7. Brick Wall Construction:
  - a. Standard: 1/4 inch in 10 feet vertical or horizontal.
  - b. Reference: ACI 117-90
8. Granite and Marble Installation:
  - a. Standard: 1/4 inch in 10 feet vertical or horizontal.
  - b. Reference: *Dimension Stone Design Manual*, Marble Institute of America, Inc.
9. Limestone Installation:
  - a. Standard: 1/4 inch in 10 feet vertical or horizontal
  - b. Reference: Determined by Architect.
10. Slate Tile Installation for Flooring or Walls:
  - a. Standard: 1/4 inch in 10 feet vertical or horizontal
  - b. Reference: Determined by Architect.
11. Floor and Wall Tile:
  - a. Standard: 1/4 inch in 8 feet for wall or flooring. This does not apply to thresholds.
  - b. Reference: ANSI A108.1, A108.2 and A108.5.
12. Terrazzo Flooring:
  - a. Standard: 1/4 inch in 10 feet
  - b. Reference: Terrazzo Information Guide, National Terrazzo and Mosaic Association, 1993.
13. Wood Flooring:
  - a. Standard: 1/4 inch in 10 feet
  - b. Reference: ANSI/HPMA LHF, 1982.
14. Other Stone Installations:
  - a. Standard: 1/4 inch in 10 feet
  - b. Reference: *Dimension Stone Design Manual*, Marble Institute of America, Inc.
15. Cabinet and Counter Tops:
  - a. Standard: 1) 1/4 inch in 12 feet out-of-parallel with the floor

SECTION-01 88 13 - 2

- 2) 1/4 inch in 8 feet for flatness of counter top
- b. Reference: *Quality Standards for the Professional Remodeler*, National Association of Home Builders, Remodelers Council and *Architectural Woodwork Quality Standards*, AWI.

- 16. Storefront Installations:
  - a. Standard: +/- 1/8 inch in 12 feet vertically
  - b. Reference: *Aluminum Storefront and entrance Manual*, American Architectural Manufacturer's Association.
- 17. Framing for Gypsum Wallboard:
  - a. Standard: 1/8 inch in 10 feet vertical or horizontal
  - b. Reference: GA-216
- 18. Wallboard Partitions, Ceilings and Trim:
  - a. Standard: 1/4 inch in 10 feet
  - b. Reference: ANSI A108.11 and GA-216
- 19. Lath and Plaster:
  - a. Standard: 1/4 inch in 10 feet
  - b. Reference: ASTM C296
- 20. Doors and Frames: Square and Plumb
  - a. Standard: Numerous standards for door and frame flatness, warp, plumbness, squareness, straightness, alignment, clearance, etc.
  - b. Reference: *WDMA I.S. 1A, Industry Specification for Architectural Wood Flush Doors*, Window and Door Manufacturing Association (WDMA) and *Manufacturing Tolerances for Standard Steel Door and Frames*, Steel Door Institute (SDI).

C. Comply with the following Accessibility Construction tolerances:

All references are:

Florida Building Code, Building, Chapter 11, which references Florida Building Code, Accessibility which upon opening the binder, the title page states "2012 FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION, ADOPTED PURSUANT TO SECTION 553.503, FLORIDA STATUTES, BASED ON THE 2010 ADA STANDARD FOR ACCESSIBLE DESIGN"

(herein referred to as "FBC-A");

and/or:

Uniform Federal Accessibility Standards (UFAS).

1. Doors: Clear Width
  - a. Standard: Zero (0) inch tolerance for all minimums. 32 inch Clear required - measured from stop at latch side to face of door when door is open 90 degrees. [Must use 36 inch wide door for both 1 3/8 inch and 1 3/4 inch thick doors. A 34 inch wide door does not quite provide 32 inches clear on a 1 3/8 inch door and not at all for a 1 3/4 inch door].
    - 1) Exception: 5/8 inch tolerance at latch side stop is allowed in Alterations.
  - b. Reference:
    - FBC-A, paragraph 404.2.3
    - UFAS, paragraph 4.13.5
    - 1) Reference: FBC-A, paragraph 404.2.3, Exception 1.
2. Doors: Maneuvering Clearances
  - a. Standard: Zero (0) inch tolerance for all minimums.
  - b. Reference:
    - FBC-A, paragraph 404.2.4.
    - UFAS, paragraph 4.13.6, and Figure 25
3. Doors: in Series
  - a. Standard: Zero (0) inch tolerance for all minimums.
  - b. Reference:
    - FBC-A, paragraph 404.2.6.
    - UFAS, paragraph 4.13.7.
4. Doors: Thresholds:
  - a. Standard: Zero (0) inch tolerance for all maximums.
  - b. Reference:
    - FBC-A, paragraph 404.2.5.
    - UFAS, paragraph 4.13.8.
5. Water Closets: Toilet and Bathing Rooms or Toilet Compartments (aka – stalls)
  - a. Standard: Zero (0) inch tolerance. (Therefore, design and construct with a margin for error).
  - b. Reference:
    - FBC-A, paragraph 603.2 and 604.2 and Figure 604.2.
    - UFAS, paragraph 4.17.2 and Figures 29 and 30.

6. Water Closets: Seat Height
  - a. Standard: Zero (0) inch tolerance outside of range. 17 inches to 19 inches from FFE to top of seat (Except single occupant/private office fixtures are not required to comply with 604.4 and Dwelling Units: 15 inches to 19 inches).
  - b. Reference:
    - FBC-A, paragraph 604.4.
    - UFAS, paragraph 4.16.3 and Figure 29(b).
    - UFAS, paragraph 4.34.5.2(2) - At Dwelling Units only.
7. Water Closets: Clear Floor Space / Offsets from Adjoining Fixtures
  - a. Standard: Zero (0) inch tolerance for minimum. (Therefore, design and construct with a margin for error).
  - b. Reference:
    - FBC-A, paragraph 604.3 and Figures 604.3.1 and 604.3.228.
    - UFAS, paragraph 4.16.2 and Figure 28.
    - UFAS, paragraph 4.34.5.2 and Figure 47(a) - At Dwelling Units only.
8. Grab Bars: Size and Heights
  - a. Standard: Zero (0) inch tolerance outside of range.
  - b. Reference:
    - FBC-A, paragraph 609, 604.5, 604.8.1.5, 604.8.2.3, 604.9.4, 607.4, 608.3, 608.3.2, 608.3.3 and Figures 604.5.1, 604.5.2, 607.4.1, 607.4.2, 608.3.1, 608.3.2, and 608.3.3.
    - UFAS, paragraph 4.16.4, 4.26 and Figures 29, 30, 34, 37, and 39.
9. Flush Controls:
  - a. Standard: Zero (0) inch tolerance outside of range.
  - b. Reference:
    - FBC-A, paragraph 604.6.
    - UFAS, paragraph 4.16.5.
10. Urinals: Height and Projection
  - a. Standard: Zero (0) inch tolerance outside of range.
  - b. Reference:
    - FBC-A, paragraph 605.2 and Figure 605.2
    - UFAS, paragraph 4.18.2.
11. Urinals: Clear Floor Space

- a. Standard: Zero (0) inch tolerance outside of range.
  - b. Reference:
    - FBC-A, paragraph 605.3 and 306 and Figures 305.5, 305.7.1, 306.2 and 306.3.
    - UFAS, paragraph 4.18.3.
12. Urinal: Flush Controls
- a. Standard: Zero (0) inch tolerance outside of range.
  - b. Reference:
    - FBC-A, paragraph 605.4.
    - UFAS, paragraph 4.18.4.
13. Lavatories: Height
- a. Standard: Zero (0) inch tolerance outside of range. (Except single occupant/private office fixtures are not required to comply with 604.3).
  - b. Reference:
    - FBC-A, paragraph 606.3.
    - UFAS, paragraph 4.19.2.
14. Operable Parts:
- a. Standard: Zero (0) inch tolerance outside of range.
  - b. Reference:
    - FBC-A, paragraph 309.
    - UFAS, paragraph 4.27.2.
15. Forward Reach: High, Over Obstruction, Low
- a. Standard: Zero (0) inch tolerance outside of range.
  - b. Reference:
    - FBC-A, paragraph 308.1 and Figures 308.2.1 and 308.2.2.
    - UFAS, paragraph 4.2.5
16. Side Reach: High, Over Obstruction, Low
- a. Standard: Zero (0) inch tolerance outside of range.
  - b. Reference:
    - FBC-A, paragraph 308.3 and Figures 308.3.1 and 308.3.2.
    - UFAS, paragraph 4.2.6.
17. Mirror Height:
- a. Standard: Zero (0) inch tolerance outside of range.
  - b. Reference:

FBC-A, paragraph 603.3.  
UFAS, paragraph 4.19.6.

18. Drinking Fountain:
  - a. Standard: Zero (0) inch tolerance outside of range.  
(Therefore, design and construct with a margin for error).
  - b. Reference:  
FBC-A, paragraph 602.4 and 602.7.  
UFAS, paragraph 4.15.2.
19. Ramps: Slope
  - a. Standard: Zero (0) inch tolerance outside of range.  
(Therefore, design and construct with a margin for error).
  - b. Reference:  
FBC-A, paragraph 405.2. (Table 405.2 allows steeper slopes for specific situations).  
UFAS, paragraph 11-4.8.1 and 11-4.8.2. (11-4.1.6(4)(a) allows steeper slopes for specific situations).
20. Ramps: Width
  - a. Standard: Zero (0) inch tolerance outside of range.  
(Therefore, design and construct with a margin for error).
  - b. Reference:  
FBC-A, paragraph 405.5 and 405.7 (+ 405.9.1 OR 405.9.2) and Figure 405.7 (+ 405.9.1 OR 405.9.2)  
UFAS, paragraph 4.8.3.
21. Ramps (and Stairs): Handrails - Height, gripping and clearances
  - a. Standard: Zero (0) inch tolerance outside of range. (Note regarding size: For round, steel pipe, must use 1 inch, 1-1/4 inch or 1-1/2 inch (nominal) diameter pipe with actual 1.315 inch OD, 1.66 inch OD, and 1.9 inch OD respectively; therefore, all comply).
  - b. Reference:  
FBC-A, paragraph 505 and Figures 505.4, 505.5, 505.6, 505.7.2, 505.10.1, 505.10.2 and 505.10.3.  
UFAS, paragraph 4.8.5 (4.9.4) and Figures 17, 19 and 39.
22. Ramps: Accessible Route - Cross Slope
  - a. Standard: Zero (0) inch tolerance. (Therefore, design and construct with a margin for error).

- b. Reference:
  - FBC-A, paragraph 405.3.
  - UFAS, paragraphs 4.3.7 and 4.8.6.

- C. Other Constructed Elements, which are not specifically regulated above, shall be permitted to have a construction tolerance of  $\pm 1/4"$ , unless in the opinion of the Architect or Engineer, such variation impedes access and intention for finish quality.

## 2. PRODUCTS

- A. There are no products required for this Section.

**END OF SECTION**



## 02070 SELECTIVE DEMOLITION

### 1. GENERAL

#### A. Description

1. Work included: Carefully demolish and/or remove from the site all material as shown on the Drawings and as necessary for a complete job.
2. Related work:
  - a. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications. Section 01070: Cutting and Patching.

#### B. Quality Assurance

1. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

#### C. Product Handling

1. Comply with pertinent provisions of Section 1.

### 2. PRODUCTS

(No products are required in this Section).

### 3. EXECUTION

#### A. Surface Conditions

1. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

#### B. Demolition

## SECTION-02070-1

1. By careful study of the Contract Documents and existing conditions, determine the location and extent of selective demolition to be performed.
2. In company of Architect/Engineer and Owner's representative, visit the site and verify the extent and location of selective demolition required.
  - a. Carefully identify limits of selective demolition.
  - b. Mark interface of adjacent surfaces as required to enable workers to also identify items to be removed and items to be left in place intact.
3. Prepare and follow an organized plan for demolition and removal of items.
  - a. Shut off, cap, and otherwise protect existing utility lines in accordance with the requirements of the public agency or utility having jurisdiction. The shutdown of utilities shall be coordinated with the Owner's representative. He/She shall be given 48 hours minimum advance notice of shutdown.
  - b. Completely remove items scheduled to be demolished and removed, leaving surfaces clean, dry, solid, and ready to receive new materials specified elsewhere.
  - c. Material scheduled to be relocated or to remain which is damaged during the demolition work shall be replaced by the Contractor at no additional cost to the Owner.
4. Demolished and/or removed material shall be considered to be the property of the Owner and shall be completely removed from the job site if requested by the Owner's representative.
  - a. All debris shall be removed from the building area in rubber tired carts and covered. Debris shall be wet down to prevent dust.
  - b. Contractor to have truck or dumpster on hand to receive debris promptly.

#### SECTION-02070-2

5. Equipment, fixtures, and trim removed will be considered property of the Owner and shall be dealt with in accordance with the direction of the Owner's representative.
6. Use means necessary to prevent dust becoming a nuisance to the public, to neighbors, and to other work being performed on or near the site.

C. Replacements

1. In the event of demolition of items not so scheduled to be demolished, promptly replace such items to the approval of the Architect/Engineer and at no additional cost to the Owner.

**END OF SECTION**

**SECTION-02070-3**

## **055133.13 VERTICAL METAL LADDERS**

### **PART 1: GENERAL**

#### **1.01 SUMMARY**

A. Aluminum Fixed Vertical Ladder including ladder, mounting brackets and related components.

B. Products Required, but Not Supplied Under This Section.

1. Required fasteners.

#### **1.02 SYSTEM DESCRIPTION**

A. The system is an aluminum ladder designed to be attached to a wall as indicated on the drawings.

#### **1.03 DELIVERY, STORAGE, AND HANDLING.**

A. Examine ladder when it arrives on site. Notify the carrier and manufacturer of any damage.

B. Store ladder until installation under roof, if possible; or, if stored outside, under a tarp or suitable cover.

#### **1.04 WARRANTY**

The unit carries a limited warranty of one (1) year against defective material and workmanship, covering parts only, no labor or freight. Defective parts, if deemed so by the manufacturer, will be replaced no charge, freight excluded, upon inspection at manufacturer's plant which warrants same.

#### **1.05 MAINTENANCE**

A. Under normal usage, the ladder shall require no preventive maintenance.

B. No "spare parts" shall be required.

## PART 2: PRODUCTS

### 2.01 MANUFACTURER

Provide equivalent to those manufactured by the following:

Precision Ladders, LLC, P. O. Box 2279, Morristown, Tennessee 37816.  
Phone: (800)225-7814. FAX: (423)586-2091.

O'Keeffe's  
[www.okeeffes.com](http://www.okeeffes.com)  
(888)653-3333

### 2.02 MATERIALS

#### A. LADDER

##### 1. Stringers (Siderail)

1.1 Aluminum channel. (6005-t5)

1.2 2 1/2" X 1 1/16" X 1/8".

1.3 A 1/8" molded polyurethane safety cap provided at top.

1.4 2 1/2" X 2" X 3" floor bracket if required.

##### 2. Treads

2.1 Extruded aluminum (6005-t5)

2.2 2 1/4" X 3/4" X 1/4".

2.3 Treads deeply serrated for safety.

##### 3. Mounting Bracket

3.1 8-1/2" X 4-1/2" X 3" X 1/4" aluminum angle.

#### B. WALK-THRU

2. 1" Aluminum square tube.
3. 4" X 4" X 1/4" aluminum mounting brackets.

#### C. FINISHES

1. Mill finish on aluminum ladder components

#### 3.01 EXECUTION

1. The ladder is completely fabricated ready for installation before shipment to the site.
2. All components shall be completely fabricated and ready for field assembly to the ladder before shipment to the site.
3. Install per the manufacturer's installation instructions.

**END OF SECTION**

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SECTION 07 54 19.11

PART 1 - GENERAL

1.1 SUMMARY

- A. Roofing System: Provide 80 mil guaranteed thick PVC top membrane adhered roofing system.
  - 1. Urethane Based Adhesive (Feltback) Sarnacol AD.
  - 2. System shall be as specified herein or equivalent as manufactured by Carlisle Syntec Systems.
- B. Related Work: Include the following sections.
  - 1. Section 055133.13 - Vertical Metal Ladders
  - 2. 07624 – Flashing and Sheet Metal
  - 3. Section 07900 – Caulking and Sealants

1.2 REFERENCES

- A. Current Edition of: Identified reference requirements as put forth by the project specification.
  - 1. 2017 Florida Building Code, 6<sup>th</sup> edition
  - 2. International Building Code (IBC)
  - 3. American Society of Testing Materials (ASTM)
  - 4. National Roofing Contractors Association (NRCA)
  - 5. Single Ply Roofing Institute (SPRI)
  - 6. Roofing Manufacturer's Roofing Applicator Handbook
  - 7. Technical Bulletins

1.3 SUBMITTALS

- A. Literature: Copies of current relevant information pertaining to the primary components to be used in the roof system including but not limited to:
  - 1. Specifications
  - 2. Manufacturer - Roofing's Warranty
  - 3. Applicator's Warranty
  - 4. Product Data Sheets
  - 5. Material Safety Data Sheets
  - 6. FM/UL listings/approvals
  - 7. UL Environment validation of recycling claims
- B. Samples for Verification: Representative samples of primary components to be used in the roof system.
- C. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work, including:

1. Base flashings and membrane terminations.
2. Roof plan showing orientation of roof deck, orientation of roofing membrane, and walkways.
3. Ladder shop drawings

#### 1.4 QUALITY ASSURANCE

##### A. Roofing Manufacturer Qualifications:

1. Demonstrated performance history of producing PVC roof membranes no less, in duration of years, than the warranty duration specified.
2. Manufactured by membrane supplier and not private labeled.
3. Minimum of five years' experience recycling membranes at the end of their service life back into new membrane products. Provide a minimum of five reference projects.

##### B. Installer Qualifications:

1. A qualified firm that is authorized by Roofing Corporation - Roofing to install all work pertaining to product manufacturer's roof system and that is eligible to receive manufacturer's warranty.

##### C. Preinstallation Roofing Conference: Conduct conference at Project site.

1. Manufacturer's Roofing representative, Owner, Architect, Testing and Inspecting Agency representative, Roofing Installer, and installers whose work interfaces with or affects roofing, including installers of roof accessories and roof-mounted equipment.
2. Review methods and procedures related to roofing installation, including manufacturer's most current requirements.
3. Review base flashings, special roofing details and transitions, roof drainage, roof penetrations, equipment curbs, and condition of other construction that affects roofing system.
4. Review governing regulations and requirements for insurance and certificates.
5. Review temporary protection requirements for roofing system during and after installation.
6. Deviations from the project specifications or the approved shop drawings are not permitted without prior written approval by roofing manufacturer, the owner, the owner's representative, and the designer.

##### D. Fire Design:

1. Underwriters Laboratories, Inc. (Class C Assembly)

##### E. Wind Design:

1. System shall meet minimum requirements in accordance of ASCE 7 most recent edition.
2. Factory Mutual Research Corporation (FM) - Norwood, MA  
Class 1-90 (for high wind exposure)

##### F. Special Design:

1. Florida Building Code (FBC), 2017, 6<sup>th</sup> edition.

#### 1.5 DELIVERY, HANDLING, AND STORAGE

- ##### A.
1. Deliver roofing materials to project site in original containers with seals unbroken and labeled with product manufacturer's name or product brand name.



- B. Comply with most current product data sheet requirements when handling, storing, protecting, or installing roofing materials. Including but not limited to avoiding physical damage, deterioration by sunlight, excessive moisture, or other potentially damaging conditions.
- C. Store liquid materials in their original undamaged containers in a clean, dry, protected location; away from direct sunlight; within the temperature range noted on the product data sheet.
- D. Handle and store roofing materials and equipment in a manner to avoid permanent deflection of deck.

## 1.6 FIELD CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's most current requirements and warranty requirements.
- B. Material Compatibility: Roofing materials shall be compatible with one another and adjacent materials under conditions of service and application required and confirmed by roofing manufacturer.

## 1.7 WARRANTY

- A. Sika Corporation - Roofing Warranty: Sika warrants to the owner the specified warranty for the specified warranty period as long as the roofing is installed according to Sika's Technical instructions by a Sika Authorized Roofing Applicator. The warranty must be non-prorated and must not exclude coverage due to ponding water.

1. Warranty: MEMBRANE

2. Warranty Period: 20 years from date of substantial completion.

- B. Applicator's Warranty: Signed by installing applicator, covering the work of a System Warranty, including all components of roofing system installation such as membrane roofing, base flashing, roof insulation, fasteners, cover boards, vapor retarders, and walkway products, for the following warranty period:

1. Warranty Period: 5 years from date of substantial completion.

## 2. PRODUCTS

## 1.8 PERFORMANCE / DESIGN CRITERIA

- A. ASTM D4434: Type II
- B. NSF/ANSI Standard 347: Platinum
- C. Guarantee membrane thickness meets or exceeds specified thickness when tested according to ASTM D751

## 1.9 SIKA CORPORATION – ROOFING MATERIALS

- A. PVC Sheet:
  - 1. Thermoplastic membrane, fiberglass scrim reinforcement, with lacquer coating and factory applied 9 oz. felt backing

- B. PVC Sheet Thickness:
  - 1. Sarnafil G410, 80 mil (2.0 mm) guaranteed.
- C. PVC Sheet Exposed Face Color:
  - 1. EnergySmart White, initial solar reflectance of 0.83, emittance of 0.90, and solar reflective index (SRI) of 104.
- D. Membrane Attachment Component:
  - 1. Sarnacol AD Feltback Membrane (urethane based adhesive)
- E. Roof Board or Insulation Attachment Components: (As required to repair moisture damaged areas)
  - 1. Sarnacol AD Board Adhesive (urethane based adhesive)
- F. Roof Board: (As required to repair moisture damaged areas)
  - 1. Securock Gypsum-Fiber
- G. Flashing Materials:
  - 1. Wall/Curb Flashing:
    - a. Sarnaclad (PVC-coated sheet metal)
    - b. Sika Liquid Flashing SW & primer where indicated on drawings.
  - 2. Perimeter Edge Flashing:
    - a. Sarnaclad (PVC-coated sheet metal)
    - b. Edge Grip Fascia
      - 1) Retainer base plate, 0.05 inch aluminum in 10 ft. lengths
      - 2) Snap-on fascia cover, 0.063 inch aluminum in 10 ft. lengths
      - 3) Snap-on fascia cover finish, aluminum with natural mill finish
  - 3. Misc. Flashing Accessories:
    - a. Sarnacircles
    - b. Sarnacorners Inside
    - c. Sarnacorners Outside
    - d. Sarnastack Universal
    - e. Sarnastack Split
    - f. Open Post Flashing
    - g. Sarnareglet
    - h. Sarnacol 2170 adhesive
    - i. Sarnacol 2170 VC adhesive
    - j. Sarnafelt
    - k. Sarnadrain UFlow
    - l. G410 Coverstrip
- H. Miscellaneous Materials:
  - 1. Accessories:
    - a. Aluminum Tape

- b. Perimeter Warning Tape
- c. Perimeter Warning Membrane
- d. Seam Cleaner
- e. Sarnastop
- f. Sarnacord

2. Sealants and Pitch Pocket Fillers:

- a. Sikaflex-1a
- b. Sarnafiller
- c. Multi-Purpose Tape

3. PVC Welding Equipment:

- a. Sarnamatic
- b. Hand Welder

I. Walkway Protection:

- 1. Sarnatred-V

J. Nailers and Blocking:

- 1. Wood, #2 quality or better, Wolmanized or Osmose treated for fire and rot resistance.
- 2. Plywood, minimum 1/2 inch CDX (C side out).

## PART 2 - EXECUTION

### 2.1 EXAMINATION

A. Applicator shall verify that the work done under related sections meets the following conditions:

- 1. Roof drains and scuppers have been installed properly, or reconditioned, or replaced.
- 2. Roof curbs, nailers, equipment supports, vents and other roof penetrations are properly secured and prepared to receive new roofing materials.
- 3. All surfaces are smooth and free of dirt, debris and incompatible materials.
- 4. Verify that substrate is dry and free of moisture. Verify that any curing compounds that will impair adhesion of roofing components to roof deck have been removed.
- 5. All roof surfaces shall be free of water, ice and snow.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 2.2 PREPARATION

- A. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing installation according to roofing system manufacturer's most current requirements. Remove sharp projections.
- B. Prevent materials from entering and clogging roof drains and flashings and from spilling or migrating onto surfaces of other construction. Remove roof drain plugs when no work is taking place or when rain is forecast.

## 2.3 ROOFING INSTALLATION, GENERAL

- A. Install roofing system according to product manufacturer's most current requirements including but not limited to roofing applicator handbook, product data sheets, specifications, and or relevant technical bulletins.
- B. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at end of workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.
- C. For tie-in with existing roofing, install roofing and auxiliary materials to maintain weather tightness of transitions.

## 2.4 SARNATHERM INSULATION / ROOF BOARD INSTALLATION

- A. Remove and replace any moisture-laden insulation. Coordinate installing roofing system components so insulation or roof boards are not exposed to precipitation or other sources of moisture.
- B. Comply with product manufacturer's most current requirements for installing insulation or roof boards.
- C. Install tapered insulation to conform to existing roof slopes.
- D. Install insulation to achieve required thickness. Use at least 2 layers of insulation when the total insulation thickness exceeds 2.7 inches. Stagger joints in both directions at least 12 inches between layers.
  - 1. Where installing composite and non-composite insulation in two or more layers, install non-composite board insulation for bottom layer and intermediate layers, if applicable, and install composite board insulation for top layer.
- E. Trim insulation where necessary at roof drains so completed surface is smooth and does not restrict flow of water.
- F. Drains shall be properly sumped to allow membrane to sit flat without stretching or wrinkling.
- G. Fill gaps exceeding 1/4 inch with insulation. Cut and fit insulation within 1/4 inch of nailers, projections, and penetrations.
- H. Installation Method:
  - 1. Urethane Adhered: Install layer/s of insulation or roof board and secure by adhering to substrate by using Sarnacol Urethane Board Adhesive at the spacing rate and application method according to Sika and Owner's Representative/Designer.

## 2.5 SIKA ROOFING MEMBRANE INSTALLATION

- A. The surface of the insulation or substrate shall be inspected prior to installation of the Sarnafil roof membrane. The substrate shall be clean, dry, free from debris and smooth with no surface

roughness or contamination. Broken, delaminated, wet or damaged insulation boards shall be removed and replaced.

- B. Accurately align roofing, and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.
- C. Apply roofing with side laps shingled with slope of roof deck where possible.
- D. Make sure seam areas are free of debris, dirt, and dust, overlap membrane sheets, and hot-air weld side and end laps of roofing and sheet flashings according to manufacturer's most current requirements to ensure a watertight seam installation.
  - 1. Verify in-field weld strength of seams a minimum of twice daily, repair seam sample areas.
  - 2. Test lap edges with probe to verify seam weld continuity.
  - 3. If any tears or voids in lapped seams are found repair using appropriate approved technique.
- E. Adhered System:
  - 1. Urethane Based Adhesive (Feltback):
    - a) Dispense Sarnacol Urethane Feltback Adhesive onto approved substrate at spacing rate and application method according to Sika and Owner's Representative/Designer. Unroll feltback membrane into raised adhesive, do not allow adhesive to dry. Membrane sheet shall be pressed firmly in place with a minimum 100 lb steel membrane roller.

## 2.6 BASE / FIELD FLASHING INSTALLATION

- A. Install all membrane and preformed flashings according to roofing system manufacturer's most current requirements.
- B. Install membrane base flashing by applying bonding adhesive to substrate and underside of membrane flashing at required rate. Do not apply to seam area of flashing.
- C. Flash field penetrations and inside/outside corners with appropriate prefab flashing components or by approved custom in-field fabrication technique.
- D. Firmly roll membrane flashing into the adhesive. Hot-air weld side and end laps to ensure a watertight seam installation.
- E. Terminate and seal top of membrane flashings and mechanically anchor to substrate by approved Sika Corporation - Roofing detail.
- F. Spread continuous sealant bead leaving no gaps over deck drain flange at roof drains, and securely seal roofing in place with clamping ring.
- G. Precautions shall be taken to prevent odors and/or vapors from entering the building/structure, including but not limited to turning off and sealing air intake vents and other means of ingress for odors and/or vapors into the building/structure during product application and cure when installing Liquid Flashing,

## 2.7 WALKWAY INSTALLATION

- A. Sarnatred-V: Install walkway product in locations indicated, adhere (except edges) to deck sheet, and hot-air weld edges.

## 2.8 FIELD QUALITY CONTROL

- A. Arrange for roofing system manufacturer's technical personnel to inspect roofing installation upon completion.
- B. Repair or remove and replace components of roofing system that do not comply with specified requirements.
- C. Correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- D. Additional testing and inspecting, at Contractor's expense, will be performed to determine if replaced or additional work complies with specified requirements.

## 2.9 PROTECTION

- A. Protect new roofing system from damage and wear during construction period. Inspect new roofing for damage if used during construction

### END OF SECTION

### DISCLAIMER

All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s). Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at [usa.sarnafil.sika.com](http://usa.sarnafil.sika.com) or by calling 800-451-2504.

**Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Safety Data Sheet which are available online at [usa.sarnafil.sika.com](http://usa.sarnafil.sika.com) or by calling Sika's Technical Service Department at 800-451-2504. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Safety Data Sheet prior to product use.**

Sika warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf

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1460-25

life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor.

**NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

07624     FLASHING AND SHEET METAL (ALUMINUM)

1.     GENERAL

A.     Description

1.     Work included:

- a.     Provide all flashing and sheet aluminum not specifically described in other Sections of these Specifications but required to prevent penetration of water through exterior shell of the building.
- b.     Provide materials and labor for flashing vent stacks, equipment curbs, and flashing as illustrated in the Drawings.

2.     Definitions (as used in these documents):

- a.     Girth: Width of the unformed metal stock.

3.     Quality Assurance

- a.     Standards: Comply with standards specified in this Section.
- b.     **ALL metal work shall be fabricated and installed in accordance with SMACNA.**
- c.     Qualifications of Manufacturer: Products used in the work of this Section shall be produced by manufacturers regularly engaged in manufacture of similar items and with a history of successful production.
- d.     Qualifications of Installers: Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

B.     Product Handling

- 1.     Protection: Use all means necessary to protect materials of this Section before, during, and after installation and to protect installed work and materials of all other trades.



2. Replacements: In the event of damage, immediately make all repairs and replacements necessary to the approval of the Architect/Engineer and at no additional cost to the Owner.

## 2. PRODUCTS

### A. Design

1. Standard commercial items may be used for flashing, trim, and reglets, provided all such items meet or exceed the quality standards specified herein.
2. Quality Standards: In addition to complying with all pertinent codes and regulations, comply with all pertinent recommendations contained in "Architectural Sheet Metal Manual," current edition, of the Sheet Metal and Air Conditioning Contractors National Association (SMACNA).

### B. Materials and Thickness

1. Where sheet aluminum is required, and no thickness is indicated on the Drawings, provide the highest quality with a minimum thickness commensurate with the following standards, based on SMACNA.
2. Finish of all gutters, flashing and downspouts shall match that of metal roof panels, unless noted otherwise.
3. Minimum inside bend radius on flashings shall be 3T, and all edges shall have open hem for stiffness.
4. Unless shown otherwise on the drawings, the following gauges shall be used:  
  
.032" - all other miscellaneous flashing

### C. Aluminum

1. General: Sheet aluminum shall be a standard brand of sheet aluminum, equivalent to Reynolds.
2. Aluminum Sheets:

- a. All aluminum sheets shall meet ASTM B-209 with both coil and cut length sheets.
- b. Aluminum flashing shall be formed from sheet stock or extruded shapes and all clips and caps shall be at least Series 300 non-magnetic stainless steel.
- c. Color for flashing unexposed to view shall be mill finish. Any new flashing exposed view shall match existing. Colors for such shall be chosen by A/E from samples provided. Finishes shall be factory-applied with a 20-year guarantee against fading and chipping.

D. Nails, Rivets, and Fasteners

Use only aluminum rivets having rust-resistive coating, aluminum nails, and stainless steel screws and washers in connection with aluminum.

E. Joint Caulking

All joint caulking shall be clear silicone type. See Section 07900.

F. Other Materials

All other materials, not specifically described but required for a complete and proper installation of the work of this Section, shall be new, first quality of their respective kinds, and as selected by the Contractor subject to the approval of the Architect/Engineer.

3. EXECUTION

A. Inspection

Examine the areas and conditions under which work of this Section will be installed. Correct conditions detrimental to the proper and timely completion of the Work. Do not proceed until unsatisfactory conditions have been corrected.

B. Workmanship

1. General

- a. Form all sheet metal accurately and to the dimensions and shapes required, finishing all molded and broken surfaces with true, sharp, and straight lines and angles and, where intercepting other members, coping to an accurate fit, mechanically fastening securely and caulking water-tight with gutter caulk material.
  - b. Unless otherwise specifically permitted by the Architect/Engineer, turn all exposed edges back 1/2".
- 2. Expansion: Form, fabricate, and install all sheet metal so as to adequately provide for expansion and contraction in the finished work.
- 3. Weatherproofing:
  - a. Finish watertight and weathertight where so required.
  - b. Make all lock seam work flat and true to line.
  - c. Make all lock seams and lap seams, when sealing, at least 1/2" wide.
  - d. Where lap seams are not sealed, lap according to pitch but in no case less than 3".
  - e. Make all flat and lap seams in direction of flow.
- 4. Joints:
  - a. Join parts with rivets or sheet metal screws where necessary for strength or stiffness.
  - b. Provide suitable watertight expansion joints for all runs of more than 40' except where closer spacing is indicated on the Drawings or required for proper installation.
- 5. Nailing:
  - a. Whenever possible, secure metal by means of clips or cleats without nailing through the metal.

- b. In general, space all nails, rivets, and screws not more than 8" apart and, where exposed to the weather, use neoprene washers.
  - c. For nailing into wood, use ring shank aluminum roofing nails 1-1/4" long by 11 gauge.
  - d. For nailing into concrete, use drilled plugholes and plugs.
6. Cleaning: After installation, thoroughly wash with a mild cleaning solution or as recommended by flashing manufacturer.

C. Tests

Upon request of the Architect/Engineer, demonstrate by hose or standing water that all flashing and sheet metal is completely watertight.

**END OF SECTION**

SECTION-07624-5

## 07900 CAULKING AND SEALANTS

### 1. GENERAL

A. General Requirements: Applicable provisions of general conditions and special conditions govern work in this Section. The Contractor shall provide all items, articles, materials, operations, or methods listed, mentioned, or scheduled on the drawings or herein, including all labor, materials, equipment, and incidentals necessary and required for their completion. Caulking and sealants shall not be applied when the temperature is below 40 degrees F. Caulking and sealing work shall only be done by an applicator who is normally engaged in work of this nature.

B. Work Included: Furnish all labor and materials to complete all work shown, mentioned or noted on the drawings, specified herein, or both to include, but not necessarily limited to the following.

1. Caulking of all joints exposed on the exterior of the building in the area of the work shown on these documents.

2. Caulking all flashing joints indicated in the area of the work on these documents.

### C. Quality Assurance

#### 1. Applicator

a. Qualifications: Shall have a minimum of two (2) years of experience installing sealants.

b. Identification: Shall be listed on bid form with major subcontractors.

c. Compatibility with Substrate: Applicator shall be responsible for verifying that sealants used are compatible with joint substrates.

2. Joint Tolerance: All joints varying over 1/8" from design dimension shall be called to the attention of the Architect/Engineer prior to sealant installation. Joint width/depth ratios are critical to sealant performance and compliance with those limitations is required.

### D. Submittals

1. For general description of submittals and substitutions, see Section 01340.

E. Product Delivery and Storage

1. For general description of product delivery, storage and handling, see Section 01640.

F. Guarantees

1. Sealed joints shall be guaranteed against adhesive or cohesive failure of sealant and watertightness of sealed joint for five (5) years.

2. PRODUCTS

A. Materials

1. Sealants

REFERENCE #		DESCRIPTION & REQUIRED PRODUCT CHARACTERISTICS
1.	TT-S-227(e) Class A (Type I or II as required)	Two component polyurethane or polysulfide, with Shore A hardness of 30-40. Acceptable: Vulkem 245, Vulkem 227 and Vulkem 922 by Mameco International; Dynatrol II and NR-200 by Pecora; Dualthane and Pourthane by W.R. Meadows.
2.	TT-S-230(c) Class A (Type I or II as required)	One component polyurethane or polysulfide with Shore A hardness of 25-45. Acceptable: Vulkem 45, Vulkem 116 and Vulkem 921 by Mameco International; Dynatrol I and NR-201 by Pecora; Sikaflex 1A by Sika.
3.	TT-S-1543 Class A (Amide cure only)	One component silicone, non-acid cure construction sealant, minimum 1500% elongation, shore A hardness of 15-25. Acceptable: Dow Corning 790.
4.	TT-S-1543 Class A (Acetox cure or Amide cure)	One component silicone (primer or primerless) for structural glazing; Shore A hardness of 25-30. Acceptable: Dow Corning 999, Dow Corning 795, GE 1200 by General Electric, 863 by Pecora.
5.	SSS-S-200(d) Type H	Two component, coal tar extended, fuel resistant, polyurethane sealant, Shore A hardness of 10-35. Acceptable: Vulkem 202 by Mameco; NR-300 by Pecora; Gardox by W.R. Meadows.
6.	TT-S-1543 Class A (Mildew resistant)	One component silicone, mildew resistant, Shore A hardness of 20-30. Acceptable: Dow Corning 786.

2. Caulking

REFERENCE #	DESCRIPTION & REQUIRED PRODUCT CHARACTERISTICS
-------------	------------------------------------------------

7.	ASTM C834-76	One component Acrylic Latex caulking with a minimum of 75% recovery when tested in accordance with ASTM C-736-72. Acceptable: AC-20 by Pecora; Easaply by W.R. Meadows.
8.	(N/A)	One component acoustical caulking, non-drying, non-hardening, synthetic rubber. Acceptable: BA-98 by Pecora; Acoustical Sealant by Temco.

### 3. Primers

- a. Shall be in accordance with Manufacturer's instructions. Manufacturer shall be consulted for all surfaces not specifically covered in submitted application instructions

### 4. Backer Rod

- a. Shall be open or closed cell polyethelene or polyurethane as recommended by the sealant manufacturer. Bond breaker tape shall be used to prevent three-sided adhesion in locations where backer rod cannot be used.
5. Solvents, cleaning agents, and other accessories shall be as recommended by the Manufacturer.

## 3. EXECUTION

### A. Inspection

1. Substrate surface shall be inspected to ensure that no bond-breaker materials contaminate the surface to which the sealant is to adhere and to ensure that unsound substrates are repaired.
2. Joint dimensions shall be verified to ensure that all dimensions are within tolerances established in Paragraph 1C above.

### B. Preparation

1. Prepare all joints in accordance with Manufacturer's recommended instructions to ensure maximum adhesion. Prime as required, protecting all adjacent exposed surfaces.
2. Porous material shall be cleaned where necessary to provide a base for sealant adhesion by grinding, blast-cleaning, acid washing, or a combination of these methods.
3. Laitance shall be removed by acid cleaning.

4. Non-porous surfaces shall be cleaned either mechanically or chemically. Protective coatings on metal surfaces shall be removed by a solvent that leaves no residue. Do not allow solvent to dry before wiping all solvent off the surface.

C. Installation

1. Sealant shall be mixed (if multi-component) and installed in accordance with Manufacturers' recommendations and instructions to ensure complete mixing and an installed proper width/depth ratio with maximum adhesion contact. Three-sided adhesion must be prevented.
  2. Backer rod shall be installed using only blunt or rounded tools which will ensure a uniform ( $\nabla$  1/8") depth without puncturing the material. Backer rod shall be a minimum of 33% oversized for closed cell and a minimum of 50% oversized for open-cell backer rod, unless otherwise required by the Manufacturer.
  3. Surrounding surfaces shall be protected as required to ensure no sealant contaminates these surfaces.
  4. Joints to receive caulking and sealants shall be a minimum of 1/4" deep unless indicated or specified otherwise.
  5. Joints in Masonry and Concrete: Depth of the caulking may be equal to the width in joints up to 1/2" wide. For joints 1/2" to 1" wide, depth shall be 1/2". For expansion and other joints 2" to 2 1/2" wide, depth shall not be greater than 1/2 the applied sealant width.
  6. Joints in Metal: Caulking shall be a minimum of 1/2 the applied sealant width, and in no case exceed the applied sealant width.
  7. Primer shall be applied to all surfaces as recommended by the Manufacturer.
  8. Caulking and sealant shall be applied with guns in accordance with the Manufacturers' printed recommendations. Materials shall completely fill joints.
- D. Cleaning of Surfaces: Adjacent surfaces shall be cleaned of soiling and materials resulting from this work with solvent or cleaning agent recommended by the Manufacturer.



- E. Concrete slabs shall receive two coats of sealant according to Manufacturer's instructions and in recommended quantities per unit of area. Concrete walls shall be sealed by applying one coat of sealer according to Manufacturer's instructions and recommended quantity per unit of area. Sealer shall be Thompson's Water Seal or Crystal Clear by Lambert or Enviroseal by Clariant Life Science Molecules.
- F. Both temperature and dampness conditions may restrict applications of these sealants. Comply with Manufacturer's instructions.
- G. Schedule (unless shown otherwise on the Drawings)

JOINT TYPE	SEALANT REFERENCE NUMBER							
	1	2	3	4	5	6	7	8
A. Exterior and Interior Sealants								
1. Significant movement (panel, coping, control and expansion joints)	X		X					
2. Minimal movement (Reglet and perimeter joints)	X	X	X					
3. Paving (requiring fuel resistant sealants)					X			
B. Glazing Sealants								
1. Structural				X				
2. Non-Structural		X	X	X				
C. Interior								
1. General							X	
2. Special								
a. Bathrooms						X		
b. Exposed Acoustical							X	
c. Non-exposed Acoustical								X

**END OF SECTION**

SECTION-07900-5

## **SECTION 08 45 23**

### **2-3/4" PRE-ENGINEERED INSULATED TRANSLUCENT FIBERGLASS SANDWICH PANEL CENTER RIDGE, PYRAMID, GEODESIC SKYLIGHT SYSTEM**

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

##### **1.1 SUMMARY**

- A. Section includes the pre-engineered self-supporting insulated translucent sandwich panel skylight system and accessories as shown and specified. These are to replace the existing skylights as Alternate #1.
- B. Work includes providing and installing:
  - 1. Flat factory prefabricated structural insulated translucent sandwich panels
  - 2. Aluminum installation system
  - 3. Aluminum flashing attached to skylights
  - 4. Drywall repair and painting as required to complete the work.
- C. Related Sections:
  - 1. Roofing: Section 075491
  - 2. Flashing and Sheet Metal: Section 07624
  - 3. Sealants: Section 07900

##### **1.2 SUBMITTALS**

- A. Submit manufacturer's product data. Include construction details, material descriptions, profiles and finishes of skylight components.
- B. Submit shop drawings. Include elevations and details.
- C. Submit manufacturer's color charts showing the full range of colors available for factory-finished aluminum.
  - 1. When requested, submit samples for each exposed finish required, in same thickness and material indicated for the work and in size indicated below. If finishes involve normal color variations, include sample sets consisting of two or more units showing the full range of variations expected.
    - a. Sandwich panels: 14" x 28" units
    - b. Factory finished aluminum: 5" long sections

- D. Submit Installer Certificate, signed by installer, certifying compliance with project qualification requirements.
- E. Submit product reports from a qualified independent testing agency indicating each type and class of panel system complies with the project performance requirements, based on comprehensive testing of current products. Previously completed reports will be acceptable if for current manufacturer and indicative of products used on this project.
  - 1. Reports required are:
    - a. International Building Code Evaluation Report
    - b. Flame Spread and Smoke Developed (UL 723) – Submit UL Card
    - c. Burn Extent (ASTM D 635)
    - d. Color Difference (ASTM D 2244)
    - e. Impact Strength (UL 972)
    - f. Bond Tensile Strength (ASTM C 297 after aging by ASTM D 1037)
    - g. Bond Shear Strength (ASTM D 1002)
    - h. Beam Bending Strength (ASTM E 72)
    - i. Fall Through Resistance (ASTM E 661)
    - j. Insulation U-Factor (NFRC 100)
    - k. NFRC System U-Factor Certification (NFRC 700)
    - l. Solar Heat Gain Coefficient (NFRC or Calculations)
    - m. Condensation Resistance Factor (AAMA 1503)
    - n. Air Leakage (ASTM E 283)
    - o. Structural Performance (ASTM E 330)
    - p. Water Penetration (ASTM E 331)
    - q. Class A Roof Covering Burning Brand (ASTM E 108)
    - r. UL Listed Class A Roof System (UL 790) (Optional) – Submit UL Card
    - s. Daylight Autonomy

### 1.3 QUALITY ASSURANCE

#### A. Manufacturer's Qualifications

- 1. Material and products shall be manufactured by a company continuously and regularly employed in the manufacture of specified materials for a period of at least ten consecutive years and which can show evidence of those materials being satisfactorily used on at least six projects of similar size, scope and location. At least three of the projects shall have been in successful use for ten years or longer.
- 2. Panel system must be listed by an ANSI accredited Evaluation Service, which requires quality control inspections and fire, structural and water infiltration testing of sandwich panel systems by an accredited agency.
- 3. Quality control inspections shall be conducted at least once each year and shall include manufacturing facilities, sandwich panel components and production sandwich panels for conformance with AC177 "Translucent Fiberglass Reinforced Plastic (FRP) Faced Panel Wall, Roof and Skylight Systems" as issued by the ICC-ES.

- B. Installer's Qualifications: Installation shall be by an experienced installer, which has been in the business of installing specified skylight systems for at least two consecutive years and can show evidence of satisfactory completion of projects of similar size, scope and type.

#### 1.4 PERFORMANCE REQUIREMENTS

- A. The manufacturer shall be responsible for the configuration and fabrication of the complete skylight panel system.
  - 1. When requested, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
  - 2. Standard skylight system shall have less than 0.01 cfm/ft<sup>2</sup> air leakage by ASTM E 283 at 6.24 PSF (50 mph) and no water penetration by ASTM E 331 at 15 PSF; and structural testing by ASTM E 330.
  - 3. Structural Loads; Provide skylight system capable of handling the loading requirements stipulated by Chapter 16 the 2017 Florida Building Codes, 6<sup>th</sup> Edition.
  - 4. Skylights shall meet or exceed the requirements stipulated by Chapter 24, and applicable requirements of Section 2610 the 2017 Florida Building Codes, 6<sup>th</sup> Edition.

#### 1.5 DELIVERY STORAGE AND HANDLING

- A. Deliver panel system, components and materials in manufacturer's standard protective packaging.
- B. Store panels on the long edge; several inches above the ground, blocked and under cover in accordance with manufacturer's storage and handling instructions.

#### 1.6 WARRANTY

- A. Submit manufacturer's and installer's written warranty agreeing to repair or replace panel system work, which fails in materials or workmanship within one year of the date of delivery. Failure of materials or workmanship shall include leakage, excessive deflection, deterioration of finish on metal in excess of normal weathering, defects in accessories, insulated translucent sandwich panels and other components of the work.
- B. Warranty Period: 5 year Materials and Workmanship

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURER

- A. The basis for this specification is for products manufactured by Kalwall Corporation. Other manufacturers may bid this project provided they comply with all of the performance requirements of this specification and submit evidence thereof. Listing other manufacturers' names in this specification does not constitute approval of their

products or relieve them of compliance with all the performance requirements contained herein.

- B. Kalwall Corporation, Tel: (800) 258-9777 – Fax: (603) 627-7905 – Email: [info@kalwall.com](mailto:info@kalwall.com)

## 2.2 PANEL COMPONENTS

### A. Face Sheets

1. Translucent faces: Manufactured from glass fiber reinforced thermoset resins, formulated specifically for architectural use.
  - a. Thermoplastic (e.g. polycarbonate, acrylic) faces are not acceptable.
  - b. Face sheets shall not deform, deflect or drip when subjected to fire or flame.
2. Interior face sheets:
  - a. Flame spread: Underwriters Laboratories (UL) listed, which requires periodic unannounced retesting, with flame spread rating no greater than 50 and smoke developed no greater than 250 when tested in accordance with UL 723.
  - b. Burn extent by ASTM D 635 shall be no greater than 1".
3. Exterior face sheets:
  - a. Color stability: Full thickness of the exterior face sheet shall not change color more than 3 CIE Units DELTA E by ASTM D 2244 after 5 years outdoor South Florida weathering at 5° facing south, determined by the average of at least three white samples with and without a protective film or coating to ensure long-term color stability. Color stability shall be unaffected by abrasion or scratching.
  - b. Strength: Exterior face sheet shall be uniform in strength, impenetrable by hand held pencil and repel an impact minimum of 70 ft. lbs. without fracture or tear when impacted by a 3-1/4" diameter, 5 lb. free-falling ball per UL 972.
4. Appearance:
  - a. Exterior face sheets: Smooth, 0.070" thick and white in color.
  - b. Interior face sheets: Smooth, 0.045" thick and white in color.
  - c. Face sheets shall not vary more than  $\pm 10\%$  in thickness and be uniform in color.

### B. Grid Core

1. Thermally broken composite I-beam grid core shall be of 6063-T6 or 6005-T5 alloy and temper with provisions for mechanical interlocking of muntin-mullion and perimeter. Width of I-beam shall be no less than 7/16".
2. I-beam Thermal break: Minimum 1", thermoset fiberglass composite.

### C. Laminate Adhesive

1. Heat and pressure resin type adhesive engineered for structural sandwich panel use, with minimum 25-years field use. Adhesive shall pass testing requirements specified by the International Code Council "Acceptance Criteria for Sandwich Panel Adhesives".
2. Minimum tensile strength of 750 PSI when the panel assembly is tested by ASTM C 297 after two exposures to six cycles each of the aging conditions prescribed by ASTM D 1037.
3. Minimum shear strength of the panel adhesive by ASTM D 1002 after exposure to four separate conditions:
  - a. 50% Relative Humidity at 68° F: 540 PSI
  - b. 182° F: 100 PSI
  - c. Accelerated Aging by ASTM D 1037 at room temperature: 800 PSI
  - d. Accelerated Aging by ASTM D 1037 at 182° F: 250 PSI

## 2.3 PANEL CONSTRUCTION

- A. Provide sandwich panels of flat fiberglass reinforced translucent face sheets laminated to a grid core of mechanically interlocking I-beams. The adhesive bonding line shall be straight, cover the entire width of the I-beam and have a neat, sharp edge.
  1. Thickness: 2-3/4"
  2. Light transmission, Solar heat gain coefficient, and system's U-factor shall meet the minimum requirements of the 2017 Florida Building Code, Energy Conservation, 6<sup>th</sup> Edition.
  3. Light transmission, Solar heat gain coefficient, and system's U-Factor shall meet any additional requirements of the Owner.
  4. 2-3/4" thermally broken grid.  
Complete insulated panel system shall have NFRC certified U-factor meeting the requirements of the 2017 Florida Building Code, Energy Conservation, 6th Edition.
  5. Grid pattern: Nominal size: 12" x24"; pattern vertical (Shoji).
- B. Standard panels shall deflect no more than 1.9" at 30 PSF in 10' 0" span without a supporting frame by ASTM E 72.
- C. Standard panels shall withstand 1200° F fire for minimum one hour without collapse or exterior flaming.
- D. Thermally broken panels: Minimum Condensation Resistance Factor of 80 by AAMA 1503 measured on the bond line.
- E. Skylight System:
  1. Skylight system shall pass Class A Roof Burning Brand Test By ASTM E 108.

- F. Skylight System shall meet the fall through requirements of OSHA 1910.23 as demonstrated by testing in accordance with ASTM E 661, thereby not requiring supplemental screens or railings.

## 2.4 BATTENS AND PERIMETER CLOSURE SYSTEM

- A. Closure system:
  - 1. Extruded aluminum 6063-T6 and 6063-T5 alloy and temper clamp-tite screw type closure system.
  - 2. Skylight perimeter closures at curbs shall be factory sealed to panels.
- B. Sealing tape: Manufacturer's standard, pre-applied to closure system at the factory under controlled conditions.
- C. Fasteners: 300 series stainless steel screws for aluminum closures, excluding final fasteners to the building.
- D. Finish:
  - 1. Manufacturer's factory applied finish, which meets the performance requirements of AAMA 2604. Color to be unfinished, "mill."

## 2.5 STRUCTURAL SUPPORT FOR STANDARD MODELS

- A. Pyramid skylights: Pyramids to 16'-0" square shall have concealed support integral with the installation system.. (27.25° slope). Aluminum curb cap extrusions and flashing shall be supplied.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Installer shall examine substrates, supporting structure and installation conditions.
- B. Do not proceed with panel installation until unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Metal Protection:
  - 1. Where aluminum will contact dissimilar metals, protect against galvanic action by painting contact surfaces with primer or by applying sealant or tape recommended by manufacturer for this purpose.
  - 2. Where aluminum will contact concrete, masonry or pressure treated wood, protect against corrosion by painting contact surfaces with bituminous paint or method recommended by manufacturer.

### 3.3 INSTALLATION

- A. Install the skylight system in accordance with the manufacturer's suggested installation recommendations and approved shop drawings.
  - 1. Anchor component parts securely in place by permanent mechanical attachment system.
  - 2. Accommodate thermal and mechanical movements.
  - 3. Set perimeter framing in a full bed of sealant compound, or with joint fillers or gaskets to provide weather-tight construction.
- B. Install joint sealants at perimeter joints and within the panel system in accordance with manufacturer's installation instructions.

### 3.4 FIELD QUALITY CONTROL

- A. Water Test: Installer to test skylights according to procedures in AAMA 501.2.
- B. Repair or replace work that does not pass testing or that is damaged by testing and retest work.

### 3.5 CLEANING

- A. Clean the skylight system interior and exterior, immediately after installation.
- B. Refer to manufacturer's written recommendations.

END OF SECTION 08 45 23



12085 RESEARCH DR  
ALACHUA. FL. 32615  
BLDG #1041

## SITE VICINITY MAP



SVM JOB NUMBER: 01460-25  
PROJECT NAME: 01460-25 UF SID MARTIN RE-ROOF

12085 RESEARCH DR  
ALACHUA, FL 32615  
BLDG #1041,  
USE: BLDG TYPE - FBC: B-BUSINESS  
OCCUPANCY TYPE - NFPA: EXISTING BUSINESS  
NUMBER OF BUILDINGS: 1

PROJECT TYPE: RE-ROOF, LEVEL 1 ALTERATIONS PER 2017 FBC, EXISTING BUILDING, 6TH EDITION. COMPLIANCE WITH UF DESIGN & CONSTRUCTION STANDARDS IS REQUIRED

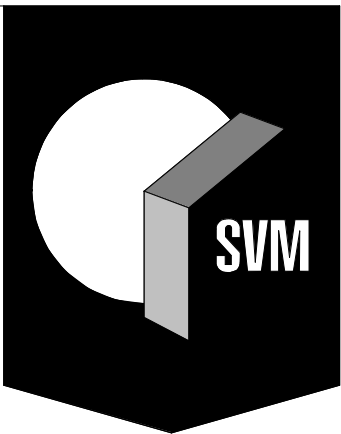
PROJECT SCOPE OF WORK: ARCHITECTURAL DESIGN AND CONSTRUCTION PHASE SERVICES FOR THE RE-ROOF OF THIS APPROX. 30,000 S.F. FACILITY

SHEET #	SHEET NAME	Current Revision	Current Date
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TITLE			
TOO	COVER SHEET		
ARCHITECTURALS - PLANS			
A1.6	ROOF PLAN		
ARCHITECTURALS - DETAILS			
A7.0	PROPOSED - DETAILS		
A7.1	PROPOSED - DETAILS		
A7.2	PROPOSED - DETAILS		

**ARCHITECT**  
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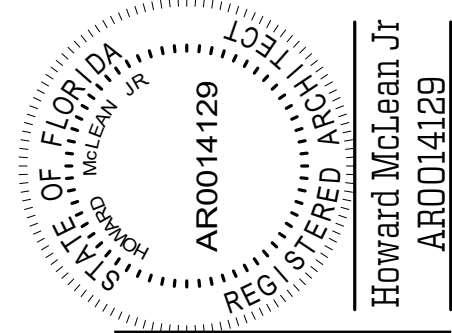
1. DRAWINGS ARE DIAGRAMATIC TO CONVEY EXISTING/NEW CONDITIONS. CONTRACTOR SHALL INSPECT AND VERIFY THE SCOPE OF WORK. ANY ADDITIONAL WORK NOT SPECIFICALLY NOTED ON THE DRAWINGS BUT YET ARE APPARENT TO FIELD INSPECTION SHALL BE CONSIDERED AS PART OF THIS CONTRACT. CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR VERIFYING ALL EXISTING CONDITIONS.
2. CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.
3. NO INSTRUCTION, REVISIONS, ADDITIONS, DELETIONS, SPECIFICATIONS OR DETAILS OTHER THAN THE INFORMATION CONTAINED HEREIN BEFORE SHALL GOVERN THE PROJECT UNLESS THEY ARE IN WRITING AND APPROVED BY THE ARCHITECT, OWNER AND CONTRACTOR IN THE FORM OF A CHANGE ORDER.
4. GC, VENDORS & SUB-CONTRACTORS SHALL REFER TO ALL DRAWINGS, PROJECT MANUAL AND P&E SHEETS (WHEN APPLICABLE) OF CONTRACT DOCUMENTS AND COMPLY WITH ALL PROVISIONS THEREIN. IF THERE IS A DISCREPANCY BETWEEN CONTRACT DOCUMENTS, EXISTING CONDITIONS AND VENDOR SUPPLIED WATER TREATMENT DOCUMENTS, GC TO VERIFY AND COORDINATE PRIOR TO INSTALLATION OF ANY SLEAVING.
5. ALL MATERIALS SHALL BE INSTALLED IN ACCORDANCE W/ MANUFACTURER'S INSTRUCTIONS. IT IS GENERAL CONTRACTOR'S RESPONSIBILITY TO VERIFY AND APPROVE ALL DIMENSIONS OF EQUIPMENT AND MATERIAL WITH SUPPLIERS PRIOR TO ORDERING AND / OR INSTALLATION OF ALL PRODUCTS.
6. RFI'S - SUBMIT ALL QUESTIONS ON RFI DOCUMENT PROVIDED IN BID DOCUMENTS WITH DATE OF REQUEST. ARCHITECT WILL PROVIDE RESPONSE AS QUICKLY AS PRACTICAL.
7. UPON GENERAL CONTRACTOR APPROVAL, ALL SUBMITTALS ARE TO BE SENT FROM THE SUBCONTRACTOR TO THE GENERAL CONTRACTOR FOR REVIEW AND SUBMISSION TO THE ARCHITECT; THE SUBCONTRACTOR IS TO FLAG ANY SUBSTITUTIONS. THE FULL SUBMITTAL PACKAGE IS TO BE SENT ELECTRONICALLY IN PDF FORMAT ON EITHER CD, FTP WEBSITE FOR DOWNLOAD, OR DROP BOX TO THE ARCHITECT WITHIN TWO WEEKS OF AWARD. ALL SUBMITTALS ARE TO BE REVIEWED BY GC PRIOR TO SUBMISSION TO THE ARCHITECT. ALL NON-REVIEWED SUBMITTALS WILL BE REJECTED. THE ARCHITECT WILL SUBMIT TO THE PROJECT MANAGER COPIES OF ALL REJECTED SUBMITTALS AND APPROVED SUBSTITUTIONS. ALL APPROVED SUBMITTALS AND CUT-SHEETS ARE TO BE MADE AVAILABLE PERMANENTLY ON THE JOB SITE FOR FUTURE REFERENCE DURING CONSTRUCTION MEETINGS. TIMELINESS OF SUBMITTALS IS OF EXTREME IMPORTANCE DUE TO PROJECT SCHEDULE. LATE SUBMITTALS WILL BE BACKCHARGED FROM THE SCHEDULE OF VALUES ANY REVIEWS AFTER THIRD WEEK SHALL BE BORNE BY GENERAL CONTRACTOR @ A RATE OF \$200 PER SUBMITTAL.
8. PROJECT MAY INCLUDE MISCELLANEOUS STANDARD DETAILS. GC IS TO REVIEW ALL TO VERIFY ALL ARE APPLICABLE. SOME DETAILS MAY BE MIRRORRED FOR THIS PROJECT COORDINATE W/ FLOOR PLAN.
9. SEE PROJECT MANUAL SECTION 01100 FOR ALTERNATES (WHEN APPLICABLE).
10. SEE PROJECT MANUAL SECTION 01021 FOR ALLOWANCES (WHEN APPLICABLE).
11. SEE 1:5 SERIES DRAWINGS FOR CODE DATA & LIFE SAFETY INFORMATION.
12. SEE SHEET A0.01 FOR ALL REQUIRED ADA & FIREPLACE HEIGHTS.
13. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS TO VISIT THE JOBSITE AND FAMILIARIZE THEMSELVES WITH ALL EXISTING CONDITIONS IN THE FIELD. ANY DISCREPANCIES BETWEEN EXISTING FIELD CONDITIONS AND THE CONSTRUCTION DOCUMENTS ARE TO BE BROUGHT TO ARCHITECT'S ATTENTION IMMEDIATELY PRIOR TO BIDS BEING DUE. OWNER WILL PROVIDE DIRECTION TO GENERAL CONTRACTOR FOR BIDDING PURPOSES TO ASSURE APPROPRIATE SCOPE IS INCLUDED WITHIN BID.
14. CONTRACTOR IS TO COORDINATE WITH TENANTS, LANDLORDS AND/OR SURROUNDING TENANTS/LANDOWNERS WHEN PERFORMING ANY WORK. THERE SHALL NOT BE ANY DISRUPTION OF SERVICES FOR THE SURROUNDING TENANTS/LANDOWNERS DURING THE CONSTRUCTION / RELOCATION AND/OR EXPANSION AND/OR RENOVATION OF THE FACILITY.



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**SKINNER VIGNOLA MCLEAN, INC.**

**ARCHITECTS & PLANNERS** | FL CERTIFICATE | AA3478



**01460-25 UF SID MARTIN RE-ROOF**

FOR  
UF PLANNING, DESIGN &  
CONSTRUCTION  
PROJECT LOCATION: 12085 RESEARCH

PROJECT LOCATION:  
12085 RESEARCH DR  
ALACHUA, FL. 32615  
BLDG #1041

## DESIGN PHASE: 100% CONSTRUCTION DOCS

REVISIONS

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DATE: **04/26/2019**  
DRAWN BY: **JER**  
CHECKED BY: **HJM**

**SHEET**  
**TO.0**

COVER SHEET

01460-25

ALL REPORTS, PLANS, SPECIFICATIONS, COMMENTS, NOTES, FIELD DATA, NOTES & OTHER DOCUMENTS PREPARED BY THE DESIGN PROFESSIONAL SHALL REMAIN THE PROPERTY OF THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL SHALL RETAIN ALL COMMON LAW STATUTORY & OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHT THEREIN, FOR ANY PURPOSE OR PROJECT OTHER THAN THE PROJECT WHICH IS SUBJECT OF THE AGREEMENT IS IN A VITAL. 4/29/2019 12:43 PM BIM 360://01460-25 - UF MP04678 SID MARTIN REDNOF.FMT

01085 APPLICABLE STANDARDS

1. GENERAL
- A. Description
1. Work Included:
- a. Comply with all applicable codes and laws as prescribed by the Authorities Having Jurisdiction (AHJ) including the University of Florida Department of Environmental Health and Safety and as may be listed below or elsewhere in these documents.
- b. Comply with UF Design and Construction Standards, most recent edition.
- c. Throughout the Contract Documents, reference is made to codes and standards which establish qualities and types of workmanship and materials, and which establish methods for testing and reporting on the pertinent characteristics.
- d. Where materials or workmanship are required by these Contract Documents to meet or exceed the specifically named code or standard, it is the Contractor's responsibility to provide materials and workmanship which meet or exceed the specifically named code or standard.
- e. It is also the Contractor's responsibility, when so required by the Contract Documents or by written request from the Architect/ Engineer, to deliver to the Architect/Engineer all required proof that the materials or workmanship, or both, meet or exceed the requirements of the specifically named code or standard. Such proof shall be in the form requested in writing by the Architect/Engineer, and generally will be required to be copies of a certified report of tests conducted by a testing agency approved for that purpose by the Architect/Engineer.
2. Related work described elsewhere: Specific naming of codes or standards occurs on the Drawings and in other Sections of these Specifications.
- B. Quality Assurance
1. Familiarity with Pertinent Codes and Standards: In procuring all items used in this Work, it is the Contractor's responsibility to verify the detailed requirements of the specifically named codes and standards and to verify that the items procured for use in this Work meet or exceed the specified requirements.
2. Rejection of Noncomplying Items: The Architect/Engineer reserves the right to reject items incorporated into the Work which fail to meet the specified minimum requirements. The Architect/Engineer further reserves the right, and without prejudice to other recourse the Architect/Engineer may take, to accept noncomplying items subject to an adjustment in the Contract Amount as approved by the Architect/Engineer and the Owner.
3. Applicable Standards listed in these Specifications include, but are not necessarily limited to, standards promulgated by the following agencies and organizations:

AASHTO= American Association of State Highway and Transportation Officials, 341 National Press Building, Washington, D.C. 20004.

ACI = American Concrete Institute, Box 19150, Redford Station, Detroit, MI 48129.

AISC = American Institute of Steel Construction, Inc., 1221 Avenue of the Americas, New York, NY 10020.

ANSI = American National Standards Institute (successor to USA51 and ASA), 1430 Broadway, New York, NY 10018.

APA = American Plywood Association.

ASCE = American Society of Civil Engineering

ASTM = American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

AWS = American Welding Society, Inc., 2501 NW 7th Street, Miami, FL 33125.

AWWA = American Water Works Association, Inc., 6666 West Quincy Avenue, Denver, CO 80235.

CRSI = Concrete Reinforcing Steel Institute, 228 North LaSalle Street, Chicago, IL 60610.

ECC = Energy Conservation Code, Rule 13D-10, and Section 255.251, Florida Statutes, Florida Energy Conservation Act of 1974.

ELEVATORS = FBC-B Chapter 30, Chapter 11, and Chapter 7

DBPR Chapter 399 FS

Florida Administrative Code Section 61C-5

Comply with ASME A17.2.1, including ASME A17.2.1a, Addenda and ASME A17.2.1b, Addenda.

Comply with National Fire Protection Association, NFPA-70, National Electrical Code, 2014 edition.

Comply with the Uniform Fire Safety Standards for Elevators, Chapter 4A-47, Florida Administrative Code

Safety Code for Elevators and Escalators ASME

And those codes referenced therein.

FBC-B = Florida Building Code Building, 2017 edition

FBC-E = Florida Building Code Existing, 2017 edition

FBC-A = Florida Building Code - Accessibility, 2017 edition

FBC-P = Florida Building Code Plumbing, 2017 edition

FBC-M = Florida Building Code Mechanical, 2017 edition

FBC-FG = Florida Building Code Fuel Gas, 2017 edition

FBC-EC = Florida Building Code Energy Conservation, 2017 edition

FGMA = Flat Glass Marketing Association, 3310 Harrison, Topeka, KS 66611.

FM = Factory Mutual

GC = Glass Code, Chapter 553 Florida Statutes, Part III.

NAAMM = National Association of Architectural Metal Manufacturers, 1033 South Boulevard, Oak Park, IL 60302.

NEC = National Electrical Code (see NFPA), NFPA 70 - local adopted edition.

NEMA = National Electrical Manufacturers Association, 155 East 44th Street, New York, NY 10017.

NFPA = National Fire Protection Association, 470 Atlantic Avenue, Boston, Massachusetts, 02210, NFPA 101, Life Safety Code, local adopted edition, and NFPA 1 the Fire Prevention Code, local adopted edition.

SDI = Steel Deck Institute, 135 Addison Avenue, Elmhurst, IL 60125.

SSPC = Steel Structures Painting Council, 4400 5th Avenue, Pittsburgh, PA 15213.

TCA = Tile Council of America, Inc., Post Office Box 326, Princeton, NJ 08540.

UL = Underwriters' Laboratories, Inc., 207 East Ohio Street, Chicago, IL 60600.

FED SPECS AND FED STANDARDS:

Specifications Sales (3FR), Bldg 197, Washington Navy Yard, General Services Administration, Washington, D.C. 20402.

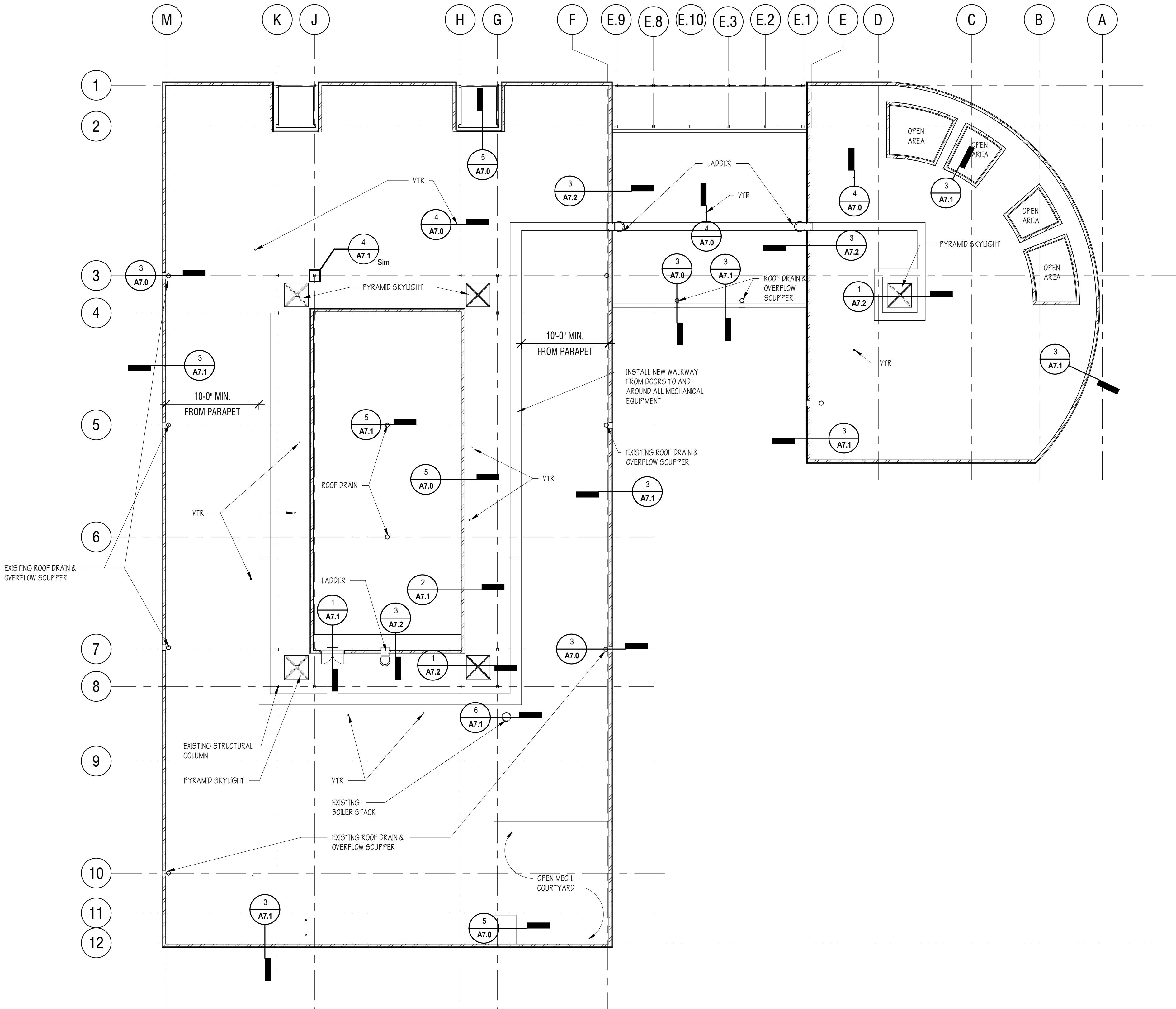
MIL SPECS:

Military Specifications, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

OTHER:

- Chapter 10D-28, Florida Administrative Code (FAC), Hospital Licensure
- Chapter 10D-30, Florida Administrative Code (FAC), Intermediate Care Facilities for the Developmentally Disabled
- Chapter 64E-6 (formerly 10D-6), Florida Administrative Code (FAC), Standards for On Site Sewage Treatment and Disposal Systems
- Chapter 17-761, Florida Administrative Code (FAC), Underground Storage Tank Systems
- Chapter 61C-4, Florida Administrative Code (FAC), Public Food Services Establishments
- Chapter 509, Part I, Florida Statutes (FS), Lodging and Food Service Establishments
- Chapter 33-B, Florida Administrative Code (FAC), County and Municipal Detention Facilities
- Chapter 10D-17, Florida Administrative Code (FAC), State and Local Detention Facilities
- American Correctional Association (ACA) Standards, Revised 1996
- Chapter 6A-2, Florida Administrative Code (FAC), Educational Facilities, 1994 and adopted publication "State Requirements for Educational Facilities," 1994, and Supplemental 92.4, Part III, Section A.
- Chapter 10D-9, Florida Administrative Code (FAC), Plumbing
- Chapter 40C-4, Florida Administrative Code (FAC), Environmental Resource Permits: Surface Water Management Systems
- Chapter 65C-22, Florida Administrative Code (FAC), Child care Standards

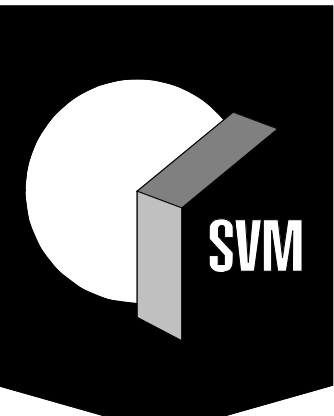
END OF SECTION



PROPOSED - ROOF PLAN

SCALE: 1/16" = 1'-0"

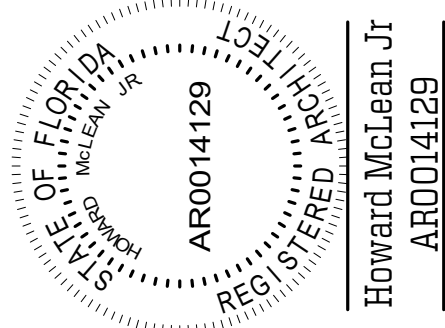
NOTE: AT THE TIME OF BUILDING PERMIT APPLICATION, THE ARCHITECT HAS NOT BEEN SO EMPLOYED TO REGISTER ARCHITECTS & PLANNERS. THE ARCHITECT HAS NO KNOWLEDGE OF THE START OF CONSTRUCTION NOR DOES HE HAVE KNOWLEDGE OF ANY OTHER REGISTERED ARCHITECT BEING SO EMPLOYED TO FURNISH CONSTRUCTION OBSERVATION OR CONSTRUCTION ADMINISTRATION SERVICES.



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**SKINNER VIGNOLA McLEAN, INC.**

**ARCHITECTS & PLANNERS** | FL CERTIFICATE | AA3478



01460-25 UF SID MARTIN RE-ROOF

FOR  
UF PLANNING, DESIGN &  
CONSTRUCTION

PROJECT LOCATION:  
12085 RESEARCH DR  
ALACHUA, FL 32615  
BLDG #1041

DESIGN PHASE: 100% CONSTRUCTION DOCS

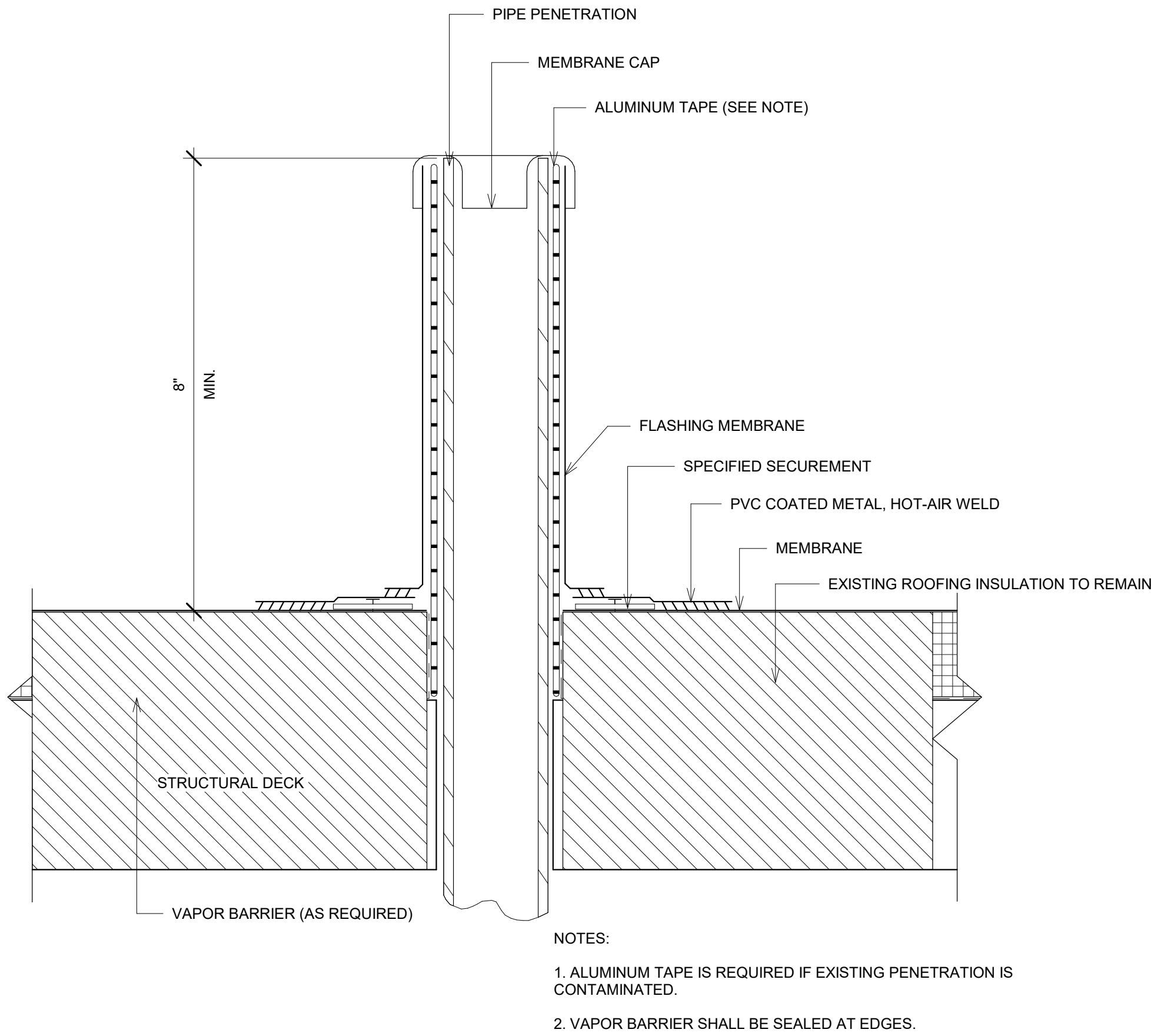
REVISIONS

DATE: **04/26/2019**  
DRAWN BY: **JER**  
CHECKED BY: **HJM**

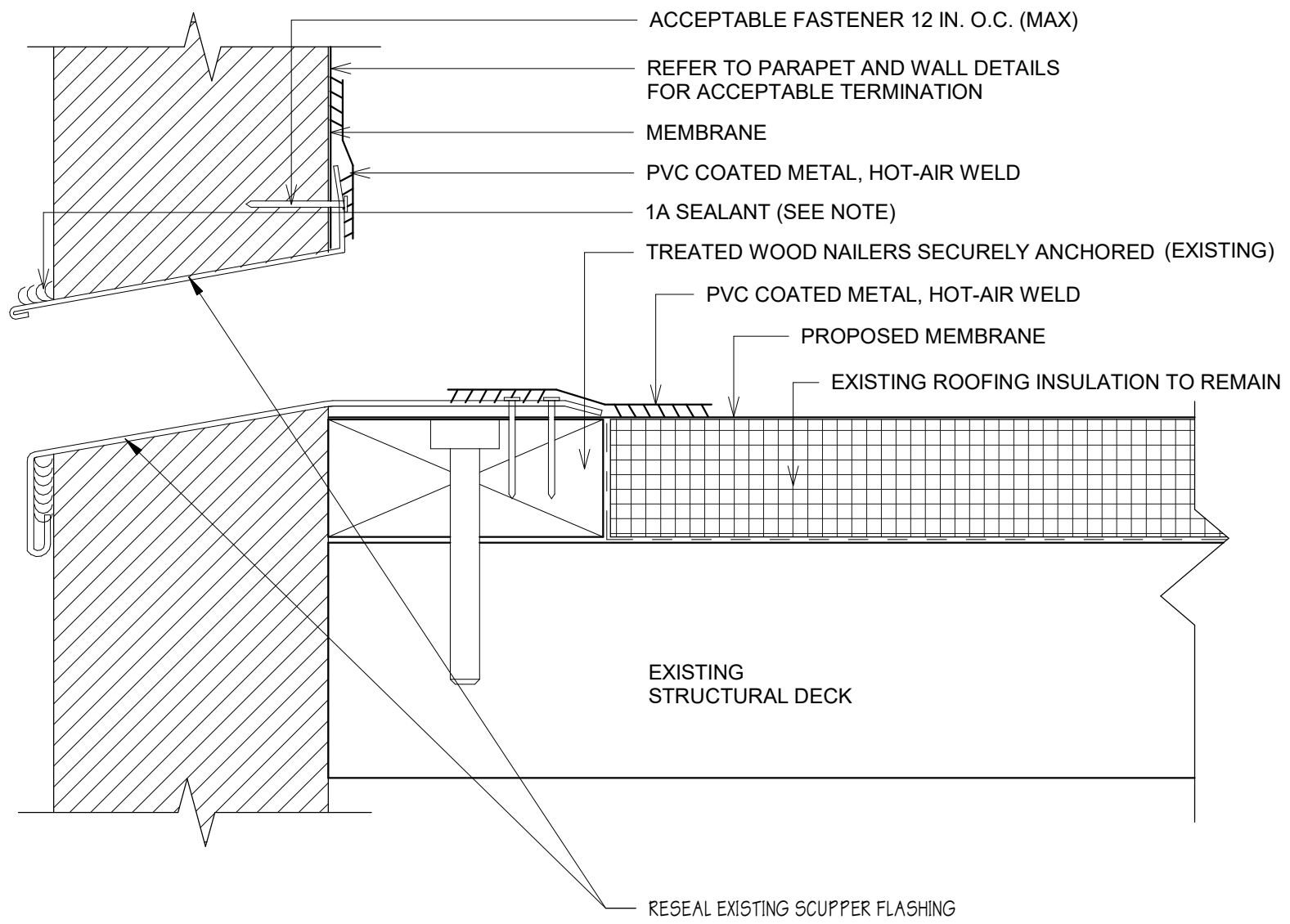
**SHEET**  
**A1.6**  
ROOF PLAN

**01460-25**

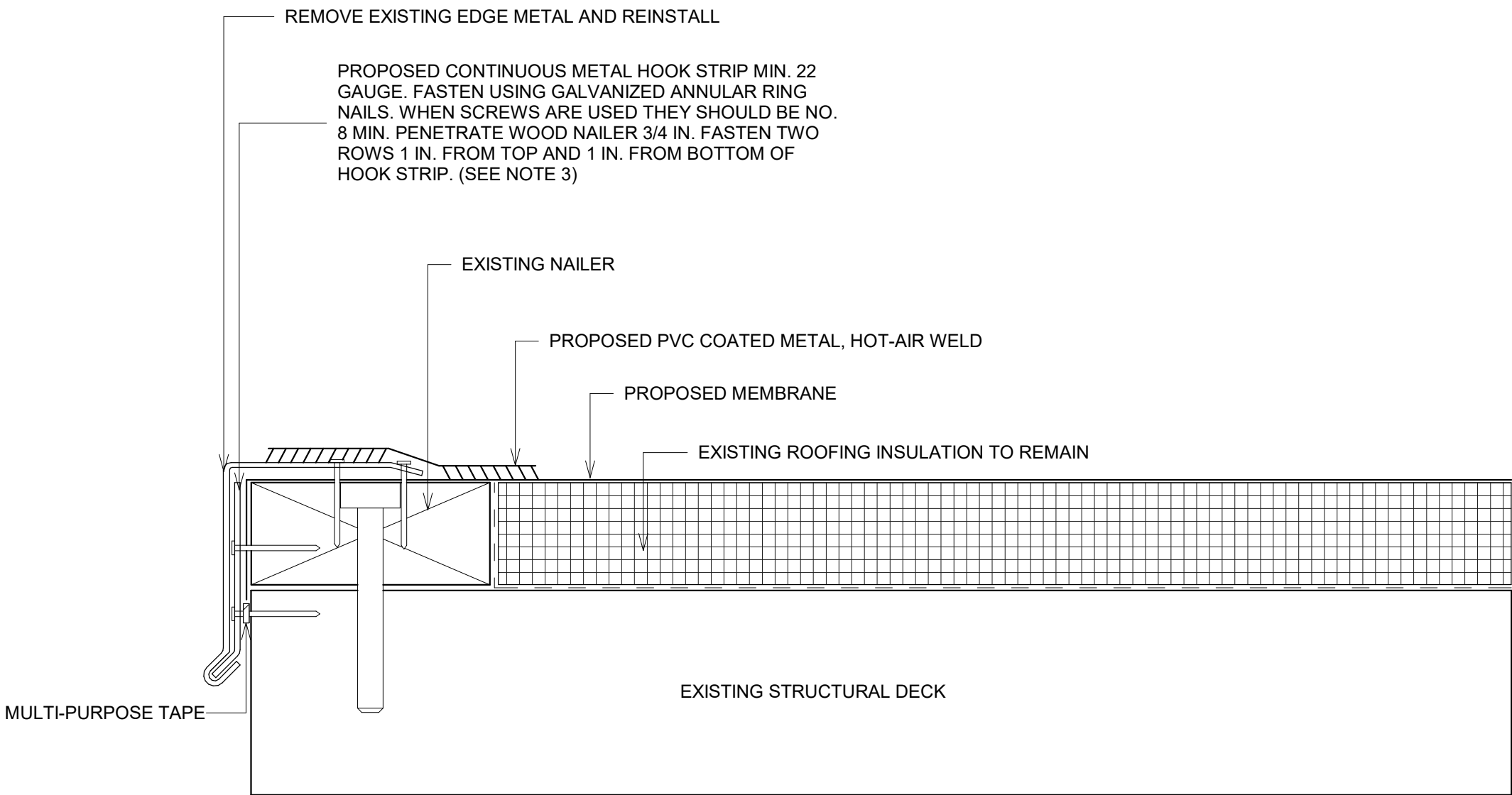
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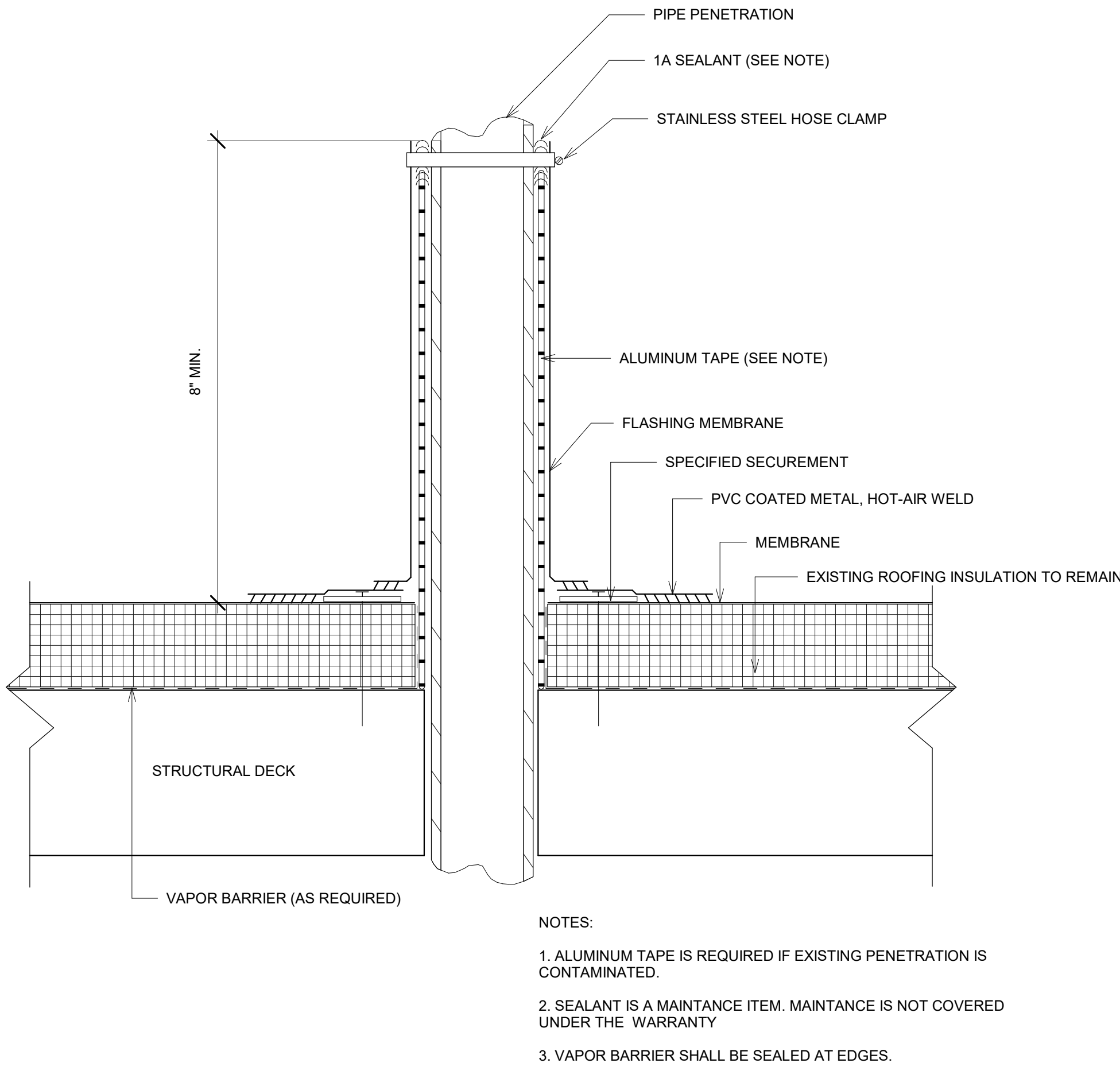
**4 VENT STACK FLASHING**  
SCALE: 6" = 1'-0"



**3 ROOF SCUPPER**  
SCALE: 6" = 1'-0"

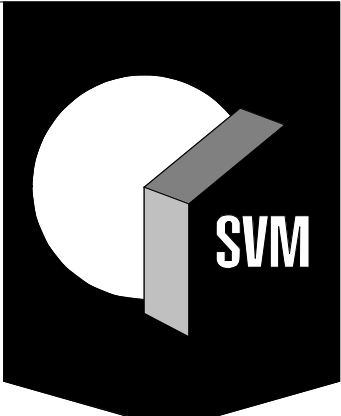


**5 EAVE DETAIL**  
SCALE: 6" = 1'-0"

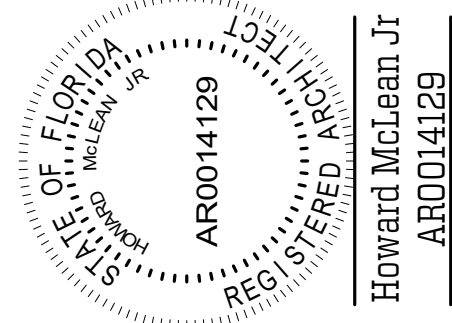


**6 PIPE PENETRATION FLASHING**  
SCALE: 6" = 1'-0"

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**01460-25 UF SID MARTIN RE-ROOF**  
FOR  
**UF PLANNING, DESIGN & CONSTRUCTION**  
PROJECT LOCATION:  
12065 RESEARCH DR  
ALACHUA, FL 32615  
BLDG #1041

REVISIONS

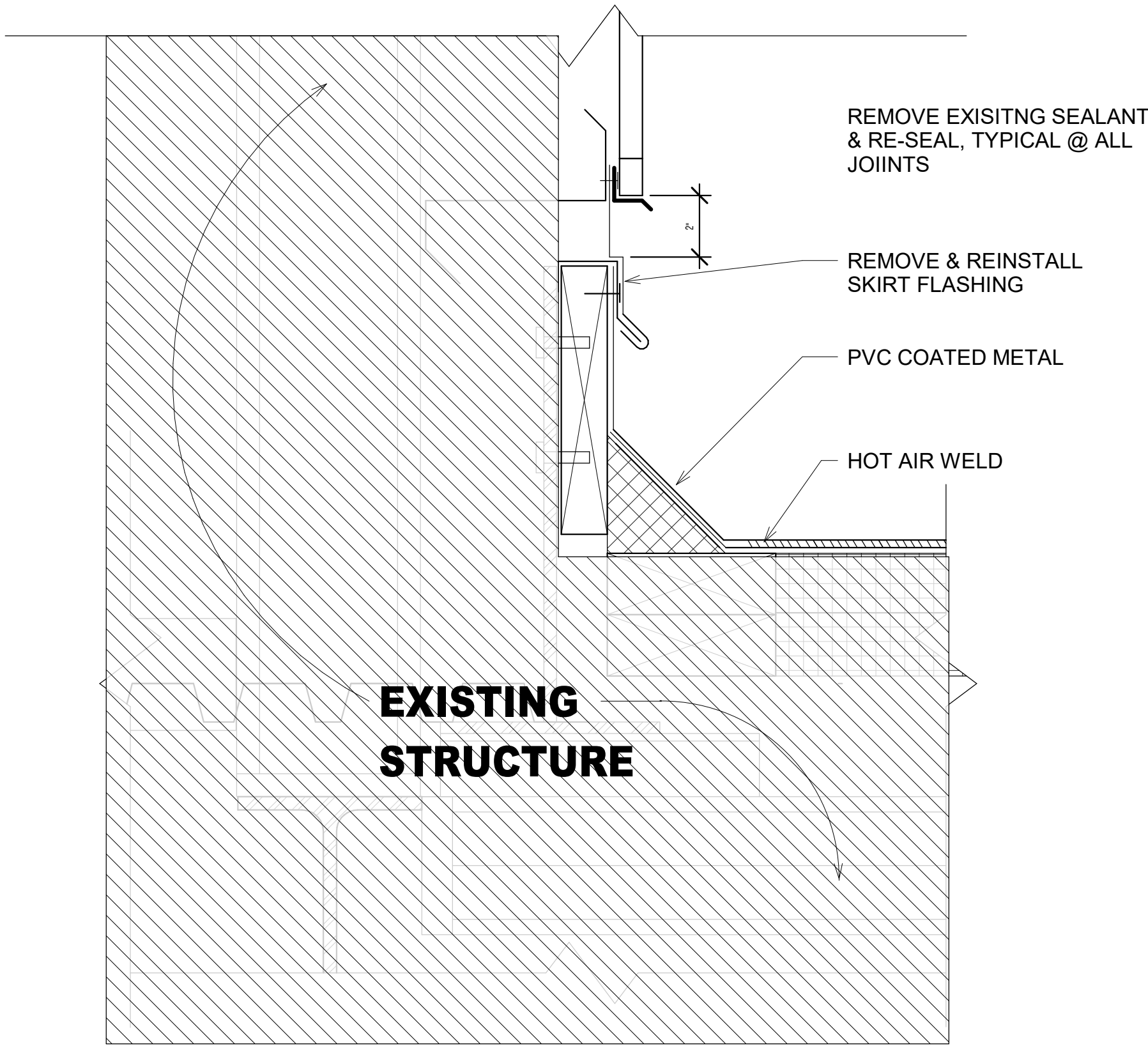
DATE: **04/26/2019**  
DRAWN BY: **JER**  
CHECKED BY: **HJM**

**SHEET A7.0**  
PROPOSED - DETAILS  
**01460-25**

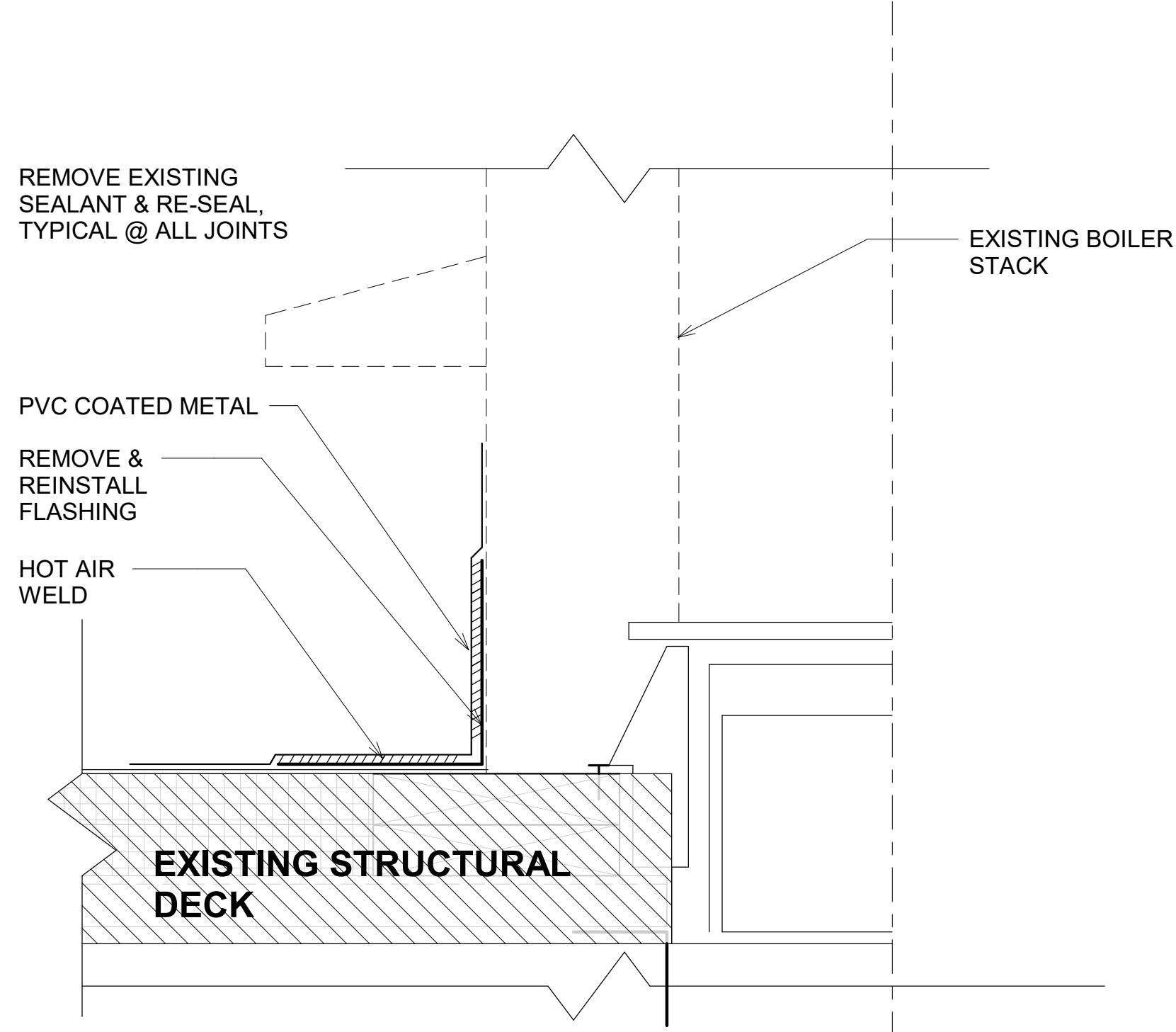
DESIGN PHASE: 100% CONSTRUCTION DOCS



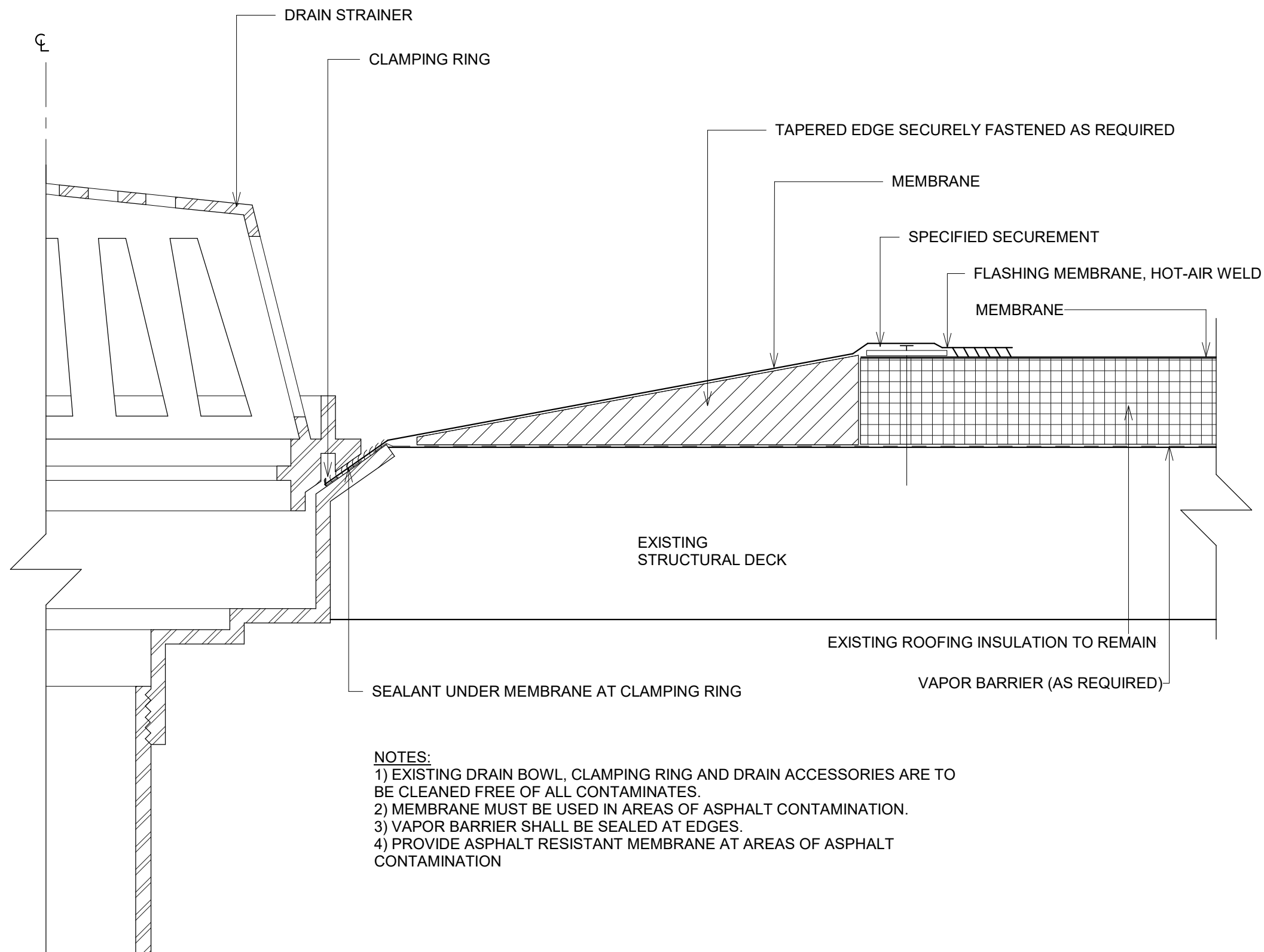
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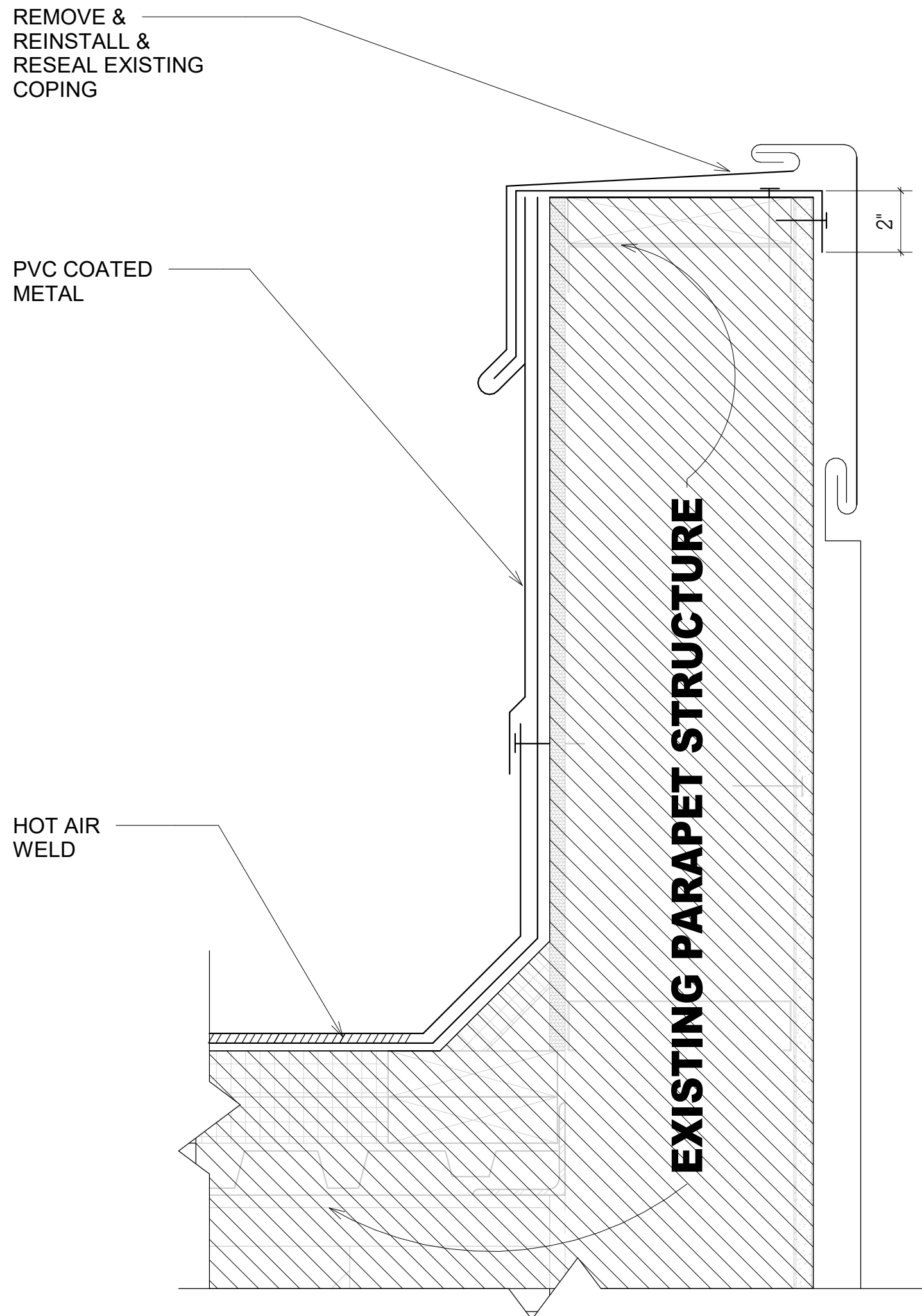
2  
A7.1 ROOF/WALL FLASHING DETAIL  
SCALE: 3" = 1'-0"



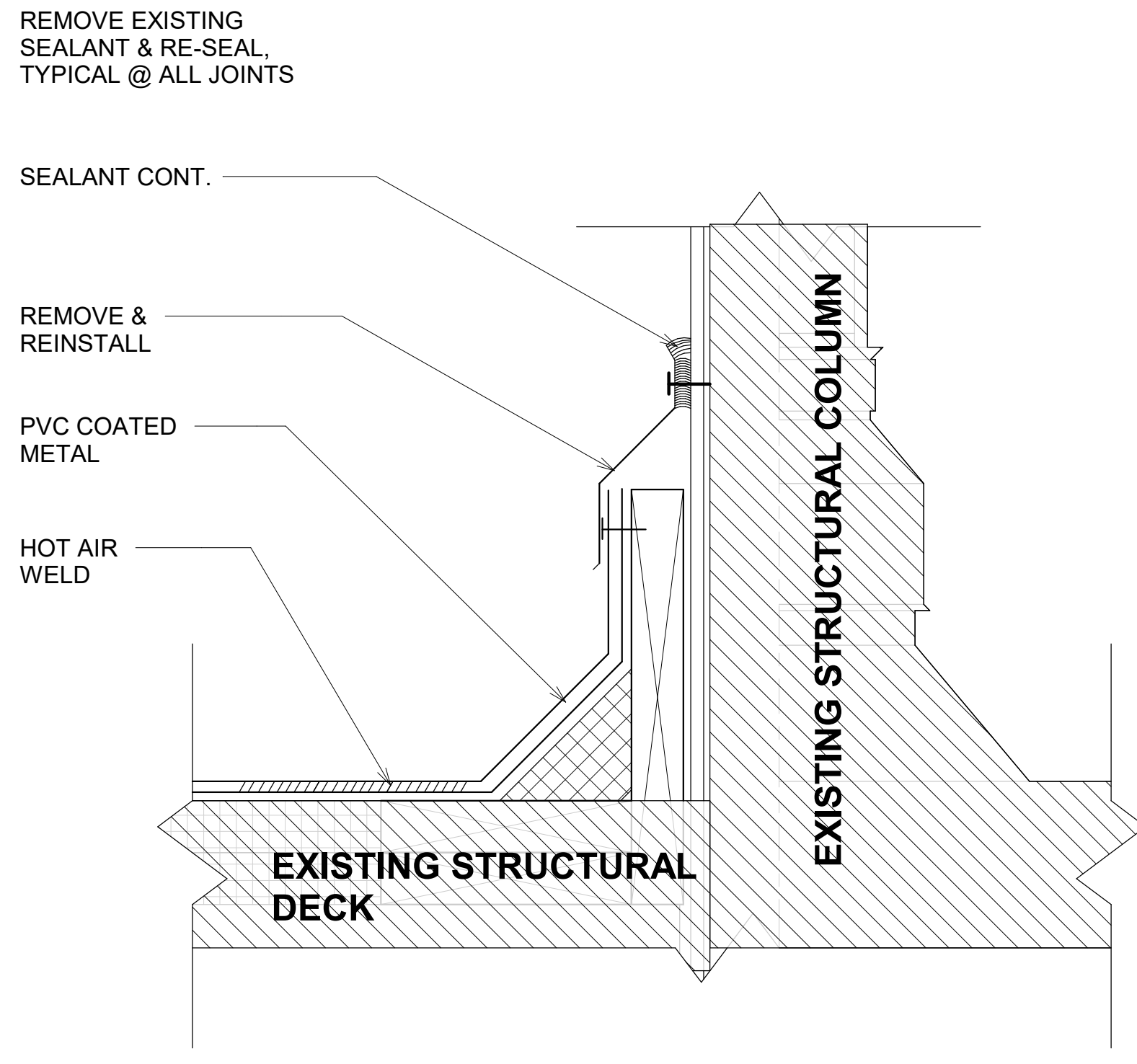
6  
A7.1 BOILER STACK THRU ROOF DETAIL  
SCALE: 3" = 1'-0"



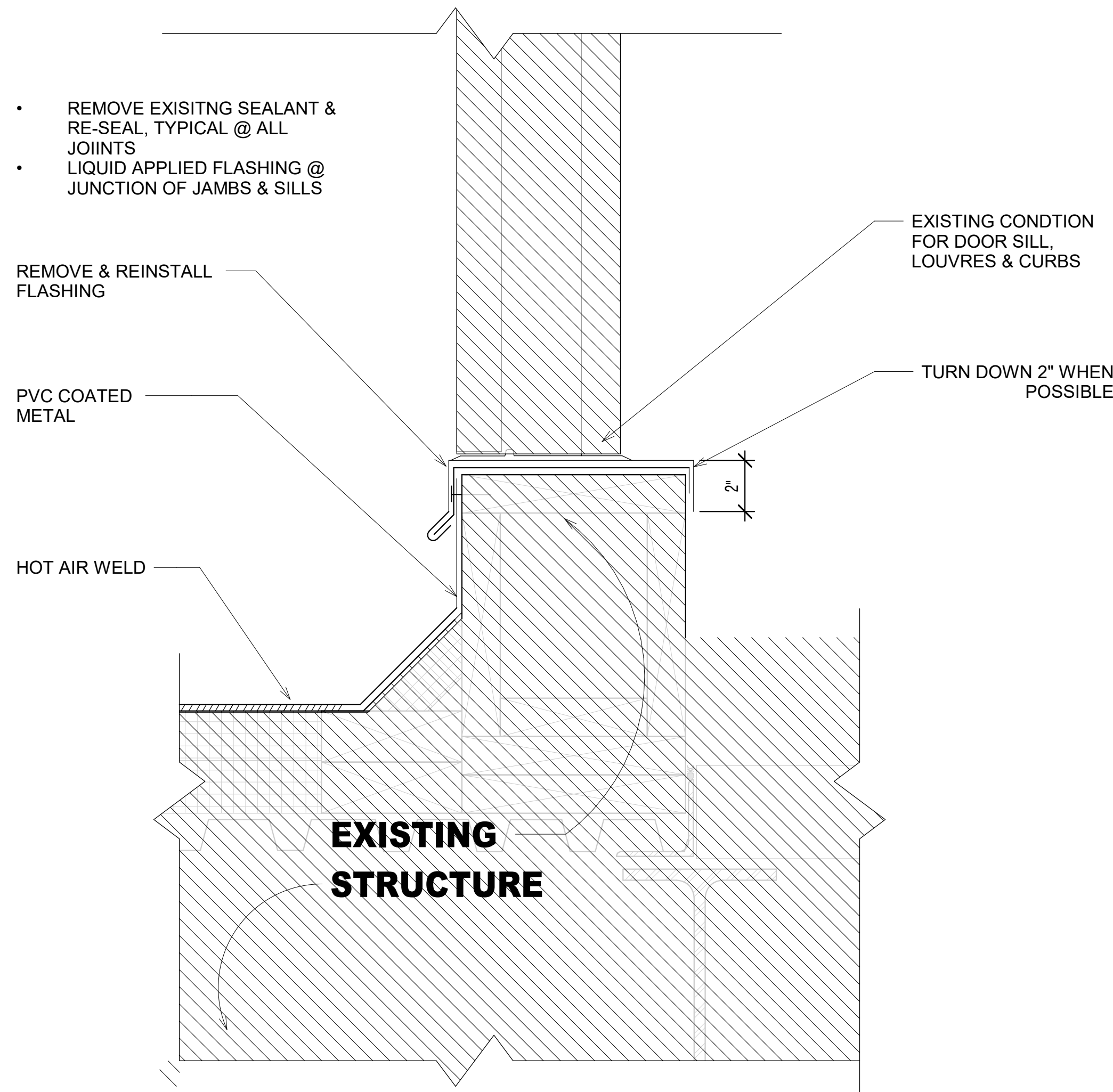
5  
A7.1 ROOF DRAIN DETAIL  
SCALE: 6" = 1'-0"



3  
A7.1 PARAPET DETAIL  
SCALE: 3" = 1'-0"

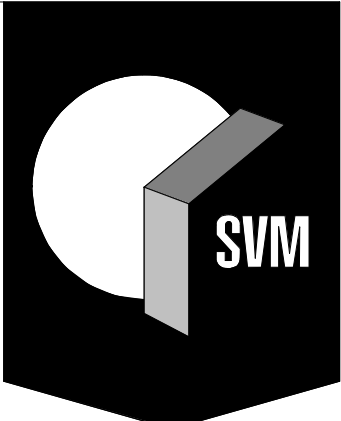


4  
A7.1 COLUMN THRU ROOF DETAIL  
SCALE: 3" = 1'-0"

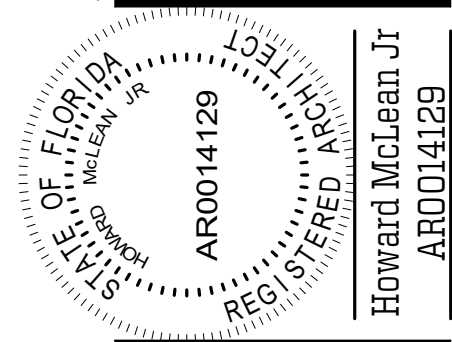


1  
A7.1 SILLS & CURBS DETAIL  
SCALE: 3" = 1'-0"

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**SKINNER VIGNOLA McLEAN, INC.**  
**ARCHITECTS & PLANNERS** | FL CERTIFICATE | AA3478



01460-25 UF SID MARTIN RE-ROOF

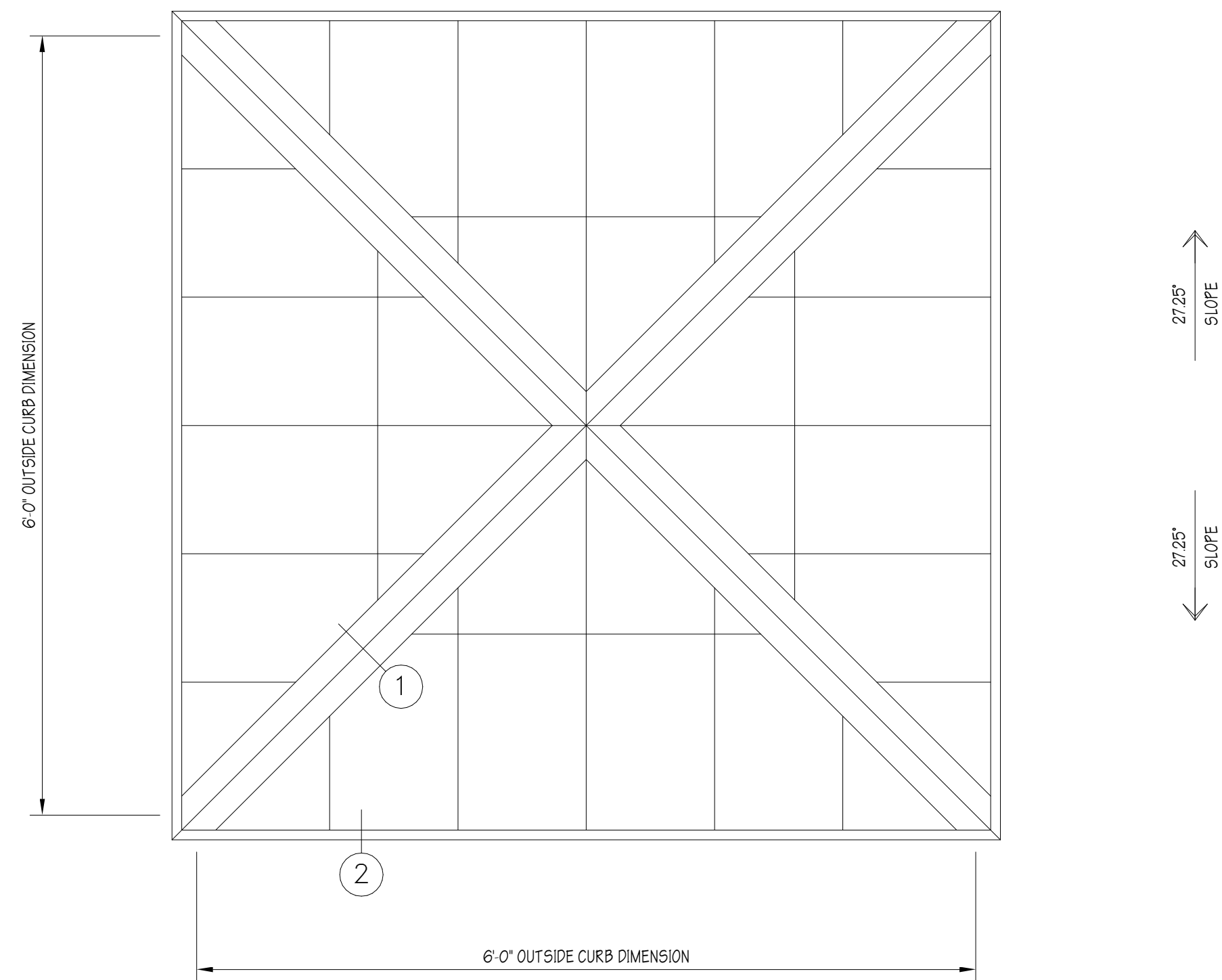
FOR  
UF PLANNING, DESIGN &  
CONSTRUCTION  
PROJECT LOCATION:  
12065 RESEARCH DR  
ALACHUA, FL 32615  
BLDG #1041

DESIGN PHASE: 100% CONSTRUCTION DOCS

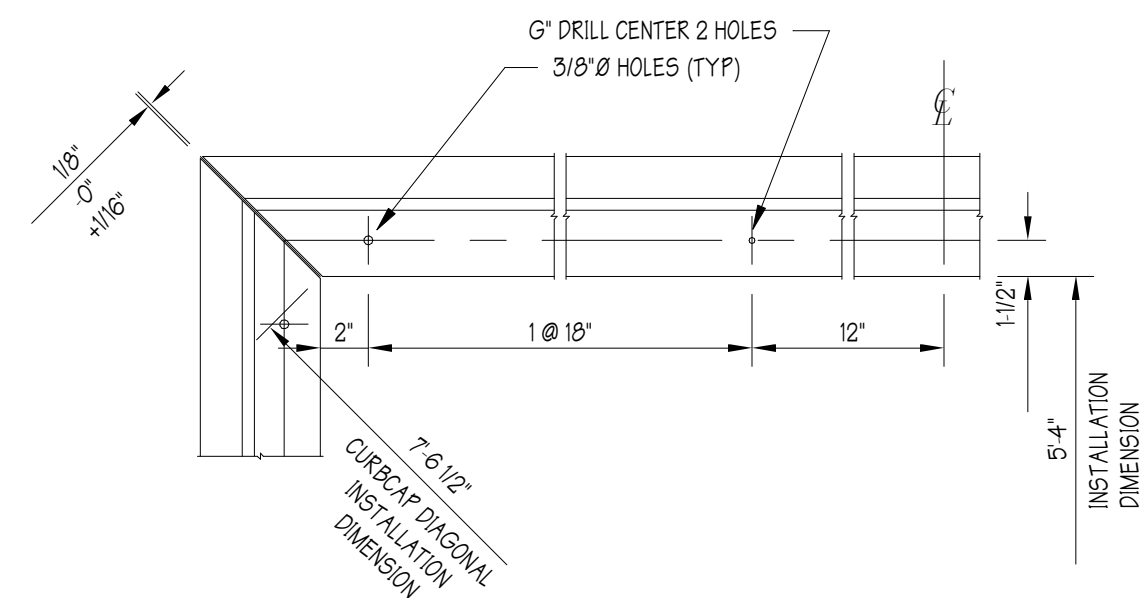
REVISIONS

DATE: 04/26/2019  
DRAWN BY: JER  
CHECKED BY: HJM

SHEET  
**A7.1**  
PROPOSED -  
DETAILS  
01460-25



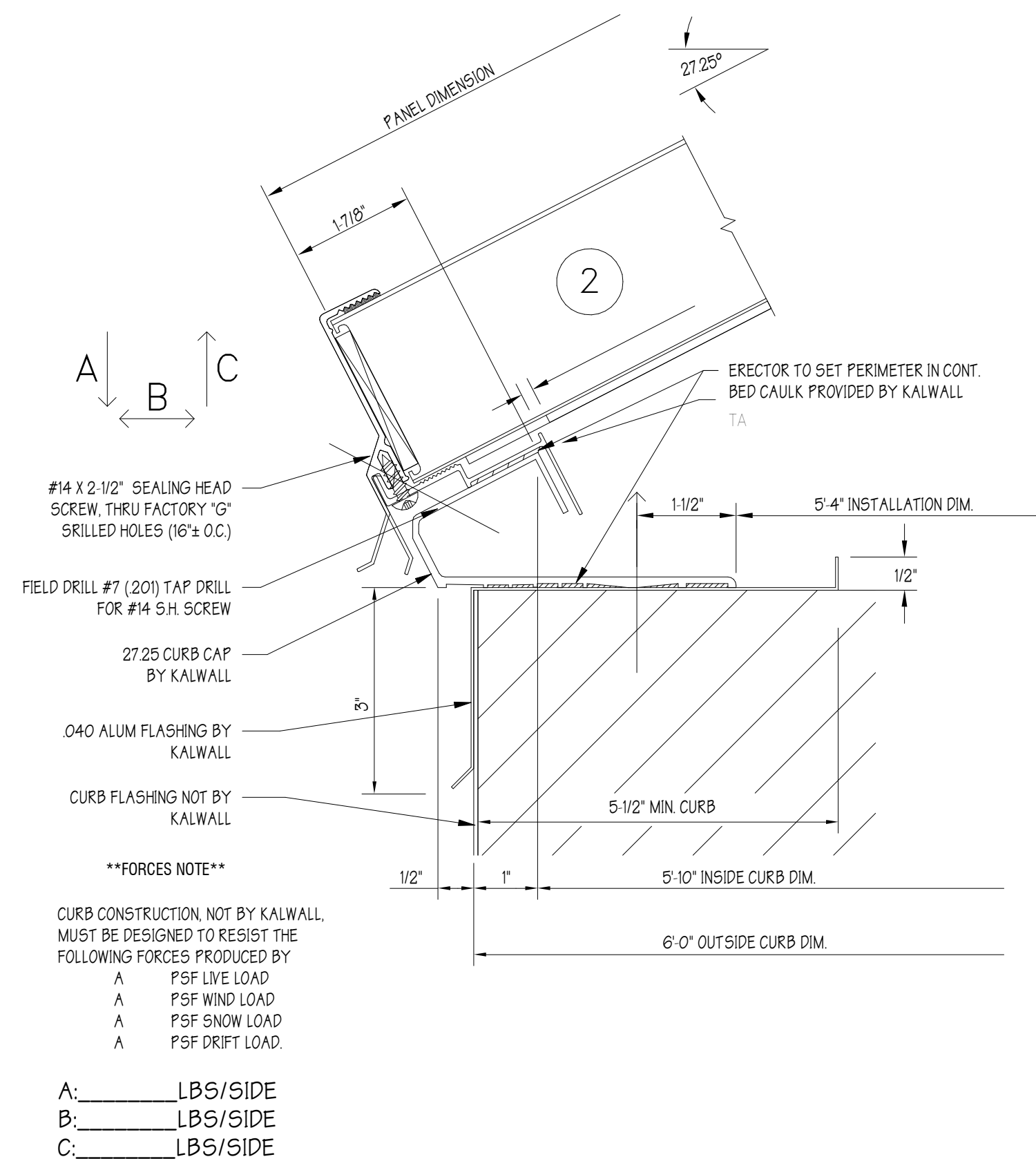
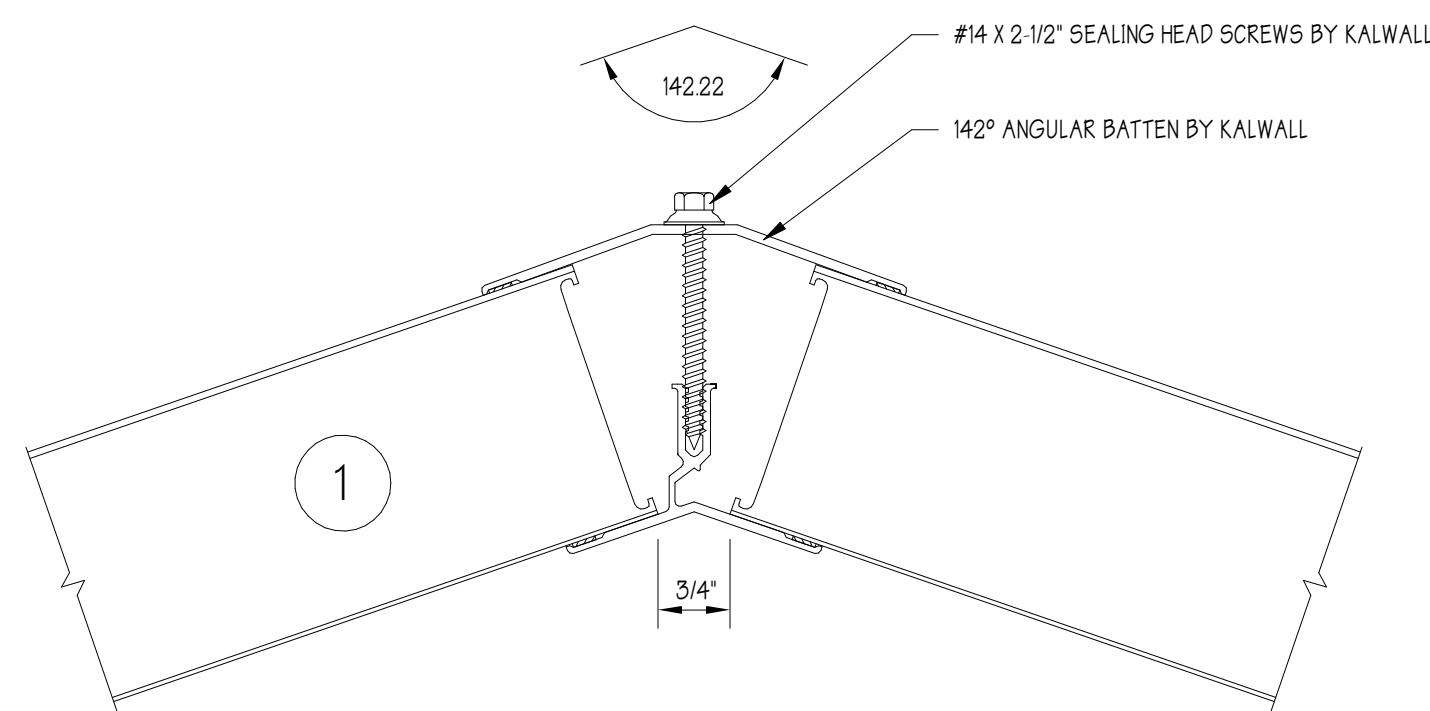
**PYRAMID PLAN**  
NOTE: SHIPPED IN 1 UNIT



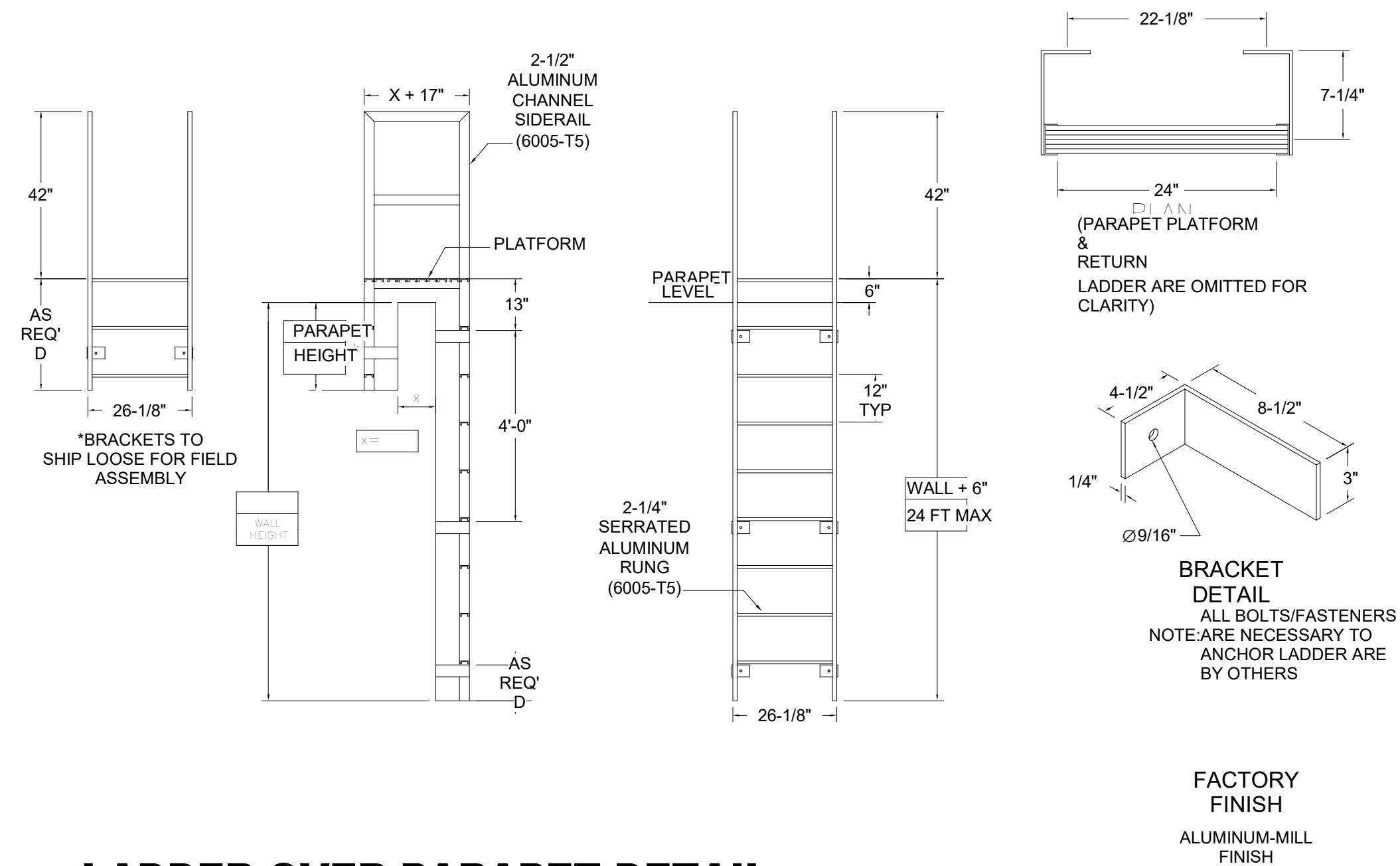
SUGGESTED FASTENING OF CURB CAP TO CURB		
CURB TYPE	FASTENER*	SPACING
WOOD	#14 RH 5.5 - 4" LG.	24" O.C.
STEEL	#14 RH 5.5 - 1" LG.	24" O.C.
CONCRETE	1/4" X 3-1/4" POWER STUD CAP #7404	24" O.C.

\*NOT SUPPLIED BY KALWALL UNLESS INSTALLED BY KALWALL  
ALL FASTENERS TO BE IN HOLE 1/8" LARGER THAN FASTENER  
DIA. HOLE AT CENTER OF CURB TO BE SAME DIA. AS FASTENER

# 27.25° - 6'-0" PYRAMID



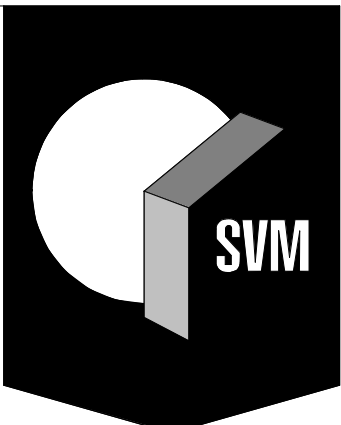
## FIXED LADDER WITH PARAPET PLATFORM & ROOFSIDE RETURN



## LADDER OVER PARAPET DETAIL

SCALE:  $3/8" = 1'-0"$

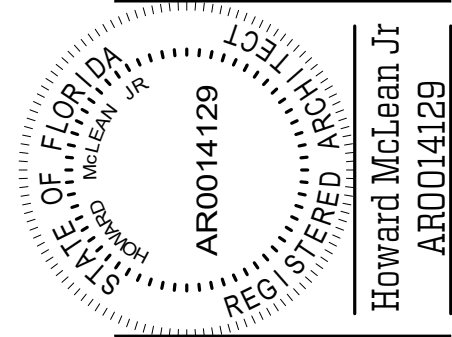
NOTE: AT THE TIME OF BUILDING PERMIT APPLICATION, THE ARCHITECT HAS NOT BEEN SO EMPLOYED TO FURNISH CONSTRUCTION OBSERVATION OR CONSTRUCTION ADMINISTRATION SERVICES. THE ARCHITECT HAS NO KNOWLEDGE OF THE START OF CONSTRUCTION NOR DOES HE HAVE KNOWLEDGE OF ANY OTHER REGISTERED ARCHITECT BEING SO EMPLOYED TO FURNISH CONSTRUCTION OBSERVATION OR CONSTRUCTION ADMINISTRATION SERVICES.



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**001460-25 UF SID MARTIN RE-ROOF**

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 12085 RESEARCH LOCATION:

PROJECT LOCATION: 12085 RESEARCH DR  
ALACHUA, FL. 32615  
BLDG #1041

## DESIGN PHASE: 100% CONSTRUCTION DOCS

REVISIONS

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DATE: **04/26/2019**  
DRAWN BY: **JER**  
CHECKED BY: **HJM**

**SHEET**  
**A7.2**

PROPOSED -  
DETAILS

01460-25

## ALT. PYRAMID SKYLIGHT DETAILS

SCALE: 1" = 1'-0"