

**OWNER:**

**Peru State College**  
600 Hoyt St  
Peru, Nebraska 68421

**PROJECT MANUAL**  
for  
**Peru State College**  
**Centennial Complex**  
**Clayburn & Mathews Roof Replacement**  
**600 Hoyt St**  
**Peru, Nebraska 68421**

Project No. 3645  
January 2, 2024

**ARCHITECT:**

**JACKSON - JACKSON & ASSOCIATES, INC.**  
6912 North 97<sup>th</sup> Circle, Suite 1  
Omaha, Nebraska 68122  
(Tele: 402/391-3999)



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**PERU STATE COLLEGE – CENTENNIAL COMPLEX**  
**CLAYBURN & MATHEWS ROOF REPLACEMENT**  
**JJA #3645**

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These Drawings and Specifications and the design concepts represented by these Documents are the property of the Architect and may not be copied or reproduced in full or in part or revised for any other project without the written approval of the Architect.

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# **PROCUREMENT REQUIREMENTS**

## PROCUREMENT REQUIREMENTS

DOCUMENT 00 11 16

### INVITATION TO BID

- 1.1 **FOR:** Centennial Complex Clayburn & Mathews Roof Replacement, located at Peru State College, Peru, Nebraska.
- 1.2 Architect's Project No. JJA 3645
- 1.3 The Owner, the Board of Trustees of the Nebraska State Colleges, doing business as Peru State College, 600 Hoyt Street, Peru, Nebraska 68421 will receive sealed bids for a combined contract, including the General, Mechanical and Electrical Work, for the Centennial Complex Clayburn & Mathews Roof Replacement Project located at 600 Hoyt Street, Peru, Nebraska 68421, under the Architect's Project Number JJA 3645.
- 1.4 The Work shall be performed in accordance with Drawings and Specifications prepared by the Architect, JACKSON - JACKSON & ASSOCIATES, INC., Architects, 6912 North 97<sup>th</sup> Circle, Suite 1, Omaha, Nebraska 68122 (Tele: 402/391-3999).
- 1.5 Sealed bids will be received until **2:00 PM (CST), Tuesday January 30, 2024**, at the office of Jennifer Rieken, Vice President for Administration and Finance, located at Peru State College Administration Building, Room #313, Peru, Nebraska 68421.
- 1.6 Bids received after this time will not be accepted.
- 1.7 Bids will be publicly opened and read aloud.
- 1.8 Bidding Documents may be examined at the office of the Architect and will be on file at the following exchanges after January 2, 2024:
  - A. **Lincoln Builders Bureau**, 5910 South 58th Street, Suite C, Lincoln, Nebraska 68516 (Tele: 402/421-8332, Fax: 402/421-8334), e-mail: [info@buildersbureau.com](mailto:info@buildersbureau.com).
  - B. **Omaha Builders Exchange, Inc.**, 4159 South 94th Street, Omaha, Nebraska 68127 (Tele: 402/991-6906, Fax: 402/884-7055). e-mail: [lisa.shockey@omahaplanroom.com](mailto:lisa.shockey@omahaplanroom.com).  
**Dropbox for digital upload:** [http://bit.ly/OBE\\_Plan\\_Room\\_Dropbox](http://bit.ly/OBE_Plan_Room_Dropbox)
  - C. **StandardSHARE**, 4422 South 108th Street, Omaha, Nebraska 68137 (Tele: 402/592-1292), e-mail: [ataute@standarddigital.com](mailto:ataute@standarddigital.com); [connect@standarddigital.com](mailto:connect@standarddigital.com).
  - D. **Construct Connect**, 30 Technology Pkwy. South, Suite 100, Norcross, GA 30092-2912 (Tele: 800/424-3996,; e-mail: [customercare@cmdgroup.com](mailto:customercare@cmdgroup.com);
  - E. **Dodge, Data, and Analytics** 2507 Ingersoll Avenue, Des Moines, Iowa 50312.
- 1.9 Bidders may obtain Bidding Documents at the office of A&D Technical Supply, 4320 S. 89 St., Omaha, NE 68127, Website: <https://adtechsupply.com/>, upon depositing the sum of fifty dollars (\$50.00), payable to Jackson-Jackson & Associates, for the set of Bidding Documents. **The entire deposit will be refunded upon the return of these documents, including any addenda**

**issued thereto, to A & D Technical Supply, 4320 S. 89 St., Omaha, NE 68127, in good condition within ten (10) days after the bid date.**

- A. A Bidder may also have the option to obtain Bidding Documents in the form of a CD or .pdf electronic download format. These will only be issued as a full set, with cost to be determined by A & D Technical Supply, with payment for either of these options payable to A & D Technical Supply. This payment will be non-refundable.
  - B. If the Bidding Documents are not returned within ten (10) days, the deposit check may be cashed. A plan deposit card, as issued by the Omaha Builders Exchange, is also acceptable in lieu of a deposit.
  - C. Partial sets of Bidding Documents will not be issued.
  - D. Bidding Documents are made available only for the purpose of obtaining offers for this project. Their distribution does not grant a license for other purposes.
- 1.10 To be considered, bids shall be made in accordance with the Instructions to Bidders and submitted on proposal forms furnished by the Architect.
  - 1.11 The bidding documents will be shipped upon receipt of an additional non-refundable check for shipping charges, payable to A&D Technical Supply.
  - 1.12 All Contractors submitting proposals for the Work shall first examine the premises and all conditions thereon and proposals shall take into consideration all conditions as may affect the work under Contract.
  - 1.13 Bids shall be on a Lump Sum basis.
  - 1.14 Bids security in an amount equal to five percent (5%) of the highest total dollar amount of the bid shall be submitted with the bid.
  - 1.15 Bidders may not withdraw their bids for a period of at least forty-five (45) days after the scheduled closing time for receipt of bids.
  - 1.16 The Owner reserves the right to reject any or all bids or to waive any informalities or irregularities in the bidding.
  - 1.17 A Performance Bond and Labor and Material Payment Bond is required. The Contractor shall be able to furnish same on Work to be performed.
  - 1.18 The substantial completion date required by the Owner is July 26, 2024. The final completion date required by the Owner is August 2, 2024.**
  - 1.19 Contractor shall be completely off site no later than Friday, August 2, 2024.

END OF DOCUMENT

## PROCUREMENT REQUIREMENTS

DOCUMENT 00 21 13

### INSTRUCTIONS TO BIDDERS

#### 1.1 SUMMARY

- A. To be considered, bids shall be made in accordance with these Instructions to Bidders.
- B. Instructions to Bidders, AIA Document A701, 2018 Edition, shall be a part of these Instructions as if herein written out in full.
- C. All American Institute of Architects (AIA) Documents referenced herein may be examined at the office of the Architect or purchased from the:
  - 1. American Institute of Architects, 1735 New York Avenue, N.W., Washington, D.C. 20006; or AIA Nebraska, 335 North 8<sup>th</sup> Street, Suite A, Lincoln, Nebraska 68508 (Tele: 402/858-1929).
- D. Document Includes:
  - 1. Definitions.
  - 2. Contract Documents identification.
  - 3. Availability of documents.
  - 4. Examination of documents.
  - 5. Inquiries and Addenda.
  - 6. Product substitutions.
  - 7. Site examination.
  - 8. Pre-bid conference.
  - 9. Tax exempt status.
  - 10. Bidder prequalification.
  - 11. Preparation of Bid.
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  - 18. Notification of Selection of Successful Bidder and Award of the Contract
  - 19. Pre-Construction Conference
  - 20. Post-Contract Submittals
  - 21. Commencement and Completion
- E. Related Documents:
  - 1. Document 00 11 16 - Invitation to Bid.
  - 2. Document 00 31 00 - Available Project Information.
  - 3. Document 00 41 13 - Bid Form - Stipulated Sum (Single-Prime Contract).
  - 4. Document 00 73 13 - Supplementary Conditions
  - 5. Document 01 60 00 - Product Requirements

## 1.2 WORK IDENTIFIED IN CONTRACT DOCUMENTS

- A. Work under this proposed contract will consist of the removal of the existing low sloped roof system with full removal down to the existing pre-stressed concrete roof slabs, and replacement with a new 60 mil EPDM adhered membrane roofing system with a 20-year manufacturer's warranty.
- B. Location: Centennial Complex, Clayburn and Mathews located at Peru State College, Park Avenue, Peru, Nebraska.

## 1.3 DEFINITIONS

- A. Bidding Documents: Include the Invitation to Bidders, Instructions to Bidders, Bid Proposal Form as furnished by the Architect, other sample Bidding and Contract Forms, and Drawings and Specifications, including any Addenda issued prior to receipt of bids.
- B. Contract Documents: Defined in AIA Document A201-2017 Article 1, including issued Addenda.
- C. Bid: Executed Bid Form and required attachments submitted in accordance with these Instructions to Bidders.
- D. Addenda: Written or graphic instruments issued prior to the execution of the Contract which modify or interpret the Bidding Documents, including Drawings and Specifications, by additions, deletions, clarifications or corrections. Addenda will become part of the Contract Documents when the Construction Contract is executed.
- E. Work or Project: Include all labor, materials, tools, and equipment, and all work and services necessary or incidental to the furnishing and installation, complete, to produce the construction required by the Contract Documents, and all materials and equipment incorporated or to be incorporated in such construction.
- F. Where "AIA" or "A.I.A." occurs, it shall mean "American Institute of Architects, 1735 New York Avenue, N.W. Washington, D.C. 20006".
- G. The term "Project Manager" shall be interchangeable with the word "Contractor".

## 1.4 CONTRACT DOCUMENTS IDENTIFICATION

- A. The Contract Documents are identified as Peru State College, Centennial Complex Clayburn and Mathews – Roof Replacement; JJA #3645 as prepared by the Architect, Jackson-Jackson & Associates, Inc. located at 6912 North 97<sup>th</sup> Circle, Suite 1, Omaha, Nebraska 68122 (Tele: 402/391-3999; Email: [ekorth@jjaarchitects.com](mailto:ekorth@jjaarchitects.com) (Eileen Korth) or [amcfarland@jjaarchitects.com](mailto:amcfarland@jjaarchitects.com) (Anika McFarland).

## 1.5 AVAILABILITY OF DOCUMENTS

- A. Bidding Documents may be obtained as stated in the Invitation to Bid.



## 1.6 EXAMINATION OF DOCUMENTS

- A. Bidding Documents may be viewed at the office of the Architect, Jackson-Jackson & Associates, Inc., located at 6912 North 97<sup>th</sup> Circle, Suite 1, Omaha, Nebraska 68122 (Tele: 402/391-3999.)
- B. Bidding Documents are on display at the offices of the construction association plan room facilities as stated in the Invitation to Bid.
- C. Upon receipt of Bidding Documents, verify documents are complete. Notify distributor if documents are incomplete.
- D. Discrepancies: Immediately notify Architect/Engineer upon finding discrepancies in Bidding Documents. In cases where discrepancies occur between the Drawings and Specifications, or in either the Drawings or Specifications, the Contractor shall notify the Architect and furnish the higher-priced item or procedure indicated, unless an Addendum is issued clarifying the alleged discrepancy.

## 1.7 INQUIRIES AND ADDENDA

- A. During the bidding period, all questions regarding the meaning or intent of the Bidding Documents shall be directed to the Architect at Jackson-Jackson & Associates, 6912 North 97<sup>th</sup> Circle, Suite 1, Omaha, Nebraska 68114 (Tele: 402/391-3999.)
- B. Direct questions in writing to the office of the Architect; Email: [ekorth@jjaarchitects.com](mailto:ekorth@jjaarchitects.com) (Eileen Korth) or [amcfarland@jjaarchitects.com](mailto:amcfarland@jjaarchitects.com) (Anika McFarland).
- C. The Architect, Consulting Engineers and the Owner will not be responsible for oral clarification.
- D. Replies reflecting any changes in the Contract Documents shall be issued to Prime Bidders of record as Addenda to the Bidding Documents. Questions received less than forty-eight (48) hours prior to bid opening will not be answered.

## 1.8 PRODUCT SUBSTITUTIONS

- A. Where Bidding Documents stipulate particular Products, substitution requests will be considered by Architect up to eight (8) calendar days before bid date and hour. Requests received after this time will not be considered. Refer to Section 01 60 00 - for substitution procedures.

## 1.9 SITE EXAMINATION

- A. Bidders shall visit the existing building(s) and work area, compare the Drawings and Specifications with any work in place and become informed of all conditions, including other work being performed, if any, at the site.
- B. Failure to visit the existing building(s) and work area shall not relieve the successful Bidder from the necessity of furnishing any materials or performing any work that may

be required to complete the Work in accordance with the Drawings and Specifications without additional cost to the Owner.

- C. Contact the Owner Representative, Joseph Foresman (Director of Facility Services), at the following address and phone number to arrange date and time to visit Project site:
  - 1. Address: Peru State College Campus.
  - 2. Telephone: 402-917-0875.
  - 3. E-mail: jforesman@peru.edu

#### 1.10 PRE-BID CONFERENCE

- A. A **MANDATORY** Pre-Bid Conference is scheduled for 10:00 A.M. CDT on Tuesday January 16, 2024, at the site, located at south side of the Clayburn and Mathews building at Centennial Complex, located at Peru State College, Park Avenue, Peru, Nebraska.
- B. All general/roofing contractors wishing to submit a bid proposal are required to meet with the Owner and Architect to review all aspects of the Project. Interested subcontractors and suppliers are also welcome to attend.
- C. Representatives of the Owner and Architect will be in attendance.
- D. Information relevant to Bidding Documents will be issued by Addendum.

#### 1.11 TAX EXEMPT STATUS

- A. Sales and Use Tax: The Owner, a tax-exempt entity, will appoint the successful Bidder to be its Purchasing Agency. Materials to be incorporated into the complete Project shall be purchased tax-exempt in the name of the Owner and the bidder shall exclude from his bid all State of Nebraska and local Option Sales and Use Tax for such materials. The successful Bidder shall include State of Nebraska and Local Option Sales and Use Tax for materials which are used or consumed in performing the Work but which are not incorporated into the complete Project.
- B. Federal Taxes: The Owner is a tax-exempt entity. Where Federal Statutes exempt the Owner from the payment of excise or manufacturer's taxes on materials or equipment, the bidder shall exclude the amount of any applicable federal excise or manufacturer's taxes from his bid. The Owner will furnish the Contractor, on request by the Contractor, the necessary exemption certificates to aid the Contractor in the recovery of any such Federal taxes paid by the Contractor.

#### 1.12 EMPLOYEES AND APPLICANTS

- A. Attention is called to the fact that the Bidder must ensure that employees and applicants for employment are not discriminated against because of their race, color, religion, sex, national origin, age, disability, sexual orientation, or gender identity.

#### 1.13 FAIR LABOR STANDARDS:

- A. The bidder shall comply with fair labor standards in the pursuit of his business and in the execution of the Work contemplated in the Bid Proposal.

- B. The award will be made in compliance with the Nebraska Fair Labor Standards Act, and the Contractor shall comply with the provisions of Section 73-104 of the Nebraska State Statutes and with all applicable Fair Labor Standards set forth in Chapter 73 of the Nebraska Revised Statutes.
- C. The Contractor is required to use a federal immigration verification system to determine the work eligibility status of new employees physically performing services with the State of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program authorized by the Illegal Immigration Reform and Immigration Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility of a newly hired employee.

OR

- D. The Contractor is an individual or sole proprietorship. The Contractor must complete the "United States Citizenship Attestation Form," available on the Department of Administrative Services website at <https://das.nebraska.gov/>. If the Contractor indicates on such attestation form that he or she is a qualified alien, the Contractor agrees to provide US Citizenship and Immigration Services (USCIS) documentation required to verify the Contractor's lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program. The attestation form and USCIS documents (if applicable) must be attached to the contract between the Owner and Contractor/Construction Manager.
- E. Bidders are required to have in effect a drug free workplace policy that complies with the State of Nebraska's policy and provide copies of this policy to the Owner and Architect prior to beginning work onsite. Compliance with the State of Nebraska's Drug-Free Workplace shall be enforced at all times.

#### 1.14 BIDDER PREQUALIFICATION

- A. All Bidders shall, when specifically requested, complete and submit a properly executed Contractor's Qualification Statement on AIA Document A305, December 2010 Edition to the Architect at least fifteen (15) calendar days before bids are received. Statement shall at minimum provide evidence of financial position, previous experience, current commitments and license to perform work in the area where the project is located.
- B. Architect will notify Bidders of acceptance or rejection of Bidder's qualifications within five (5) calendar days of Bidder's submittal.

#### 1.15 PREPARATION OF BID

- A. Bid shall be submitted on unaltered Bid Proposal Form furnished by the Architect.
- B. Bid shall include the legal name of the Bidder, and shall show whether the Bidder is a corporation, a partnership, or a sole proprietor, or any other legal entity. A bid of a corporation shall give the State of Incorporation and shall have the seal affixed. A Bid of a partnership shall give the names of both partners. A Bid of a sole proprietorship doing

business under a trade name shall give the name of the sole proprietor and the trade name under which the individual is doing business.

- C. Fill in all blank spaces for bid prices in ink or typewritten words, and submit one (1) copy. No segregated or qualified bids will be accepted. Bidders are to complete all applicable items on the Bid Proposal Form. To not comply with this requirement may be cause for rejection of the bid.
- D. Bid shall be signed by the person or persons legally authorized to bind the bidder to the Contract. A bid submitted by an agent shall have a current power of attorney attached, certifying the agent's authority to bind the bidder.

#### 1.16 BID SECURITY

- A. A satisfactory bid bond, certified check, cashier's check, or bank draft payable to the order of the Owner Peru State College, or negotiable U. S. Government Bonds (at par value), in an amount equal to five percent (5%) of the highest total dollar amount of the bid, shall be submitted with the bid.
  - 1. The bid bond, if used for bid security, shall be issued by a surety company authorized by the State of Nebraska to issue bonds and shall be acceptable to the Owner.
  - 2. The bid bond shall be submitted on AIA Document A310, 2010, or latest edition, and the attorney-in-fact who executes the bond on behalf of the surety shall affix to the bond a certified and current copy of his power of attorney.
- B. Bid security shall be enclosed with the Bid Proposal.
- C. Bid security of the three (3) lowest Bidders will be retained until the Contract is signed and required bond and insurance are filed, the specified time has elapsed so that bids may be withdrawn, or all bids have been rejected.
- D. If within ten (10) days after notice of acceptance of the Bid, the successful Bidder refuses to enter into a Contract or fails to furnish bonds as described in these Instructions to Bidders, for the faithful performance of the Contract and payment of obligations arising there under, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty.

#### 1.17 SUBMISSION OF BID

- A. The Bid Proposal , including the required bid security shall be enclosed in an opaque envelope which shall be sealed and clearly labeled with the words "Proposal for Peru State College, Centennial Complex Clayburn and Mathews Roof Replacement", along with the Bidder's name, address, and the date and time of Bid opening in order to guard against premature opening of the Bid. If the bid is sent by mail, it shall be enclosed in a separate mailing envelope with notation, "Sealed Bid Enclosed," on the face thereof and shall be directed to: Jennifer Rieken, Vice President for Administration and Finance, located at Peru State College Administration Building, Room #313, Peru, Nebraska 68421. If sending bids via UPS or FedEx, the street address is 600 Hoyt Street.

- B. Each bidder by submitting a bid represents that the Bidding Documents have been read and understood and that the bidder has visited the site and has become familiar with the local conditions under which the Work is to be performed.
- C. Bids may be held by the Owner for a period of forty-five (45) days from the date of the opening of bids for the purpose of reviewing the bids and investigating the qualification of bidders prior to the award of the Contract.
- D. No facsimile (faxed) or emailed proposal will be accepted.

#### 1.18 MODIFICATION OR WITHDRAWAL OF BID

- A. A bid may not be modified, withdrawn or canceled by the bidder until forty-five (45) days after the time and date for receipt of bids without the consent of the Owner.
- B. Prior to the time and date for receipt of bids, bids submitted early may be modified or withdrawn only by notice to the party receiving bids at the place and prior to the time designated for receipt of bids. Such notice shall be in writing over the signature of the bidder.
- C. Withdrawn bids may be resubmitted up to the time designated for the receipt of bids. Bid security shall be sufficient for the bid as modified or resubmitted.

#### 1.19 CONSIDERATION OF BIDS

- A. To be considered, the bid must be made in accordance with these Instructions to Bidders.
- B. Rejection of Bids, Informalities and Irregularities: The Owner shall have the right to reject any or all bids and, in particular, to reject any bids not accompanied by required bid security, or data required by the Bidding Documents or in any way incomplete or irregular. The Owner reserves the right to waive any informality or irregularity in the Bidding or in any bid received.
- C. Disqualification: The Owner reserves the right to disqualify any bid, before or after the opening, upon evidence of collusion with intent to defraud or other illegal practices upon the part of the bidder.

#### 1.20 EVALUATION OF BIDS

- A. The Owner, with the assistance of the Architect, will evaluate the bids received to award the Contract on the basis of the lowest and/or best bid as determined by the Owner based upon the Base Bid and any accepted Alternate. Alternates will not be accepted or rejected in any specific order or priority.

#### 1.21 NOTIFICATION OF SELECTION OF SUCCESSFUL BIDDER AND AWARD OF THE CONTRACT

- A. The successful Bidder, approved by the Owner, will be notified of selection for the award of the Contract for the Work.

- B. This Bidder shall within seven (7) days after notification of selection of the award of the Contract for the Work, submit the following:
  - 1. A statement of costs (Schedule of Values) for each major Item of Work included in the Bid.
  - 2. A designation of the Work to be performed by this Bidder with his own forces.
  - 3. Preliminary list of Subcontractors.

#### 1.22 PRE-CONSTRUCTION CONFERENCE

- A. Pre-Construction Conference: A pre-construction conference will be held with the successful bidder prior to the signing of the Contract for Construction. The intent of the conference will be to review the Work, required submittals, insurance responsibilities, warranties, payments, proposed subcontractors and proposed completion. The Bidder will be notified of the day, time and place of the conference.
- B. Architect will record minutes and distribute one copy within three days after meeting to all participants.

#### 1.23 POST-CONTRACT SUBMITTALS

- A. Performance and Labor and Material Payment Bond:
  - 1. The successful Bidder shall be required to furnish a Performance and Labor and Material Payment Bond.
  - 2. Performance and Labor and Material Payment Bond covering the faithful performance of the Contract and the payment of all obligations arising thereunder, in the amount of one-hundred percent (100%) of the Contract Sum, shall be submitted in triplicate to the Architect within three (3) days after execution of the contract and shall be dated on or after the date of execution of the Contract. Or, if the Work is commenced prior thereto in response to a letter of intent, the successful Bidder shall, prior to commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be issued.
  - 3. Such bonds shall be issued by a surety company acceptable to the Owner and properly licensed in the State of Nebraska, and shall be executed on AIA Document A312, December 2010 Edition. The Attorney-In-Fact, who executes the bonds on behalf of the surety, shall affix thereto a certified and current copy of its power of attorney indicating the monetary limit of such power.
  - 4. No surety company will be acceptable as bondsman that has no permanent agent or representative in the State of Nebraska upon whom notices may be served; service of said notice on said agent or representative in the State of Nebraska shall be equal to service of notice on the president or such other officer of the surety company as may be concerned.
  - 5. Should the surety company acting as bondsman remove its permanent agent or representative from the State of Nebraska, the Contractor shall then furnish the Owner with a new surety bond conforming to the above described requirements.
- B. Schedule of Values:
  - 1. Submit printed schedule on AIA Form G703 - Continuation Sheet for G702. Contractor's standard form or electronic media printout will be considered.
  - 2. Submit Schedule of Values in duplicate within 7 days after notification of selection of the award of the Contract for the Work or the date established in Notice to Proceed.

3. Format: Identify each major Item of Work included in the Bid. Identify site mobilization, bonds and insurance. Separate from the General Conditions.
  4. Revise schedule to list approved Change Orders, with each Application for Payment.
- C. List of Subcontractors:
1. The Contractor, within two (2) weeks after the award of the Contract, shall furnish to the Architect in writing for acceptance by the Owner and the Architect, a complete and final list of the names of the Subcontractors proposed for the Work.
  2. The Architect shall promptly notify the Contractor in writing if either the Owner or the Architect, after due investigation, has reasonable objection to any Subcontractor (person or organization) on such list and does not accept same.
  3. The Contractor shall use AIA Document G705, List of Subcontractors, April 2001 Edition, or approved equal.
  4. The successful Contractor will be required to establish to the satisfaction of the Architect and the Owner the reliability and responsibility of the proposed subcontractors' respective trades.
  5. If the Contractor submits an acceptable subcontractor substitute with an increase in his Bid price to cover the difference in cost occasioned by such substitution, the Owner may, at his discretion, accept the increased Bid price, accept the original subcontractor or he may disqualify this Bidder and cancel the contract.
  6. Subcontractors and other persons and organizations proposed by this Bidder and accepted by the Owner and the Architect must be used on the Work for which they were proposed and accepted and shall not be changed except with the written approval of the Owner and the Architect.
- D. The Contractor shall submit to the Architect for approval two (2) copies of a Schedule of Work on the entire project within two (2) weeks after signing of the Contract. Schedule shall be submitted and tracked at each monthly coordination meeting.
- E. Certificates of Insurance: After award of the Contract, all certificates of insurance shall be filed with the Architect and Owner, using Insurance Industry Document ACORD 25-S, and AIA Document G715, 2017 Edition, Instruction Sheet and Supplemental Attachment for ACORD Certificate of Insurance 25-S. These Certificates, once approved by the Architect, will then be forwarded to the Owner. Refer to Document 00 73 13 - Supplementary Conditions for requirements.

#### 1.24 COMMENCEMENT AND COMPLETION

- A. The Contractor shall commence work under the Contract upon written Notice to Proceed, or upon signing of the Contract for Construction by both parties, and as weather will permit, and should fully complete all Work thereunder within the time limit designated in the Bid Proposal and to be made a part of the Contract.
- B. Full time on-site labor may begin upon receipt of a fully executed contract or upon receipt of a "Notice to Proceed" from the Owner.
- C. **The substantial completion date required by the Owner is July 26, 2024. The final completion date required by the Owner is Friday, August 2, 2024.**

- D. Contractor shall be completely off site no later than Friday, August 2, 2024.

END OF DOCUMENT



## **BID PROPOSAL**

**PROPOSAL OF:** \_\_\_\_\_, a corporation, organized and existing under the State of \_\_\_\_\_, a partnership consisting of: \_\_\_\_\_ and \_\_\_\_\_ or a sole proprietorship as: \_\_\_\_\_, hereinafter called the Bidder,

**TO:** The Board of Trustees, Nebraska State Colleges  
Peru State College  
600 Hoyt Street, Peru, Nebraska 68421

The undersigned acknowledges visitation to the site and being familiar with the local conditions affecting the cost of the Work, hereby proposes and agrees to furnish all labor, materials, tools and equipment and perform all work and services required for the Combined Construction, including General Construction and Mechanical and Electrical Work required, in accordance with the Contract Documents prepared by Jackson - Jackson & Associates, Inc., 6912 North 97th Circle, Suite 1, Omaha, Nebraska, 68122, under **JJA Project No. 3645**, including Addenda issued thereto,

**FOR:** The Centennial Complex Clayburn and Mathews Roof Replacement on the Peru State College Campus.

*All amounts shown herein are in both figures and words. In case of discrepancy, amounts shown in words shall govern.*

**ADDENDA:** The undersigned acknowledges receipt of all Addenda including **Addendum No. \_\_\_\_\_** through **Addendum No. \_\_\_\_\_**.

**LUMP SUM BASE BID:** The undersigned hereby proposes and agrees to perform the foregoing combined construction for the lump sum base bid of:

**BASE BID:** \$ \_\_\_\_\_ Dollars

**ALTERNATES:** The above Base Bid may be modified in accordance with the following Alternate Proposals as may be accepted by the Owner:

**ALTERNATE #1:** Upgrade the roof assembly to a 90 mil EPDM adhered membrane roofing system with a 30-year manufacturer's warranty.

**ADD:** \$ \_\_\_\_\_ Dollars

**UNIT PRICES:** The quantity of those materials/procedures which are listed below may be modified by a Change Order in accordance with the following Unit Prices:

1. **UNIT PRICE #1:** Remove/Replace Existing Deteriorated 2x12 Wood Blocking.

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)/Linear Foot

**The undersigned further acknowledges and agrees:**

1. That the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding.
2. That this Bid shall be good and may not be withdrawn for a period of thirty (30) days after the scheduled closing time for receiving bids.

3. That if notified of the acceptance of this Bid Proposal within forty-five (45) days from the scheduled opening of the bids, the undersigned will enter into and execute an "Owner-Contractor Agreement" based upon this Bid, in the form of a stipulated sum agreement, to be attached to and made part of the Contract Documents.
  4. That if awarded the Contract and Alternate #1 is accepted by the Owner, to furnish and deliver to the Owner within fifteen (15) days after the signing of the Contract, a satisfactory Performance Bond and Labor and Material Payment Bond in the form currently issued by the AIA in an amount equal to one hundred percent (100%) of the Contract Sum for the Work to be performed.
  5. That if awarded the Contract, **the work shall be substantially complete by Friday, July 26, 2024 with final completion obtained by Friday, August 2, 2024.**
1. All bidders must comply with the State of Nebraska's Drug Free Workplace.
  2. Either (1) The Contractor is required to use a federal immigration verification system to determine the work eligibility status of new employees physically performing services with the State of Nebraska. Or (2) The Contractor is an individual or sole proprietorship. The Contractor must complete the "United States Citizenship Attestation Form," available on the Department of Administrative Services website at <https://ndbf.nebraska.gov/sites/ndbf.nebraska.gov/files/doc/industries/mb/mb-attestation-form.pdf>.
  3. Contractor understands that Contracts executed as a result of this bid proposal are subject to statutory public disclosure and public website posting requirements. Information submitted with your bid proposal and written responses are subject to disclosure requirements under the Nebraska Public Record statutes. Information may only be withheld from the public under very limited circumstances. Documents submitted as part of the bid proposal containing trade secret or proprietary information must be submitted in a sealed envelope marked "Proprietary".

**BID SECURITY:** Attached hereto is bid security as required in accordance with the Instructions to Bidders in the amount of not less than five percent (5%) of the highest total dollar amount bid.

**STATE REGISTRATION NUMBER:** \_\_\_\_\_

**SIGNED** this \_\_\_\_\_ day of \_\_\_\_\_,

**BY:**

\_\_\_\_\_  
Legal Name of Bidder

\_\_\_\_\_  
Address

\_\_\_\_\_  
City State Zip

\_\_\_\_\_  
Authorized Officer (signature) Title

(Corporate Seal)

This Proposal Form furnished by  
Jackson - Jackson & Associates, Inc., Architects  
6912 North 97th Circle, Suite 1; Omaha, Nebraska 68122; Tele: (402) 391-3999

(End of Proposal)

# **CONTRACTING REQUIREMENTS**

# Nebraska Resale or Exempt Sale Certificate

for Sales Tax Exemption  
• Read instructions on reverse side/see note below

FORM  
**13**

| NAME AND MAILING ADDRESS OF PURCHASER |       |          | NAME AND MAILING ADDRESS OF SELLER |       |          |
|---------------------------------------|-------|----------|------------------------------------|-------|----------|
| Name                                  |       |          | Name                               |       |          |
| Street or Other Mailing Address       |       |          | Street or Other Mailing Address    |       |          |
| City                                  | State | Zip Code | City                               | State | Zip Code |

**Check Type of Certificate**

☐ Single Purchase    ☐ Blanket    If blanket is checked, this certificate is valid until revoked in writing by the purchaser.

**I hereby certify that the purchase, lease, or rental by the above purchaser is exempt from the Nebraska sales tax for the following reason:**

**Check One**    ☐ Purchase for Resale (Complete Section A)    ☐ Exempt Purchase (Complete Section B)    ☐ Contractor (Complete Section C)

## SECTION A—Nebraska Resale Certificate

Description of Item or Service Purchased

I hereby certify that the purchase, lease, or rental of \_\_\_\_\_  
from the above seller is exempt from the Nebraska sales tax as a purchase for resale, rental, or lease in the normal course of our business, either in the form or condition in which purchased, or as an ingredient or component part of other property to be resold.

I further certify that we are engaged in business as a:    ☐ Wholesaler    ☐ Retailer    ☐ Manufacturer    ☐ Lessor  
of \_\_\_\_\_  
Description of Product Sold, Leased, or Rented

If None, State Reason

and hold Nebraska Sales Tax Permit Number    01- \_\_\_\_\_

or Foreign State Sales Tax Number \_\_\_\_\_ State \_\_\_\_\_

## SECTION B—Nebraska Exempt Sale Certificate

The basis for this exemption is exemption category \_\_\_\_\_ (Insert appropriate category as described on reverse of this form.)

If exemption category 2 or 5 is claimed, enter the following information:

| Description of Item(s) Purchased | Intended Use of Item(s) Purchased |
|----------------------------------|-----------------------------------|
|                                  |                                   |

If exemption categories 3 or 4 are claimed, enter the Nebraska Exemption Certificate number.    05- \_\_\_\_\_

If exemption category 6 is claimed, seller must enter the following information and sign this form below:

| Description of Item(s) Sold | Date of Seller's Original Purchase | Was Tax Paid when Purchased by Seller?<br><input type="checkbox"/> YES <input type="checkbox"/> NO | Was Item Depreciable?<br><input type="checkbox"/> YES <input type="checkbox"/> NO |
|-----------------------------|------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                             |                                    |                                                                                                    |                                                                                   |

## SECTION C—For Contractors Only

**1. Purchases of Building Materials or Fixtures:**

☐ As an Option 1 or Option 3 contractor, I hereby certify that purchases of building materials and fixtures from the above seller are exempt from Nebraska sales tax. My Nebraska Sales or Consumer's Use Tax Permit Number is:    01- \_\_\_\_\_

**2. Purchases Made Under Purchasing Agent Appointment:**

☐ Pursuant to an **attached** Purchasing Agent Appointment and Delegation of Authority for Sales and Use Tax, Form 17, I hereby certify that purchases of building materials, and fixtures are exempt from Nebraska sales tax.

Any purchaser, or the agent thereof, or other person who completes this certificate for any purchase which is other than for resale, lease, or rental in the regular course of the purchaser's business, or is not otherwise exempted from the sales and use tax under Sections 77-2701 through 77-27,135 of the Nebraska Revenue Act, as amended, shall in addition to any tax, interest, or penalty otherwise imposed, be subject to a penalty of \$100 or ten times the tax, whichever amount is larger, for each instance of presentation and misuse. With regard to a blanket certificate, said penalty shall apply to each purchase made during the period the blanket certificate is in effect. Under penalties of law, I declare that I am authorized to sign this certificate, and to the best of my knowledge and belief, it is correct and complete.

**sign  
here** ➔

Authorized Signature

Title

Date

**NOTE: Sellers must keep this certificate as part of their records. DO NOT SEND TO THE NEBRASKA DEPARTMENT OF REVENUE.**

**Incomplete certificates cannot be accepted.**

## INSTRUCTIONS

**WHO MAY ISSUE A RESALE CERTIFICATE.** Form 13, Section A, is to be issued by persons or organizations making purchases of property or taxable services in the **normal** course of their business for the purpose of resale either in the form or condition in which it was purchased, or as an ingredient or component part of other property.

**WHO MAY ISSUE AN EXEMPT SALE CERTIFICATE.** Form 13, Section B can only be issued by persons or organizations exempt from payment of the Nebraska sales tax by qualifying for one of the six enumerated **Categories of Exemption** (see below). Nonprofit organizations that have a 501(c) designation and are exempt from federal and state income tax are **not** automatically exempt from **sales** tax. Only the entities listed in the referenced regulations are exempt from paying Nebraska sales tax on their purchases when the exemption certificate is properly completed and provided to the seller. Organizations claiming a sales tax exemption may do so only on items purchased for their own use. Items purchased by an exempt organization that will be resold must be supported by a properly completed Nebraska Resale Certificate, Form 13, Section A.

Indicate the category which properly reflects the basis for your exemption. Place the corresponding number in the space provided in Section B. If category 2 through 6 is the basis for exemption, you must complete the information requested in Section B.

Nebraska Sales and Use Tax Reg-1-013, Sale for Resale – Resale Certificate, and Reg-1-014, Exempt Sale Certificate, provide additional information on the proper issuance and use of this certificate. These and other regulations referred to in these instructions are available on our Web site: [www.revenue.ne.gov/legal/regs/slstaxregs](http://www.revenue.ne.gov/legal/regs/slstaxregs).

**Use Form 13E for purchases of energy sources which qualify for exemption. Use Form 13ME for purchases of mobility enhancing equipment on a motor vehicle.**

**CONTRACTORS.** Form 13, Section C, Part 1, must be completed by contractors operating under Option 1 or Option 3 to document their tax-free purchase of building materials or fixtures from their suppliers. Section C, Part 2, may be completed to exempt the purchase of building materials or fixtures pursuant to a Purchasing Agent Appointment, Form 17. See the contractor information guides on our Web site [www.revenue.ne.gov](http://www.revenue.ne.gov) for additional information.

**WHERE TO FILE.** The Form 13 is given to the seller at the time of the purchase of the property or service or when sales tax is due. The certificate must be retained with the seller's records for audit purposes. Do not send to the Department of Revenue.

**WHEN NO NUMBER IS REQUIRED.** A purchaser who completes Section A and is engaged in business as a wholesaler or manufacturer is not required to provide an identification number. Section B does not require an identification number when exemption category 1, 2, or 5 is indicated.

**PROPERLY COMPLETED CERTIFICATE.** A purchaser must complete a certificate before issuing it to the seller. To properly complete the certificate, the purchaser must include: (1) identification of the purchaser and seller, (2) a statement as to whether the certificate is for a single purchase or is a blanket certificate, (3) a statement of basis for exemption including

completion of all information for the basis chosen, (4) the signature of an authorized person, and (5) the date the certificate was issued.

**PENALTIES.** Any purchaser who gives a Form 13 to a seller for any purchase which is other than for resale, lease, or rental in the **normal** course of the purchaser's business, or is not otherwise exempted from sales and use tax under the Nebraska Revenue Act, shall be subject to a penalty of \$100 or ten times the tax, whichever amount is larger, for each instance of presentation and misuse.

Any purchaser, or the agent thereof, who fraudulently signs a Form 13 may be found guilty of a Class IV misdemeanor.

### CATEGORIES OF EXEMPTION

**1.** Purchases made directly by certain governmental agencies identified in Nebraska Sales and Use Tax Reg-1-012, Exemptions; Reg-1-072, United States Government and Federal Corporations; and Reg-1-093, Governmental Units, are exempt from sales tax. A list of specific governmental units are provided in the above regulations. Governmental units are not assigned exemption numbers.

Sales to the United States government, its agencies, and corporations wholly owned by the United States government are exempt from sales tax. However, sales to institutions chartered or created under federal authority, but which are not directly operated and controlled by the United States government for the benefit of the public, generally are taxable.

Purchases that are NOT exempt from Nebraska sales and use tax include, but are not limited to, governmental units of other states, sanitary and improvement districts, urban renewal authorities, rural water districts, railroad transportation safety districts, and county historical or agricultural societies.

**2.** Purchases when the intended use renders it exempt as set out in paragraph 012.02D of Reg-1-012, Exemptions. Complete the description of the item purchased and the intended use as required on the front of Form 13. Sellers of **repair parts** for agricultural machinery and equipment cannot accept a Form 13 to exempt such sales from tax.

**3.** Purchases made by organizations that have been issued a Nebraska Exempt Organization - Certificate of Exemption are exempt from sales tax. Reg-1-090, Nonprofit Organizations; Reg-1-091, Religious Organizations; and Reg-1-092, Educational Institutions, identify such organizations. These organizations will be issued a Nebraska state exemption identification number. This exemption number must be entered in Section B of the Form 13.

**4.** Purchases of common or contract carrier vehicles and repair and replacement parts for such vehicles.

**5.** Purchases of manufacturing machinery or equipment by a manufacturer for use predominantly in manufacturing. This includes the installation, repair, or maintenance of such qualified manufacturing machinery or equipment.

**6.** A sale that qualifies as an occasional sale, such as a sale of depreciable machinery and equipment productively used by the seller for more than one year and the seller previously paid tax on the item. The **seller** must sign and give the exemption certificate to the purchaser. The certificate must be retained by the purchaser for audit purposes. See Reg-1-014.01.

# Purchasing Agent Appointment and Delegation of Authority for Sales and Use Tax

FORM  
**17**

## PURCHASING AGENT APPOINTMENT

| Name and Address of Prime Contractor |       |          | Name and Address of Governmental Unit or Exempt Organization |       |          |
|--------------------------------------|-------|----------|--------------------------------------------------------------|-------|----------|
| Name                                 |       |          | Name                                                         |       |          |
| Street or Other Mailing Address      |       |          | Street or Other Mailing Address                              |       |          |
| City                                 | State | Zip Code | City                                                         | State | Zip Code |
| Name and Location of Project         |       |          | Appointment Information                                      |       |          |
| Name                                 |       |          | Effective Date (see Instructions)                            |       |          |
| Street or Other Mailing Address      |       |          | Expiration Date                                              |       |          |
| City                                 | State | Zip Code | Nebraska Exemption Number (Exempt Organizations Only)        |       |          |
| Identify Project                     |       |          |                                                              |       |          |

The undersigned governmental unit or exempt organization appoints the above-named contractor and the contractor's delegated subcontractors as its agent to purchase and pay for building materials that will be annexed to real estate by them into the tax exempt construction project stated above.

**sign  
here**

Authorized Signature of Governmental Unit or Exempt Organization

Title

Date

## DELEGATION OF PRIME CONTRACTOR'S AUTHORITY

| Name and Address of Subcontractor |       |          | Delegation Information |  |  |
|-----------------------------------|-------|----------|------------------------|--|--|
| Name                              |       |          | Effective Date         |  |  |
| Street or Other Mailing Address   |       |          | Expiration Date        |  |  |
| City                              | State | Zip Code | Portion of Project     |  |  |

The undersigned prime contractor hereby delegates authority to act as the purchasing agent of the named governmental unit or exempt organization to the above-named subcontractor.

**sign  
here**

Signature of Prime Contractor or Authorized Representative

Title

Date

## INSTRUCTIONS

**WHO MUST FILE.** Any governmental unit or organization that is **exempt** from sales and use tax may appoint as its agent a prime contractor to purchase building materials and/or fixtures that will be annexed to property that belongs to or will belong to the governmental entity or exempt organization pursuant to a construction contract with the governmental unit or exempt organization. The appointment of the prime contractor as its agent is completed by issuing a Purchasing Agent Appointment and Delegation of Authority for Sales and Use Tax, Form 17, to the prime contractor. The Form 17 is required to be given to the contractor **BEFORE** he or she annexes building materials. The exempt organization or governmental unit must identify the project (e.g., east wing, chapel construction, or new school auditorium).

The exemption from the payment of the Nebraska and local option sales and use taxes only applies if the governmental unit or exempt organization directly or through its contractor pays for the building materials.

**WHEN TO FILE.** A prime contractor engaging in a construction project with a governmental unit or exempt organization must receive a properly completed and signed Form 17 **BEFORE** any building materials are annexed. If Form 17 is not issued, the contractor must pay the sales and use taxes and the governmental unit or exempt organization may obtain a refund of the taxes paid by the contractor.

**WHERE TO FILE.** A copy of the completed form should be retained by the governmental unit or exempt organization

Visit our Web site: [www.revenue.ne.gov](http://www.revenue.ne.gov) or call 1-800-742-7474 (toll free in NE and IA) or 1-402-471-5729.

issuing the Form 17. The original is to be retained by the prime contractor. Copies of this form must be made by the prime contractor for delegation purposes to any subcontractors working on the project identified on this form.

**APPOINTMENT INFORMATION.** Enter the dates the purchasing agent appointment will become effective and when it will expire. This appointment will not allow any purchases without payment of the tax by the prime contractor or subcontractor before the effective date or after the expiration date. The dates the delegation becomes effective and the expiration dates must be completed. The phrase “upon completion” or similar phrase is not acceptable as an expiration date. The governmental unit or exempt organization may need to issue another Form 17 if the project is not completed within the prior “effective” and “expiration” dates. Exempt organizations must enter their Nebraska Sales and Use Tax Exemption number.

**DELEGATION OF PRIME CONTRACTOR'S AUTHORITY.** The prime contractor may delegate his or her authority to act as the purchasing agent of the governmental unit or exempt organization to a subcontractor. The prime contractor must complete his or her copy of Form 17 for each subcontractor who is delegated authority to act as a purchasing agent. Reproductions of this delegation must be provided to the subcontractor, who must retain a copy for his or her records, and to the governmental unit or exempt organization.

Enter the dates the delegation of the subcontractor will become effective, when it will expire, and the portion of the project delegated. This delegation will not allow any purchases without payment of the tax by the subcontractor before the delegation date or after the expiration date. Any further delegation from a subcontractor to additional subcontractors must be delegated by providing a copy of the Form 17 that they received from the prime contractor and attaching it to a separate Form 17 with any further delegation to other subcontractors. The purchasing agent appointment is limited to the contractor's purchase of building materials and/or fixtures for the specific project and is only valid during the appointment dates shown on the Form 17.

**EXEMPT SALE CERTIFICATE.** A prime contractor who has been appointed to act as a purchasing agent by a governmental unit or exempt organization, and who hires a subcontractor operating as an Option 1 contractor, must provide to that subcontractor a completed copy of Form 17 and a Nebraska Resale or Exempt Sale Certificate, Form 13, with Section C, Part 2, completed. The subcontractor will retain these forms in his or her records, and will not charge the contractor sales tax on any portion of the invoice involving the annexation of materials to the specific project identified on the Form 17. If these forms are not provided to the subcontractor operating under Option 1, the subcontractor must collect and remit sales tax on the charge for the separately stated building materials portion of the invoice. If the Option 1 subcontractor does not separately state the charge

for the building materials from contractor labor, then the entire charge is taxable to the prime contractor.

Contractors operating under Option 2 (maintaining a tax-paid inventory) who have been issued a Form 17 from a governmental unit or an exempt organization, must furnish each vendor a copy of the Form 17 and a Form 13, completing Section C, Part 2, when purchasing building materials that will be annexed to real estate. Forms 13 and 17 must be retained with the vendor's and contractor's records for audit purposes. A contractor or subcontractor may reproduce copies of these documents which will be furnished to the vendors for each invoice or order made by them.

Invoices from vendors for the purchase of building materials by the contractor as purchasing agent, or the authorized subcontractor, must clearly identify that such purchase is for the specific Form 17 project.

**CREDIT/REFUND OF SALES AND USE TAX.** A contractor or subcontractor who has been appointed as a purchasing agent before any materials are annexed, may withdraw sales or use tax-paid materials from inventory that will be annexed to real estate or used to repair property annexed to real estate and receive a credit for the sales or use tax amount previously paid on those materials.

The contractor or subcontractor may take a credit either against his or her current tax liability, or file a Claim for Overpayment of Sales and Use Tax, Form 7, and receive a refund of the sales or use tax paid on those materials.

**TOOLS, EQUIPMENT, AND SUPPLIES.** The purchase, rental, or lease of tools, supplies, or equipment (i.e., scaffolding, barricades, machinery, etc.) by a contractor for use in the completion of an exempt project CANNOT be purchased tax free, even if the contractor has been issued a Form 17. These items do not become annexed to the real estate.

**OPTION 1 CONTRACTOR ONLY.** If an Option 1 contractor is the **only** contractor involved in performing work for a governmental unit or exempt organization, a Form 17 is NOT required. The Option 1 contractor must only obtain a Form 13, Section B, from the exempt project owner.

**PENALTY.** Any person who signs this document with the intent to evade payment of tax is liable for the sales and use tax, interest, and penalty, and may be found guilty of a misdemeanor. A contractor can confirm the exempt status of a governmental unit or organization by contacting the Nebraska Department of Revenue.

**AUTHORIZED SIGNATURE.** The Purchasing Agent Appointment must be signed by an officer of the exempt organization or proper government official. The Delegation of Prime Contractor's Authority must be signed by the owner, partner, corporate officer, or other individual authorized to sign by a power of attorney on file with the Nebraska Department of Revenue.



# United States Citizenship Attestation Form

For the purpose of complying with Neb. Rev. Stat. §§ 4-108 through 4-114, I attest as follows:

☐ I am a citizen of the United States.

— OR —

☐ I am a qualified alien under the federal Immigration and Nationality Act. In addition to this Form, I have included a current and legible copy of the front and back of one or more of the available USCIS forms, (listed below), required for verification.

- ☐ I-327 (Reentry Permit)
- ☐ I-551 (Permanent Resident Card)
- ☐ I-571 (Refugee Travel Document)
- ☐ I-766 (Employment Authorization Card)
- ☐ Certificate of Citizenship
- ☐ Naturalization Certificate
- ☐ Machine Readable Immigrant Visa (with Temporary I-551 Language)
- ☐ Temporary I-551 Stamp (**on passport or I-94**)
- ☐ I-94 (Arrival/Departure Record)
- ☐ **Unexpired Foreign Passport (must include an I-94)**
- ☐ I-20 (Certificate of Eligibility for Nonimmigrant (F-1) Student Status)
- ☐ DS2019 (Certificate of Eligibility for Exchange Visitor (J-1) Status)

**I hereby attest that my response and the information provided on this form and any related application for public benefits are true, complete, and accurate and I understand that this information may be used to verify my lawful presence in the United States.**

Print Name \_\_\_\_\_  
(First, Middle, Last)

Signature \_\_\_\_\_

Individual NMLS ID # \_\_\_\_\_ Date \_\_\_\_\_



## CONTRACTING REQUIREMENTS

DOCUMENT 00 71 13

### CONTRACT FOR CONSTRUCTION (DOCUMENTS LISTING)

1.1 THE FOLLOWING DOCUMENTS SHALL FORM THE CONTRACT FOR CONSTRUCTION:

- A. Invitation to Bidders.
- B. Instructions to Bidders.
- C. AIA Document A701, Instructions to Bidders, 2018 Edition.
- D. Drawings.
- E. Specifications (Project Manual).
- F. All Addenda (modifications) issued by the Architect prior to execution of the Contract.
- G. Bid Proposal Form, as furnished by the Architect.
- H. AIA Document A305, Contractor's Qualification Statement, 1986 Edition, if requested by the Architect after bids are received.
- I. AIA Document A310, Bid Bond, February 2010 Edition; or certified check, cashier's check or bank draft; to serve as bid security.
- J. AIA Document A101, Standard Form of Agreement Between Owner and Contractor Where the Basis of Payment is a Stipulated Sum, 2017 Edition (As modified by the State of Nebraska).
- K. AIA Document A201, General Conditions of the Contract for Construction, 2017 Edition.
- L. AIA Document A312, Performance/Payment Bond, 2010 Edition.
- M. AIA Document G715, 2017 Edition, Instruction Sheet and Supplement Attachment for ACORD Certificate of Insurance 25-S.
- N. AIA Document G705, List of Subcontractors, 2001 Edition, or approved equal.
- O. AIA Document G701, Change Order, 2017 Edition, for Change Orders (modifications) issued by the Architect after execution of the Contract.
- P. AIA Document G702 and G703, Application for Payment, 2000 Edition.
- Q. AIA Document G706, Contractor's Affidavit of Payment of Debts and Claims, 1994 Edition.

- R. AIA Document G706A, Contractor's Affidavit of Release of Liens, 1994 Edition.
  - S. AIA Document G704, Certificate for Substantial Completion, 2017 Edition.
  - T. AIA Document G707, Consent of Surety to Final Payment, 1994 Edition.
  - U. AIA Document G710, Architect's Supplemental Instructions with Instructions, 2017 Edition.
  - V. AIA Document G709, Proposal Request, April 2001 Edition.
  - W. Consent of Surety Company To Off-Site Storage Agreement, Form.
- 1.2 Note: All AIA Documents referenced herein may be examined at the office of the Architect or purchased from the American Institute of Architects, 1735 New York Avenue, N.W., Washington D.C. 20006, or AIA Nebraska, 335 North 8<sup>th</sup> Street, Suite A, Lincoln, Nebraska 68508 (Tele: 402/858-1929).

END OF DOCUMENT

# CONSENT OF SURETY COMPANY TO OFF-SITE STORAGE AGREEMENT

|            |                          |
|------------|--------------------------|
| OWNER      | <input type="checkbox"/> |
| ARCHITECT  | <input type="checkbox"/> |
| CONTRACTOR | <input type="checkbox"/> |
| SURETY     | <input type="checkbox"/> |
| OTHER      | <input type="checkbox"/> |

Bond Number

---

**PROJECT:**

(Name, Address)

TO: (Owner)

ARCHITECT'S

PROJECT NO.

CONTRACT FOR:

# SAMPLE

CONTRACTOR:

CONTRACT DATE:

---

In accordance with the provisions of the Contract between the Owner and the Contractor as indicated above, the  
(insert name and address of Surety Company here)

, SURETY COMPANY,

on bond of

(insert name and address of Contractor here)

, CONTRACTOR,

hereby approves the attached off-site agreement with the Contractor, and agrees that off-site storage agreement  
shall not relieve the Surety Company of any of its obligations to (insert name and address of Owner here)

as set forth in the said Surety Company's bond.

IN WITNESS WHEREOF,

the Surety Company has hereunto set its hand this            day of

\_\_\_\_\_  
Surety Company

\_\_\_\_\_  
Signature of Authorized Representative

\_\_\_\_\_  
Title

Attest:

(Seal)

## CONTRACTING REQUIREMENTS

DOCUMENT 00 72 14

### GENERAL CONDITIONS - AIA STIPULATED SUM (SINGLE-PRIME CONTRACT)

#### 1.1 SUMMARY

- A. Document Includes:
  - 1. General Conditions.
- B. Related Documents:
  - 1. Document 00 71 13 – Contract for Construction, including Agreement Form - AIA Stipulated Sum (Single-Prime Contract).
  - 2. Document 00 73 13 - Supplementary Conditions.

#### 1.2 GENERAL CONDITIONS

- A. The General Conditions of the Contract for Construction, American Institute of Architects' AIA Document A201, 2007 Edition, latest printing, Articles 1 to 14 inclusive, are hereby made a part of this Specification to the same extent as if herein written out in full.
- B. The General Conditions of the Contract for Construction, AIA Document A201, may be purchased from the American Institute of Architects, 1735 New York Avenue, N.W., Washington, D.C. 20006, or AIA Nebraska, 335 North 8<sup>th</sup> Street, Suite A, Lincoln, Nebraska 68508 (Tele: 402/858-1929). This document may also be examined at the office of the Architect.

#### 1.3 SUPPLEMENTARY CONDITIONS

- A. Refer to Document 00 73 13 for modifications to General Conditions.

END OF DOCUMENT

## CONTRACTING REQUIREMENTS

DOCUMENT 00 73 13

### SUPPLEMENTARY CONDITIONS

#### 1.1 SUMMARY

- A. Document Includes:
  - 1. Supplementary Conditions to the General Conditions.
- B. Related Documents:
  - 1. Document 00 42 13 - Bid Proposal Form - Stipulated Sum (Single-Prime Contract).
  - 2. Document 00 71 13 – Contract for Construction, including Agreement Form - AIA Stipulated Sum (Single-Prime Contract).
  - 3. Document 00 72 14 - General Conditions - AIA Stipulated Sum (Single-Prime Contract).

1.2 Where any article of the General Conditions of the Contract for Construction, AIA Document A201, is supplemented, the original non-supplemented provisions of such article shall remain in effect. All the supplemental provisions shall be considered as added thereto. Where any such article is modified, the provisions of such article not so specifically modified, shall remain in effect.

1.3 The following modifications shall be made a part of the General Conditions of the Contract for Construction, AIA Document A201- 2007:

- A. ARTICLE 1. "GENERAL PROVISIONS". Modify the Article as follows:
  - 1. §1.1.1. Delete “a Construction Change Directive, or (4)” (There will be no Construction Change Directives, only approved Change Orders).
- B. ARTICLE 3. "CONTRACTOR". Modify the Article as follows:
  - 1. §3.1.1. Add the following sentence: “The term "Contractor" shall apply to all subcontractors.”
  - 2. §3.4. Add the following subparagraphs:
    - a. 3.4.4. All manufactured articles, material, and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturers, unless herein specified to the contrary.
    - b. 3.4.5. Materials shall be delivered at such stages of the work as will expedite the work as a whole and shall be marked and stored in such a way as to be protected and easily checked.
    - c. 3.4.6. The Contractor shall make provisions for the delivery and safe storage of his materials and shall make the required arrangements and cooperate with all other Contractors for the introduction into the building of equipment of material too large to pass through finished openings.
  - 3. §3.6 shall be deleted and replaced with: “The Contract will not be required to pay Nebraska Sales and Use Taxes. The Owner will issue to the Contractor a tax exempt certificate appointing the Construction Manager as the Purchasing Agent.”

4. §3.11 Delete “,Construction Change Directives,” (There will be no Construction Change Directives, only approved Change Orders).
  5. §3.12.8 Delete “or Construction Change Directive” (There will be no Construction Change Directives, only approved Change Orders).
  6. §3.16. Move the language following “Access to Work” to new paragraph §3.16.1.
  7. §3.16. Add the following subparagraph:
    - a. **§3.16.2** The Contractor shall provide access to all mechanical devices required for operation and maintenance purposes, including the furnishing and installation of access doors of appropriate size and configuration to fit the condition.
- C. ARTICLE 4. "CONTRACTOR". Modify the Article as follows:
1. §4.2.8. Delete “Construction Change Directives, and” (There will be no Construction Change Directives, only approved Change Orders).
- D. ARTICLE 7. “CHANGES IN THE WORK”. Modify the Article as follows:
1. §7.1.1 Delete “, Construction Change Directive” (There will be no Construction Change Directives, only approved Change Orders).
  2. §7.1.2 Delete the second sentence “A Construction Change Directive....agreed to by the Contractor.” (There will be no Construction Change Directives, only approved Change Orders.)
  3. §7.1.3 Delete “, Construction Change Directive, “ (There will be no Construction Change Directives, only approved Change Orders.)
  4. §7.3 Delete in its entirety. (There will be no Construction Change Directives, only approved Change Orders.)
- E. ARTICLE 9. “PAYMENTS AND COMPLETION”. Delete the following paragraphs:
1. §9.3.1.1 should be entirely deleted. (There will be no Construction Change Directives, only approved Change Orders.)
  2. §9.10.3 Delete in its entirety. (Payments after substantial completion are addressed in other provision of the General Conditions.)
- F. ARTICLE 11. "INSURANCE AND BONDS". Article 11 specifies complete insurance requirements. The following requirements are in addition to those specified in Article 11 and shall supersede same when in conflict.
1. General:
    - a. Contractor shall purchase and maintain insurance to protect Contractor and Owner against all hazards herein enumerated throughout duration of the contract. Said insurance shall be by an insurance company approved by insurance commissioner of the State of Nebraska. All policies shall be in form and amounts and with companies satisfactory to Owner.
    - b. “Insurance”, “insurance policy” or “insurance contract” when used in these specifications shall have same meaning as “insurance policy” provided, however, that when “insurance” as demonstrated by an “insurance policy” or “insurance contract” is required to be posted, presented or demonstrated to exist by any person or other entity by virtue of any contract, bid request, specification, rule or other action or request

of Owner, said “insurance policy” or “contract of insurance” shall provide coverage on an occurrence basis and not on a claims-made basis and person or other entity shall provide evidence of such coverage through an “insurance policy”, “contract of insurance” or “certificate of insurance” which clearly discloses on its face coverage on an occurrence basis, except as to insurance coverage required for hazardous materials abatement including removal of lead, asbestos, PCBs or the like, which may be provided on a claims-made basis when it is demonstrated to satisfaction of Owner that occurrence coverage is not reasonably available.

2. Insurance Requirements: Contractor shall purchase and maintain such insurance as will protect Contractor from claims set forth below which may arise out of or result from Contractor’s operations under contract, whether such operations be by Contractor or by any subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable.
  - a. Claims under workers’ compensation, disability benefit and other similar employee benefit acts.
  - b. Claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor’s employee.
  - c. Claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor’s employee.
  - d. Claims for damages insured by personal injury liability coverage which are sustained:
    - 1) By any other person.
  - e. Claims for damages other than to work itself, because of injury to or destruction of tangible property, including loss of use resulting there from.
  - f. Claims for damages because of bodily injury or death of any person or property damage arising out of ownership, maintenance, or use of any motor vehicle.
  - g. Wherever term “ISO” appears in these Specifications, an equivalent form or better may be substituted.
3. Limits of Liability: Insurance shall be written as follows:
  - a. Commercial General Liability Insurance, which shall be no less comprehensive and no more restrictive than coverage provided by a standard form Commercial General Liability Policy (ISO CG00010798) with standard exclusions “a” through “o”, with minimum limits shown below covering bodily injury, property damage and personal injury. Any additional exclusions shall be identified on certificate of insurance and shall be subject to review and approval of Owner:
 

|                                                  |             |
|--------------------------------------------------|-------------|
| 1) General Aggregate Limit                       | \$2,000,000 |
| 2) Products Completed Operations Aggregate Limit | \$2,000,000 |
| 3) Personal and Advertising Injury Limit         | \$1,000,000 |
| 4) Each Occurrence Limit                         | \$1,000,000 |
| 5) Fire Damage Limit (Any One Fire)              | \$50,000    |
| 6) Medical Damage Limit (Any One Person)         | \$5,000     |
  - b. This insurance must include the following features:
    - 1) Coverage for all premises and operations.
    - 2) Policy shall be endorsed to provide the aggregate per project endorsement.

- 3) Personal and advertising injury.
  - 4) Operations by independent contractors.
  - 5) Contractual liability coverage: If work to be performed by Contractor includes construction or demolition operations within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, road beds, tunnel, underpass or crossing, then such policy will include a Railroad's Contractual Liability Endorsement (ISO CG 24 17 10 93; see Figure 1.2).
  - 6) Coverage for demolition of any building or structure, collapse, explosion, blasting, excavation and damage to property below surface of ground (XCU coverage).
  - 7) Any fellow employee exclusions shall be deleted as it applies to managerial and supervisory employees.
  - 8) Policy shall not contain a total or absolute pollution exclusion. Coverage shall be provided for pollution exposures arising from products and completed operations.
  - 9) Products and completed operations shall be maintained for duration of work and shall be further maintained for a minimum period of three years after final acceptance and payment, unless modified in the Special Provisions.
  - 10) Owner and Architect shall be named as "Additional Insured" with respect to work performed for Owner.
  - 11) Contractual liability coverage will also include contractually assumed defense costs in addition to policy limits.
  - 12) In lieu of including Owner as an additional insured on Contractor's commercial general liability insurance, Owner, at its option, may require Contractor to provide an Owner's protective liability policy by special provision, or may allow Contractor to provide an Owner's protective liability policy by change order. If an Owner's protective liability policy is provided, minimum coverage, limits and exclusions shall be as shown above, and Contractor's premium cost of obtaining such insurance shall be considered incidental to work and shall not be subject to reimbursement by Owner.
- c. Automobile liability insurance, covering all owned, non-owned, hired and leased vehicles with a minimum combined single limit for bodily injury and property damage of \$1,000,000 per accident. Insurance must include contractual liability coverage. Any fellow employee exclusion shall be deleted. Policy shall provide auto cargo pollution endorsement (ISO CA 99 48), if requested, in special provisions.
- d. Umbrella/excess insurance: Limits of \$5,000,000 each occurrence and aggregate. This limit may be satisfied with a combination of primary and umbrella/excess insurance. At Owner's option, minimum insurance limits specified above may be increased by special provision. This increase may be satisfied with a combination of primary and umbrella/excess insurance.
- e. Workers' Compensation and Employers' Liability Insurance, as prescribed by Nebraska law with minimum limits shown below covering Employers' Liability Limits:
- 1) Bodily injury by accident \$500,000 each occurrence
  - 2) Bodily injury by disease \$500,000 each occurrence



- 3) Bodily injury by disease \$500,000 policy limit
- f. Additional insured endorsements: Except for Workers' Compensation, insurance specified shall:
  - 1) Include Owner and Architect as an "Additional Insured" with respect to work performed for the Owner, with such additional insured endorsements providing coverage for Owner and Architect with respect to liability arising out of Contractor's work performed for Owner (including, but not limited to, liability caused or contributed by negligence of Contractor, its subcontractors, owner, third parties, or agents, employees, or officers of any of them).
  - 2) Be primary to, and not in excess of or contributory with, any other insurance available to Owner.
- g. Installation Floater:
  - 1) The Contractor shall effect and maintain with approved insurer, fire, extended coverage, vandalism, and malicious mischief insurance and all other perils insurance, (All Risk - Special Endorsement, CF-1004 Ed. 1-83; including theft of building materials), with the Owner and Architect listed as Additional Insureds. One- hundred percent (100%) of the completed value of the Work covered by this Contract as herein defined shall be insured, including items of labor and materials connected therewith, or to be used as part of the permanent construction, including surplus materials, and fences or temporary structures, miscellaneous materials and supplies incidental to the Work and such scaffoldings, staging, forms and equipment as are not owned or rented by the Contractor, the cost of which is included in the Work.
  - 2) Exclusions: Such insurance is not intended to cover tools owned by mechanics, tools and equipment owned or rented by the Contractor, the capital value of which is not included in the cost of the Work; or any utility structures erected for the convenience of the workmen.
  - 3) Settlement of Claims: Loss, if any, is to be made adjustable with any proceeds of such insurance shall be payable to the Owner as Trustee for himself and the insured Contractor.
4. Certificate of Insurance, using AIA Document G715, Instruction Sheet and Supplemental Attachment for ACORD Certificate of Insurance 25-S, shall be filed in duplicate with the Owner and Architect within ten (10) working days after signing of the Contract Agreement, with the exception of Worker's Compensation Insurance which shall be furnished before the Agreement is signed. The Certificate of Insurance shall state that the certificate holder, Owner, will receive thirty (30) days prior notice in the event of cancellation or non-renewal of the above referenced insurance policies. Failure of the insured to provide all insurance requirements, or to provide notice, shall not relieve the insured of its' obligations under this contract.

G. ARTICLE 13. "MISCELLANEOUS PROVISIONS".

1. §13.1 Delete the last sentence, beginning with "If the parties have selected..."

- H. ARTICLE 15. "INSURANCE AND BONDS".
  - 1. §15.3.2 Delete the last sentence, beginning with "If and arbitration is stayed..."
  - 2. §15.4 Delete in its entirety (§15.4.1 through §15.4.4.2) because Nebraska state law does not recognize arbitration as a method of resolving disputes or claims.
- I. Add Article 16 as follows:
  - 1. ARTICLE 16. STANDARD SPECIFICATIONS.
    - a. 16.1. All standard specifications referred to shall be latest edition or revision, unless otherwise noted.

END OF DOCUMENT

# DIVISION **01**

## GENERAL REQUIREMENTS

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 10 00

#### SUMMARY

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Contract description.
- B. Phasing of the work.
- C. Examination of the site.
- D. Drawings and specifications.
- E. Owner information.
- F. Laying out work.
- G. Building code compliance.
- H. Lead Paint Abatement
- I. Permits and fees.
- J. Items furnished by the Owner and installed by the Contractor.
- K. Acknowledgement and acceptance of responsibility.
- L. Warranties and Bonds.
- M. Lien waivers.
- N. Right of occupancy.
- O. Project record documents.

##### 1.2 CONTRACT DESCRIPTION

- A. The Work of this Contract comprises the replacement of the existing low sloped roof system with full removal down to the existing concrete roof slabs. Removal and reinstallation of existing mechanical equipment will be required, and replacement of some of the existing roof top condensing units with Owner provided new units. Roof walkway pavers are to be installed. The roofs are located at Peru State College, Centennial Complex, Clayburn and Mathews, 600 Hoyt St, Peru, Nebraska 68421.
  - 1. The Owner provided units to be installed on the roof are Goodman GSZ140181 1.5 Ton 14 SEER Heat Pumps, The contractor shall provide all new mechanical and electrical connections as required for the units to be fully operational at the completion of the project.
- B. Construct the Work under a single stipulated sum contract.

### 1.3 PHASING OF THE WORK

- A. Work under this Contract shall be constructed so that the Owner shall maintain uninterrupted use of the entire Building.

### 1.4 EXAMINATION OF THE SITE:

- A. Bidders shall visit the site, existing buildings and work area, compare the Drawings and Specifications with any work in place and become informed of all conditions, including other work being performed, if any, at the site.
- B. Failure to visit the site, existing buildings and work area shall not relieve the successful Bidder from the necessity of furnishing any materials or performing any work that may be required to complete the Work in accordance with the Drawings and Specifications without additional cost to the Owner.

### 1.5 DRAWINGS AND SPECIFICATIONS:

- A. These Specifications are intended to supplement the Drawings, and it will not be the province of the Specifications to mention any part of the work which the Drawings are competent to fully explain in every particular, and such omission is not to relieve the Contractor from carrying out portions indicated on the Drawings only, and should items be required by these Specifications and not indicated on the Drawings, they are to be supplied even if of such nature that they could have been indicated thereon.
- B. The Contractor, upon receipt of the Drawings and Specifications, shall check and verify proper coordination of all items shown on the contract documents and shall be responsible for any errors which might have been avoided by complying with this provision.
- C. If there is a conflict on the Drawings or in the Specifications, or if the Drawings should conflict with the Specifications, the Contractor shall immediately notify the Architect upon discovery of the conflict and shall base his bid on the higher priced item and/or procedure.
- D. The intent of the Drawings and Specifications and other Contract Documents is to provide a completed project, as required by the Contract Documents, that will properly function without additional work being performed thereon, and it shall be the Contractor's obligation to provide such a facility and to put all equipment and systems in operation including, but not limited to mechanical devices and piping, electrical power and appurtenances, control wiring, and adjusting, balancing and demonstrating their satisfactory operation, whether or not such items are detailed on the Contract Documents.
- E. At the Contractor's request, the Architect and his consultants, will provide electronic files for the Contractor's convenience and use in the preparation of shop drawings related to this project, subject to the following terms and conditions:
  - 1. The Architect's electronic files are compatible with AutoCAD 2021. The Architect makes no representation as to the compatibility of these files with the

Contractor's hardware or software beyond the specified release of the referenced specifications.

2. Data contained on these electronic files is part of the Architect's instruments of service and shall not be used by the Contractor or anyone else receiving this data through or from the Contractor for any purpose other than as a convenience in the preparation of shop drawings for the reference project. Any other use or reuse by the Contractor or by others will be at the Contractor's sole risk and without liability or legal exposure to the Architect. The Contractor agrees to make no claim and hereby waive, to the fullest extent permitted by law, any claim or cause of action of any nature against the Architect, its officers, directors, employees, agents or consultants, which may arise out of or in connection with the Contractor's use of the electronic files.
3. Furthermore, the Contractor shall, to the fullest extent permitted by law, indemnify and hold harmless the Architect from all claims, damages, losses and expenses, including attorney's fees arising out of or resulting from the Contractor's use of these electronic files.
4. These electronic files are not contract documents. Significant differences may exist between these electronic files and corresponding hard copy contract documents due to addenda, change orders or other revisions. The Architect makes no representation regarding the accuracy or completeness of the electronic files the Contractor may receive. In the event that a conflict arises between the signed documents prepared by the Architect and electronic files, the signed contract documents shall govern. The Contractor is responsible for determining if any conflict exists. By the Contractor's use of these electronic files, the Contractor is not relieved of his duty to fully comply with the contract documents, including and without limitation, the need to check, confirm and coordinate all dimensions and details, take field measurements, verify field conditions and coordinate his work with that of other contractors for the project.
5. Because of the potential that the information presented on the electronic files can be modified, unintentionally or otherwise, the Architect reserves the right to remove all indication of its ownership and/or involvement for each electronic display.
6. A service fee of \$50.00 per sheet shall be remitted to the Architect prior to delivery of the electronic files.
7. Under no circumstances shall delivery of the electronic files for use by the Contractor be deemed a sale by the Architect and the Architect makes no warranties, either expressed or implied, of merchantability and fitness for any particular purpose. In no event shall the Architect be liable for any loss of profit or any consequential damages.
8. These terms and conditions will be defined in a release letter that the contractor will be required to sign prior to the delivery of these drawings to the contractor.

## 1.6 OWNER INFORMATION

- A. Whenever reference to the "Owner" is made in these Specifications, it shall mean: Board of Trustees of the Nebraska State Colleges (d.b.a.) Peru State College.

- B. The Owner's representative for this project will be Joseph Foresman (Director of Facility Services) Tele: 402-917-0875.

#### 1.7 LAYING OUT WORK:

- A. The Contractor shall, immediately upon entering the project site and building area for the purpose of beginning work, locate all general reference points and take such action as is necessary to prevent their destruction, lay out his own work and be responsible for all lines, elevations and measurements of the buildings, grading, paving, utilities and other work executed by him under the Contract. Proper precaution must be exercised to verify figures shown on the Drawings before laying out work and the Contractor will be held responsible for any error resulting from failure to exercise such precaution.
- B. The Contractor shall be responsible for confirming the location of all concealed underground utilities prior to starting of any work on the job site. There is no guarantee made by the Architect or Engineer that all utilities are shown on the Construction Documents. If they are shown, the layout is conceptual only and accuracy as to the exact location of the utility is not guaranteed.

#### 1.8 BUILDING CODE COMPLIANCE:

- A. The Contractor shall comply with all National, State, and local Building Codes relative to Work under this Contract.
- B. The Contractor shall be responsible for notification of local building code officials for inspections by local officials as required by Section 109 of the International Building Code at appropriate stages of construction. These include, but are not limited to:
  - 1. Final roof inspection.
- C. The Contractor shall be responsible to coordinate required inspections by state officials including the fire marshal and any other state inspector appropriate to the project, including the State Electrical Inspector.
- D. The Contractor shall be responsible for obtaining occupancy permits as appropriate from local and/or state officials at the completion of the project.
- E. If any known violation is noted by the Contractor or code official, the Architect shall be notified immediately.

#### 1.9 LEAD PAINT ABATEMENT:

- A. Pursuant to the Federal OSHA Employee Right-To-Know Act, the Contractor is hereby advised that a potential for lead hazard exists. Lead paint may be present in older paint finishes that include exterior steel lintel paint.
- B. The Contractor is advised that he is responsible to comply with the Federal Standards for Lead in the Construction Industry that were adopted in June of 1993 by OSHA.CFR 29 Part 1926.62.

- C. The regulations require the Contractor to develop work strategies when working with lead to minimize and protect workers from lead hazards.
- 1.10 PERMITS AND FEES (both temporary and permanent):
- A. Contractor shall obtain and pay for all permits and fees required by the State of Nebraska and authorities having jurisdiction.
- 1.11 ITEMS FURNISHED BY THE OWNER AND INSTALLED BY THE CONTRACTOR:
- A. All items noted as such on the Drawings, including, but not limited to:
    - 1. Rooftop Heat Pump Units: The Owner provided units are Goodman GSZ140181 - 1.5 Ton 14 SEER Heat Pumps, The contractor shall provide all new mechanical and electrical connections as required for the units to be fully operational at the completion of the project.
- 1.12 ACKNOWLEDGMENT AND ACCEPTANCE OF RESPONSIBILITY:
- A. The Contractor acknowledges the requirements of and his acquaintance with all of the Specifications by the signing of the Contract. The Contractor shall be responsible for any defects in work under this Contract only which may develop in any material or equipment because of poor workmanship or design, and correct without cost to the Owner any deficiency which may develop, for a period of one (1) calendar year from the date of substantial completion as accepted by the Owner, which shall be defined as the "correction period". (Refer to AIA Document, A201 General Conditions of the Contract for Construction, paragraph 3.5.) All additional work, repair and/or replacement, because of such deficiencies, shall be made promptly by the Contractor upon written notice from the Owner or Architect. Financial responsibility for correction of nonconforming work thereafter, shall be as established by the statute of limitations or statute of repose in the State of Nebraska, which shall be defined as the "warranty period". (Refer to AIA Document, A201 General Conditions of the Contract for Construction, paragraph 12.2.) The first year of the applicable statute shall run concurrently with the one-year "correction period".
  - B. The Contractor shall not be responsible for natural wear, accidental damage or damage due to carelessness after Owner's occupancy unless judged by the Architect to be the direct responsibility of the Contractor.
  - C. Refer to DIVISION 01 - GENERAL REQUIREMENTS, Section 01 78 36: Warranties and Bonds, and to individual Specification Sections for specific required guarantees in addition to the warranty required above.
- 1.13 WARRANTIES AND BONDS:
- A. Submit warranties and bonds as required in individual Specification Sections, Submit an electronic copy, and two (2) originals of each warranty/bond within ten (10) days after date of issuance of Certificate of Substantial completion, prior to final request for payment, to the Architect for approval and transmittal to the Owner.



- B. For items of work where acceptance is delayed materially beyond date of Substantial Completion, provide updated submittal within ten (10) days after acceptance, listing date of acceptance as start of warranty period.

1.14 LIEN WAIVERS:

- A. Pursuant with Article 9 of the General Conditions of the Contract for Construction, AIA Document A201, the Contractor shall submit to the Architect a Contractor's Affidavit of Payment of Debits and Claims, AIA Document G706, and Contractor's Affidavit of Release of Liens G706/A, with separate releases or waiver of liens for each subcontractor and material and equipment suppliers, following the issuance of Certificate for Substantial Completion, AIA Document G704, by the Architect and before final payment to the Contractor. All AIA Documents shall be latest edition. Refer to Section: Contract Closeout.

1.15 RIGHT OF OCCUPANCY:

- A. The Owner shall have the right, if necessary, to take possession of and to use any completed or partially completed portions of the work, even if the time for completing the entire work or such portions of the work has not expired and even if the work has not been finally accepted.
  - 1. Such possession and use shall not constitute an acceptance of such portions of the work.
  - 2. The Owner shall also have the right to enter the premises for the purpose of doing work not covered by its contract with the Contractor.
  - 3. The Contractor shall not be held responsible for any damage to the occupied part of the project resulting from the Owner's occupancy.
  - 4. Occupancy by the Owner shall not be deemed to constitute a waiver of existing claims in behalf of the Owner or Contractor against each other.

1.16 PROJECT RECORD DOCUMENTS:

- A. The Contractor shall keep a set of Record Drawings and Specifications onsite, recording all changes made to the Contract Documents. These Record Documents shall be given to the Architect for review and completeness at the conclusion of the project, with changes shown neatly and legibly.
  - 1. Document and post all addendum items.
  - 2. Document and post all change order items.
  - 3. Show dimensional changes.
  - 4. Show relocation of all utilities, if other than as shown on the drawings.
  - 5. Show modifications of architectural and/or structural elements.

END OF SECTION

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 10 01

#### REFERENCES

#### PART 1 GENERAL

##### 1.1 RELATED DOCUMENTS

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

##### 1.2 DEFINITIONS

- A. General: Basic contract definitions are included in Conditions of the Contract.
- B. The word “approved” as used herein, means “approved by the Project Architect”; “selected “ means “selected by the Architect”. Where the words “or equal”, or “or approved equal”, or “or similar” are used, the Architect is the sole judge of the quality and suitability of the proposed substitution.
- C. “Indicated”: Refers to graphic representations, notes or schedules on Drawings, or other paragraphs or schedules in Specifications and similar requirements in Contract Documents. Terms such as “shown,” “noted,” “scheduled,” and “specified” are used to help user locate reference.
- D. “Directed”: Terms such as “directed,” “requested,” “authorized,” “selected,” “approved,” “required,” and “permitted” mean direct by Architect, requested by Architect, and similar phrases.
- E. “Approved”: When used in conjunction with Owner’s action on Contractor’s submittals, applications, and requests, is limited to Owner’s duties and responsibilities as stated in Conditions of the Contract.
- F. “Regulations”: Includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, and agreements within construction industry that control performance of the Work.
- G. “Furnish”: Means supply and deliver to Project Site, ready for unloading, unpacking, assembly, installation, and similar operations.
- H. “Install”: Describes operations at Project site including actual unloading, temporarily storing, unpacking, assembly, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- I. “Provide”: Means to furnish and install, complete and ready for intended use.

- J. “Installer”: Is Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, or similar operations.
1. “Experienced”: When used with term “installer,” means having successfully completed a minimum of 5 previous projects similar in size and scope to this Project, being familiar with special requirements indicated, and having complied with requirements of authorities having jurisdiction.
  2. Trades: Using a term such as “carpentry” does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as “carpenter.” It also does not imply that requirements specified apply exclusively to tradespersons of corresponding generic name.
  3. Assigning Specialists: Certain Sections of Specifications require that specific construction activities shall be performed by specialists who are recognized experts in those operations. Specialists must be engaged for those activities, and their assignments are requirements over which Contractor has no option. However, ultimate responsibility for fulfilling contract requirements remains with the Contractor.
    - a. This requirement shall not be interpreted to conflict with enforcing building codes and similar regulations governing the Work. It is also not intended to interfere with local trade-union jurisdictional settlements and similar conventions.
- K. “Project Site”: Space available to Contractor for performing construction activities. Extent of Project Site shall be as shown on Drawings or directed by Owner.

### 1.3 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless Contract Documents include more stringent requirements, applicable construction industry standards have same force and effect as if bound or copied directly into Contract Documents to the extent referenced. Such standards are made a part of Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of Contract Documents, unless otherwise indicated.
- C. Conflicting Requirements: If compliance with 2 or more standards is specified and standards establish different or conflicting requirements for minimum quantities or quality levels, comply with most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.
1. Minimum Quantity or Quality Levels: Quantity or quality level shown or specified shall be the minimum provided or performed. Actual installation may comply exactly with minimum quantity or quality specified, or it may exceed minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for context of requirements. Refer uncertainties to Architect for a decision before proceeding.

- D. Copies of Standards: Each entity engaged in construction on Project is required to be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with Contract Documents.
1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source and make them available on request.
- E. Abbreviations and Acronyms for Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean recognized name of trade association, standards-generating organization, authorities having jurisdiction, or other entity applicable to context of text provision. Refer to: Gale Research Co.'s, "Encyclopedia of Associations," or in Columbia Books "National Trade & Professionals Associations of the U.S.".

## PART 2 PRODUCTS

Not Used.

## PART 3 EXECUTION

Not Used.

END OF SECTION

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 20 00

#### PRICE AND PAYMENT PROCEDURES

##### PART 1 GENERAL

###### 1.1 SECTION INCLUDES

- A. Schedule of values.
- B. Applications for payment.
- C. Unit prices.

###### 1.2 SCHEDULE OF VALUES

- A. Submit printed schedule on AIA Form G703 - Continuation Sheet for G702. Contractor's standard form or electronic media printout will be considered.
- B. Submit Schedule of Values in duplicate within 7 days after notification of selection of the award of the Contract for the Work.
- C. Format: Identify each major Item of Work included in the Bid. Identify each line item with number and title of each specification Section. Identify site mobilization, bonds and insurance.
- D. Include within each line item, direct proportional amount of Contractor's overhead and profit, where amounts shown shall be the subcontractor's bid price for those area of work.
- E. Revise schedule to list approved Change Orders, with each Application for Payment.

###### 1.3 APPLICATIONS FOR PAYMENT

- A. Submit four copies of each application on AIA Form G702 - Application and Certificate for Payment and AIA G703 - Continuation Sheet for G702. Electronic copy of this Application shall be submitted to the Architect for approval. Requests shall show breakdown of materials for the total job. Materials delivered and properly stored on the job site may be included in the payment request.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment. Requests shall show breakdown of materials for the total job. Materials delivered and properly stored on the job site may be included in the payment request.

- C. Payment Period: Application for payment requests shall be made monthly.
- D. Submit with transmittal letter as specified for Submittals in Section 01 33 00 - Submittal Procedures.
- E. Substantiating Data: When Architect/Engineer requires substantiating information, submit data justifying dollar amounts in question. Include the following with each Application for Payment:
  - 1. Partial release of liens from major subcontractors and vendors.
  - 2. Affidavits attesting to off-site stored products.
  - 3. Construction progress schedules, revised and current.
- F. Payment will be made to the General Contractor within forty-five (45) days after receipt of his payment request by the Owner in accordance with the Nebraska Prompt Pay Act. A ten percent (10%) retainage will be withheld for the duration of the project.
- G. Final payment constituting the entire unpaid balance of the Contract Sum, excluding the retainage, shall be paid by the Owner to the Contractor within forty-five (45) days after completion of the project, approval by the Architect of the final Certificate for Payment and final acceptance by the Owner.

#### 1.4 UNIT PRICES

- A. Authority: Measurement methods are delineated in individual specification sections.
- B. Measurement methods delineated in individual specification sections complement criteria of this section. In event of conflict, requirements of individual specification section govern.
- C. Take measurements and compute quantities. Architect/Engineer will verify measurements and quantities.
- D. Unit Quantities: Quantities and measurements indicated in Bid Form are for contract purposes only. Actual quantities provided shall determine payment.
  - 1. When actual Work requires more or fewer quantities than those quantities indicated, provide required quantities at unit sum/prices contracted.
  - 2. When actual Work requires 25 percent or greater change in quantity than those quantities indicated, Owner or Contractor may claim for Contract Price adjustment.
- E. Payment Includes: Full compensation for required labor, products, tools, equipment, plant and facilities, transportation, services and incidentals; erection, application or installation of item of the Work; overhead and profit.
- F. Final payment for Work governed by unit prices will be made on basis of actual measurements and quantities accepted by Architect/Engineer multiplied by unit sum/price for Work incorporated in or made necessary by the Work.
- G. Measurement Of Quantities:

1. Weigh Scales: Inspected, tested and certified by applicable state Weights and Measures department within past year.
2. Platform Scales: Of sufficient size and capacity to accommodate conveying vehicle.
3. Metering Devices: Inspected, tested and certified by applicable State department within past year.
4. Measurement by Weight: Concrete reinforcing steel, rolled or formed steel or other metal shapes will be measured by handbook weights. Welded assemblies will be measured by handbook or scale weight.
5. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness.
6. Measurement by Area: Measured by square dimension using mean length and width or radius.
7. Linear Measurement: Measured by linear dimension, at item centerline or mean chord.
8. Stipulated Sum/Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as completed item or unit of the Work.

## PART 2 PRODUCTS

Not Used.

## PART 3 EXECUTION

Not Used.

END OF SECTION

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 22 00

#### UNIT PRICES

#### PART 1 GENERAL

##### 1.1 RELATED DOCUMENTS

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

##### 1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for unit prices.
  - 1. A unit price is an amount proposed by Bidders and stated on the Bid Form as a price per unit of measurement for materials or services that will be added to or deducted from the Contract Sum by Change Order in the event the estimated quantities of Work required by the Contract Documents are increased or decreased.
  - 2. Coordinate pertinent related work and modify surrounding work as required to properly integrate the work under each Unit Price, and to provide the complete construction required by the Contract Documents.
  - 3. Unit prices include all necessary material, labor, overhead, profit and applicable taxes.
  - 4. Refer to individual Specification Sections for construction activities requiring the establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- B. Schedule: A “Unit Price Schedule” is included at the end of this Section. Specification Sections referenced in the Schedule contain requirements for materials and methods described under each unit price.
  - 1. The Owner reserves the right to reject the Contractor’s measurement of work-in-place that involves use of established unit prices, and to have this Work measured by an independent surveyor acceptable to the Contractor at the Owner’s expense.

#### PART 2 PRODUCTS

Not Used.



## PART 3 EXECUTION

## PART 4

### 4.1 UNIT PRICE SCHEDULE

- A. UNIT PRICE #1: Remove/Replace Deteriorated Existing Wood Blocking:
1. Provide a cost per linear foot to remove and replace existing deteriorated perimeter 2x12 wood blocking, to match existing size. New wood blocking shall meet the requirements of Specification Section 06 10 00 – Rough Carpentry.

END OF SECTION

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 23 00

#### ALTERNATES

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. This Section identifies each Alternate by number and describes the basic changes and modifications to be incorporated into the Work, only when that Alternate is made a part of the Work by specific provisions in the Owner-Contractor Agreement.
- B. Coordinate pertinent related work and modify surrounding work as required to properly integrate the work under each Alternate, and to provide the complete construction required by the Contract Documents.
- C. Referenced Sections of the Specifications listed under the respective Alternates stipulate pertinent requirements for products and methods to achieve the work stipulated under each Alternate.
- D. The Contractor shall submit on his Proposal the amount to be ADDED or DEDUCTED from the Base Bid for each Alternate.

##### 1.2 DESCRIPTION OF ALTERNATES

- A. ALTERNATE #1: UPGRADE THE ROOF ASSEMBLY TO A 90 MIL EPDM ADHERED MEMBRANE ROOFING SYSTEM WITH A 30-YEAR MANUFACTURER'S WARRANTY. (ADD)
  - 1. Upgrade the roof assembly from a 60 mil EPDM adhered membrane roofing system with a 20-year manufacturer's warranty (base bid) to a 90 mil EPDM adhered membrane roofing system with a 30-year manufacturer's warranty. Refer to specification sections 07 53 03 – Elastomeric Membrane Roofing - Fully Adhered, and 07 62 00 – Architectural Sheet Metal, Flashing and Trim, and to the Drawings & Photos for work associated with Alternate #1.

#### PART 2 PRODUCTS

Not Used.

#### PART 3 EXECUTION

Not Used.

END OF SECTION

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 26 57

#### CHANGE ORDER PROCEDURES

##### PART 1 GENERAL

###### 1.1 SUMMARY

- A. The following **change order procedures** will be required for initiation, documentation and authorization of changes in the Work. Refer to the General Conditions of the Contract for Construction, AIA Document A201 (2017 Edition).
- B. Architect's Supplemental Instructions, AIA Document G710 (2017 Edition), or Observation Report: A written order, instructions or interpretations signed by the Architect making minor changes in the Work **not** involving a change in Contract Sum and/or Contract Time.
- C. Change Order: Change Order will be issued by the Architect on AIA Document G701, Change Order (2017 Edition) and approved by the Owner, Contractor and Architect.
- D. **No oral agreement or conversation** with any officer, agent or employee of the **Owner or the Architect**, either before or after the execution of this Contract, shall affect or modify any of the terms or obligations contained in the Contract Documents.
- E. The Architect/Engineer may advise the Contractor of minor changes in the Work not involving adjustment to Contract Sum/Price or Contract Time in Field Observation Reports or by issuing supplemental instructions on AIA Form G710.

###### 1.2 PRELIMINARY REQUIREMENTS

- A. Promptly implement Change Order procedures:
  - 1. Provide full written data required to evaluate changes.
  - 2. Maintain detailed records of work done on a time-and-material/labor force account basis.
  - 3. Provide full documentation to Architect on request.
- B. Designate in writing to the Architect the member of Contractor's organization who is authorized to accept changes in the Work and who is responsible for informing others in the Contractor's employ of the authorization of changes in the Work.

###### 1.3 PRELIMINARY PROCEDURES

- A. Owner or Architect may initiate changes by submitting a proposal request to the Contractor. Request shall include:

1. Detailed description of the change, products and location of the change in the projects.
  2. Supplemental or revised Drawings and Specifications.
  3. A specific period of time during which the requested price will be considered valid; thirty (30) days unless noted otherwise.
  4. Whether such request is for information only and not instruction to execute the changes nor stop Work in progress.
- B. Contractor may initiate change by submitting a written request to the Architect. Request shall include:
1. Description of the proposed change.
  2. Statement of the reason for making the change.
  3. Statement of the effect on the Contract Sum and the Contract Time.
  4. Statement of the effect on the work of separate contractors, as appropriate.
  5. Documentation supporting any change in Contract Sum or Contract Time, as appropriate.

#### 1.4 ALLOWANCE FOR OVERHEAD AND PROFIT

- A. The allowance for the combined overhead and profit included in the total cost to the Owner for any Change Order that may be issued shall be based on the following multiplier calculation method (Cost x 1.XX):
1. For the Contractor, for Work performed by the Contractor's own forces, a maximum of ten percent (10%) of the cost;
  2. For the Contractor, for Work performed by the Contractor's Subcontractor, a maximum of five percent (5%) of the amount due the Subcontractor **not including** the Subcontractor's mark-up for combined overhead and profit;
  3. For each Subcontractor or Sub-subcontractor involved, for Work performed by that Subcontractor's or sub-subcontractor's own forces, a maximum of ten percent (10%) of the cost; and
  4. For each Subcontractor for Work performed by the Subcontractor's sub-subcontractors, a maximum of five percent (5%) of the amount due the Sub-subcontractor **not including** the sub-subcontractor's markup for combined overhead and profit.
  5. Cost to which overhead and profit is to be applied shall be determined in accordance with subparagraph 7.3.7 of the General Conditions of the Contract for Construction, AIA Document A201-2017.
  6. In order to facilitate checking of quotations for extras or credits, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of actual costs, including labor, materials and subcontracts. Labor and materials shall be itemized in the manner prescribed above. Where major cost items are subcontracts, they shall also be itemized.

#### 1.5 DOCUMENTATION OF PROPOSALS AND CLAIMS

- A. Support each quotation for a lump sum proposal and for each unit price which has not previously been established, with sufficient substantiating data to allow Architect to evaluate the quotation.

- B. On request, provide additional data to support time and cost computations:
  - 1. Labor required.
  - 2. Equipment required.
  - 3. Products required.
    - a. Recommended source of purchase and unit cost.
    - b. Quantities required.
  - 4. Taxes, insurance and bonds.
  - 5. Credit for work deleted from Contract, similarly documented.
  - 6. Overhead and profit.
  - 7. Justification for any change in Contract Time.

#### 1.6 PREPARATION OF CHANGE ORDER

- A. Architect will prepare each Change Order.
- B. Change Order Form: AIA Document G701, 2017 Edition.
- C. Change Order will include description of changes in the Work, both additions and deletions, with attachments of revised Contract Documents to define details of the change.
- D. Change Order shall provide an accounting of the adjustment in the Contract Sum and Contract Time.

#### 1.7 TIME AND MATERIAL/ CHANGE ORDER

- A. Submit itemized account and supporting data after completion of change, within time limits indicated in Conditions of the Contract. Architect will determine change allowable in Contract Sum/Price and Contract Time as provided in Contract Documents.
- B. Maintain detailed records of work done on Time and Material basis. Provide full information required for evaluation of proposed changes, and to substantiate costs for changes in the Work.

#### 1.8 LUMP SUM/FIXED PRICE CHANGE ORDER

- A. Content of Change Order shall be based on either:
  - 1. Architect Proposal Request and Contractor's Responsive Proposal as mutually agreed between Owner and Contractor.
  - 2. Contractor's Proposal for a change, as approved by Architect.
- B. Contractor shall sign and date the Change Order to indicate agreement with the terms therein.
- C. Owner and Architect shall then sign and date the Change Order as authorization for the Contractor to proceed with the changes.
- D. Unit Price Change Order: For contract unit prices and quantities, the Change Order will be executed on fixed unit price basis. For unit costs or quantities of units of work which

are not pre-determined, execute Work under Construction Change Directive. Changes in Contract Sum/Price or Contract Time will be computed as specified for Time and Material/and then included in a formal Change Order.

#### 1.9 CORRELATION WITH CONTRACTOR'S SUBMITTALS

- A. Revise Schedule of Values and Request for Payment Forms to record each Change Order as a separate item of work and to record the adjusted Contract Sum.
- B. Revise the Construction Schedule to reflect each change in Contract Time.
- C. Revise sub-schedules to show changes for other items of work affected by each Change Order.
- D. Upon completion of Work under a Change Order, enter pertinent changes in Record Documents at the job site.

#### 1.10 EXECUTION OF CHANGE ORDERS

- A. Architect will issue Change Orders for signatures of parties as provided in Conditions of the Contract.
  - 1. Contractor shall sign and date the Change Order to indicate agreement with the terms therein and forward Change Order to the Owner.
  - 2. Owner shall then sign and date the Change Order as authorization for the Contractor to proceed with the changes.

#### PART 2 PRODUCTS

Not Used.

#### PART 3 EXECUTION

Not Used.

END OF SECTION

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 30 00

#### ADMINISTRATIVE REQUIREMENTS

##### PART 1 GENERAL

###### 1.1 SECTION INCLUDES

- A. Coordination and project conditions.
- B. Contractor's superintendent.
- C. Subcontractor coordination.
- D. Work near energized electrical lines and other utilities.
- E. Safety requirements.
- F. Fire protection.
- G. First aid and reporting of accidents.
- H. Preconstruction meeting.
- I. Progress coordination meetings.
- J. Continuity of operation.
- K. Use of site.
- L. Pre-installation meetings.
- M. Periodic observations.
- N. Receiving and storing materials.
- O. Requests for information.
- P. Defect assessment.

###### 1.2 COORDINATION AND PROJECT CONDITIONS

- A. Coordinate scheduling, submittals, and Work of various sections of Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Verify utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, operating equipment.
- C. In finished areas, except as otherwise indicated, conceal pipes, ducts, and wiring within construction. Coordinate locations of fixtures and outlets with finish elements.

- D. Coordinate completion and clean-up of Work of separate sections in preparation for Substantial Completion.
- E. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

### 1.3 CONTRACTOR'S SUPERINTENDENT

- A. The Contractor shall keep on this Work full time during its progress a competent Superintendent and any necessary Assistants, all satisfactory to the Architect. The Superintendent shall not be changed without the consent of the Architect, unless the Superintendent proves to be unsatisfactory to the Contractor and ceases to be in his employ.
- B. The Superintendent shall represent the Contractor in his absence and all directions given by him shall be as binding as if given by the Contractor. Important directions shall be confirmed in writing to the Contractor. Other directions shall be so confirmed on written request in each case.

### 1.4 SUBCONTRACTOR COORDINATION (GENERAL CONTRACTOR TO COORDINATE ALL WORK)

- A. Each subcontractor shall make the field measurements necessary for his own work and shall be responsible for its accuracy. Also, should any structural difficulties prevent a subcontractor or tradesman from installing any material properly, the Contractor shall be promptly notified so that he may be consulted how best to resolve the difficulty. Cutting into walls and floors, if necessary, shall be carefully and neatly performed and then be repaired in an approved manner. The Contractor and Architect shall be consulted in all cases where cutting into a structural portion of the building is either desirable or necessary so that a satisfactory reinforcement may be provided.
- B. In instances where the manufacturers of materials or fixtures used on this job provide installation or maintenance directions not covered in these Specifications or detailed in the Drawings, the subcontractor furnishing the item shall follow such directions as though specifically mentioned.
- C. Each subcontractor shall acquaint himself with the work of other trades whose activities will adjoin or be affected by his work. He shall consult with these other subcontractors or workmen and study their shop drawings in order to coordinate their efforts toward avoiding mistakes, omissions, disputes or delays.
- D. Each subcontractor shall be responsible for damage to other work caused by his work or the neglect of his workmen. Patching and repairing of damaged items shall be done by the trade that originally performed the work, but the cost shall be borne by the subcontractor responsible.



#### 1.5 WORK NEAR ENERGIZED ELECTRICAL LINES OR OTHER UTILITIES:

- A. It shall be the Contractor's sole and exclusive responsibility to (a) provide personnel capable of working adjacent to energized electrical lines or other utilities; (b) provide adequate, safe and properly maintained equipment; (c) conduct all of his work in accordance with the safety rules and regulations prescribed by the National Electrical Code, National Electric Safety Code H30, and Safety Rules for Installation and Maintenance of Electrical Supply and Communication Lines Handbook 81, Occupational Safety and Health Act, as well as other safety codes in effect at the site of construction and as specified elsewhere herein, and as are generally applicable to the type of work being performed; and (d) continuously supervise and inspect the work being performed to assure that the requirements of (a), (b), and (c) above are complied with and nothing in these Contract Documents shall be held to mean that any such responsibility is the obligation of the Owner or the Architect. Notwithstanding any reference to any rules or regulations above or in other parts of the Contract Documents, the Owner and Architect and anyone employed by either of them and anyone for whose acts either of them may be liable, are not assuming, neither jointly nor separately, any duty to provide supervision of construction methods or processes or safety measures. All such supervision shall be the sole and exclusive responsibility of the Contractor.

#### 1.6 SAFETY REQUIREMENTS:

- A. The Contractor shall be solely and exclusively responsible for determining the requirements for and providing temporary ladders, guard rails, barricades, fencing, shoring, bracing, dewatering if required, warning signs, night lights and other safeguards desirable or required, and shall comply with all Federal, State and Municipal Safety Requirements. The Contractor shall be solely and exclusively responsible for the design, construction, inspection and continual maintenance of such facilities at all times. The Contractor shall be responsible for protecting the work and stored materials until completion and acceptance of the work by the Owner. It shall be the sole and exclusive responsibility of the Contractor to provide a safe place to work for all laborers and mechanics and other persons employed on or in connection with the project, and nothing in these Contract Documents shall be construed to give any of such responsibility to the Owner or the Architect.
- B. The Contractor will be held solely responsible for the safety, proper construction and protection of the entire work until the same has been finally accepted and paid for by the Owner. The Contractor shall be solely responsible for conducting his work in compliance with the requirements of the "Occupational Safety and Health Act", the Nebraska State Department of Labor and Safety and requirements of such other agencies that have jurisdiction over such operations. The Architect shall not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, and he will not be responsible for the Contractor's failure to carry out the work in accordance with the requirements of the Contract. Notwithstanding any reference to any rules or regulations above or in other parts of the Contract Documents, the Owner and Architect and anyone employed by either of them and anyone for whose acts either of them may be liable, are not assuming, neither jointly nor separately, any duty to provide supervision of construction methods or

processes or safety measures. All such supervision shall be the sole and exclusive responsibility of the Contractor.

#### 1.7 FIRE PROTECTION

- A. Adequate provisions shall be made throughout the construction of this project to ensure that fire fighting equipment is available for all areas of construction. The Contractor shall be solely responsible for supplying an adequate supply of hand-operated fire fighting devices at the job site during construction.

#### 1.8 FIRST AID AND REPORTING OF ACCIDENTS:

- A. The Contractor shall be solely and exclusively responsible for the determining of requirements for first aid facilities and for providing such first aid facilities at the site, as are necessary to supply first-aid service to anyone who may be injured in connection with the work. The Contractor must promptly report in writing to the Architect and Owner all accidents whatsoever arising out of, or in connection with the performance of the work, whether on, or adjacent to the site, which causes death, personal injury or property damages, giving full details and statements of witnesses. In addition, if death or serious injuries or damages are caused, the accident shall be reported immediately by telephone or messenger to the Architect and the Owner. If any claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing to the Architect and the Owner, giving full details of the claim.

#### 1.9 PRECONSTRUCTION MEETING

- A. Architect in coordination with the Owner will schedule meeting prior to signing of the Owner-Contractor Agreement by both parties.
- B. Attendance Required: Owner's representative, Architect, Architect's Consultants, Contractor's project manager, Contractor's Superintendent, and major Subcontractors.
- C. Agenda:
  - 1. Distribution of Contract Documents, if needed.
  - 2. Review of executed Owner-Contractor Agreement.
  - 3. Review of executed bonds and insurance certificates.
  - 4. Review of list of Subcontractors, schedule of values, and construction schedule.
  - 5. Designation of personnel representing parties in Contract.
  - 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
  - 7. Use of premises by Owner and Contractor.
  - 8. Owner's requirements and occupancy.
  - 9. Construction facilities and controls provided by Owner.
  - 10. Temporary utilities provided by Owner.
  - 11. Security and housekeeping procedures.
  - 12. Procedures for testing.
  - 13. Procedures for maintaining record documents.

14. Review the Work
15. Review payment procedures.
16. Subcontractors.
17. Completion.

- D. Contractor shall record minutes and distribute one copy within five days after meeting to all participants, and those affected by decisions made.

#### 1.10 PROGRESS COORDINATION MEETINGS

- A. Architect will schedule progress coordination meetings at the job site at times agreed to by the Owner, Architect and Contractor.
- B. Attendance Required: The Owner's representative, Architect, Contractor's project manager, job superintendent, major subcontractors and suppliers as appropriate to agenda topics for each meeting.
- C. Contractor shall prepare agenda with suggested topics as listed below with copies for participants.
- D. Agenda:
  1. Review minutes of previous coordination meetings.
  2. Review past field observations, problems, and decisions.
  3. Progress during preceding work period.
  4. Projected work progress this period.
  5. Identification of issues that may be impeding planned progress.
  6. Review of off-site fabrication and delivery schedules.
  7. Review progress construction schedule.
  8. Corrective measures to regain projected schedules, if necessary.
  9. Maintenance of quality and work standards.
  10. Effect of proposed changes, if any, on progress schedule and coordination.
  11. Other business relating to Work.
  12. Owner and/or Architect issues.
  13. Review and status of shop drawing submittals and other required submittals.
  14. Review proposed pay request payment and application form
- E. The Contractor will record minutes and distribute one copy within three days after meeting to all participants including Architects consultants. Contractor shall distribute meeting minutes to all affected parties.

#### 1.11 CONTINUITY OF OPERATION

- A. The Owner will continue to occupy the existing facility and support areas throughout the construction operations.
- B. The Contractor shall so organize his work as to cause a minimum of interference with the normal routine activities held in those areas and areas adjacent to the site. This includes keeping approaches to all existing doors unobstructed at all times.

- C. The Contractor shall enforce the Architect's instructions regarding signs, advertisements, fire and smoking. Insofar as is practicable, the Contractor shall confine his operations to those areas of the buildings where construction is located.
- D. Whenever the Drawings and Specifications or progress of the work require the Contractor to perform work in the occupied portions of the existing building, the Contractor shall submit the proposed work schedule to the Architect and Owner and shall not proceed with any part of the work in the occupied portions of the existing building until approval has been received of same. Schedules of work shall then be coordinated with the Owner.
- E. Existing utilities and services shall not be interrupted without the Owner's approval as to time and duration.
- F. Before commencing any work in the existing facility, the Contractor shall take every precaution to prevent the spread of dust into the occupied parts of the building and shall construct one hour fire rated dustproof partitions to close off the construction areas from the occupied areas.
- G. All required cutting and patching necessary for completion of the Work under this Contract in the building shall be the responsibility of this Contractor. Cutting of surfaces and removal of items shall be done in a neat, workmanlike manner. All surfaces shall be repaired and finished to match the surrounding surfaces by craftsmen skilled in the trade involved. All items damaged by this Contractor due to his work shall be repaired or replaced as approved and the cost of same borne by this Contractor.

#### 1.12 SITE

- A. The Contractor shall use every possible precaution to prevent damage to any adjacent structure and/or to prevent damage to trees, shrubbery, lawns, lawn sprinkler system, drives, curbs and walks, on or adjacent to the site of the Work and shall repair or replace, at his own expense, any item damaged or destroyed by him.
- B. The Contractor shall replace any sod at lawn areas damaged by Contractor operations or access to the building sites.
- C. It is suggested that the Contractor photograph the site prior to construction to accurately establish conditions of the existing buildings prior to commencement of work.
- D. Limit use of site and premises to allow for:
  - 1. Owner access to occupied portions of the building.
  - 2. Public use and access to occupied portions of the building.

#### 1.13 PRE-INSTALLATION MEETINGS

- A. When required in individual specification sections, convene pre-installation meetings at the project site prior to commencing work of specific section.
- B. Require attendance of parties directly affecting, or affected by, Work of specific section.

- C. Notify Architect and Owner at least three days in advance of meeting date and time.
- D. Contractor shall prepare agenda and preside at meeting:
  - 1. Review conditions of installation, preparation and installation procedures.
  - 2. Review coordination with related work.
  - 3. Provide shop drawings, manufacturer installation drawings and manufacturers representatives as required for intent of meeting.
- E. Contractor shall record minutes and distribute 1 copy to each participant within three days after meeting.

#### 1.14 PERIODIC OBSERVATIONS:

- A. The Architect shall have free access to the construction site and any place of manufacture of equipment, apparatus and material furnished by the Contractor and shall have the right to observe and witness routine testing of all workmanship and materials covered by these Specifications. The Architect shall have the right to approve the manner in which special or requested tests are conducted. The Contractor shall provide reasonably accessible means to all work in progress when requested by the Architect.
- B. The Contractor shall furnish, at his own expense, such materials and facilities as the Architect may require for the purpose of approving all work. Decision as to quality of materials and workmanship shall rest with the Architect and any portion of the work rejected by the Architect shall be replaced with approved work at the expense of the Contractor. Any such observations, tests or approval or waiver of tests shall not in any way relieve the Contractor of full responsibility for furnishing apparatus, equipment and materials meeting the intended performance standards and requirements of the Contract.

#### 1.15 RECEIVING AND STORING MATERIALS

- A. Space for receiving and storing materials and equipment at the job site will be limited. Therefore, the Contractor is encouraged to hold materials off-site until needed.
- B. The Contractor shall be responsible for receiving at the site and proper storage of all equipment furnished under this Contract and shall provide and maintain adequate provisions for storage of all materials, supplies and equipment.
- C. All equipment shall be stored in accordance with recommendations of the manufacturer and additionally, any equipment in storage shall have all openings sealed against moisture, dust and other debris and exposed surfaces shall be properly protected to prevent rust, corrosion or other deterioration.
- D. No equipment shall be stored out in the open against the recommendation of the manufacturer. Materials onsite not suitably protected and/or secured will not be included in estimates for payment.
- E. No payment will be allowed for materials stored off of the site unless evidence is submitted that materials are stored in a bonded warehouse and clearly identified as material for this project.

- F. When necessary, the Contractor shall make provisions for introducing equipment into the building that is too large to pass through existing finished openings.

#### 1.16 REQUEST FOR INFORMATION

- A. The Contractor may submit a Request For Information (RFI) to the Architect seeking clarification or interpretation of conflicts, discrepancies or ambiguities in the contract documents, but a telephone call is preferred. An original and two copies of an RFI must be presented in writing on a form of the Contractor's choice.
- B. Written RFIs shall be submitted with all supporting documentation or they will be returned unanswered.
- C. The Architect's review of, or responses to, RFIs shall not constitute an approval, direction or procedure related to the construction means, methods, techniques, sequences or procedures of the contractor.
- D. The Architect's review of, or responses to, RFIs shall not constitute an approval, direction or procedure related to the construction site safety, precautions, procedures or methodology of the Contractor.
- E. The use of a written RFI is limited to clarification of the contract documents. The Contractor will limit each RFI to a single issue. Information which is discernable from the contract documents, construction means and methods, and construction site safety will not be addressed by the Architect in responding to an RFI.
- F. As a clarification, the Architect's responses to RFIs are not to be construed as a change order or directive authorizing change in construction cost or time to completion.
- G. Responses to RFIs will be limited to a clarification of the contract documents and the Architect will not review requests for substitute items as an RFI.

#### 1.17 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.
- B. If, in the opinion of the Architect/Engineer, it is not practical to remove and replace the Work, the Architect/Engineer will direct appropriate remedy as listed below or adjust payment.
  - 1. The defective Work may remain, but price will be adjusted at discretion of Architect/Engineer and approved by the Owner.
  - 2. Defective Work may be partially repaired to instructions of Architect/Engineer but price will be adjusted at discretion of Architect/Engineer and approved by the Owner.
- C. Authority of Architect/Engineer approved by the Owner to assess defects and identify payment adjustments, is final.

D. Non-Payment For Rejected Products: Payment will not be made for rejected products for any of the following:

1. Products wasted or disposed of in a manner that is not acceptable.
2. Products determined as unacceptable before or after placement.
3. Products not completely unloaded from transporting vehicle.
4. Products placed beyond lines and levels of required Work.
5. Products remaining on hand after completion of the Work.
6. Loading, hauling, and disposing of rejected products.

## PART 2 PRODUCTS

Not Used.

## PART 3 EXECUTION

Not Used.

END OF SECTION

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 33 00

#### SUBMITTAL PROCEDURES

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. The Contractor shall furnish all labor, materials, tools and equipment, and perform all work and services necessary for or incidental to **the furnishing, processing, delivery, reproduction and other necessary functions incidental to the submittal of shop drawings, product data, and samples** as indicated on the Drawings and/or as specified, in accordance with provisions of the Contract Documents.
- B. Although such work is not specifically shown or specified, furnish all data necessary for comprehensive submittal of shop drawings necessary for completion of the Work.
- C. See appropriate Sections for specific items for which data and/or samples are required. Refer to the General Conditions, for additional information.

##### 1.2 SECTION INCLUDES

- A. Submittal procedures.
- B. Construction progress schedules.
- C. Shop Drawing Submittal Log
- D. Product data.
- E. Shop drawings.
- F. Samples.
- G. Certificates.
- H. Manufacturer's instructions.
- I. Construction photographs.

##### 1.3 SUBMITTAL PROCEDURES

- A. Electronic Submittal Procedures
  - 1. Summary:
    - a. Shop drawing and product data submittals shall be transmitted to Architect in electronic (PDF) format.
    - b. The intent of electronic submittals is to expedite the construction process by reducing paperwork, improving information flow, and decreasing turn-around time.



- c. The electronic submittal process is not intended for color samples, color charts, and physical material samples.
- 2. Procedures:
  - a. Submittals Preparation – Contractor may use any or all of the following options:
    - 1) Subcontractors and Suppliers provide electronic (PDF) submittals to Contractor via the Submittal Exchange website.
    - 2) Subcontractors and suppliers provide paper submittals to General Contractor who electronically scans and converts to PDF format.
    - 3) Subcontractors and Suppliers provide paper submittals to Scanning Service which electronically scans and converts to PDF format.
  - b. Contractor shall review and apply electronic stamp certifying that the submittal complies with the requirements of the Contract Documents including verification of manufacturer/product, dimensions and coordination of information with other parts of the work.
  - c. Contractor shall transmit each submittal to Architect using email under the base bid.
    - 1) NOTE: At the Contractor's option the use of Submittal Exchange website, [www.submittalexchange.com](http://www.submittalexchange.com), or approved equal may be used.
  - d. Architect review comments will be made on the electronic submittals. Contractor will receive email notice of completed review.
  - e. Distribution of reviewed submittals to subcontractors and suppliers is the responsibility of the Contractor.
  - f. Submit paper copies of reviewed submittals at project closeout for record purposes in accordance with Section 017800 – Closeout Submittals.
- B. The Contractor shall be responsible for and make all submittals and shall coordinate submittals of related items. Do not allow subcontractors to make submittals directly to the Architect. Such submittals will not be accepted and may be discarded.
- C. Transmit each submittal with Architect's accepted form of transmittal. Do not combine items from different Specification sections on one transmittal. Furnish one transmittal for each item.
- D. Sequentially number transmittal forms. Mark revised submittals with original number and sequential alphabetic suffix.
- E. In the transmittal, identify project name, Architect's project number, Contractor's name, subcontractor and/or suppliers name and clear reference to pertinent drawings, detail numbers and specification section number, appropriate to submittal.
- F. Apply Contractor's stamp, signed and dated, to each set of submittals as indication of his checking and verification of dimensions, quantities and coordination with interrelated items and that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with requirements of the Work and Contract Documents. Items submitted without Contractor's approval stamp will be returned, without action, for resubmittal.

- G. Contractor shall stamp all non-electronic items submitted, prior to submittal to the Architect. The stamp shall occur on the first page of each item or set of different items.
- H. Schedule submittals to expedite Project and deliver non-electronic submittals to Architect at: JACKSON - JACKSON & ASSOCIATES, INC., Architects, 6912 North 97th Circle, Suite 1, Omaha, Nebraska 68122-1010.
- I. The Contractor shall make all submittals requiring Architect/Engineer action in the first twenty-five percent (25%) of the construction time period.
- J. Processing Time:
  - 1. Submit items sufficiently in advance of date required to allow Architect/Engineer reasonable time for review and to allow for resubmittal, if necessary. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
  - 2. Initial Review: Allow 21 calendar days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
  - 3. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
  - 4. Resubmittal Review: Allow 21 calendar days for review of each resubmittal.
  - 5. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow 21 days for initial review of each submittal.
  - 6. Concurrent Consultant Review: Where the Contract Documents indicate that submittals may be transmitted simultaneously to Architect and to Architect's consultants, allow 21 calendar days for review of each submittal. Submittal will be returned to Architect before being returned to Contractor.
- K. Any deviation from specified items should be clearly noted in the remarks section of the transmittal letter, with justification for acceptance of this deviation, along with an estimate of cost savings to be experienced with acceptance of this deviation included as part of the submittal.
- L. Allow 4" x 4" clear space on right hand side of submittals for Architect/Engineer review stamps.
- M. When revised for resubmission, identify changes made since previous submission.
- N. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report inability to comply with requirements.
- O. Submittals not requested will not be recognized or processed and returned without action to the Contractor.
- P. Approval or Rejection:

1. Shop drawings receiving Architect/Engineer "Reviewed" or "Reviewed, Furnish as Corrected" will be so stamped and returned to the Contractor.
  2. The Contractor shall reproduce non-electronic drawings submitted and returned as reproducibles.
  3. The Contractor shall distribute all shop drawings.
  4. Resubmit shop drawings stamped "Revise and Resubmit" or "Rejected, Resubmit".
  5. Approval is general and does not permit departure from Contract Documents or relieve Contractor from responsibility for errors in detail, quantities, dimensions or related items.
- Q. The Contractor shall maintain one (1) extra set of approved shop drawing and data submittals of each item. This set shall be assembled and maintained by the Contractor throughout the construction process. At the conclusion of construction, this set of approved submittals shall be given to the Owner.
- R. Manufacture or fabrication of items prior to final approval shall be at Contractor's risk.

#### 1.4 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit initial proposed construction schedule within fourteen (14) days after date of Owner-Contractor Agreement. After review, resubmit revised schedules within ten (10) days modified to accommodate revisions recommended by Architect or Owner, if any.
- B. Submit updated construction Progress Schedule at each monthly progress meeting.
- C. Distribute copies of updated schedule to Project site file, subcontractors, suppliers, and other concerned parties.
- D. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in schedules.
- E. Submit computer generated horizontal bar chart with separate line for each major portion of Work or operation, identifying first work day of each week.

#### 1.5 SHOP DRAWING SUBMITTAL LOG

- A. Shop Drawing Submittal Log: The Contractor shall submit to Architect/Engineer within fourteen (14) days after date the execution of Owner-Contractor Agreement for review a list of all shop drawing submittals as indicated in the Project Manual, Specification Sections.

#### 1.6 PRODUCT DATA

- A. Product Data: Submit to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.

- B. Submit electronic copy of standard items such as equipment brochures, cuts of fixtures and standard catalog items.
- C. Mark to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- D. Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- E. After review, produce copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.

#### 1.7 SHOP DRAWINGS

- A. Shop Drawings: Submit to Architect for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
- B. Identify drawings as to manufacturer, item, use, type, project designation, specification section or drawing detail reference, and other pertinent information.
- C. When required by individual specification sections, provide shop drawings signed and sealed by professional engineer responsible for designing components shown on shop drawings.
  - 1. Include signed and sealed calculations to support design.
  - 2. Submit drawings and calculations in form suitable for submission to and approval by authorities having jurisdiction.
  - 3. Make revisions and provide additional information when required by authorities having jurisdiction.
- D. Submit electronic file of all other required shop drawings not specifically indicated otherwise. Identify drawings as to manufacturer, item, use, type, project designation, specification section or drawing detail reference, and other pertinent information. After review, distribute in accordance with SUBMITTAL PROCEDURES article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.
- E. The Contractor shall keep one copy of stamped and signed shop drawings at the project site, in good order, available to the Architect, the Owner and their representatives for reference. Erection drawings will not be considered a substitute for stamped shop drawings. These sets may then be the extra sets to be provided to the Owner at the conclusion of the project.
- F. The Architect will provide electronic files for use in the preparation of shop drawings related to this project, subject to the terms and conditions set forth in Section 01 10 00: Summary.

## 1.8 SAMPLES

- A. Samples: Submit to Architect for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
- B. Samples For Selection as Specified in Product Sections:
  - 1. Submit to Architect/Engineer for aesthetic, color, or finish selection.
  - 2. Submit samples of finishes from full range of manufacturers' standard colors or in custom colors as noted in specific specification sections, textures, and patterns for Architect selection.
- C. Submit each sample with a letter of transmittal. The Contractor shall stamp sample transmittals as indication of his checking and verification of dimensions and coordination with interrelated items. Include brochures, shop drawings and installation instructions, as required. Resubmit samples of previously rejected items.
- D. Identify samples as to manufacturer, item, use, type, product designation, Specification Section or drawing detail reference, color, range, texture, finish and other pertinent data.
- E. Submit number of samples specified in individual specification sections; Architect will retain one (1) sample.
- F. Approved samples submitted constitute criterion for judging completed work. Finish work or items not equal to samples will be rejected.
- G. Contractor shall pay all costs of furnishing samples.
- H. After review, obtain duplicates and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes described in Section 01 70 00 - Execution and Closeout Requirements.

## 1.9 DESIGN DATA

- A. Submit for Architect/Engineer's knowledge as contract administrator for Owner.
- B. Submit for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.

## 1.10 TEST REPORTS

- A. Submit to Owner and Architect as contract administrator for Owner.
- B. Submit for information for limited purpose of assessing conformance with the specifications given and design requirements expressed in Contract Documents.

#### 1.11 CERTIFICATES

- A. When specified in individual specification sections, submit certification by manufacturer, installation/application subcontractor, or Contractor to Architect, in quantities specified for Product Data.
- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or Product, but must be acceptable to Architect.

#### 1.12 MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, to Architect for delivery to Owner in quantities specified for Product Data.
- B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

#### PART 2 PRODUCTS

Not Used.

#### PART 3 EXECUTION

Not Used.

END OF SECTION

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 40 00

#### QUALITY REQUIREMENTS

##### PART 1 GENERAL

###### 1.1 SECTION INCLUDES

- A. Regulatory requirements.
- B. Quality control and control of installation.
- C. Tolerances
- D. Mock-up requirements.
- E. Testing and inspection services.
- F. Manufacturers' field services.

###### 1.2 REGULATORY REQUIREMENTS

- A. The Contractor shall comply with all National, State, and local Building Codes relative to Work under this Contract.
- B. If any known violation is noted by the Contractor, the Architect shall be notified immediately.

###### 1.3 QUALITY CONTROL AND CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. When manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as minimum quality for the Work, except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform Work by persons qualified to produce required and specified quality.
- F. Verify field measurements are as indicated on the Contract Drawings, on Shop Drawings and/or as instructed by manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

#### 1.4 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. When manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

#### 1.5 MOCK-UP REQUIREMENTS

- A. Tests will be performed under provisions identified in this section and identified in respective product specification sections.
- B. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.
- C. Accepted mock-ups shall be comparison standard for remaining Work.
- D. Where mock-up has been accepted by Architect and is specified in product specification sections to be removed; remove mock-up and clean area.

#### 1.6 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, test, adjust and balance of equipment as applicable, and to initiate instructions when necessary.
- B. Submit qualifications of observer to Architect/Engineer thirty (30) days in advance of required observations. Observer subject to approval of Architect and Owner.
- C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
- D. Refer to Section 01 33 00 - Submittal Procedures, "MANUFACTURERS' INSTRUCTIONS" article.

### PART 2 PRODUCTS

Not Used.



## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions and responsibility for performance.
- B. Verify existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Verify utility services are available, of correct characteristics, and in correct locations.

### 3.2 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

END OF SECTION

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 41 13

#### CODES, REGULATIONS AND GUIDELINES

##### PART 1 GENERAL

###### 1.1 SCOPE:

- A. The project design is based on, but not limited to, the following codes, regulations and guidelines, including:
  - 1. Nationally published amendments.
  - 2. Local amendments.
- B. Additional requirements may be indicated in individual Specification sections.
- C. The Contractor is not required to ascertain that contract documents are in accordance with applicable laws, statutes, ordinances, building codes and rules and regulations, unless they bear upon construction means, methods, techniques or safety and health precautions, but any nonconformity discovered by or made known to the Contractor shall be reported promptly to the Architect.

###### 1.2 INDEX:

- A. Building Code:
  - 1. International Building Code (IBC), Edition: 2018.
- B. Fire Code/Life Safety Code:
  - 1. NFPA – Life Safety Code 101, Edition: 2012.
  - 2. International Fire Code (IFC), Edition: 2012.
- C. Accessibility:
  - 1. ADA Accessibility Guidelines, 2010 Edition.
  - 2. Nebraska Accessibility Guidelines (NAG).
  - 3. Where multiple codes are listed and requirements differ, comply with the most stringent language.
- D. Mechanical Code:
  - 1. International Mechanical Code, Latest Edition.
  - 2. Refer to Mechanical Specification Sections.
- E. Plumbing Code:
  - 1. International Plumbing Code, Latest Edition.
  - 2. Refer to Plumbing Specification Sections.
- F. Electrical Code:
  - 1. ICC Electrical Code, Latest Edition.

2. National Electrical Code, 2017 Edition.
  3. Refer to Electrical Specification Sections.
- G. Energy Code:
1. International Energy Conservation Code (IECC), 2018 Edition.
  2. ASHRA 90.1, Edition: 1999 or 2001.
- H. Indoor Air Quality Design: ASHRAE 62, Latest Edition.
- I. Nebraska State College System Policy Manual, Facilities Section, Policy 8000 through 8075.
- J. Reference Standards:
1. Refer to technical specification sections for other listed standards.

END OF SECTION

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 50 00

#### TEMPORARY FACILITIES AND CONTROLS

##### PART 1 GENERAL

###### 1.1 SCOPE:

- A. The Contractor shall furnish all labor, materials, tools and equipment, and perform all work and services necessary for or incidental to providing, constructing, furnishing and installing, complete, all **temporary facilities and controls and subsequent removal** as shown on the Drawings, and as specified, in accordance with the provisions of the Contract Documents, and completely coordinated with work of all other trades.
- B. Although such work is not specifically shown or specified, furnish and install all supplementary or miscellaneous items, appurtenances and devices incidental to or necessary for a sound, secure and complete installation.
- C. No additional payment shall be made for any Work under this Section.

###### 1.2 QUALITY ASSURANCE:

- A. Comply with requirements of local laws and regulations governing construction and local industry standards in the installation and maintenance of temporary services and facilities, including, but not limited to, the following:
  - 1. Building codes, including local requirements for permits, testing and inspection.
  - 2. Health and safety regulations.
  - 3. Utility company regulations and recommendations governing temporary utility services.
  - 4. Police, Rescue Squad and Fire Department rules and recommendations.
  - 5. Environmental protection regulations governing use of water and energy and the control of dust, noise and other nuisances.
- B. Comply with the requirements of NFPA Code 241, “Building Construction and Demolition Operations”, the ANSI-A10 Series standards for “Safety Requirements for Construction and Demolition” and the NECA National Joint Guidelines NJG-6, “Temporary Job Utilities and Services”.
- C. Refer to “Guidelines for Bid Conditions for Temporary Job Utilities and Services”, as prepared jointly by AGC and ASC for industry recommendations.
- D. Inspect and test each service before placing temporary utilities in use. Arrange for required inspections and tests by governing authorities and obtain required certifications and permits for use.

### 1.3 JOB CONDITIONS:

- A. Provide each temporary service and facility ready for use when the service or facility is first needed to avoid delay in performance of the Work. Maintain, expand as required and modify temporary services or facilities as needed throughout the progress of the Work. Do not remove until services or facilities are no longer needed or are replaced by the authorized use of completed permanent facilities.

### 1.4 SECTION INCLUDES

- A. Temporary Utilities:
  - 1. Temporary electricity.
  - 2. Temporary lighting for construction purposes.
  - 3. Telephone service.
  - 4. Temporary water service.
  - 5. Temporary sanitary facilities.
- B. Construction Facilities:
  - 1. Field offices
  - 2. Storage and working areas.
  - 3. Vehicular access.
  - 4. Parking.
  - 5. Progress cleaning and waste removal.
  - 6. Project signs.
  - 7. Traffic regulation.
  - 8. Fire prevention facilities.
- C. Temporary Controls:
  - 1. Barriers.
  - 2. Enclosures and fencing.
  - 3. Security.
  - 4. Construction aids.
  - 5. Water control.
  - 6. Dust control.
  - 7. Erosion and sediment control.
  - 8. Noise control.
  - 9. Pollution control.
  - 10. Miscellaneous.
- D. Removal of utilities, facilities, and controls.

### 1.5 TEMPORARY ELECTRICITY

- A. Owner will provide the electrical power for use by all trades and contractors throughout the construction period, for the following purposes:
  - 1. Operation of miscellaneous power tools and equipment.
  - 2. Temporary lighting.
- B. All temporary power work shall meet the requirements of all regulatory agencies.

- C. At such time as building power distribution system is installed, the Contractor may use this system for temporary power. At completion of Work, Contractor shall remove and replace all parts of the power distribution system damaged because of use for temporary power. Warranty or guarantee period on any permanent item used for temporary power shall commence with date of final acceptance of the building by Owner.
- D. Contractor shall remove all temporary electrical equipment, wiring, switches, transformers, panels, poles and outlets at completion of work.
- E. Contractor shall provide any heavy-duty electrical power, exceeding available temporary power, required for his operations.
- F. Cost of temporary power used during construction and power transmitted through the permanent system prior to Substantial Completion, shall be borne by the Owner.
- G. Before final acceptance, clean fixtures and replace all defective lamps used during construction period and replace with new lamps. Replace any other defective parts.

#### 1.6 TEMPORARY LIGHTING FOR CONSTRUCTION PURPOSES

- A. Provide lighting for construction operations in work areas to allow Work to be completed in accordance with the Contract Documents.
- B. Provide lighting to exterior staging and storage areas after dark as required for security purposes.
- C. Provide HID lighting to interior work areas after dark for security purposes.
- D. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, and lamps for required lighting levels.
- E. Provide light levels to permit visual observation of areas of Work.
- F. Maintain lighting and provide routine repairs.

#### 1.7 TELEPHONE SERVICE

- A. Provide and pay for cell phone service for use by the site superintendent and project manager.

#### 1.8 TEMPORARY WATER SERVICE

- A. Owner will pay cost of temporary water. Exercise measures to conserve water. Utilize Owner's existing water system, extend and supplement with temporary devices as needed to maintain specified conditions for construction operations.

## 1.9 TEMPORARY SANITARY FACILITIES

- A. Contractor shall provide and maintain temporary toilet facilities and enclosures for use of all work force. Existing facility use is not permitted. Provide facilities at time of project mobilization.
- B. Maintain daily in clean and sanitary condition. Provide adequate supplies of toilet paper, cleaning products and other required items.

## 1.10 FIELD OFFICES

- A. Locate office where approved by the Owner.
- B. Field Office:
  - 1. Provide cell phone services.
- C. Removal: At completion of Work remove buildings. Restore areas.

## 1.11 STORAGE AND WORKING AREAS:

- A. The Contractor and each Subcontractor shall provide suitable and sufficient enclosed and covered spaces, with raised flooring, to protect materials and equipment from damage by weather or construction work as required. Provide trailers to suitably store materials and equipment needing only limited protection. Provide heat in enclosed spaces when required to protect items from freezing damage.
- B. Arrange and locate temporary storage structures and trailers in an area approved by the Owner to avoid interfering with construction and existing site traffic.
- C. Within area designated for his use, each Contractor shall provide sufficient temporary items necessary to protect his materials and equipment.
- D. Each Contractor shall maintain his storage and working area in a secure, clean and orderly condition, free of rubbish and debris. Upon completion of his work, he shall remove temporary structures, all debris and rubbish and leave area in clean and orderly condition. Restore areas to original condition as approved by the Architect and Owner.

## 1.12 VEHICULAR ACCESS

- A. Location as approved by Owner.
- B. Provide unimpeded access for emergency vehicles. Maintain 20 feet wide driveways with turning space between and around combustible materials.
- C. Provide and maintain access to fire hydrants and control valves free of obstructions.
- D. Provide means of removing mud from vehicle wheels before entering streets.
- E. Use designated existing on-site roads for construction traffic.

### 1.13 PARKING

- A. Location as approved by Owner.
- B. When site space is not adequate, provide additional off-site parking.
- C. Use of designated existing on-site streets and driveways used for construction traffic is permitted when approved by the Owner. Tracked vehicles not allowed on paved areas.
- D. Use of designated areas of existing parking facilities by construction personnel is not permitted.
- E. Do not allow heavy vehicles or construction equipment in parking areas.
- F. Do not allow vehicle parking on existing pavement.
- G. Maintenance:
  - 1. Maintain traffic and parking areas in sound condition.
  - 2. Maintain existing paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original, or specified, condition.
- H. Removal, Repair:
  - 1. Remove temporary materials and construction when permanent paving is usable before Substantial Completion.
  - 2. Repair existing facilities damaged by use, to original condition.

### 1.14 PROGRESS CLEANING AND WASTE REMOVAL

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in clean and orderly condition.
- B. Remove debris and rubbish from site, storm drain piping, and other closed or remote spaces, prior to enclosing spaces.
- C. Establish a system for daily collection and disposal of waste materials from construction areas and elsewhere on the site. Enforce requirements strictly. Do not hold collected materials at the site longer than seven (7) days during normal weather or three (3) days when the daily temperature is expected to rise above 80 degrees F. (27 degrees C.).
- D. Handle waste materials that are hazardous, dangerous or unsanitary separately from other inert waste by containerizing appropriately. Dispose of waste material in a lawful manner.
- E. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.



#### 1.15 PROJECT SIGNS

- A. No project identification signs will be allowed.

#### 1.16 FIRE PREVENTION FACILITIES

- A. Adequate provisions shall be made throughout the construction of this project to ensure that fire-fighting equipment is available for all areas of construction. The Contractor shall be solely responsible for supplying an adequate supply of hand-operated fire fighting devices at the job site during construction.
- B. Establish fire watch for cutting and welding and other hazardous operations capable of starting fires. Maintain fire watch before, during, and after hazardous operations until threat of fire does not exist.
- C. Portable Fire Extinguishers: NFPA 10; 10-pound capacity, 4A-60B: C UL rating.
  - 1. Provide one or more fire extinguishers at building demolition and construction areas. Travel distance to a fire extinguisher shall be no further than 75 feet.
  - 2. Provide minimum one fire extinguisher in every construction trailer and storage shed.
  - 3. Provide minimum one fire extinguisher on roof during roofing operations using heat producing equipment.

#### 1.17 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas to allow for Owner's use of site, and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide barricades and covered walkways required by authorities having jurisdiction for public rights-of-way and for public access to existing building.
- C. Provide protection for plants designated to remain. Replace damaged plants. Peru State College will cut back plant material at the request of the contractor. Contractor shall not cut back plant materials themselves.
- D. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

#### 1.18 SECURITY

- A. Security Program:
  - 1. Protect Work existing premises and Owner's operations from theft, vandalism, and unauthorized entry.
  - 2. Initiate program in coordination with Owner's existing security system at project mobilization.
  - 3. Maintain program throughout construction period until Owner acceptance precludes need for Contractor security.

- B. Entry Control:
  - 1. Restrict entrance of persons and vehicles into Project site and existing facilities.
  - 2. Allow entrance only to authorized persons with proper identification.
  - 3. Maintain log of workers and visitors, make available to Owner on request.
  - 4. Owner will control entrance of persons and vehicles related to Owner's operations.
- C. Personnel Identification:
  - 1. Provide identification badge to each person authorized to enter premises.
  - 2. Badge To Include: Personal photograph, name and employer.
  - 3. Maintain list of accredited persons, submit copy to Owner on request.
  - 4. Require return of badges at expiration of their employment on the Work.

#### 1.19 CONSTRUCTION AIDS

- A. Provide construction aids and equipment required by personnel and to facilitate execution of the work, such as scaffolds, staging, ladders, stairs, ramps, runways, platforms, railings, hoists, cranes, chutes and other such facilities and equipment necessary to perform the work.

#### 1.20 WATER CONTROL

- A. Grade site to drain. Maintain excavations free of water.
- B. Protect site from puddling or running water.
- C. Dispose of rainwater, subsurface water or other fluids in a lawful manner which will not result in flooding the Project or adjoining property nor endanger either permanent work or temporary facilities.
- D. Control and suitably dispose of water and other fluids by means of temporary pumps, piping drainage lines and/or other methods.
- E. Provide temporary drainage where the roofing or similar waterproof deck construction is completed prior to the connection and operation of the permanent drainage piping system.

#### 1.21 DUST CONTROL

- A. Execute Work by methods to minimize raising dust from construction operations.
- B. Refer to Document 02 41 19 Selective Structure Demolition for Dust Control due to demolition operations.

#### 1.22 NOISE CONTROL

- A. Provide methods, means, and facilities to minimize noise produced by construction operations, particularly as it might affect the Owner's continued operations of the existing facility.

### 1.23 POLLUTION CONTROL

- A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.
- B. Comply with pollution and environmental control requirements of authorities having jurisdiction.

### 1.24 MISCELLANEOUS

- A. The following support items are the responsibility of the Contractor:
  - 1. First aid station.
  - 2. Rodent and pest control.
  - 3. Weed control.
  - 4. Temporary fire protection:
    - a. Prohibit smoking in compliance with state regulations and Owner requirements.

### 1.25 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Unless the Architect requests that it be maintained for a longer period of time, remove each temporary utilities, equipment, service and facility promptly when the need for it or a substantial portion of it has ended or when it has been replaced by the permanent facility or no later than Substantial Completion inspection.
- B. Complete or, if necessary, restore existing facilities used during construction to original condition or which may have been delayed because of interference with the temporary service or facility. Restore permanent facilities used during construction to specified condition.
- C. Clean and repair damage caused by installation or use of temporary work. Replace work which cannot be satisfactorily repaired.

## PART 2 PRODUCTS

Not Used.

## PART 3 EXECUTION

Not Used.

END OF SECTION

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 60 00

#### PRODUCT REQUIREMENTS

##### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Products.
- B. Product delivery requirements.
- C. Product storage and handling requirements.
- D. Product options.
- E. Product substitution procedures.
- F. Equipment electrical characteristics and components.

##### 1.2 PRODUCTS

- A. Furnish products of qualified manufacturers suitable for intended use. Furnish products of each type by single manufacturer unless specified otherwise.
- B. Do not use materials and equipment removed from existing premises, except as specifically permitted by Contract Documents.
- C. Furnish interchangeable components from same manufacturer for components being replaced.

##### 1.3 PRODUCT DELIVERY REQUIREMENTS

- A. Transport and handle products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to ensure products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

##### 1.4 PRODUCT STORAGE AND HANDLING REQUIREMENTS

- A. The Contractor shall be responsible for receiving at the site and proper storage of all material and equipment furnished under this Contract and shall provide and maintain adequate provisions for storage of all materials, supplies and equipment. All equipment

shall be stored in accordance with recommendations of the manufacturer and additionally, any equipment in storage shall have all openings sealed against moisture, dust and other debris and exposed surfaces shall be properly protected to prevent rust, corrosion or other deterioration. No equipment shall be stored out in the open against the recommendation of the manufacturer. Materials onsite not suitably protected and/or secured will not be included in estimates for payment. No payment will be allowed for materials stored off of the site unless evidence is submitted that materials are stored in a bonded warehouse and clearly identified as material for this project.

- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.
- G. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- H. Store loose granular materials on solid flat surfaces in well-drained area. Prevent mixing with foreign matter.
- I. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- J. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.
- K. The Contractor shall make provisions for introducing equipment into the building that is too large to pass through finished openings.

#### 1.5 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of one of manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit request for substitution for any manufacturer not named in accordance with the following article.

## 1.6 PRODUCT SUBSTITUTION PROCEDURES

- A. The Contractor shall perform all work and services necessary for or incidental to the furnishing, submitting, processing and handling of requests for substitution and product options.
- B. Materials, products and equipment specified by name of manufacturer, brand, trade name or catalog reference, and methods and procedures specified SHALL BE THE BASIS OF THE CONTRACT PRICE and shall be furnished and performed under the Contract, unless changed by mutual agreement and in writing before bids are received. Where two (2) or more materials are named, the choice of these shall be optional with the Contractor.
- C. Contractor shall be held responsible for ordering all specified materials in ample time to assure their availability on the job when needed. Failure on the part of the Contractor to allow ample time for delivery of materials, as specified, will not be accepted as a just cause for substitution.
- D. Basis for substitution:
  - 1. Base the bid only on materials, equipment and procedures specified.
    - a. Certain types of equipment and kinds of materials are described in the Specifications by means of trade names and catalog numbers and/or manufacturer's name. Where this occurs, it is not intended to exclude from consideration such types of equipment and kinds of material bearing other trade names, catalog numbers and/or manufacturers' names capable of accomplishing the same purpose as material specifically indicated, unless noted "no substitutions allowed". Other types of equipment and kinds of material may be acceptable to the Owner and Architect.
    - b. Kinds of material and types of equipment to be used, if not specifically indicated, must be approved by Architect and be agreed upon by the Owner prior to letting of the Contract. No substitution will be permitted after letting of the Contract, except as indicated herein. Conditional bids will not be accepted.
- E. Substitution Submittal Procedure during bidding period:
  - 1. The Architect will consider written requests from Contractors for substitution of products, materials, systems or other items. Requests shall be submitted on the CSI Form included at the end of this section. Requests must be received by the Architect at least eight (8) calendar days prior to bid date. This time frame is essential to allow time for review of proposed substitutions or alternatives. Requests received after that time will not be considered.
  - 2. Architect reserves the right to require substitute items to comply "Color-wise" and "pattern-wise" with base specified items if necessary to secure "design intent."
  - 3. Submit two (2) copies of request for substitution including complete data substantiating compliance of proposed substitution with Contract Documents.
    - a. For products include:
      - 1) Product identification, including manufacturer's name.

- 2) Manufacturer's literature **marked to indicate specific model, type and size to be considered**, including product description performance and test data and reference standards.
  - 3) Submit samples, full size, if so requested. All costs of furnishing and return of samples shall be paid by Contractor or requester. Architect is not responsible for loss of or damage to samples.
  - 4) Name and address of similar projects on which product was used, date of installation and field performance data on installation, if requested by the Architect.
- b. For construction methods, include:
- 1) Detailed description of proposed method.
  - 2) Drawings illustrating method.
4. Accurate cost data on proposed substitution in comparison with product or method specified.
  5. Data relating to changes in construction schedule.
  6. Relation to separate contracts, if any.
- F. In making request for substitution or in using an approved substitute item or method, Contractor represents that:
1. He has personally investigated proposed product or method and has determined that it is "equal to" or "superior" in all respects to that specified and that it will adequately perform function for which it is intended.
  2. He will provide same guarantee for substitute item as for product or method specified.
  3. He will coordinate installation of accepted substitution into work, to include building modifications, if necessary, making such changes as may be required for Work to be complete in all respects and to allow its use in project.
  4. He waives all claims for additional costs or time extensions relating to substitution which subsequently become apparent after approval by the Architect.
  5. Will reimburse Owner and Architect for review or redesign services associated with re-approval by authorities having jurisdiction.
- G. Specific Substitutions: Proposed substituted items must be annotated to show which specific product is being substituted for each specific product specified. A statement that a certain manufacturer is to be substituted is not acceptable.
- H. Substitution Submittal Procedure after contract award:
1. Unavailability of specified item due to strikes, lockouts, bankruptcy, discontinuance of production, proven shortage or similar occurrences are only reasons for substitution after letting of Contract. Submit data as required sufficiently in advance to avoid delay in construction.
    - a. Submit three copies of request for Substitution for consideration. Limit each request to one proposed Substitution.
    - b. Submit Shop Drawings, Product Data, and certified test results attesting to proposed product equivalence. Burden of proof is on proposer.
    - c. Submit proposed credit to the contract price and substantiating data.
    - d. Architect will notify Contractor in writing of decision to accept or reject request.

2. Contractor shall notify Architect in writing with substantiating data as soon as condition becomes apparent that a substitution will be required.
- I. Contractor's option
1. For products specified only by reference standards, select any product meeting standards by any manufacturer.
  2. For products specified by naming several products or manufacturers, select any product and manufacturer named.
  3. For products specified by naming one or more products, but indicating option of selecting equivalent products by stating "or equal" after specified product, Contractor must submit request as required for substitution for any product not specifically named. Only the Architect may judge whether requested substitution is "equal to" item or procedure specified.
- J. Rejection of substitution or optional items
1. Substitutions and/or options will not be considered if:
    - a. They are indicated or implied on shop drawings or project data submittals without formal request submitted in accordance with this Section.
    - b. Acceptance will require substantial revision of Contract Documents or building spaces.
    - c. If they are not equal to base product specified or will not perform adequately the function for which intended.
    - d. If Contractor fails to allow ample time for delivery of materials specified.
  2. Rejection of substitution shall not relieve the Contractor's responsibility for ordering all specified materials in ample time to assure their availability on the job when needed.

## PART 2 PRODUCTS

Not Used.

## PART 3 EXECUTION

Not Used.

END OF SECTION



# SUBSTITUTION REQUEST

(During the Bidding/Negotiating Phase)



PROJECT: \_\_\_\_\_ SUBSTITUTION REQUEST NUMBER: \_\_\_\_\_

FROM: \_\_\_\_\_

TO: \_\_\_\_\_ DATE: \_\_\_\_\_

A/E PROJECT NUMBER: \_\_\_\_\_

RE: \_\_\_\_\_ CONTRACT FOR: \_\_\_\_\_

SPECIFICATION TITLE: \_\_\_\_\_ DESCRIPTION: \_\_\_\_\_

SECTION: \_\_\_\_\_ PAGE: \_\_\_\_\_ ARTICLE/PARAGRAPH: \_\_\_\_\_

PROPOSED SUBSTITUTION: \_\_\_\_\_

MANUFACTURER: \_\_\_\_\_ ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

TRADE NAME: \_\_\_\_\_ MODEL NO.: \_\_\_\_\_

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

SUBMITTED BY: \_\_\_\_\_

SIGNED BY: \_\_\_\_\_

FIRM: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_

## A/E's REVIEW AND RECOMMENDATION:

- ☐ Approve Substitution—Make submittals in accordance with Specification Section 01 33 00 Submittal Procedures.
- ☐ Approve Substitution as noted—Make submittals in accordance with Specification Section 01 33 00 Submittal Procedures.
- ☐ Reject Substitution—Use specified materials.
- ☐ Substitution Request received too late—Use specified materials.

SIGNED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

SUPPORTING DATA ATTACHED: ☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ \_\_\_\_\_

# PRODUCT SUBSTITUTION CHECKLIST



DATE: \_\_\_\_\_ RE: \_\_\_\_\_  
A/E NUMBER: \_\_\_\_\_ MANUFACTURER'S  
PROJECT NUMBER: \_\_\_\_\_  
FILING NO.: \_\_\_\_\_ CONTRACT FOR: \_\_\_\_\_

## PRODUCT EQUIVALENCE:

- ☐ Is the submitted product equivalent to the specified item? \_\_\_\_\_
- ☐ Does it serve the same function? \_\_\_\_\_
- ☐ Does it have the same dimensions? \_\_\_\_\_
- ☐ Does it have the same appearance? \_\_\_\_\_
- ☐ Will it last as long? \_\_\_\_\_
- ☐ Does it comply with the same codes, and standards and performance requirements? \_\_\_\_\_
- ☐ Has the product been used locally, and where are the projects? \_\_\_\_\_  
\_\_\_\_\_
- ☐ Has a problem occurred with the product, and what was the remedy? \_\_\_\_\_  
\_\_\_\_\_

## EFFECT ON THE PROJECT:

- ☐ Will the substitution affect other aspects of the construction? \_\_\_\_\_
- ☐ Are any details affected and are changes required? \_\_\_\_\_
- ☐ What is the cost of the changes? \_\_\_\_\_
- ☐ Who pays for the required changes? \_\_\_\_\_
- ☐ Is construction time affected? \_\_\_\_\_  
\_\_\_\_\_

## EFFECT ON THE WARRANTY:

- ☐ How does the proposed warranty differ from the specified warranty? \_\_\_\_\_  
\_\_\_\_\_
- ☐ Does the manufacturer have a track record of standing behind the warranty? \_\_\_\_\_  
\_\_\_\_\_

## DIVISION 01 - GENERAL REQUIREMENTS

### SECTION 01 70 00

#### EXECUTION AND CLOSEOUT REQUIREMENTS

##### PART 1 GENERAL

###### 1.1 SECTION INCLUDES

- A. Closeout procedures.
- B. Closeout submittals.
- C. Protecting installed construction.
- D. Project record documents.
- E. Operation and maintenance data.
- F. Spare parts and maintenance products.
- G. Maintenance service.

###### 1.2 CLOSEOUT PROCEDURES

- A. Comply with requirements stated in General Conditions of the Contract and in the Specifications for administrative procedures in closing out the Work.
- B. When Contractor considers the Work is complete, the Architect shall be notified with the understanding that:
  - 1. Contract Documents have been reviewed.
  - 2. Work has been completed in accordance with Contract Documents.
  - 3. Equipment and systems have been tested in the presence of the Owner's representative and are operational.
  - 4. Work is completed and ready for final review.
- C. Architect will make a field observation to verify the status of completion with reasonable promptness after receipt of such notice.
- D. Should the Architect consider that the Work is incomplete or defective at the conclusion of the project, a final "punch list" will be made by the Architect and the Architect's consultants indicating a list of work items to be completed. The Job Superintendent shall accompany the Architect on the final review and subsequent reviews, if requested.
  - 1. Contractor shall take immediate steps to remedy the stated deficiencies and notify the Architect that the Work is complete by initialing and dating each item and returning a copy of this initialed punch list to the Architect.
  - 2. Architect/Engineer will re-observe the Work to confirm completion.

- E. When Architect/Engineer concurs that the Work is substantially complete, the Architect shall:
  - 1. Prepare a certificate of substantial completion on AIA Document G704, Certificate for Substantial Completion, accompanied by Contractor's list of items to be completed or corrected, as verified and amended by the Architect.
  - 2. Submit the Certificate to Owner and Contractor for their written acceptance of the responsibilities assigned to them in the Certificate.
- F. When the Architect finds that the Work is acceptable under the Contract Documents, the Architect shall request the Contractor to make closeout submittals.

### 1.3 CLOSEOUT SUBMITTALS TO ARCHITECT

- A. Evidence of Payment and Release of Liens: Pursuant with Article 9 of the General Conditions of the Contract for Construction, AIA Document A201, the Contractor shall submit to the Architect a Contractor's Affidavit of Payment of Debits and Claims, AIA Document G706, and Contractor's Affidavit of Release of Liens G706/A, with separate releases or waiver of liens for each subcontractor and material and equipment suppliers, following the issuance of Certificate for Substantial Completion, AIA Document G704, by the Architect and before final payment to the Contractor. All AIA Documents shall be latest edition.
- B. Cleaning up: Refer to the cleaning up requirements listed in Section 01 74 00 - Cleaning and Waste Management and as noted under the specific Sections of these Specifications.
- C. Warranties and Bonds: Refer to product warranties and product bonds listed in Section 01 78 36 - Warranties and Bonds and as noted under the specific Sections of these Specifications.
- D. Certificate of Insurance for Products and Completed Operations.
- E. Evidence of compliance with requirements of governing authorities:
  - 1. Certificate of Occupancy, as required by the State Fire Marshal's Office, shall be obtained by the General Contractor.
  - 2. Certificate of Inspection, as required by the State Electrical Inspector.
  - 3. Invoices and other substantiating evidence acceptable to the Tax Commission, so that the Owner may be reimbursed for Sales Tax on materials which have been incorporated into the complete project.
- F. Spare Parts and Maintenance Materials: Refer to requirements of individual Specification Sections.
- G. Operating and Maintenance Data and Instructions for Owner's Personnel:
  - 1. Submit all data in punched three ring binders, clearly indexed with a table of contents, neatly typed in orderly sequence.
  - 2. Submit two copies to the Architect for review. If submittals are complete, they will be forwarded to the Owner for their permanent record. If incomplete, they will be returned to the Contractor for correction and resubmittal.
  - 3. Refer to requirements of individual Specification Sections.

- H. Submittals and Shop Drawings: Refer to requirements of Section 01 33 00: Submittal procedures for submittal of copies of all submittals and shop drawings to the Owner.
- I. Project Record Drawings.
- J. Consent of Surety for final payment.
- K. Final Adjustments of Account:
  - 1. Submit a final request for payment to Architect. Request shall reflect all adjustments to the Contract Sum.
    - a. The original Contract Sum.
    - b. Additions and Deductions resulting from:
      - 1) Previous change orders.
      - 2) Allowances.
      - 3) Deductions for uncorrected work.
      - 4) Other adjustments.
    - c. Total Contract Sum, as adjusted.
    - d. Previous payments.
    - e. Sum remaining due.
- L. Final Application for Payment: Contractor shall submit the final Application for Payment in accordance with procedures and requirements stated in the General Conditions of the Contract.

#### 1.4 PROTECTING INSTALLED CONSTRUCTION

- A. Protect installed Work and provide special protection where specified in individual specification sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- F. Prohibit traffic into landscaped areas.

#### 1.5 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; recording all changes to the Contract Documents:
  - 1. Drawings.
  - 2. Specifications.

3. Addenda.
  4. Change Orders and other modifications to the Contract.
  5. Reviewed Submittals, Shop Drawings, Product Data, and Samples.
  6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure that entries are complete and accurate, neat and legible, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress on a weekly basis.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, if they differ from product specified, including the following:
1. Manufacturer's name and product model and number.
  2. Product substitutions or alternates utilized.
  3. Changes made by Addenda and modifications.
- F. Record Drawings: Legibly mark each item if they differ from the location shown, to record actual construction including:
1. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
  2. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
  3. Field changes of dimension and detail.
  4. Details not on original Contract drawings that would be of value to the Owner in maintaining the building.
- G. Submit record documents to Architect for review and completeness with closeout documents.

#### 1.6 OPERATION AND MAINTENANCE DATA

- A. Submit electronic set on flash drive and one hard copy to the Architect for review. If submittals are complete, they will be forwarded to the Owner for their permanent record. If incomplete, they will be returned to the Contractor for correction and re-submittal.
- B. Submit data bound in 8-1/2 x 11 inch text pages, three ring binders with durable plastic covers.
- C. Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project, Contractor's name, address and phone number, and subject matter of binder when multiple binders are used.
- D. Internally subdivide binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
- E. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.

- F. Contents: Prepare Table of Contents for each volume, with each product or system description identified, typed on white paper, in three parts as follows:
1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, Subcontractors, and major equipment suppliers.
  2. Part 2: Operation and maintenance instructions arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
    - a. Significant design criteria.
    - b. List of equipment.
    - c. Parts list for each component.
    - d. Operating instructions.
    - e. Maintenance instructions for equipment and systems.
    - f. Maintenance instructions for finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
  3. Part 3: Project documents and certificates, including the following:
    - a. Shop drawings and product data.
    - b. Air and water balance reports.
    - c. Certificates.
    - d. Photocopies of warranties, bonds and service and maintenance contracts.
- G. Refer also to requirements of individual Specification Sections.

#### 1.7 SPARE PARTS AND MAINTENANCE PRODUCTS

- A. Furnish spare parts, maintenance, and extra products in quantities specified in individual specification sections.
- B. Deliver to Project site and place in location as directed by Owner. Obtain receipt prior to final payment.

#### 1.8 MAINTENANCE SERVICE

- A. Furnish service and maintenance of components indicated in specification sections during warranty period.
- B. Examine system components at frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
- C. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by manufacturer of original component.
- D. Do not assign or transfer maintenance service to agent or Subcontractor without prior written consent of Owner.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION



## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 74 00

#### CLEANING AND WASTE MANAGEMENT

##### PART 1 GENERAL

###### 1.1 SUMMARY

- A. The Contractor shall furnish all labor, materials, tools and equipment, and perform all work and services necessary for or incidental to the performance, complete, of **all cleaning up** as specified in areas where construction has taken place, in accordance with provisions of the Contract Documents and completely coordinated with work of all other trades.
- B. Although such work is not specifically shown or specified, furnish and install all supplementary or miscellaneous items, appurtenances and devices incidental to, or necessary for, a sound, secure and complete job.
- C. Clean all items installed under this Contract, including interior of building. Polish and leave free of stains, damage or other defects, prior to final acceptance, including but not necessarily limited to, washing, sweeping, polishing, or otherwise cleaning of all finished wall surfaces, floors, windows, hardware, mirrors, lighting fixtures and items of equipment. Replace damaged, defaced, marred or unacceptable items to the Architect's satisfaction at no additional expense to Owner.
- D. Refer to individual Sections in these Specifications for additional cleaning requirements.

###### 1.2 POLLUTION CONTROL

- A. Do not burn or bury rubbish and waste on site. Legally dispose of all rubbish and waste off of job site.
- B. Do not dispose of volatile fluid wastes in storm or sanitary sewer systems, streams or waterways.

###### 1.3 CLEANING MATERIALS

- A. Use only cleaning materials recommended by manufacturers of surfaces to be cleaned.
- B. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

###### 1.4 DURING CONSTRUCTION

- A. Oversee cleaning and ensure that building and grounds are maintained free from accumulations of waste and debris.

- B. At reasonable intervals, at least once a week during progress of work, clean up site and building areas and once a week legally dispose of waste and debris off of Owner's property.
- C. Provide metal containers located on site for collection of waste and debris.
- D. Handle waste materials in a controlled manner. Do not drop or throw materials from heights.
- E. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process do not fall on wet, newly painted surfaces.

#### 1.5 FINAL CLEANING

- A. Use experienced workmen or professional cleaners for final cleaning.
- B. At completion of construction and just prior to acceptance or occupancy, conduct a final observation of exposed surfaces.
- C. Remove grease, dust, dirt, stains, labels, fingerprints and other foreign materials.
- D. Repair, patch and touch-up marred surfaces to match adjacent finishes.
- E. Replace air conditioning filters if units were operated during construction.
- F. Clean blowers and coils if air conditioning units were operated without filters during construction.
- G. All drains shall be free of debris and draining freely. It shall be the responsibility of the Contractor to open all clogged roof drains at the completion of the roofing work whether clogging was caused directly by re-roofing operations or not.
- H. Maintain cleaning until project is occupied by Owner.

#### PART 2 PRODUCTS

Not Used.

#### PART 3 EXECUTION

Not Used.

END OF SECTION

## DIVISION 01 – GENERAL REQUIREMENTS

### SECTION 01 78 36

#### WARRANTIES AND BONDS

##### PART 1 GENERAL

###### 1.1 SUMMARY

- A. The Contractor shall perform all work and services necessary for or incidental to **the furnishing, submitting, processing and handling of warranties and bonds required under this Contract.**
- B. Where a guarantee of workmanship and/or materials is required by the Specifications or elsewhere in the Contract Documents, Contractor shall secure written warranties from the responsible manufacturers, suppliers, and/or subcontractors that such workmanship and/or materials shall be free from defects for a period of one (1) year from date of final payment to the Contractor, or for a longer period if so stipulated in the Contract Documents.
- C. The warranties shall be addressed to, and in favor of, the Owner and shall be signed by an authorized representative of the manufacturer, supplier, and/or subcontractor, countersigned by the Contractor, and delivered to the Architect within ten (10) days after date of Substantial Completion.
- D. Such warranties shall include an agreement to remedy any such defects and repair, restore or replace all other work damaged by or otherwise affected as a result of such defects at own cost and without expense to the Owner within five (5) days after written notice to the Contractor by the Owner.
  - 1. In the event such defects are not corrected and other repairs made within five (5) days after notice, the Owner may have the work done and deduct the cost thereof from any monies due or to become due, to the Contractor, or if such monies are not available or are insufficient to cover such cost, the Contractor and his Sureties shall agree to reimburse the Owner for the cost of the work.
- E. Delivery of such guarantees or warranties shall not relieve the Contractor of any obligations assumed under any other provision of the Contract Documents.

###### 1.2 SUBMITTAL PROCEDURES

- A. Compile specified warranties, bonds and service and maintenance contracts, verifying compliance with Sections of Specifications, and executed by each of the respective manufacturers, suppliers and subcontractors.
- B. Verify documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when so specified.
- D. Submit to Architect for review and transmittal to Owner, two (2) original signed copies of each submittal within ten (10) days after Date of Substantial Completion, prior to final request for payment.

- E. For items of work where acceptance is delayed materially beyond Date of Substantial Completion, provide undated submittals within ten (10) days after acceptance, listing date of acceptance as start of warranty period.
- F. One copy of submittals will be retained by the Architect.

### 1.3 SUBMITTAL REQUIREMENTS

- A. Table of Contents: Neatly typed, in orderly sequence. Provide complete information for each item.
  - 1. Product or work item.
  - 2. Firm, with name of principal, address and telephone number.
  - 3. Scope.
  - 4. Date of beginning of warranty, bond or service or maintenance contract.
  - 5. Duration of warranty, bond or service maintenance contract.
  - 6. Information for Owner's personnel:
    - a. Proper procedure in case of failure.
    - b. Circumstances which might affect the validity of warranty or bond.
  - 7. Contractor, name of responsible principal, address and telephone number.

### 1.4 FORM OF SUBMITTAL

- A. Provide one (1) electronic copy and two (2) hard copies.
- B. Prepare in duplicate 3 ring binders.
  - 1. Size 8-1/2 inch by 11 inch sheets, punched for standard three-ring binder. Fold larger sheets to fit into binders.
  - 2. Cover: Identify each packet with typed or printed title "WARRANTIES AND BONDS". Also indicate on cover title of project and name of Contractor.
  - 3. Binders: Commercial quality, three-ring, with durable and cleanable plastic covers.

### 1.5 SUBMITTALS REQUIRED

- A. Submit warranties, bonds, service and maintenance contracts as specified in respective DIVISIONS and Sections of the Specifications, including but not limited to:
  - 1. DIVISION 7 - THERMAL AND MOISTURE PROTECTION:
    - a. Section 07 53 03: Elastomeric Membrane Roofing – fully adhered.
    - b. Section 07 62 00: Sheet Metal Flashing and Trim.
    - c. Section 07 90 00: Joint Protection.

PART 2 PRODUCTS - Not Used.

PART 3 EXECUTION - Not Used.

END OF SECTION

# DIVISION 02

EXISTING  
CONDITIONS

## DIVISION 02 – EXISTING CONDITIONS

### SECTION 02 41 19

#### SELECTIVE STRUCTURE DEMOLITION

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. The Contractor shall furnish all labor, materials, tools and equipment, and perform all work and services necessary for or incidental to the complete performance of **all demolition, cutting, removal, matching and patch repairing** as shown on the Drawings and as specified, in accordance with provisions of the Contract Documents, and completely coordinated with work of all other trades.
- B. Although such work is not specifically shown or specified, furnish and install all supplementary or miscellaneous items, appurtenances and devices incidental to or necessary for a sound, secure and complete installation.
- C. Section Includes:
  - 1. Cutting and Patching.
  - 2. Demolishing designated building equipment and fixtures.
  - 3. Demolishing designated construction.
  - 4. Cutting and alterations for completion of the Work.
  - 5. Removing designated items for reuse and Owner's retention.
  - 6. Protecting items designated to remain.
  - 7. Removing demolished materials.
- D. Related Sections:
  - 1. Section 01 50 00 - Temporary Facilities and Controls.

##### 1.2 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Demolition Schedule:
  - 1. Indicate overall schedule and interruptions required for utility and building services.
  - 2. Submit schedules of work contemplated under this Section to the Owner and Architect for coordination purposes.
  - 3. Coordinate and reschedule as required to preclude interference with other operations and Owner's continued use of existing buildings.
- C. Shop Drawings:
  - 1. Submit to Architect when items of matching and repairing require additional drawings to allow clarification of intent.
  - 2. Indicate location of items designated for reuse and Owner's retention.

- D. Submit electronic copy of shop drawings to Architect when items of matching and repairing require drawings to allow clarification of intent.

### 1.3 CLOSEOUT SUBMITTALS

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for submittals.
- B. Project Record Documents: Accurately record actual locations of capped utilities, concealed utilities discovered during demolition, subsurface obstructions, and any other changed or unknown conditions.

### 1.4 QUALITY ASSURANCE

- A. Provide all materials and perform all work in compliance with the applicable requirements of the codes, standards, and specifications, latest editions, of the following regulatory associations and as herein specified:
  - 1. American Society for Testing and Materials (ASTM).
- B. Use only firms or individual trades with a minimum of five (5) years experience in demolition of comparable structures.
- C. Employ skilled and experienced workers to perform cutting and patching and removal.
- D. Conform to applicable code for demolition work, dust control, products requiring electrical disconnection and re-connection.
- E. Conform to applicable code for procedures if hazardous or contaminated materials are discovered. Hazardous materials may include but not be limited to mold, asbestos, lead, mercury or Polychlorinated Biphenyl (PCB) containing substances.
  - 1. If hazardous materials are discovered during removal operations, Construction Manager shall stop work and notify Architect and Owner.

### 1.5 PRE-DEMOLITION MEETING

- A. Section 01 30 00 - Administrative Requirements: Pre-demolition meeting.
- B. Convene minimum one week prior to commencing work of this section.

### 1.6 SCHEDULING

- A. Section 01 30 00 - Administrative Requirements: Requirements for scheduling.
- B. Schedule Work to coincide with new construction.
- C. Cooperate with Owner in scheduling noisy operations and waste removal that may impact Owners operation.

- D. Noisy, malodorous, and dusty work may not performed while some events are held adjacent buildings nor early in the mornings if work extends into school year when students are living in the dormitory. Coordinate event and activity dates with the Owner.
- E. Coordinate utility and building service interruptions with Owner.
  - 1. Schedule tie-ins to existing systems to minimize disruption.
  - 2. Coordinate Work to ensure life safety systems remain in full operation in occupied areas.

## 1.7 PROJECT CONDITIONS

- A. Conduct demolition to minimize interference with roads, streets, driveways, sidewalks and adjacent occupied facilities. Maintain protected egress and access at all times.
- B. Do not close or obstruct streets, sidewalks, alleys or passageways without permission from authorities having jurisdiction.
- C. Erect and maintain temporary barriers, fences, guard rails, enclosures, chutes and shoring as required to protect personnel, structures and utilities to remain intact.
- D. Provide shoring, bracing and other supports to prevent movement, settlement or collapse of remaining or adjacent wall areas, structure or facilities. Arrange shoring, bracing and supports to prevent overloading of structure. Do not remove shoring, bracing and other supports until permanent structures are in place to allow removal. Cease operations immediately if structure appears to be in danger and notify Architect. Do not resume operations until directed.
- E. Perform preliminary investigations as required to ascertain extent of work. Conditions which would be apparent by such investigation will not be allowed as cause for claims for extra costs.
- F. Before start of work, obtain and pay for all permits required by all authorities having jurisdiction and notify all interested utility companies.
- G. Before start of work, obtain approval of authorities having jurisdiction for any work which affects existing exit ways, exit stairs, means of egress or access to or exit from such areas. Maintain protected egress from and access to adjacent existing buildings at all times. Review with and obtain approval of authorities for any temporary construction which affects such areas. Special attention is directed to approvals by fire authorities.

## PART 2 PRODUCTS

Not Used.



## PART 3 EXECUTION

### 3.1 PREPARATION

- A. Verify that the areas to be demolished are unoccupied and discontinued in use.
- B. Arrange for and verify termination of utility services to areas of work shown, to include removing meters and capping utility lines as required. Notify affected utility companies before starting work and comply with their requirements.
- C. Temporary Facilities and Controls: Refer also to Section 01 50 00 - Temporary Facilities and Controls
  - 1. Erect and maintain weatherproof closures for exterior openings.
  - 2. Provide temporary weather protection as necessary to prevent damage to existing facilities and discomfort to persons in occupied areas.
  - 3. Erect and maintain temporary partitions to prevent spread of dust, odors, and noise to permit continued Owner occupancy.
  - 4. Provide appropriate temporary signage.
  - 5. Sprinkle debris and use temporary enclosures as necessary to limit dust.
    - a. Do not use water to extent of causing flooding, contaminated runoff, or icing.
- D. Take all precautions necessary to prevent damage to existing remaining work or to adjacent facilities. Execute work using methods which will prevent interference with use of remaining and adjacent facilities by Owner.

### 3.2 SALVAGE REQUIREMENTS

- A. Salvage items designated for Owner's salvage as a unit. Verify with Owner items to be salvaged. Clean, list, tag for storage, protect from damage and deliver to locations designated for salvage items. Deliver to locations agreed upon. Salvage each item with auxiliary or associated equipment required for operation.
- B. Remove items designated for removal and re-use as a unit. Clean, condition, list, tag for storage, protect from damage and deliver to locations designated for re-use items. Items designated for removal and re-use shall include any auxiliary or associated equipment required for operation.
  - 1. Re-use items shall include, but not be limited to:
    - a. Existing Designated Roof-top mechanical units, exhaust fans, equipment curbs, etc.
  - 2. Prime all bare metal with primer described in DIVISION 9 - FINISHES, Section: Painting.
  - 3. Disassemble components as required to permit removal.
  - 4. Package small and loose parts to avoid loss.
  - 5. Mark components and packaged parts to permit reinstallation.
  - 6. Items that are scheduled for re-use that are damaged during removal shall be replaced by the Contractor at no additional cost to the Owner.

- C. Dispose of items or materials not designated for Owner's salvage or for removal and re-use. Promptly remove such items or materials from job site.
  - 1. Storage or sale of Contractor-salvaged items or materials is not permitted on site.
  - 2. Credit shall be given to the Owner for all salvageable material sold or used elsewhere by the Contractor.

### 3.3 CUTTING AND REMOVAL

- A. Neatly and carefully cut and remove materials and prepare all openings to receive new work.
- B. Where masonry or concrete is cut and removed, remove material in small sections.
- C. Take all precautions necessary to prevent damage to existing remaining work or to adjacent facilities. Execute work using methods which will prevent interference with use of remaining and adjacent facilities by Owner.
- D. Remove existing work indicated to be removed, or as necessary for installation of new work.

### 3.4 MATCHING AND PATCH REPAIRING

- A. Submit written request in advance of cutting or altering elements affecting:
  - 1. Structural integrity of element.
  - 2. Integrity of weather-exposed or moisture-resistant elements.
  - 3. Efficiency, maintenance, or safety of element.
  - 4. Visual qualities of sight exposed elements.
  - 5. Work of Owner or separate contractor.
- B. Execute cutting, fitting, and patching to complete Work, and to:
  - 1. Fit the several parts together, to integrate with other Work.
  - 2. Uncover Work to install or correct ill-timed Work.
  - 3. Remove and replace defective and non-conforming Work.
  - 4. Remove samples of installed Work for testing.
  - 5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.
- C. Cut masonry and concrete materials using masonry saw or core drill.
- D. Restore Work with new products in accordance with requirements of Contract Documents.
- E. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- F. Maintain integrity of wall, ceiling, or roof deck construction; completely seal voids.
- G. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for assembly, refinish entire unit.

- H. Identify hazardous substances or conditions exposed during the Work to Architect for decision or remedy.
- I. Where existing construction is cut or otherwise disturbed to permit installation of new work, match and patch repair existing construction so disturbed.
- J. Execute work by methods to avoid damage to other Work, and to provide proper surfaces to receive patching and finishing. Use methods and materials which are similar in appearance and quality to those areas or surfaces being repaired. Methods, materials, and finished work are subject to approval of the Architect. Remove areas, surfaces or items which cannot be satisfactorily matched and patch and replace with new work at no additional expense to Owner.
- K. Where roofing is required to be cut provide necessary temporary weather protection to keep building weather tight.
- L. Cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion.
- M. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.
- N. Where new Work abuts or aligns with existing, provide smooth and even transition. Patch Work to match existing adjacent Work in texture and appearance.
- O. When finished surfaces are cut so that smooth transition with new Work is not possible, terminate existing surface along straight line at natural line of division and submit recommendation to Architect for review.
- P. Where change of plane of 1/4 inch or more occurs, submit recommendation for providing smooth transition; to Architect for review.
- Q. Trim existing doors to clear new floor finish. Refinish trim to original condition.
- R. Finish surfaces as specified in individual product sections.

### 3.5 DEMOLITION

- A. Remove unsuitable material not marked for salvage, including rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished Work.
- B. Cap and identify abandoned utilities at termination points when utility is not completely removed. Annotate Record Drawings indicating location and type of service for capped utilities remaining after demolition.

### 3.6 CLEAN-UP

- A. Except where specifically noted, immediately remove all debris, rubbish and materials resulting from cutting, demolition or patching operations as work progresses. Transport materials and legally dispose of off site. Do not burn or bury materials on site.
- B. Upon completion of work, leave areas of work in clean condition.
- C. Remove and promptly dispose of contaminated, vermin infested, or dangerous materials encountered.

END OF SECTION

DIVISION **06**

WOOD, PLASTICS,  
AND COMPOSITES

## DIVISION 06 – WOOD, PLASTICS AND COMPOSITES

### SECTION 06 10 00

#### ROUGH CARPENTRY

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. The Contractor shall furnish all labor, materials, tools and equipment, and perform all work and services necessary for or incidental to the furnishing and installation for complete work of **all rough carpentry** as shown on the Drawings and as specified in accordance with provisions of the Contract Documents, and completely coordinated with work of all other trades.
- B. Although such work is not specifically shown or specified, furnish and install all supplementary or miscellaneous items, appurtenances and devices incidental to or necessary for a sound, secure and complete installation.
- C. Unless otherwise specified, the Contractor shall furnish all rough and dressed lumber and all rough hardware, locate all centers and supply all templates, etc., required for the masonry work, and install and provide all necessary wood blocking, nailing strips, plugs, etc., as required by the other Subcontractors for their work.
- D. This Contractor shall cut and frame lumber as required by the various other trades for the completion of their work and provide all lumber required by them for protection of finished work.
- E. Section includes:
  - 1. Concealed wood blocking for edge metal and re-roofing operations.
  - 2. 4x4 Treat Wood Mechanical Equipment Support Rails.
  - 3. Alternate Conduit, Pipe and/or Equipment Supports.
- F. Related Sections:
  - 1. Section 07 53 03 – Elastomeric Membrane Roofing – Fully Adhered.

##### 1.2 REFERENCES

- A. Provide all materials and perform all work in compliance with the applicable requirements of the codes, standards, and specifications, latest editions, of the following regulatory associations, and as herein specified.
- B. American Wood-Preservers' Association:
  - 1. AWWA C1 - All Timber Products - Preservative Treatment by Pressure Process.
- C. American National Standards Institute:
  - 1. ANSI A135.4 - Basic Hardboard.
- D. ASTM International:

1. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
  2. ASTM E119 - Standard Test Methods for Fire Tests of Building Construction and Materials.
- E. National Institute of Standards and Technology:
1. NIST PS 20 - American Softwood Lumber Standard.
- F. National Lumber Grades Authority:
1. NLGA - Standard Grading Rules for Canadian Lumber.
- G. Northeastern Lumber Manufacturers Association:
1. NELMA - Standard Grading Rules for Northeastern Lumber.
- H. Southern Pine Inspection Bureau:
1. SPIB - Standard Grading Rules for Southern Pine Lumber.
- I. Underwriters Laboratories Inc.:
1. UL 723 - Tests for Surface Burning Characteristics of Building Materials.
- J. West Coast Lumber Inspection Bureau:
1. WCLIB - Standard Grading Rules for West Coast Lumber.
- K. Western Wood Products Association:
1. WWPA G-5 - Western Lumber Grading Rules.

### 1.3 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Submittal procedures.
- B. Submit copies of manufacturer's treatment instructions for use of treated material to Architect for approval. Indicate by transmittal form that a copy of these instructions has been distributed to Installer.
1. Dip Treatment: For each type specified, include certification by treatment plant stating chemical solutions used, submersion period and conformance.
  2. Pressure Treatment: For each type specified, include certification by treatment plant stating chemicals and process used, submersion period and conformance.
  3. For Water-Borne Preservatives: Include statement that moisture content of treated materials was reduced to a maximum of fifteen percent (15%) prior to shipment.
  4. Fire-Retardant Treatment: Include certification by treatment plant that treatment material complies with governing ordinances and will not bleed through finished surfaces.
- C. Submit data on wood screws and anchoring patterns specified for review and approval.
- D. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

### 1.4 QUALITY ASSURANCE

- A. Grading rules of the following associations apply to materials furnished:

1. Lumber Grading Agency: Certified by NIST PS 20.
    - a. Lumber grading rules and species shall be in conformance with Voluntary Products Standards (PS): PS 1-83.
  2. National Forest Products Association (NFPA), National Design Specification for Wood Construction, 1991, (NDS-91).
  3. Southern Forest Products Association (SFPA).
  4. Timber Construction Manual, 3rd Edition, 1985.
  5. Plywood grading rules shall be in conformance with:
    - a. American Plywood Association (APA).
    - b. United States Department of Commerce, Voluntary Product Standards:
      - 1) Softwood Plywood: PS I-95 and PS 2.
      - 2) Hardwood Plywood: PS 51-71.
    - c. APA PRP-108 Performance Standard.
- B. Factory-mark all lumber and plywood to identify type, grade, moisture content, agency providing inspection service, producing mill and other qualities specified.
1. Markings may be omitted if manufacturer's certificate certifying products meet or exceed specified requirements is provided for each shipment.
  2. Omit markings and provide manufacturer's certificate certifying products meet or exceed specified requirements when products are to receive a transparent or natural finish and marking will be visible after finishing.
- C. Surface Burning Characteristics:
1. Fire Retardant Treated Materials: Maximum 25/450 flame spread/smoke developed index when tested in accordance with ASTM E84.
- D. Apply label from agency approved by authority having jurisdiction to identify each fire retardant treated material.

## 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.
- B. Time delivery and installation to avoid delaying progress of work dependent on carpentry work.
- C. Deliver and store materials in dry areas. Protect materials against exposure to weather and contact with damp or wet surfaces. Stack to provide air circulation within stacks.
- D. Store materials for which maximum moisture content is specified in areas where relative humidity has been reduced to a level where specified moisture content can be maintained.
- E. Protect fire-retardant treated materials against high humidity and moisture during storage and erection.

## 1.6 PROJECT CONDITIONS

- A. Examine all parts of supporting structure and conditions under which work is to be installed. Do not proceed until unsatisfactory conditions have been corrected. Start of work constitutes acceptance of substrate and responsibility for performance.



- B. Obtain measurements and verify dimensions and shop drawing details before proceeding with work. Correlate location of furring, nailers, blocking, grounds and similar supports so that attached work will comply with design requirements. Fit accurately to other work, scribe and cope as required.

## PART 2 PRODUCTS

### 2.1 LUMBER MATERIALS

- A. All lumber for nailers, blocking, stripping and miscellaneous framing shall be Spruce-Pine-Fir (SPF) or Hemi-Fir, Grade #2, or better.
1. Douglas Fir (any region).
  2. Southern Yellow Pine.
- B. All lumber shall meet these minimum allowable stresses:
- |                                         |      |                                              |
|-----------------------------------------|------|----------------------------------------------|
| 1. Extreme Fiber in Bending and Tension | Fb = | 1,000 psi single and<br>1,150 psi repetitive |
| 2. Horizontal Shear                     | Fv = | 75 psi                                       |
| 3. Compression Perpendicular to Grain   | Fc = | 425 psi                                      |
| 4. Compression Parallel to Grain        | Fc = | 850 psi                                      |
| 5. Modulus of Elasticity                | E =  | 1,400,000 psi                                |
- C. All lumber shall meet the minimum allowable stresses as listed in the National Design Specification for Wood Construction - Design Values for Wood Construction, by the National Forest Products Association, 2018 Edition.
- D. All lumber except Southern Yellow Pine shall have a maximum moisture content not greater than nineteen percent (19%) and shall be smooth on four (4) sides. Southern Yellow Pine shall have a maximum moisture content of fifteen percent (15%) or less.
- E. Anchorage and Fastening Materials: Proper type, size, material and finish for application. Provide Electro- or Hot- dipped galvanized to comply with ASTM A-153 for exterior comply with the following:
1. Wood Screws: F.S. FF-S-111C(1).
  2. Lag Screws and Bolt: F.S. FF-B-5610.
  3. Bolts and Studs: F.S. FF-B-575C.
  4. Nuts: F.S. FF-N-836D(1).
  5. Washers: F.S. FF-W-92A(1).
  6. Expansion Shields, Expansion Nails and Drive Screw Devices: F.S. FF-S-325(3).
  7. Toggle Bolts: F.S. FF-B-558C.
  8. Bar or Strap Anchors: ASTM A-575 carbon steel bars.
  9. Wood to Metal Screws: Hilti – S-WW 14-20x2 ¾ PFH #4 wings.
- F. Anchors:
1. Toggle bolt type for anchorage to hollow masonry.
  2. Expansion shield and lag bolt type for anchorage to solid masonry or concrete.
  3. Bolt or ballistic fastener for anchorages to steel.

## 2.2 FACTORY WOOD TREATMENT

- A. Fire Retardant treatment shall be Dricon, as manufactured by Arch Wood Protection, Smyrna, Georgia (Tele: 770-801-6600), or approved equal, produced by a licensed treatment plant.
  - 1. Fire Retardant Treatment: Pressure treatment, AWP C20 for lumber and AWP C27 for plywood, Exterior Type fire retardant, chemically treated and pressure impregnation to achieve a flame spread rating under twenty-five (25) when tested in accordance with ASTM E-84. Use treatment which will not bleed through or adversely affect bond of any applied finish. Provide UL label, or certificate, on each piece of fire-retardant treated lumber and plywood. Lumber shall be dyed pink for identification.
    - a. All roof blocking and miscellaneous wood framing shall be fire-retardant treated.
- B. Provide AWP preservative treated wood for uses listed below, including lumber and plywood treated to comply with AWP requirements, kiln dried to fifteen percent (15%) moisture content. All such lumber shall be inspected and certified by an AISC certified agency.
  - 1. Treated wood shall be Alkaline Copper Quat (ACQ) or Copper Azole. ACQ shall be ACQ Preserve as manufactured by Chemical Specialties, Inc. (CSI), or NatureWood by Osmose. Copper Azole shall be Wolmanized Natural Select, produced by Arch Wood Protection. Creosote CCA (Chromate Copper Arsenate) and asphaltic preservatives are not acceptable. Furnish certification by treatment plant stating chemicals used, process of treatment and net amounts of salts retained. Substitutions: Section 01 60 00 - Product Requirements.
  - 2. Nailers, blocking, stripping and similar members used in connection with roofing, shall be #2 Grade, or better lumber, pressure treated for rot resistance.
  - 3. Flashing, vapor barriers, waterproofing, wood sills, blocking, furring, stripping and similar concealed members in contact with masonry or concrete, or below grade, shall be treated.
  - 4. All fasteners used to anchor treated wood shall be hot-dipped galvanized, complying with ASTM A-153. This is required to eliminate corrosion.
  - 5. **Equipment mounting supports shall be constructed of 4x4 treated lumber, two (2) rails per unit. Anchor units to mounting rails. Provide an extra layer of membrane (slip sheet) between the wood vibration Isolation rails and the primary membrane to protect the roof assembly.**
  - 6. Piping and Conduit supports may be constructed of 4x4 treated lumber. Secure conduits and pipes to mounting rails. Provide an extra layer of membrane (slip sheet) between the wood support rails and the primary membrane to protect the roof assembly.

## 2.3 ROOF DECK INFILL MATERIALS

- A. Roof Sheathing (At Incinerator Intake Infill): Provide C-C Grade, APA Rated Sheathing, Exposure Durability Classification, Exterior, fire retardant, 19/32 inch minimum thickness, 32/16 Panel Span Rating plywood, 48 x 96 inch sized sheets, square edges, preservative treated complying with PSI-09.

## PART 3 EXECUTION

### 3.1 FRAMING INSTALLATION

- A. Use only sound, thoroughly seasoned, well fabricated materials of longest practical lengths and sizes to minimize jointing. Use materials free of warp, unless warp can be easily corrected by anchoring and attachment. Sort out and discard warped and defective material which would impair quality of work.
- B. Provide wood nailers or blocking where required for attachment of work. Form to shapes indicated. Cut as required for true line and level of work to be attached.
- C. Do not use wood shims for leveling on wood or metal bearings. Slate or tile shims with full bearings may be used for leveling on masonry or concrete.
- D. Set work accurately to required levels and lines, plumb, true, accurately cut and fitted.
- E. Contractor shall verify with the roofing system manufacturer that the minimum load requirements for fastening wood blocking meets the specified 90 mph wind uplift resistance.
- F. Securely attach work by anchoring and fastening as indicated or required to support applied loading.
  - 1. Provide washers under bolt heads and nuts in contact with wood.
  - 2. When fastening plywood, comply with recommendations of American Plywood Association.
  - 3. Countersink nail heads on exposed work and fill holes.
- G. Use hot dipped galvanized nails, except as otherwise indicated. Do not wax or lubricate fasteners that depend on friction for holding power. Use fasteners of size that will not penetrate members where opposite side will be exposed to view or receive finish materials. Make tight connections between members. Install fasteners without splitting of wood. Pre-drill as per Timber Construction Manual, 6th Edition, 2012. Do not drive threaded friction type fasteners. Tighten bolts and lag screws at installation and retighten as required.
- H. Provide and install all rough hardware and metal fastenings as shown on the Drawings, specified herein, or required for proper installation of carpentry work. Nails, spikes, screws, bolts, and similar items shall be of sizes and types to rigidly secure members in place.
- I. Install wood furring plumb and level with closure strips at all edges and openings. Shim as required.
- J. Wood blocking, cant strips and nailers shall be installed around all roof penetrations and projections, as noted on the Drawings. Do not install around vent pipes or drains.
  - 1. Height of nailers shall be matched to the thickness of the insulation being used. Nailers shall be firmly anchored to the deck to resist a force of seventy-five pounds per lineal foot in any direction.

### 3.2 SHEATHING INSTALLATION

- A. Secure roof sheathing at Incinerator Intake Infill with longer edge (strength axis) perpendicular to framing members and with ends staggered and sheet ends over bearing.
- B. Fasten plywood roof sheathing at 6 inches on center at panel edges and 12 inches on center at intermediate supports. Install panel clips between each bearing member along unsupported edges. Leave 1/8 inch space at all panel and end joints and 1/4 inch space at all panel edge joints. If applicable, provide 1 inch minimum clearance between hot pipes and materials passing through roof.

### 3.3 SITE APPLIED WOOD TREATMENT

- A. Brush apply heavy coat of preservative treatment on wood in contact with cementitious materials.
- B. Coat cut surfaces of treated wood or plywood with heavy brush coat of same chemical used to treat original members.
- C. Allow preservative to dry prior to erecting members.

### 3.4 TOLERANCES

- A. Section 01 40 00 - Quality Requirements: Tolerances.
- B. Framing Members: 1/8 inch from indicated position, maximum.
- C. Surface Flatness of Parapet Walls: 1/4 inch in 20 feet maximum.

END OF SECTION

# DIVISION **07**

## THERMAL AND MOISTURE PROTECTION

## DIVISION 07 – THERMAL AND MOISTURE PROTECTION

### SECTION 07 53 03

#### ELASTOMERIC MEMBRANE ROOFING - FULLY ADHERED

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. The Contractor shall furnish all labor, materials, tools and equipment, and perform all work and services necessary for or incidental to the furnishing and installation, complete, of the **EPDM Membrane Roofing - Adhered System, including roof insulation, flashing, and associated work**, as shown on the Drawings and as specified, in accordance with provisions of the Contract Documents, current manufacturers specifications, the NRCA roofing and waterproofing manual and completely coordinated with work of all other trades.
- B. Although such work is not specifically shown or specified, furnish and install all supplementary or miscellaneous items, appurtenances and devices incidental to or necessary for a sound, secure, watertight and complete installation.
- C. Related Sections:
  - 1. Section 06 10 00 - Rough Carpentry: Wood blocking, nailers and sheathing associated with roofing.
  - 2. Section 07 62 00 - Sheet Metal Flashing and Trim.

##### 1.2 REFERENCES

- A. Provide all materials and perform all work in compliance with the applicable requirements of the codes, standards, and specifications, latest editions, of the following regulatory associations, and as herein specified:
- B. ASTM International:
  - 1. ASTM C79 - Standard Specification for Gypsum Sheathing Board.
  - 2. ASTM C177 - Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus.
  - 3. ASTM C578 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.
  - 4. ASTM C1278 – Standard Specification for Fiber-Reinforced Gypsum Panel
  - 5. ASTM C1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board.
  - 6. ASTM D412 - Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers -Tension.
  - 7. ASTM D624 - Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers.
  - 8. ASTM D746 - Standard Test Method for Brittleness Temperature of Plastics and Elastomers by Impact.

9. ASTM D822 - Standard Practice for Conducting Tests on Paint and Related Coatings and Materials Using Filtered Open-Flame Carbon-Arc Exposure Apparatus.
  10. ASTM D1004 - Standard Test Method for Initial Tear Resistance of Plastic Film and Sheeting.
  11. ASTM D4637 - Standard Specification for EPDM Sheet Used in Single-Ply Roof Membrane.
  12. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
  13. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials.
  14. ASTM E108 - Standard Test Methods for Fire Tests of Roof Coverings.
- C. FM Global:
1. FM DS 1-28 - Wind Loads to Roof Systems and Roof Deck Securement.
  2. FM 4450 - Approval Standard for Class 1 Insulated Steel Deck Roofs.
- D. Intertek Testing Services (Warnock Hersey Listed):
1. WH - Certification Listings.
- E. National Fire Protection Association:
1. NFPA 255 - Standard Method of Test of Surface Burning Characteristics of Building Materials.
- F. National Roofing Contractors Association:
1. NRCA - The NRCA Roofing and Waterproofing Manual.
- G. Underwriters Laboratories Inc.:
1. UL - Fire Resistance Directory.
  2. UL 723 - Tests for Surface Burning Characteristics of Building Materials.
  3. UL 790 - Tests for Fire Resistance of Roof Covering Materials.
  4. UL 1256 - Fire Test of Roof Deck Construction.
  5. UL 1897 - Uplift Tests for Roof Covering Systems.
- H. American Society of Civil Engineers (ASCE): Standard 7, Wind Load Tables.

### 1.3 SYSTEM DESCRIPTION

- A. Shall be RubberGard Adhered System, as manufactured by Elevate Roofing, Wall, and Lining Systems, or approved equal. All principal, incidental and accessory items shall be as required or as specified herein.
- B. Edge securement shall be installed and tested for wind load resistance in accordance with ANSI/SPRI ES-1. As required by the IBC, Section 1504.5

### 1.4 PERFORMANCE REQUIREMENTS

- A. Roof Assembly Classification: FM Class 1 Construction, windstorm classification of 1-75, in accordance with FM DS 1-28.
- B. Uplift Resistance: American Society of Civil Engineers (ASCE): Standard 7, Minimum Design Loads for Buildings and Other Structures, for Wind Uplift pressure resistance.

- C. Nebraska Energy Code Compliance: The new Roof system assembly shall comply with the 2018 International Energy Code (IECC) minimum thermal resistance (R-Value) of the insulation material installed as specified in Table 502.2(1) based on the construction materials used in the roof assembly.

## 1.5 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Submittal procedures.
- B. Submit electronic copy of roofing literature, manufacturer's specifications and all installation details to be used and specified on this project to Architect for approval. Indicate all details of membrane to be used and specified on this project to Architect for approval, including joint and termination details, and conditions of interface with other materials. Include anchor configurations to be used to anchor the first layer of insulation panels in the field of the roof, at perimeters and at corners as required to meet the ASCE, Standard 7 2006 F.M. 1-75 guidelines.
  - 1. If the Contractor wishes to deviate from the details as shown on the Drawings or from the manufacturer's standard details, scaled shop drawings shall be submitted to the Architect for the Owner and the membrane manufacturer's approval prior to proceeding with roofing operations.
- C. Product Data: Submit electronic copy of product data for each type of product proposed for use. Include data that substantiates that materials comply with requirements. Submit characteristics on membrane materials, adhesives, seaming materials, termination materials, and insulation.
- D. Manufacturer's Installation Instructions: Submit electronic copy of membrane roofing manufacturer's installation instructions. Submit special precautions required for seaming membrane.
- E. Submit an electronic copy of the manufacturers proposed tapered insulation design drawings for Architect's review and approval prior to the purchase and/or installation of new insulation system.
- F. Submit a copy of the Contractor's Pre-installation Notice (PIN) to the roof system manufacturer. Pre-installation Notice shall be in compliance with the specifications.
  - 1. Each manufacturer may call this roof system assembly notice something different. "Notice of Award" (NOA) or Design Assembly Letter, Contractor Registration, Application Review. Provide documentation of what was submitted to the Roof Manufacturer regarding the system assembly and warranty requirements.
- G. Submit copies of all adhesion and pull test results required by the manufacturer.
- H. Submit specimen copy of roofing warranty.
- I. If requested, submit to the Architect, delivery tickets or true photocopies thereof, showing weights of materials delivered and applied to the roof.
- J. If requested, submit EPDM membrane manufacturer and roofing contractor qualifications.



- K. If requested, submit samples of components to the Architect for approval.

#### 1.6 QUALITY ASSURANCE

- A. Protect roofing during the construction period. Repair or replace (as required) deteriorated or defective work to a condition free of damage and deteriorations at time of Substantial Completion and according to warranty requirements.
- B. Roofing contractor shall maintain a full-time supervisor/foreman on the job site at all times when roofing work is in progress. This supervisor/foreman shall be experienced and qualified to install the specified roof system. He shall have available at the job site a copy of this specification and all applicable construction details and instructions from the roofing manufacturer and NRCA.
- C. Contractor shall engage the roof manufacturer's field representative to visit the site and be present at the following time during the course of the installation of the new roof system.
1. On a Roof System Replacement Project the manufacturer's field representative shall be present at the beginning of the project for the Anchor Pull and/or Adhesive Release Testing as well as to review the roof products delivered to the job site prior to installation.
  2. During the construction of the new roof system the roof manufacturer's field representative shall make **(1) one site visit to observe the installation of the new the roof assembly for every 30,000 square feet**, or portion thereof roof area being installed. These trips shall be in addition to any other required trips at the start to observe the anchor pull or adhesive release testing and final inspection.
  3. At the end of the project the roof manufacturer's field representative shall complete a warranty inspection once all components covered under the warranty have been installed. If not all of the components have been installed at the time of the visit or if there are a number of items that need to be corrected the manufacturer's representative shall make an additional trip to verify the installations have been corrected.
- D. Provide primary roofing materials (full system) from only one manufacturer. Provide secondary materials and materials not available from primary roofing materials manufacturer which are recommended and accepted by manufacturer of primary materials/roof system, to maintain warranty required.
- E. Materials other than those supplied or marketed by the membrane manufacturer must be accepted by membrane manufacturer prior to project bid and installation. The performance or integrity of products by others, when selected by the specifier and accepted by the membrane manufacturer, shall be the responsibility of the membrane manufacturer and shall not be disclaimed in the membrane manufacturer's warranty.
- F. Polyisocyanurate foam core board roof insulation including tapered insulation shall be Factory Mutual, Class 1 approved (Standard 4450) and Underwriter's Class A (UL 790).
1. ASTM 1289-02, Type II, Class I: Classification
  2. ASTM D-1622: Density, Nom. 2 pcf.
  3. ASTM D-1621: Compressive Strength, 20 psi.
  4. ASTM D-2126: Dimensional Stability; 2% maximum, 7 days.

5. ASTM E-96: Moisture Vapor Transmission, less than 1.0 perm.
  6. ASTM C-209: Water Absorption, less than 1% volume.
  7. American Society of Civil Engineers (ASCE): Standard 7, Minimum Design Loads for Buildings and Other Structures, for Wind Uplift.
  8. American Society of Civil Engineers (ASCE): Standard 7, Minimum Design Loads for Buildings and Other Structures, for Wind Uplift.
  9. Factory Mutual (FM): Factory Mutual Research Class 1A, 1-75 rating for Design A.
- G. Manufacturers warranty inspectors shall be qualified technical representatives. (Sales representatives shall not conduct warranty inspections.)
- H. Perform Work in accordance with NRCA Roofing and Waterproofing Manual.
- I. Roof Assembly Fire Classification: Minimum Class A when tested in accordance with ASTM E108 or UL 790.
1. Roof Assembly with Foam Insulation: Passes FM 4450 or UL 1256.

## 1.7 QUALIFICATIONS

- A. Manufacturer: EPDM membrane manufacturer shall have a minimum of a ten (10) year application record on commercial buildings. The manufacturer shall be required to provide a list of five projects, with contact name and telephone number, which have had the manufacturer's system installed for five years or more.
- B. Applicator: Membrane roofing and flashing shall be applied by a factory trained and approved roofing contractor familiar with the product and in strict compliance with the manufacturer's instructions. Roofing contractor shall be certified in writing by the roofing membrane manufacturer as qualified to install the specified roof. Installer shall be required to provide a copy of this certificate, and meet the following requirements:
1. Have a minimum of five (5) years experience in the type of roof that is being specified.
  2. Provide written proof of experience in the form of a list five projects of similar size and scope, some of which are at least five years old, with contact name and telephone number, if requested by the Architect.
  3. Have a fully staffed office within 200 miles of the job site.
  4. Have previously installed a minimum of 1,000,000 square feet of low-sloped roofing membrane under manufacturer's warranty.
  5. **Prime bidder must self-perform roof installation. The use of sub-contracted crew/labor is not permitted.**
- C. Roofing contractor shall maintain a full-time supervisor/foreman on the job site at all times when roofing work is in progress. This supervisor/foreman shall be experienced and qualified to install the specified roof system. He shall have available at the job site a copy of this specification and all applicable construction details and instructions from the roofing manufacturer and NRCA.

## 1.8 PRE-APPLICATION ROOFING CONFERENCE

- A. Section 01 30 00 - Administrative Requirements: Pre-installation meetings.

- B. Pre-Application Roofing Conference: Approximately two (2) weeks prior to scheduled commencement of EPDM roofing installation and associated work, roofing subcontractor shall meet at project site with the Architect and General Contractor to review the Scope of Work. This conference shall review upcoming methods and procedures related to the roofing work, including, but not necessarily limited to, the following:
1. Meet with Owner, Architect, Owner's insurer if applicable, testing and inspecting agency representative, roofing Installer, roofing system manufacturer's representative, deck Installer, and installers whose work interfaces with or affects roofing, including installers of roof accessories and roof-mounted equipment.
  2. Review structural loading limitations of roof deck.
  3. Review requirements for deck substrate conditions and finishes, including flatness and fastening.
  4. Review existing roof drain heights and locations in relation to the plans and specifications.
  5. Review existing overflow drains/scupper locations in relation to the plans and specifications.
  6. Review methods and procedures related to roofing installation, including manufacturer's written instructions.
  7. Review roofing system requirements, drawings, specifications and other contractual documents.
  8. Review any addenda.
  9. Review Warranty Requirements – Wind Speed and Pre-installation Notice.
  10. Review and finalize Construction Schedule related to roofing work and verify availability of materials, Contractor's personnel, equipment and facilities needed to make progress and avoid delays.
  11. Review weather and forecasted weather conditions and procedures for coping with unfavorable conditions, including temporary roofing.
  12. Review workman access to the construction site/building.
  13. Review material deliver and storage.
  14. Review how debris materials will be moved from the building and new materials to the building.
  15. Review adhesive installation and weight placement on insulation board until the adhesive has cured sufficiently to fully secure the boards. Loose insulation boards will not be accepted and will be required to be removed and replaced with fully secured boards.
  16. Review base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect roofing system.
  17. Review governing regulations and requirements for insurance and certificates if applicable.
  18. Review temporary protection requirements for roofing system during and after installation.
  19. Review roof observation and repair procedures after roofing installation.

#### 1.9 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.
- B. Roof insulation must be packaged in bundles with wraps showing pieces per bundle, piece size, and origin of manufacturer.

- C. Deliver components and store to avoid damage from weather and other causes. Provide temporary protection as required. Store materials away from excessively high temperatures and all sources of ignition. Follow caution and warning labels. Store all materials in compliance with the manufacturers' requirements.
- D. Insulation and roofing materials shall be kept dry at all times. Store insulation on a skid completely covered with a breathable material such as tarp or canvas. Where materials must be stored outdoors cover with polyethylene tarps or other suitable waterproof tarps as recommended by the manufacturer. Lightweight insulation shall be weighted to prevent possible wind damage. Immediately remove wet or damaged roofing materials. Do not incorporate them into the work. Store and handle material or equipment in a manner to avoid damage to the Owner's property, building and roof system.

#### 1.10 ENVIRONMENTAL REQUIREMENTS

- A. Section 01 60 00 - Product Requirements: Environmental conditions affecting products on site.
- B. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.
- C. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed during same day.

#### 1.11 COORDINATION

- A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.
- B. Coordinate Work with installation of associated roof penetrations and metal flashings, as Work of this section proceeds.

#### 1.12 PROJECT CONDITIONS

- A. Verify suitability of substrate and conditions under which roofing system is to be installed. Verify that roof drains are correct type and are set at levels required to assure drainage. Installation constitutes acceptance of substrate and responsibility for performance of roofing and flashing as weathertight membrane.
- B. In no event shall more insulation be placed on the surface to be roofed than can be covered with roofing membrane prior to the onset of inclement weather, or termination of the day's work.
- C. Do not use roofing materials as counterweights for hoists.
- D. The Contractor shall at all times protect the building and its contents from the threat of inclement weather during demolition and construction operations. Provide necessary temporary weather protection to keep building weathertight. The Contractor shall be solely responsible for leak control and damages due to failure of such protection and repair/replacement of damaged areas shall be approved by the Owner and Architect.

## 1.13 WARRANTIES

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for warranties.
- B. Upon completion of all work and after all materials have been paid for by the Contractor to the manufacturer, the Contractor shall issue a 2-year MRCA Roofing Contractor Workmanship Warranty, see attached sample warranty form. Also, the Roofing manufacturer shall issue a twenty (20) year and thirty (30) year if Alternate #1 is selected – NO DOLLAR LIMIT material and labor water tightness warranty to cover actual costs to repair or replace the roofing system in its entirety due to material and workmanship.
  - 1. The warranty shall not charge the Owner a “proration” of materials or services during the entire warranty period, but shall repair or replace the roofing system at “actual” costs.
  - 2. The warranty shall be fully paid for by the roofing contractor.
  - 3. The warranty shall start at the date of Substantial Completion for the entire project as determined by the Architect.
  - 4. The warranty shall be transferable.
  - 5. The warranty shall not require the Owner’s signature.
  - 6. The warranty funds shall be managed by a separate warranty reserve.
  - 7. The warranty shall NOT require a maintenance program to be implemented to maintain the warranty.
  - 8. The warranty shall NOT require the Owner to pay for any mandatory inspections to maintain the warranty and any time during the warranty period.
  - 9. The warranty shall NOT require the Owner to notify the manufacturer of any wind events that occur unless they note the system has been damaged and are filing a claim.
  - 10. The warranty shall allow the Owner to make any maintenance repairs or other repairs to the roof and upon review by the manufacturer the warranty will remain in place.
  - 11. The warranty shall cover all measured wind speeds up to and including 90 mph (not 3 second gusts). A supplement to the warranty may be required.
- C. The Owner shall be allowed to have emergency repairs made to the roofing by other than licensed roofers, if necessary, in an emergency situation, provided authorized licensed roofer is subsequently allowed to inspect and repair such emergency work to keep the warranty intact.
- D. The specifications and drawings are based on the Elevate Rubbergard EPDM System to meet the above warranty. For other systems that are considered to be approved equal, subject to compliance with the drawings and specifications, the contractor bidding the system is responsible for confirming design and system requirements of the manufacturer to meet the above warranty. NO DEVIATION FROM THE ABOVE WARRANTY IS ALLOWED. Required modifications to the system details must be approved by the Owner and Architect, prior to bidding.

## PART 2 PRODUCTS

### 2.1 SINGLE PLY ROOFING - MANUFACTURERS

- A. Specifications for EPDM Membrane Roofing - Adhered System are based upon RubberGard EPDM Roofing System, as manufactured by Elevate Roofing, Wall, and Lining Systems, a division of Holcim Group, 200 4th Avenue South, Nashville, TN 37201 (Tele: 1/800-428-4442 or 1/800-428-4500), [www.holcimbe.com](http://www.holcimbe.com) or approved equal.
- B. Subject to compliance with these Specifications, EPDM Membrane Roofing - Adhered System as manufactured by the following, are approved for use.
  - 1. Carlisle SynTec Systems, 1285 Ritner Highway, Carlisle, PA 17013 (Tele: 1-800-479-6832)
  - 2. Versico Roofing Systems, a subsidiary of Carlisle SynTec, 1205 Ritner Highway, Carlisle, PA 17013 (Tele: 1-800-992-7663).
  - 3. Johns Manville Roofing Systems, 717 17<sup>th</sup> Street, Denver, CO 80202 (Tele: 1-800-922-5922). Subject to providing approved Nebraska Warranty language.
- C. Specifications for related roofing products are subject to approval of membrane manufacturer, to maintain warranty specified.
- D. The manufacturer shall verify that their adhesive will perform over the existing asphalt.

### 2.2 MATERIALS: SINGLE PLY ROOFING - ADHERED SYSTEM

- A. Insulation - Installed over concrete deck:
  - 1. Insulation shall be ISO 95+ GL and Tapered ISO 95+ GL (20 psi.) roof insulation consisting of a closed-cell Polyisocyanurate foam core laminated to a black glass reinforced mat facer, or approved equal and as recommended by the membrane manufacturer. Taper and required thickness shall be as shown on the Drawings. Maximum insulation board thick utilized in system shall be 2 inches for flat insulation boards and 2 1/2 inches for taper insulation.
    - a. Provide insulation system thickness as shown on the drawings. Overall system thickness include the taper insulation and any base layers required to provide the specified system thickness.
    - b. Taper insulation over the base layer shall be both 1/8 inch and 1/4 inch per foot slope as shown on the drawings.
    - c. Taper insulation at all crickets shall be 1/2 inch per foot slope.
- B. Membrane: Shall be RubberGard Non-Reinforced EPDM (Terpolymer of Ethylene, Propylene and Diene) membrane "Black", .060 inch thick (nominal), 20 feet wide, which meets ASTM D4637, Type 1 and ANSI/RMA IPR-1.
  - 1. **Alternate #1:** Provide .090 inch thick (nominal), 10 feet or 16'-8" feet wide.
- C. Cover Board: Shall be 1/2 inch thick DensDeck Prime, mat faced, non-combustible, water-resistant and silicone-treated. Board shall be UL Classified and FM Class I approved.
  - 1. Subject to compliance with these drawings, specifications, and approval, prior to bid, from the roofing system manufacturer to maintain the specified warranty, one of the two following products may be approved for use.

- a. 1/2 inch thick, Gypsum-Fiber Roof Board as manufactured by Securock®.
  - b. 1/2 inch thick, DensDeck Prime, Roof Guard as manufactured by Georgia-Pacific Gypsum.
- D. Transition Strips at the lower edges of the tapered insulation: Shall be 1/2" x 6" fiberboard transition strips, feathered to provide a smooth roofing transition.

## 2.3 COMPONENTS

- A. Associated Materials - to be furnished or approved by the membrane manufacturer as required for conditions shown for this system:
  - 1. Flashing:
    - a. Elevate EPDM Pipe Flashings: Specifically designed to be used for flashing of round penetrations. Elevate Pipe Flashing may be cut to the correct pipe diameter before installation. Molded pipe flashings shall be used wherever possible.
    - b. RubberGard EPDM FormFlash: Rubbergard EPDM FormFlash is a self-curing EPDM membrane Flashing
    - c. RubberGard EPDM Reinforced Perimeter Fastener Strip: RubberGard EPDM Reinforced Perimeter Fastener Strip is a 6" wide RubberGard MAX membrane for non-penetrating base tie-ins as specified in Elevate Specifications and Details.
  - 2. QuickSeam Accessories:
    - a. QuickSeam Splice Tape: Elevate 3" and 7" QuickSeam Splice Tape is designed for field splicing of RubberGard membrane panels.
    - b. QuickSeam Flashing: QuickSeam Flashing is a nominal .045", uncured EPDM laminated to a nominal .045", cured seaming tape. QuickSeam Flashing is used to flash gravel stops and other details as specified in the Elevate Specifications and Details.
    - c. QuickSeam Reinforced Perimeter Fastening Strip: QuickSeam Reinforced Perimeter Fastening Strip is a 6" wide RubberGard MAX membrane with 3" wide QuickSeam Tape factory laminated to it along one edge. It is used for non-penetrating flashings as specified in Elevate Specifications and Details.
    - d. QuickSeam FormFlash: QuickSeam FormFlash consists of 9" uncured Form Flash factory laminated to QuickSeam tape. It is designed to flash inside and outside corners, pipes, penetration pockets and other applications as required by Elevate Specifications and Details.
    - e. QuickSeam Joint Cover: QuickSeam Joint Cover is uncured FormFlash laminated to QuickSeam Tape. A second 3" layer of tape is applied at the center and is a special uncured, flowable QuickSeam Tape compound. The QuickSeam Joint Cover conforms to irregular surfaces such as to encountered at "T" joints, readily providing an excellent seal with good adhesion.
    - f. QuickSeam Curb Flashing: QuickSeam Curb Flashing is 18" wide 60 gauge non-reinforced RubberGard membrane with 3" wide tape factory laminated along one edge. The 3" tape portion is used to splice the QuickSeam Curb Flashing to the roof membrane. The balance of the QuickSeam Curb Flashing is applied to the vertical surface with Elevate

- BA-2004 or Water Based Bonding Adhesive to hold the membrane in place and terminated using an approved termination detail.
- g. QuickSeam Corner Flashing: QuickSeam Corner Flashing consists of FormFlash factory laminated to QuickSeam Tape. It is 8.5" in diameter and is designed to flash inside and outside corners.
- h. QuickSeam Pipe Flashing: QuickSeam Pipe Flashings are specifically designed to be used in roofing applications for flashing of round penetrations. QuickSeam Pipe Flashings will fit various penetrations and must be cut to correct pipe diameter before installation. Each box of pipe flashings contains universal clamps.
- i. QuickPrime Plus: QuickPrime Plus is designed to clean and prime RubberGard EPDM membrane prior to application of QuickSeam products where required by Elevate Specifications and Details. QuickPrime Plus must be applied with a QuickScrubber or QuickScrubber Plus pad and handle when preparing RubberGard membrane to receive QuickSeam Tape products. It may also be used to clean membrane prior to the application of SA-1065 Spice Adhesive.
- j. QuickScrubber Plus Primer Applications System: Consists of a scrub pad and holder that allows application of QuickPrime Plus from a standing position. The bottom bearing surface of the QuickScrubber Plus holder is slightly concave. When proper pressure is applied, the handle flattens out assuring that proper pressure is maintained.
- 3. Cleaners, Primers, Adhesives and Sealants: Prior to use of any of the products listed below, consult the Elevate Technical Information Sheets for applicable cautions and warnings.
  - a. Concrete Roof Deck Primer: H.B. Fuller Millennium Universal Primer.
  - b. Splice Wash: SW-100 is designed to clean and prepare Elevate single-ply membranes to receive adhesives where required by Elevate Specifications and Details.
  - c. Splicing Adhesive: SA-1065 is designed for splicing RubberGard membrane flashing, FormFlash and the attachment of field membrane panels to reinforced perimeter fastening strips. It is also used at seam edges as a primer to Lap Sealant.
  - d. Lap Sealant: HS Lap Sealant is designed to be used with SA-1065 Splice Adhesive for seam edge treatment applications and to be used as a sealant in other applications as specified by current Elevate Specifications and Details.
  - e. Bonding Adhesive: BA-2004 is designed for bonding RubberGard EPDM or FormFlash membranes to wood, metal, masonry and other acceptable substrates.
  - f. Water Block Seal: S-20 is designed to provide a seal when used in compression as required by Elevate Details.
  - g. Pourable Sealer: A black, 2-component, solvent-free, polyurethane based product used as a sealant around hard-to-flash membrane penetrating objects such as clusters of pipes.
  - h. General Purpose Sealant: Elevate AP Sealant is a single component polyurethane non-sag moisture-curing sealant. It may be used to seal sheet metal, masonry, brick and concrete block. It may also be used as an exterior sealant at termination bars and as a fastener sealer over fastener heads per Elevate Roofing, Wall, and Lining Systems specifications and details.



- i. Insulation Adhesive: I.S.O. Twin Pack is a two-component, low-rise polyurethane adhesive designed for anchoring acceptable roof insulation, and cover boards to specific deck types, and previous insulation layers, as allowed by Elevate specifications.
4. Terminations:
  - a. Termination Bar: A 1 inch wide by 1/8 inch thick extruded aluminum bar pre-punched 4 inches on center with bottom bead.
5. Fasteners and Components: As required by membrane manufacturer for conditions shown.
  - a. General: All insulation, base tie-ins and membrane termination must be attached to substrates that will provide a minimum of 200-lbf-pullout capacity in any direction and meet current ASCE, Standard 7 U.L. 1-75 requirements.
    - 1) Fasteners: Heavy duty (HP) fasteners with minimum penetration of 1" into substrate.
    - 2) Polymer Fastener: For use with gypsum decks with minimum penetration of 1-1/2 inches. Requires pre-drilling deck as recommended by the manufacturer.
    - 3) Metal Insulation Plate: Specifically designed to be used with Heavy-Duty Fasteners in roofing application for attaching insulation as required in Elevate Specifications and Details.
    - 4) **NO MECHANICAL INSULATION FASTENERS ARE ALLOWED INTO THE CONCRETE ROOF SLAB.**
6. Roof QuickSeam Walkway Pads: High quality rubber walkway pads with QuickSeam tape factory laminated to the bottom. Size shall be 30" x 30" x .3" thick.
7. Existing Roof Drains: Provide any missing drain components, including but not limited bolts, clamping rings, etc. Replace all missing and plastic strainer dome(s) with new coated cast iron domes.
  - a. Refer to Roof "A" & Roof "B" – Field verify Strainer dome size and configuration. Replace all existing plastic strainer domes with new cast iron domes.
8. Pipe and Conduit Flashing: Shall be pipe boots as manufactured by the Roof System Manufacturer. Boot material and size and configuration shall be as required to accommodate existing conditions; field verify. Install pipe boots per the manufacturer's recommendations.
  - a. If manufacturer does not have a privately labeled pipe boot contractor shall seek approval to use Portal Plus system.
9. Pitch Pan Flashing: At locations where the pre-molded boots by roofing manufacturer cannot be used, the contractor shall provide and install manufacturer recommended Pitch Pan assembly to meet the specified roof warranty. Flashing system size and configuration shall be as required to accommodate existing conditions; field verify. Install flashing system per the manufacturer's recommendations.
10. Vent Pipe Extension: All vent pipes shall extend minimum 12" above roof plane; provide steel pipe extension as required. Provide pipe coupler as required, minimum 4" in length. Flash / counter flash piping per roof manufacturer's standard detail. New pipe extension material shall match the existing vent pipe material.
11. Equipment mounting supports shall be constructed of 4x4 treated lumber, two (2) rails per unit. Anchor units to mounting rails. Provide an extra layer of membrane

(slip sheet) between the wood vibration Isolation rails and the primary membrane to protect the roof assembly.

## 2.4 ACCESSORIES:

- A. Conduit, Pipe and/or Equipment Supports:
  - 1. Pipes and Conduits less than 1 1/2" diameter – supports shall be supported at 6 feet on center maximum.
  - 2. Pipes and Conduits greater than 1 1/2" diameter – supports shall be supported at 8 feet on center maximum.
  - 3. Holcim “Red Shield” adjustable pipe/equipment supports by Elevate.
    - a. Provide accessory type(s) as approved for warranted installation. Refer to manufacturers website.
  - 4. Refer to specification Section 06 10 00 – Rough Carpentry, for alternative pipe and conduit support option.

## 2.5 PREPARATION:

- A. Prepare the roof deck to receive roofing system. Follow manufacturer's written instructions for typical deck type and substrate conditions. The authorized roofing applicator shall not proceed until all defects in the deck or substrate conditions are corrected.
- B. Wood nailers must not be utilized for membrane securement and shall only be installed where identified on membrane manufacturer's details.
- C. Sweep and vacuum existing deck prior to installation of the adhesive for insulation.
- D. Provide insulation adhesion field uplift tests (**At Concrete Roof Decks**) as required by the manufacturer. Contractor shall record test results and submit a copy to the Architect. Tests will be observed by the Architect.
  - 1. Criteria for field testing adhesives for adhesion to deck:
    - a. Prepare an area large enough to allow a 4 foot x 4 foot insulation board to be laid in place. Sweep and vacuum surface prior to adhesive installation to remove all surface contaminates.
    - b. Apply 1/2 inch bead of adhesive at the spacing recommended by the insulation manufacturer.
    - c. Weigh insulation board down to ensure proper adhesion of the adhesive to the roof deck and insulation board.
    - d. Allow the adhesive a minimum of 60 minutes to cure. This period should be sufficient in almost any temperature to indicate the adhesion values required for the test. If temperatures are extremely cold (below 15 degrees), it may be advisable to allow more time to ensure a proper uplift test.
    - e. After the adhesive has been allowed to cure, pull up on the adhered board by placing a hand under the corner or end of the board in the same direction as the ribbons. Make sure that the board is lifted by hand. Using tools to scrape the board sometimes disbands the adhesive from the deck. This will not show whether the adhesive is performing under uplift considerations. If a tool is used, it should be used to pry or pop the board up.

- f. Observe the insulation and deck. The desired results is a delamination of the surface or board facer with adhesive and facer residue remaining on the deck or the board breaks apart remaining adhered to the deck at the ribbons. An unacceptable substrate will occur when the board is lifted and the adhesive pulls/peels off the deck or decking is pulled up with the board.
  - g. When an unacceptable substrate is present, proceed with polymer fastener installation according to the manufacturer's recommendations.
- E. Provide pull tests for fasteners to determine fastener spacing for field and perimeter locations. Tests will be observed by the Architect. Submit pull test reports to the Architect.
- F. Clean concrete roof deck to remove asphalt as required to achieve warrantable insulation adhesion.
- G. **Verify roof deck levelness.** The Contractor shall verify the levelness of the roof deck system and provide testing report information to the Owner and Architect prior to installation of new roof materials. Upon review of the results of the roof deck levelness modifications to the new roof system may be recommended to prevent ponding water. If the contractor fails to verify the roof deck levelness, any modifications required to correct ponding water after the new roof system is installed will be the responsibility of the contractor to correct at no additional cost to the Owner.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.
- B. Verify deck is supported and secure, clean and smooth, free of depressions, waves, or projections, properly sloped, and suitable for installation of roof system.
- C. Verify deck surfaces are dry and free of snow or ice.
- D. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, and built-in items are in place.

### 3.2 ROOF SYSTEM INSTALLATION:

- A. Install entire roofing system in strict accordance with the membrane manufacturer's requirements and guidelines to meet quality assurance standards specified.
- B. Wood Nailers and Blocking:
  - 1. Wood nailers and miscellaneous blocking shall be installed as shown on the Drawings and where required by the membrane manufacturer.
    - a. Height of nailers shall be matched to the thickness of the insulation being used. Nailers shall be firmly anchored to the deck to resist a force of 75

pounds per lineal foot in any direction. A minimum of three (3) anchors shall be used to anchor each length of nailer.

- C. After existing roof assembly has been removed and the existing concrete roof deck is cleaned to remove all loose debris, un-adhered coatings, deteriorated materials, and other contaminants that may result in a surface that is not sound. Install H.B. Fuller Millennium Universal Primer, at all roof decks over asphalt.
- D. Roof Insulation: Install per manufacturer's recommendations and approved shop drawings. Do not install more insulation than can be covered by membrane in the same day or before the onset of inclement weather.
  - 1. Adhere tapered insulation to base layer to meet the current ASCE, Standard 7 and F.M. 1-75 guidelines as a minimum requirement and as required to obtain the specified 90mph wind speed warranty.
    - a. Neatly fit insulation to all penetrations, projections and nailers. Insulation shall be butted tightly, with gaps greater than 1/4" filled with acceptable insulation. Tapered insulation must be installed around roof drains so as to provide proper slope for drainage as shown in Elevate Details.
    - b. Refer to insulation thicknesses shown on the drawings.
    - c. Stagger Insulation Joints: When installing multiple layers of insulation, all joints between layers should be staggered a minimum of twelve inches (12").
    - d. Attach Insulation: Adhesively attach using ISO Twin Pack Adhesive.
    - e. Place insulation in fresh adhesive before skinning of adhesive. Apply continuous weight to insulation without damaging insulation to keep insulation down to deck.
- E. Tapered Insulation Transition Strips: Install at the lower edge of all tapered insulation to create a smooth transition at the lower edge.
- F. Roof Cover Board: Install per manufacturer's recommendations and approved shop drawings. Do not install more than can be covered by membrane in the same day or before the onset of inclement weather.
  - 1. Neatly fit cover board to all penetrations, projections and nailers. Cover board should be loosely fitted. Under no circumstances should the membrane be left unsupported over a space greater than 1/4". Cover board must be installed around roof drains so as to provide proper slope for drainage as shown in Elevate Details.
  - 2. Adhere roof cover board to anchored roof insulation as recommended by the manufacturer to provide ASCE, Standard 7 F.M. Class 1-75 rating as a minimum requirement and as required to obtain the specified 90 mph wind speed warranty.
- G. Membrane Placement:
  - 1. Place membrane and allow to relax: Place membrane panel, without stretching, over the acceptable substrate and allow to relax for a minimum of 30 minutes before splicing or attaching. The RubberGard EPDM Adhered System must be installed so that the manufactured seams and field splices shed the flow of water.
  - 2. Fold the membrane back: After making sure the sheet is placed in its final position allowing for the minimum lap width per Elevate Specifications, fold it

back evenly onto itself without wrinkles to expose the underside mating surface of the sheet.

3. Remove dusting agent and dirt: Sweep the mating surfaces with a stiff broom to remove any dusting agent or dirt that may have accumulated.
4. Apply the bonding adhesive: Apply bonding adhesive with either a 9" wide solvent-resistant paint roller or a commercial-grade adhesive sprayer. Adhesive must be applied in a relatively uniform thickness to both surfaces at approximately the same time. If adhesive is spray-applied, it must be back-rolled with a paint roller to assure proper contact and coverage. Refer to Elevate Technical Information Sheets and container labels for specific application instructions.
5. Stop bonding adhesive short of seam area: Care must be taken not to apply bonding adhesive over an area that is to be later spliced at another sheet or flashing. All bonding adhesive must be completely removed from the seam area.
6. Apply bonding adhesive at specified coverage rate: Refer to the container label and Technical information sheet for specific application requirements and coverage rates.
7. Test bonding adhesive for readiness (touch-push test): Allow the bonding adhesive to flash-off. Touch the adhesive surface in the thickest area with a clean, dry finger to be certain that the adhesive does not stick or string. As you are touching the adhesive, push forward on the adhesive at an angle to assure that the adhesive is ready throughout its thickness. If either motion exposes wet or stringy adhesive when the finger is lifted, the adhesive is not ready for mating. Flash-off time will vary depending on ambient conditions.
8. Bond the membrane to the substrate: Starting at the fold, roll the previously coated portion of the membrane into the coated substrate slowly and evenly to minimize wrinkles.
9. Broom the membrane: To assure proper contact, compress the bonded half of the membrane to the substrate with a stiff push broom.
10. Repeat procedure to complete the membrane installation: Fold the un-adhered half of the membrane back onto itself, and repeat the procedure.

#### H. Membrane Seaming:

1. Position and Fold Back the Lap Edge: Position the membrane at the seam area by overlapping membrane 4" for 3" QuickSeam Tape and 8" for 7" QuickSeam Tape. Once the membrane is in place, mark the bottom membrane 1/2" to 3/4" from the edge of the top membrane every 4' to 6'. Tack the membrane back with QuickPrime Plus as necessary to hold back the membrane at the splicing area.
2. Apply QuickPrime Plus to Seam Area: Remove excess amounts of dusting agent on the membrane and at factory splices using a stiff push broom. Stir QuickPrime Plus thoroughly before and during use. Dip the QuickScrubber or QuickScrubber Plus into the bucket of QuickPrime Plus, keeping the pad flat. Apply the QuickPrime Plus using long back and forth type strokes with pressure along the length of the splicing area until surfaces become a dark gray in color. Apply QuickPrime Plus to both surfaces at the same time. Change the scrub pad every 200 feet of seam or when the pad will no longer hold the proper amount of QuickPrime Plus. Additional scrubbing is required at all factory seams and at areas that may have become contaminated or have excess amounts of dusting agent.
3. Apply the QuickSeam Splice Tape: After allowing the QuickPrime Plus to dry properly using the Touch-Push test, apply the QuickSeam SpliceTape to the

bottom membrane, aligning the edge of the release paper with the markings. Immediately roll the splice tape with a 3" to 4" wide silicone hand roller, a short nap 3" paint roller or a clean QuickScrubber or QuickScrubber Plus pad and handle.

4. Check the Splice Tape Alignment: When the QuickSeam Splice Tape has been installed for the entire seam length, position the top membrane to rest on top of the tape's paper backing. Trim the top panel as necessary to assure that 1/8" to 1/2" of the QuickSeam SpliceTape will be exposed on the finished seam.
5. Remove Paper Backing: To remove the paper backing from the tape, roll back the EPDM membrane and peel the paper backing off the QuickSeam Splice Tape by pulling against the weight of the bottom panel at approximately a 45-degree angle to the tape and parallel with the roof surface. Allow the top membrane to fall freely onto the exposed QuickSeam Splice Tape. Broom the entire length of the seam at a 45-degree angle as the release paper is being removed.
6. Roll the Seam: Roll the seam using a 1-1/2" to 2" wide silicone hand roller, first across the seam and then along the entire length of the seam.
7. Special Considerations (End Laps, "T" Joints, etc.):
  - a. End Laps: When the seam is greater in length than the tape, the adjoining QuickSeam Splice Tape must be overlapped a minimum of 1".
  - b. Trim QuickSeam Splice Tape at "T" Joints: Trim QuickSeam Splice Tape so that the edge of QuickSeam Splice Tape and the edge of the membrane are flush beneath the "T" Joint area.
  - c. "T" Joints: Apply a section of Elevate QuickSeam Flashing or QuickSeam Joint Cover over the "T" joint area.
  - d. Using QuickSeam Splice Tape with Cured EPDM As Flashing: If cured EPDM is used as flashing, apply an 8" long section of QuickSeam Flashing or a QuickSeam Joint Cover over the intersection of the flashing and field seams.

I. Repairs/Problems: Follow procedures outlined in membrane manufacturer's application manual in repairing cuts and tears in membranes and in splice problems encountered.

1. Repair Cuts/Punctures in the Membrane or Wrinkles Within 18" of a Seam:
  - a. A wrinkle running toward a seam or within 18" of a seam must be repaired. The wrinkle must be cut out so that the membrane lays flat and patched with a piece of EPDM membrane having no factory seams that extends a minimum of 3" beyond the boundaries of the cut in all directions. If the wrinkle occurs through QuickSeam Flashing or FormFlash, like material must be used for repair. QuickSeam Flashing or FormFlash may not extend onto the roof surface more than 6".  
QUICKSEAM FLASHING OR FORMFLASH CANNOT BE USED TO REPAIR CURED MEMBRANE. If repairing of the same wrinkle must continue, then EPDM membrane must be used. Install the EPDM repair membrane first, and round all corners of the repair piece.
  - b. Repair a cut or puncture in the EPDM membrane with EPDM membrane. The repair must extend a minimum of 3" beyond the boundary of the affected area in all directions. Round all corners of the repair piece (Example: a pinhole will require a minimum 6" x 6" EPDM patch).
2. Clean the Membrane: When repairing membrane that has been in service, it is necessary to remove accumulated dirt. Proper membrane preparation is made by scrubbing the membrane with a scrub brush and warm soapy water, rinsing with clear water and drying with clean cotton cloths. Clean the area using clean cotton

cloths with Splice Wash. Additional cleaning using Splice Wash is often necessary.

3. Install Repair Material: Repairs must be made with SA-1065 Splice Adhesive. Refer to the Flashing Seam Details for application requirements of Splice Adhesive.

J. Additional Membrane Securement:

1. Provide Membrane Securement: Secure the membrane (base tie-in) at all locations where the membrane goes through an angle change greater than 1" in 12".
  - a. QuickSeam Reinforced Perimeter Fastening Strip (QSRPF):
    - 1) Attach the QSRPF Strip to the penetration, parapet wall or deck using Elevate 2" Seam Plates or Batten Strips fastened a maximum of 12" o.c. Roll the membrane into place and then fold back, exposing the underside of the membrane and the QSRPF Strip. When using batten strips, apply Elevate General Purpose Sealant over each fastener head, assuring that the fastener head is completely covered.
    - 2) Apply QuickPrime Plus to the membrane where it will mate with the QuickSeam Splice Tape and allow to dry. Apply Elevate Bonding Adhesive to the back half of the QSRPF, to the membrane that is to be bonded to the penetration or wall, and to the penetration or wall itself.
    - 3) After the surfaces have dried properly as determined by using the Touch-Push test, remove the release paper from the QuickSeam Reinforced Perimeter Fastening Strip and roll the membrane into place, assuring a tight fit into the transition between the horizontal and vertical surfaces. Continue to roll the membrane up the wall and broom in place with a stiff push broom. Roll the membrane over the QuickSeam Splice Tape with a 1-1/2" to 2" wide silicone roller across the tape and then along its length.
    - 4) Complete vertical lap seams as described in the lap splice section of this Specification. Install a T-Joint Cover over any vertical lap splices that go through an angle change. Refer to Elevate Details.
2. Seam Edge Treatment (required when using Splice Adhesive, where shown on Elevate Details, and at cut edges of Rubbergard Max Membrane):
  - a. Apply Splice Adhesive To Seam Edge: Using a Splice Adhesive brush, apply SA-1065 Splice Adhesive a minimum of 1" on either side of the seam edge. Allow the Splice Adhesive to dry. If the seam edge has become contaminated, it will be necessary to clean the edge with Splice Wash prior to applying the adhesive.
  - b. Apply Lap Sealant To Seam Edge: Apply a continuous bead of Lap Sealant, approximately 3/8" x 1/4", 20 to 22 lineal feet per 10 oz. tube centered over the seam edge using a standard caulking nozzle. Using the Elevate supplied Lap Sealant tool, feather the Lap Sealant immediately, taking care to leave a mound of sealant directly over the seam edge (refer to lap splice details). Alternately, Lap Sealant may be applied using the plastic nozzle applicator supplied by Elevate, assuring the applicator is centered at the seam edge.

- K. Termination Bars and Counter Flashing: Install termination bars and counter flashing over Water Block Seal S-20, in accordance with Elevate Details. Provide anchors at 12" on center, maximum.
- L. Flashing – Penetrations:
1. General:
    - a. Flash all penetrations passing through the membrane.
    - b. The flashing seal must be made directly to the penetration.
  2. Pipes, Round Supports, etc.:
    - a. Flash penetrations with Elevate EPDM Pre-Molded Pipe Flashings wherever possible. Do not cut or patch EPDM Pre-Molded Pipe Flashings to assist in their installation.
    - b. Flash penetrations using FormFlash when the use of Pre-Molded EPDM Pipe Flashing is not possible.
    - c. Refer to Elevate's Technical Information Sheet for minimum and maximum pipe diameters that can be successfully flashed with Pre-Molded EPDM Pipe Flashings.
  3. Roof Drains: These Specifications apply for installation of cast iron drains only. For all other drain types, contact Elevate Technical Services.
    - a. Remove existing clamping ring. Remove any broken clamping hardware and replace.
    - b. Provide a clean even finish on the mating surfaces between the clamping ring and the drain bowl. Raise or lower roof drain as required.
    - c. Install tapered insulation with suitable bonding surfaces around the drain to provide a smooth transition from the roof surface to the drain. Slope into drain shall be .5" in 12" minimum to 1" in 12" typical. (Refer to roof drain detail.)
    - d. Position the membrane and cut a hole for the roof drain allowing a 1/2" to 3/4" of membrane inside the clamping ring.
    - e. Make round holes in the membrane to align with clamping bolts (a paper punch may be used). Do not cut the membrane back to the bolt holes.
    - f. Install Elevate Water Block Seal on the clamping ring seat flange below the membrane. Use a minimum of one half of a 10 oz. tube for a 10" drain.
    - g. Install the roof drain clamping ring and all clamping bolts. Tighten the clamping bolts to achieve constant compression.
  4. Pipe Clusters and Unusual Shaped Penetrations:
    - a. Fabricate penetration pockets to allow a minimum clearance of 1" between the penetration(s) and all sides.
    - b. Secure penetration pockets and flash per Elevate Details.
    - c. Fill penetration pockets with Elevate Pourable Sealer and mound to shed water. Pourable Sealer must be a minimum of 2" deep and 1" thick around the penetrations.
  5. Hot Pipes:
    - a. Where applicable - Protect the RubberGard EPDM components from direct contact with steam or heat sources when the in-service temperature is in excess of 140° F (60° C). In all such cases flash to an intermediate "cool" sleeve.
  6. Flexible Penetrations:
    - a. Provide a weathertight gooseneck set in Water Block Seal and secured to the deck. Flash in accordance with Elevate Details.



- M. Daily Seal - Temporary Water Cut-Offs: When the completion of flashings and terminations cannot be completed by the end of each workday (of if weather is threatening to protect roof insulation), temporarily close the membrane to prevent water infiltration. Temporarily seal any loose membrane edge down slope so that the membrane edge will not buck water. Caution must be exercised to ensure that the membrane is not temporarily sealed near drains in such a way as to promote water migration below the membrane. Temporary closures which assure that moisture does not damage any completed section of the new roofing system are the responsibility of the licensed applicator. Completion of flashings, terminations and temporary closures must be completed as required to provide a watertight condition.
- N. Prefinished Metal Flashing and Other Metal Work: Not supplied by Elevate, shall be fastened to prevent the metal from pulling free or buckling and sealed to prevent moisture from entering the roofing system or building.
- O. Roof Walkways:
  - 1. Lay out RubberGard QuickSeam Walkway Pads:
    - a. Install walkway pads in locations as shown in the Drawings and in accordance with the manufactures System Design Guide Section. Layout pads so that the flat surface is over the completed RubberGard Membrane, spacing each pad a minimum of 1" and a maximum of 3" from each other to allow for drainage.
    - b. If pads must be installed over field-fabricated seams or within 6" of a seam edge, install QuickSeam Flashing over the seam edge. The QuickSeam Flashing must extend beyond the walkway pad a minimum of 6" on either side.
    - c. At insulation drainage valleys, including all at structural deck slope, taper insulation and crickets; cut the walkway pavers to provide a minimum of a 4 inch clear drainage path or as required for proper drainage.
  - 2. Attach RubberGard QuickSeam Walkway Pads to the membrane:
    - a. Clean the membrane using QuickPrime Plus where the QuickSeam Splice Tape will contact the membrane.
    - b. Remove the release paper from the QuickSeam Splice Tape. Turn the pad over and place it in the QuickPrime Plus.
    - c. Walk on the pad to press in place assuring proper adhesion.

### 3.3 FIELD QUALITY CONTROL

- A. Section 01 40 00 - Quality Requirements: Manufactures Field Services.
- B. Contactor shall schedule the membrane roofing manufacturer's technical representative to be on-site as follows:
  - 1. For the Adhesive Pull Test.
  - 2. Two (2) times while construction operations are occurring.
  - 3. At the completion of the project for the Warranty Inspection.
- C. Upon completion of the installation, an inspection shall be scheduled by the installer and will include a technical representative (sales representatives shall not conduct warranty inspections) of the membrane roofing manufacturer, the installers representative, and the

Owner's representative to ascertain that the membrane roofing system has been installed according to manufacturer's published specifications and details applicable to the time of bid. The Owner will be notified not later than 48 hours prior to the time of the inspection. A copy of the manufacturers punch list shall be provided to the Owner and the Architect at the completion of the meeting or within 24 hours thereafter. Final payment will not be made until all punch list items are satisfactorily corrected and a copy of the Warranty provided.

- D. A Roofing system that has standing water and areas that do not drain will be cause for rejection.

### 3.4 CLEANING

- A. Section 01 74 00 - Cleaning: Final cleaning.
- B. It shall be the responsibility of the Contractor to open all clogged roof drains at the completion of the roofing work. All roof drains shall be left free of debris and draining freely.
- C. Haul away all debris and legally dispose of away from the site.
- D. Repair or replace defaced or disfigured finishes caused by Work of this section.
- E. Wash entire surface with phosphate free neutral cleaner, rinse with clean water and allow to dry thoroughly.

### 3.5 PROTECTION OF INSTALLED CONSTRUCTION

- A. Section 01 70 00 - Execution and Closeout Requirements: Protecting installed construction.
- B. Protect building surfaces against damage from roofing Work.
- C. Where traffic must continue over finished roof membrane, protect surfaces.

END OF SECTION

5 December 2014



**Subject: UNMC Central Utilities Plant (FBPCO # EE5975)**  
**4315 Emile Street**  
**Omaha, NE 68105**

**Firestone Building  
Products Company, LLC**  
250 West 96th Street  
Indianapolis, IN 46260  
Phone: 317-575-7000  
Fax: 317-575-7100

To Whom It May Concern,

This letter is to confirm the wind speed coverage for the above stated project. The Red Shield Platinum™ Warranty for this project has a 90 MPH limit on the wind speed coverage. This includes winds up to and including 90 miles per hour. Wind in excess of the 90 MPH limit will not be covered. This would be winds at 91 MPH and above.

Please feel free to contact me with any questions, and thank you for choosing Firestone.

Sincerely,

**FIRESTONE BUILDING PRODUCTS COMPANY, LLC**

A handwritten signature in blue ink that reads "Brock French".

Brock French  
Roof Systems Advisor, Mid-States Region  
Quality Building Services Group  
1-800-428-4511, Extension 57265  
[frenchbrock@qbsg.net](mailto:frenchbrock@qbsg.net)

cc: Steve Johnson – L Johnson Sales  
File

EXAMPLE



**NOBODY COVERS YOU BETTER™**  
<http://www.firestonebpco.com>



## ROOFING CONTRACTOR WORKMANSHIP WARRANTY

- 1) Contractor: \_\_\_\_\_
- 2) Roof Owner: \_\_\_\_\_
- 3) Type and Name of Building: \_\_\_\_\_  
Building location: \_\_\_\_\_  
Area of Roof: \_\_\_\_\_
- 4) Roofing Materials Manufacturer: \_\_\_\_\_  
(Name and Address)
- 5) Warranty begins: \_\_\_\_\_ and expires: \_\_\_\_\_  
(Date) (Date)
- 6) **Warranty:** Contractor warrants to Owner that it applied the roofing materials to the above-described roof in accordance with (a) the written specifications of Roofing Materials Manufacturer and (b) good roofing industry practices, in effect on \_\_\_\_\_, the date application commenced. Subject to the following terms, conditions and limitations, Contractor will, during the term of this Warranty, at its expense, repair or cause to be repaired leaks in said roof which are the result of defects in Contractor's workmanship. Upon expiration of the term of this Warranty, without notice from Owner of some defect, Contractor shall have no further obligation to make repairs at Contractor's expense under any provision of this Warranty and Owner shall not make any further demand or claim against Contractor concerning Contractor's workmanship, or the roofing materials installed, provided that Contractor promptly commences and diligently proceeds with the correction and repair of all such defects covered by this Warranty which are called to Contractor's attention in the manner set forth in paragraph 8 below during the term of this Warranty by Owner.
- 7) **Terms, Conditions and Limitations.** This warranty does not cover any leaks in the roof caused by: the acts or omissions of other trades or contractors; lightning, winds of sustained speeds of 91 m.p.h. or higher measured at 10 meters above ground, hail storm, flood, earthquake or other unusual phenomenon of the elements; structural settlement; failure, movement, cracking or excess deflection of the roof deck; defects or failure of materials used as a roof substrate over which the roof system is applied; faulty condition of parapet walls, copings, chimneys, skylights, vents, supports or other parts of the building; vapor condensation beneath the roof; penetrations for pitch boxes; erosion, cracking and porosity of mortar and brick; dry rot; stoppage of roof drains and gutters; penetration of the roof from beneath by rising fasteners of any type; inadequate drainage, slope or other conditions beyond the control of Contractor which cause ponding or standing of water; termites or other insects; rodents or other animals; fire; or harmful chemicals, oils, acids and the like that come in contact with the roofing system and cause a leak or otherwise damage the roof system. If the roof fails to maintain a water-tight condition because of damage by reason of any of the foregoing, this warranty shall immediately become null and void for the balance of its term unless such damage is repaired by Contractor at the expense of Owner.
- 8) **Notification by Owner.** During the term of this warranty, if the roof leaks, Owner must immediately notify Contractor by telephone of such leaks, and promptly confirm such telephone notice by written notice to Contractor.
- 9) **Events Which May Void Warranty.** This warranty shall become null and void:
- (a) Unless Contractor receives notice from Owner during the term of this Warranty in accordance with paragraph 8 above of any leaks and is provided an opportunity to inspect, and if required by the terms of this warranty to repair the roof;
  - (b) If work is done on such roof, including, but without limitation, work in connection with flues, vents, drains, sign braces, railings, platforms or other equipment fastened to or set on the roof or if repairs or alterations are made to said roof, without first notifying Contractor in writing and giving Contractor the opportunity to make the necessary roofing application recommendations with respect thereto, which recommendations are complied with. Contractor shall be paid for time and materials expended in making recommendations or repairs occasioned by the work of others on the subject roof;
  - (c) If any area of the roof is used as a promenade, walkway or work area or is sprayed or flooded, unless such use was originally specified with a defined area and the specification is noted in paragraph 14 below.
- 10) **Transferability.** This warranty shall accrue only to the benefit of the original owner named above. It is not transferable to any other person, except with the prior written consent of Contractor.
- 11) **No Other Warranties. NO OTHER EXPRESS WARRANTY IS GIVEN BY CONTRACTOR TO OWNER. THE REPAIR OF THE SUBJECT ROOF IS THE EXCLUSIVE REMEDY. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. ALL IMPLIED WARRANTIES, AND SPECIFICALLY THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED AND DISCLAIMED.** This warranty is separate and apart from any warranty that may be issued to Owner by the Roofing Materials Manufacturer. **CONTRACTOR EXPRESSLY EXCLUDES AND DISCLAIMS ANY RESPONSIBILITY TO OWNER IN CONNECTION WITH OR ATTRIBUTABLE TO THE ROOFING MATERIALS AND ANY SUCH ROOFING MATERIALS MANUFACTURER'S WARRANTY.**
- 12) **Incidental or Consequential Damages. UNDER NO CIRCUMSTANCES SHALL CONTRACTOR BE LIABLE TO OWNER OR ANY OTHER PERSON FOR ANY INCIDENTAL, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR DAMAGE TO OR LOSS OF USE OF THE BUILDING OR ITS CONTENTS, WHETHER ARISING OUT OF BREACH OF WARRANTY, BREACH OF CONTRACT OR UNDER ANY OTHER THEORY OF LAW.**
- 13) **Payment to Contractor.** This warranty shall not be or become effective unless and until Contractor has been paid in full for said roof in accordance with the agreement pursuant to which said roof was applied.
- 14) **Additional conditions or exclusions** \_\_\_\_\_

This warranty has been duly executed this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

By: \_\_\_\_\_  
Contractor

## DIVISION 07 – THERMAL AND MOISTURE PROTECTION

### SECTION 07 62 00

#### ARCHITECTURAL SHEET METAL, FLASHING AND TRIM

##### PART 1 GENERAL

###### 1.1 SUMMARY

- A. The Contractor shall furnish all labor, materials, tools and equipment and perform all work and services necessary for or incidental to the furnishing and installation, complete, of all **architectural sheet metal flashing and trim**, not specifically included in work of other Sections, as shown on the Drawings and as specified, in accordance with provisions of the Contract Documents, and completely coordinated with work of all other trades.
- B. Although such work is not specifically shown or specified, furnish and install all supplementary or miscellaneous items, appurtenances and devices incidental to or necessary for a water-proof, secure and complete installation.
- C. Section includes flashings and counterflashings.
- D. Related Sections:
  - 1. Section 06 10 00 - Rough Carpentry: Wood nailers, cant strips, and blocking and sheathing
  - 2. Section 07 53 03 - Elastomeric Membrane Roofing-Fully Adhered: to coordinate and comply with warranty of roofing as a system.
  - 3. Section 07 90 00 - Joint Protection.

###### 1.2 REFERENCES

- A. Provide all materials and perform all work in compliance with the applicable requirements of the codes, standards, and specifications, latest editions, of the following regulatory associations, and as herein specified.
  - 1. American Society for Testing and Materials (ASTM).
  - 2. Sheet Metal and Air Conditioning Contractors National Association (SMACNA): Architectural Sheet Metal Manual.
  - 3. Sheet Metal Roofing Contractors Association (SMRCA).
  - 4. ANSI/SPRI ES-1 Wind Design Standard for Edge Systems used with low slope roofing systems.
- B. American Architectural Manufacturers Association (AAMA):
  - 1. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum.
  - 2. AAMA 2603 - Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
  - 3. AAMA 2604 - Voluntary specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels.

4. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels.
- C. American Society for Testing Materials (ASTM International):
1. ASTM A653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
  2. ASTM A755 - Standard Specification for Steel Sheet, Metallic Coated by the Hot-Dip Process and Pre-painted by the Coil-Coating Process for Exterior Exposed Building Products.
  3. ASTM B32 - Standard Specification for Solder Metal.
  4. ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
- D. Copper Development Association Inc.:
1. CDA - Copper in Architecture - Handbook.
- E. Federal Specification Unit:
1. FS TT-C-494 - Coating Compound, Bituminous, Solvent Type, Acid Resistant.
- F. Sheet Metal and Air Conditioning Contractors:  
SMACNA - Architectural Sheet Metal Manual, 7<sup>th</sup> Edition, published 2012.

### 1.3 DESIGN REQUIREMENTS

- A. Sheet Metal Flashings: Conform to the following criteria of SMACNA "Architectural Sheet Metal Manual." and as indicated on the Drawings.

### 1.4 PERFORMANCE REQUIREMENTS

- A. The 70% Kynar® 500- or Hylar® 5000-based finish coating shall conform to the following tests and standards:
1. Hardness: F Minimum; NCCA Technical Bulletin II-12.
  2. Adhesion: Cross Hatch – 1/16 inch (no removal); NCCA Technical Bulletin II-5.
  3. Formability: 2T Bend (no cracking or removal); ASTM D522.
  4. Reverse Impact: No Removal When Taped; NCAA Technical Bulletin II-6.
- B. The base metal shall conform to the following tests and standards:
1. Minimum Yield: 36,000 psi; A370, ASTM A653.
  2. Coefficient of Thermal Expansion: 6.7 x 106 in./in./F°, ASTM E228.
  3. Modulus of Elasticity: 29 x 106, ASTM E111.

### 1.5 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Submittal procedures.
- B. Shop Drawings: Submit electronic copy of shop drawings of all work under this Section to Architect for approval. Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details.
1. Include shop drawings of standing seam metal roofing showing seaming technique, seam layout and spacing, outline of roof and roof size, location and

type of all penetrations, perimeter and penetration details, special details, location of anchoring system, end closure seals, and flashing.

- C. Product Data:
  - 1. Submit electronic copy of product data on manufactured components metal types, finishes, and characteristics.
  - 2. Submit electronic copy of product data of pre-finished sheet metal showing manufacturer and specification confirming compliance with these specifications.
- D. Samples: Submit finish, color and color range samples of pre-finished materials specified for use to Architect for color selection and approval.
  - 1. When requested, submit samples of items suggested for substitution to Architect for approval.
- E. Submit documents that indicate compliance with ANSI/SPRI ES-1 requirements.

## 1.6 QUALIFICATIONS

- A. Fabricator and Installer: Company specializing in sheet metal work with minimum five years documented experience.

## 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.
- B. Stack material to prevent twisting, bending, and abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.
- C. Schedule delivery to avoid long on-site storage. Protect from weather and damage. Where possible, break materials in shop to minimize field forming operations.
- D. Materials with strippable plastic film shall not be stored in the open exposed to the sun.
- E. Stack preformed and prefinished materials to prevent twisting, bending, scoring, or abrasion and to provide ventilation. Store off ground on skids under a waterproof covering. Skids should be positioned such that the stacks of panels are on a slope so that if rain should penetrate the covering, water will drain off the panels. Particular care is required to avoid damaging the paint film on pre-painted materials.
- F. Prevent contact with materials during storage which may cause discoloration, staining, or damage.
- G. In handling prefinished sheet metal materials, lift up and separate when unstacking. Do not slide.
- H. No units having defects are to be installed. Damaged materials shall be replaced at the Contractor's expense.

## 1.8 PROJECT CONDITIONS

- A. Examine substrate and conditions under which architectural sheet metal flashing and trim is to be installed. Do not proceed until unsatisfactory conditions have been corrected. Installation constitutes acceptance of substrate and responsibility for performance.
- B. Coordinate work with roofing work. Provide all components necessary to create watertight junctures between roofing and sheet metal work.

## 1.9 GUARANTEES

- A. Provide a two (2) year written guarantee on sheet metal workmanship, agreeing to repair or replace work which leaks water, deteriorates excessively or otherwise fails to perform as watertight flashing. This Work to be part of the roofers warranty. Guarantee shall be signed jointly by the Sheet Metal Installer and the Contractor.
- B. Provide a twenty (20) year (thirty (30) year if **Alternate #1** is selected) non-prorated written material guarantee for pre-finished sheet metal work to cover fading, chalking and film integrity at no charge to Owner. Guarantee shall be signed by the Manufacturer.
  - 1. The warranty shall include labor and materials through the twentieth year (thirtieth year if Alternate #1 is selected).
  - 2. Material shall not show a color change greater than 5 NBS color units per ASTM D2244 and not show chalking in excess of 8 per ASTM D659-80.
- C. The warranties shall be in effect on the date the Substantial Completion Certificate is issued.

## PART 2 PRODUCTS

### 2.1 PRE-FINISHED SHEET METAL FLASHING AND TRIM

- A. Prefinished Sheet Metal: Shall be as manufactured by UNA-CLAD (Firestone Building Products) 310 East 96<sup>th</sup> Street, Indianapolis, IN, or approved equal.
  - 1. Prefinished Sheet Metal – for miscellaneous flashings, and all other pre-finished sheet metal work: Shall be 24 ga prefinished metal.
    - a. Finish shall be Factory Applied Finish to match existing.
    - b. Strippable coating shall be liquid applied to the top side to protect the finish during fabrication, shipping and field handling. This strippable coating shall be removed before installation.
    - c. Colors shall be chosen from the manufacturer's standard colors.

### 2.2 PRE-FINISHED EDGE METAL SYSTEM

- A. Fascia Edge System – 20 year warranty System: Shall be AnchorGard SP Fascia, as supplied by Firestone Building Products, 310 East 96<sup>th</sup> Street, Indianapolis, IN, or approved equal as distributed by L Johnson Sales, Omaha, Nebraska. (Tele: 402-894-5812)
  - 1. Manufacturer must be the same as the elastomeric membrane roofing system.



2. Fascia system at existing building roof replacement shall be Anchorgard SP Fascia, face height shall be 7" as shown on the drawings with 24ga prefinished metal cover.
  3. Provide pre-manufactured 24ga prefinished metal end caps at all open end locations.
  4. Color shall be as selected by the Owner from the manufacturer's standard colors.
- B. Fascia Edge System– 30 year warranty System (**Alternate #1**): Shall be AnchorGard Platinum Fascia, as supplied by Firestone Building Products, 310 East 96th Street, Indianapolis, IN, or approved equal as distributed by L Johnson Sales, Omaha, Nebraska. (Tele: 402-894-5812)
1. Manufacturer must be the same as the elastomeric membrane roofing system.
  2. Fascia system at existing building roof replacement shall be Anchorgard Platinum Fascia, face height shall be 7" as shown on the drawings with 24ga prefinished metal cover.
  3. Provide Anchorgard Platinum Fascia Extender with Offset when edge metal profile face height is larger than 8.5".
  4. Provide pre-manufactured 24ga prefinished metal end caps at all open end locations.
  5. Color shall be as selected by the Owner from the manufacturer's standard colors.

## 2.3 ACCESSORIES

- A. Fastenings: Provide fasteners of same material as sheet metal which are compatible and will not cause dissimilar metals corrosion or reactions. Exposed fasteners shall match color of materials being fastened. Fasteners shall be as recommended by the roofing system manufacturer and able to penetrate substrate a minimum of 3/4" with soft neoprene washers .
- B. Nails shall not be less than No. 12 gauge, with large flat heads, diamond points, barbed shafts, and of sufficient length to penetrate substrate at least 7/8 inch. Nails shall be dipped galvanized steel with lead or soft neoprene washers for galvanized sheet metal.
- C. Sealant: Tremco Spectrem 1, DowSil™ Silicone 756, or approved equal.
- D. Hardcast Tape: Two-component system of fiberglass tape and epoxy resin to seal and join clad steels.
- E. Solder: Complying with ASTM B32, or ASTM B486, type suitable for application and material being soldered.
- F. Dissimilar Metal Protection: Provide Series 66, "Epoxoline" by Tnemec or equivalent. Color to be selected by the Architect.
- G. Metal Protection: Provide alkali resistant bituminous paint, "Tneme-Tar 413" by Tnemec, or equivalent.
- H. Prefabricated Caulk Tape: Shall be Norseal V740 Foam Tape, 1/4" thick by 3/4" wide, as manufactured by Norton Performance Plastics Corporation, Granville, New York, (Tele: 1-800/724-0883), or approved equal.

## 2.4 SHEET METAL FABRICATION (GENERAL)

- A. Perform fabrication and installation of all architectural sheet metal in accordance with NRCA and SMACNA Architectural Sheet Metal Manual, latest edition, to achieve a neat, watertight installation.
- B. Fabricate sheet metal items in shop, to maximum extent possible, consistent with installation requirements and handling limitations. Fabricate to profiles and sizes indicated.
- C. Form sections shape indicated on Drawings, accurate in size, square, and free from distortion or defects.
- D. Fabricate cleats of same material as sheet metal, interlocking with sheet.
- E. Form pieces in longest possible lengths.
- F. Hem exposed edges on underside 1/2 inch; miter and seam corners.
- G. Fabricate corners from one piece with minimum 18-inch-long legs; seam for rigidity, seal with sealant.
- H. Fabricate vertical faces with bottom edge formed outward 1/4 inch and hemmed to form drip.
- I. Seal metal joints.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.
- B. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located.
- C. Verify roofing termination and base flashings are in place, sealed, and secure
- D. Examine substrate and conditions under which architectural sheet metal flashing and trim is to be installed. Do not proceed until unsatisfactory conditions have been corrected. Installation constitutes acceptance of substrate and responsibility for performance.
- E. Coordinate work with roofing work. Provide all components necessary to create watertight junctures between roofing and sheet metal work.

### 3.2 PREPARATION

- A. Install starter and edge strips, and cleats before starting installation.
- B. Install surface mounted reglets to lines and levels indicated on Drawings. Seal top of reglets with sealant.

### 3.3 INSTALLATION

- A. Installation shall be made in accordance with manufacturer's recommended procedures and approved shop drawings. Manufacturer's Handbook of Construction Details, SMACNA Architectural Sheet Metal Manual , and NRCA Roofing and Waterproofing Manual, and Handbook of Roofing Knowledge shall be used as guides and for details wherever applicable.
- B. Provide items to be built into other construction to Contractor in time to allow for their installation. If items are not provided in time for installation, sheet metal fabricator shall be responsible for cutting and installation of such items.
- C. Perform joining with sealant tape in accordance with trade procedures to achieve weathertight joints and required details and to allow for expansion and contraction of building materials.
- D. Install sealant at splices in flashing.
- E. Install flashing in accordance with the manufacturer's written recommendations or with screws with neoprene washers at 12 inches on center through over-sized holes on the back side of parapets.
- F. Provide dissimilar metals and materials protection where dissimilar metals come in contact and elsewhere where required.
- G. Provide all miscellaneous sheet metal items not specifically covered elsewhere as indicated or required to provide a weathertight installation. Fabricate to true, sharp profiles.
- H. Provide concealed fasteners and expansion and contraction provisions. Cover and seal for watertight installation. Provide cleat type anchorages for metal flashing and trim, arranged to relieve stresses resulting from building movement and thermal expansion.
- I. Remove protective strippable film on pre-finished sheet metal immediately after installation.
- J. Exercise proper care during installation to avoid damage or scratching of pre-finished sheet metal.
- K. Use care in reusing existing flashing to insure a watertight seal.
- L. Sheet Metal Fascia System:
  - 1. Pre-finished sheet metal fascia system shall be installed over the single-ply roofing underlayment membrane. The membrane material shall act as gasketing material for the fasteners of the metal system and serve as a slip sheet, as well as a waterproofing membrane.
- M. Fit flashings tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- N. Seal metal joints watertight.

3.4 CLEAN-UP:

- A. Upon completion of work, repair all damaged areas. Clean stains and remove debris. Remove protective coverings if provided. Leave work in broom-clean condition.
- B. Touch-up pre-finished sheet metal work damaged during construction with touch-up paint provided by the manufacturer.

END OF SECTION

## DIVISION 07 – THERMAL AND MOISTURE PROTECTION

### SECTION 07 90 00

#### JOINT PROTECTION

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. The Contractor shall furnish all labor, materials, tools and equipment, and perform all work and services necessary for or incidental to the furnishing and installation, complete, of all **sealants**, exterior, where the word "sealant" is shown on the Drawings and as specified, in accordance with provisions of the Contract Documents, and completely coordinated with work of all other trades.
- B. Although such work is not specifically shown or specified, furnish and install all supplementary or miscellaneous items, appurtenances and devices incidental to or necessary for a sound, secure and complete installation.
- C. The intent of the Plans and Specifications is the securing of a weatherproof building, and the Contractor shall be held responsible for results reasonably to be expected from materials and methods specified to secure a weatherproof installation.
- D. Section includes sealants and joint backing, preformed compressible joint waterstop, and accessories.
- E. Related Sections:
  - 1. Section 07 62 00- Architectural Sheet Metal, Flashing and Trim

##### 1.2 REFERENCES

- A. Provide all materials and perform all work in compliance with the applicable requirements of the codes, standards, and specifications, latest editions, of the following regulatory associations, and as herein specified.
- B. ASTM International:
  - 1. ASTM C920 - Standard Specification for Elastomeric Joint Sealants.
  - 2. ASTM C1193 - Standard Guide for Use of Joint Sealants.
  - 3. ASTM C 1248 - Stain Test Method
  - 4. ASTM C 1299 - Guide for Selection of Sealants
  - 5. ASTM C 1472 - Guide for Calculating Joint Movement
  - 6. ASTM D1667 - Standard Specification for Flexible Cellular Materials-Vinyl Chloride Polymers and Copolymers (Closed-Cell Foam).
  - 7. ASTM D638: Tensile strength, elongation and modulus of elasticity.
- C. Federal Specifications: As indicated.
- D. Sealant Weatherproofing and Restoration Institute (SWRI): Product Letter of Validation.

### 1.3 PRODUCT USE AND PERFORMANCE REQUIREMENTS:

- A. Provide colors matching materials being sealed unless otherwise scheduled. Contractor may need to provide a "custom color" to match materials being sealed where a standard color may not be acceptable. Where compound is not exposed to view in finished work, provide manufacturer's standard color which has best over-all performance for the application.
- B. Provide non-staining and non-sagging sealant for use in joints in vertical surfaces. Sealants for horizontal joints may be self-leveling. Manufacturer must perform non-staining testing on all porous substrates and provide 10 year non-staining warranty supporting use of the sealant with substrate.
- C. Before use of any sealant, investigate its compatibility with joint surfaces, joint fillers, and other materials in joint system. Provide only materials known to be fully compatible with actual installation conditions.
- D. Obtain sealant compounds only from manufacturers who will, when required, provide services of manufacturer's field service representative at project site for purposes of advising and instructing installers in proper procedures and precautions for use of materials. Provide such services, when required, at no expense to Owner.
- E. Compressible joint fillers shall be oversized so that the filler material will stay firmly in position during sealant application.

### 1.4 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Submittal procedures.
- B. Products Data: Submit electronic copy of data sheets of each proposed caulking and sealant product to Architect for approval. Include data on the following:
  - 1. Sealant chemical characteristics which include cure time, mixing, modulus of elasticity, elongation, temperature limitations, tack-free time, flow sag or slump, working time, durometer and joint movement capacity.
  - 2. Recommended joint cleaners, joint primer-sealers, bond breakers and backer rod.
- C. Manufacturer's Installation Instructions: Submit electronic copy of installation and tooling procedures and field quality control test procedures of each proposed sealant to Architect for approval.
- D. Samples: Submit two (2) samples of manufacturer's full range of colors for Architect's selection and approval. After selection and before installation of sealants, submit 6 inch long cured sample of each selected color, if requested.
- E. Submit specimen copy of manufacturer's standard twenty (20) year product warranty for silicone sealants, and five (5) year product warranty on all other sealants.

### 1.5 QUALITY ASSURANCE

- A. Compatibility and Adhesion Tests: Contractor shall be responsible for verifying with sealant manufacturer representative that all sealants to be used are compatible with and

will satisfactorily adhere to all substrates. Verify proper joint preparation for each material encountered. Tests may be conducted in the field or by submission of representative substrate samples to sealant manufacturer's laboratory, if required.

1. Perform pull tests with sealant at all of the different substrates to verify adhesion at each.

## 1.6 QUALIFICATIONS

- A. Manufacturer: Sealant manufacturer shall have been in the business of producing the specified sealant types for a minimum of ten (10) years.
- B. Applicator Qualifications: An experienced installer who has specialized in installing joint sealants similar in material, design, and extent to those indicated for this Project and whose work has resulted in joint-sealant installations with a record of successful in-service performance, with a minimum of five (5) years experience installing sealant.
- C. Source Limitations: Obtain each type of joint sealant through one source from a single manufacturer.
- D. Preconstruction Compatibility and Adhesion Testing: Submit to joint sealant manufacturers, for testing indicated below, samples of materials that will contact or affect joint sealants.
  1. Use manufacturers standard test methods to determine whether priming and other specific joint preparation techniques are required to obtain rapid, optimum adhesion of joint sealants to joint substrates.
    - a. Retain below if unusual environmental conditions may exist during installation that could affect sealant performance.
  2. Perform tests under environmental conditions replicating those that will exist during installation.
  3. Submit not fewer than nine pieces of each type of material, including joint substrates, shims, joint-sealant backings, secondary seals, and miscellaneous materials.
  4. Schedule sufficient time for testing and analyzing results to prevent delaying the Work.
  5. For materials failing tests, obtain joint sealant manufacturer's written instructions for corrective measures, including the use of specially formulated primers.
  6. Retain subparagraph below only if sealant installation is not critical.
  7. Testing will not be required if joint sealant manufacturers submit joint preparation data that are based on previous testing of current sealant products for adhesion to, and compatibility with, joint substrates and other materials matching those submitted.
- E. Preconstruction Field-Adhesion Testing: Before installing elastomeric sealants, field test their adhesion to joint substrates as follows:
  1. Locate test joints where indicated or, if not indicated, as directed by Architect.
  2. Conduct field tests for each application indicated below:
    - a. Each type of elastomeric sealant and joint substrate indicated.
    - b. Each type of non-elastomeric sealant and joint substrate indicated.
  3. Notify Architect seven days in advance of dates and times when test joints will be erected.

4. Arrange for tests to take place with joint sealant manufacturer's technical representative present.
  5. Test Method: Test joint sealants by hand-pull method described below:
    - a. Install joint sealants in 60-inch- (1500-mm-) long joints using same materials and methods for joint preparation and joint-sealant installation required for the completed Work. Allow sealants to cure fully before testing.
    - b. Make knife cuts from one side of joint to the other, followed by two cuts approximately 2 inches (50 mm) long at sides of joint and meeting cross cut at one end. Place a mark 1 inch (25 mm) from cross-cut end of 2-inch (50-mm) piece.
    - c. Use fingers to grasp 2-inch (50-mm) piece of sealant between cross-cut end and 1-inch (25-mm) mark; pull firmly at a 90-degree angle or more in direction of side cuts while holding a ruler along side of sealant. Pull sealant out of joint to the distance recommended by sealant manufacturer for testing adhesive capability, but not less than that equaling specified maximum movement capability in extension; hold this position for 10 seconds.
    - d. For joints with dissimilar substrates, check adhesion to each substrate separately. Do this by extending cut along one side, checking adhesion to opposite side, and then repeating this procedure for opposite side.
  6. Report whether sealant in joint connected to pulled-out portion failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each type of product and joint substrate. For sealants that fail adhesively, retest until satisfactory adhesion is obtained.
  7. Evaluation of Preconstruction Field-Adhesion-Test Results: Sealants not evidencing adhesive failure from testing, in absence of other indications of noncompliance with requirements, will be considered satisfactory. Do not use sealants that fail to adhere to joint substrates during testing.
- F. Mockups: Before installing joint sealants, apply elastomeric sealants as follows to verify selections made under sample Submittals and to demonstrate aesthetic effects and qualities of materials and execution:
1. Joints in mockups of assemblies specified in other Sections that are indicated to receive elastomeric joint sealants, which are specified by reference to this Section.
- G. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination."

#### 1.7 SAMPLE INSTALLATION

- A. Section 01 40 00 - Quality Requirements: Requirements for mockup.
- B. Incorporate accepted installation as part of Work.

#### 1.8 ENVIRONMENTAL REQUIREMENTS

- A. Section 01 60 00 - Product Requirements.



- B. Maintain temperature and humidity recommended by sealant manufacturer during and after installation.
- C. Perform sealant work only when ambient temperature is forty degrees (40°F.) or higher. Apply in accordance with manufacturer's instructions. If manufacturer's instructions allow for installation below 40 degrees F., then work should only proceed if substrate surfaces are clean, dry and frost free.

## 1.9 COORDINATION

- A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.
- B. Coordinate Work with sections referencing this section.

## 1.10 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver sealants and accessories in sealed containers with manufacturer's name, trade mark clearly marked, lot number and "use by date".
- B. Provide protection against weather, damage or loss.

## 1.11 GUARANTEE:

- A. Product Warranty: Provide manufacturer's standard twenty (20) year product weatherseal warranty for silicone sealants and standard five (5) year product warranty for other sealant types.
- B. Workmanship Warranty: Guarantee caulking and sealant work will be free of defects for a period of five (5) years from date of substantial completion, which shall constitute a "watertight weatherseal labor warranty." Remove any defective work or materials and replace with new work and materials and repair any other work damaged as a result of defective sealing work or materials at no additional expense to Owner. Failure of water tightness, loss of adhesion or cohesion, and sealants which do not cure shall constitute defect.

## PART 2 MATERIALS

### 2.1 JOINT SEALERS

- A. Sealants: Refer to Article 3.4 - SCHEDULE for specific sealant types shown to be used at specific locations.
  - 1. Sealants shall conform to:
    - a. Silicone Sealants:
      - 1) Federal Specification TT-S-001543A, Class A for silicone building sealants conforming to ASTM C920, Type S, Grade NS, Class 25, use NT, M, G, A, and O equal to DowSil™ 790 or Tremco Spectrem 1 equal to DowSil™ 790 or as shown otherwise in the schedule.

## 2.2 ACCESSORIES

- A. Primer: Primer for use at cast stone joints and where required, for proper adhesion as determined by pull tests to be conducted by Contractor, shall be used as recommended by manufacturer of sealant in writing to the Architect, having been tested for staining and durability on samples of actual surfaces to be sealed. Sealant and primer shall be supplied by the same manufacturer.
- B. Bond Breaker: Pressure sensitive adhesive polyethylene TEFLON® or polyurethane tape, or other material recommended by sealant manufacturer to suit application. Provide self-adhesive tape where possible.
- C. Joint Cleaner: Solvents, cleaning agents and other accessory materials shall be non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.

## PART 3 EXECUTION

### 3.1 PREPARATION:

- A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.
- B. Clean all joint surfaces of contaminants and impurities to the depth at which the new sealant and backer materials are to be installed. This may be accomplished by several methods: abrading with a wire brush (hand or power), grinding, saw cutting, or solvent cleaning. Follow solvent manufacturer's safe handling recommendations and local, state and federal regulations regarding solvent usage.
- C. Blow out all dust, loose particles, backer rod and other debris using oil free compressed air.
- D. Protect elements surrounding Work of this section from damage or disfiguration.

### 3.2 EXAMINATION:

- A. Examine substrate and conditions under which caulking and sealants are to be applied. Do not proceed until unsatisfactory conditions have been corrected. Application constitutes acceptance of substrate and responsibility for performance.
- B. Contractor shall verify that all joint surfaces are clean, sound, free of defects, and that dimensions are within sealant manufacturer's size requirements.
- C. Commencement of sealant installation shall be evidence that contractor has verified compliance of existing conditions.

### 3.3 INSTALLATION:

- A. Perform installation in accordance with ASTM C1193.
- B. Seal building and any joints or areas which will permit penetration of moisture unless sealing work is specifically required under other Sections. Make all joints watertight.

1. Seal joints prior to the brick veneer being sealed by the mason.
- C. Apply primer or solvent wipe joint where required, as determined by the sealant manufacturers recommendations and by performing pull tests, to joint surfaces to assure proper adhesion. Take extreme care to limit application to surfaces to receive sealant. Mask off adjacent surfaces.
- D. ALL joints utilizing solvent based sealants shall be primed without exception. Only latex trimming caulks are not required to be primed before sealant installation.**
- E. Provide sealant for joints as detailed on the Drawings. However, the following guidelines shall be used for sealing joints:
1. The sealant depth shall be not less than 1/4 inch and not more than 1/2 inch. (Silicone sealant - 1/4 inch + 1/8 inch and should not exceed 3/8 inch and measured over the top of the filler material.)
  2. The depth of the sealant shall be no greater than half the width of the sealant. (Silicone maximum depth 3/8 inch.)
  3. The width of the sealant shall be not less than 1/4 inch.
  4. Subcaulking is not permitted.
- F. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer. Install correctly sized backer in joints to receive sealant. Apply bond breaker to sealant contact surfaces where bond must be avoided.
- G. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- H. Apply with a proper size gun or tool. Use sufficient pressure to fill all voids and joints solid. Upon completion, leave sealant or caulking with smooth, even finish.
- I. Install compressible sealant in joint using Poly-Tool or Poly-Guide to position sealant at depth indicated. Take care to avoid contamination of sides of joint. Install with adhesive on two (2) faces in contact with sides of joints.
- J. Tool joints concave or as detailed on the drawings.
- K. Apply masking tape, where required, in continuous strips in alignment with joint edge. Remove tape immediately after joints have been sealed and tooled as directed.
- L. Install preformed compressible waterstop expansion joint filler/sealant as recommended by the manufacturer at all exterior expansion joints and where shown.
1. Joint surfaces must be free from irregularities, rough particles, foreign matter, such as dirt, dust, ice, snow and water, and coatings such as grease, oil release agents, or lacquers detrimental to the adhesion of the sealant.
  2. Remove waterstop material from the packaging and insert the precompressed material into the joint. Temporarily hold in place with wood wedges until expansion has taken place, if necessary.
    - a. At temperatures above seventy degrees (70°F.) the material will recover in a few hours. At temperatures below sixty-eight degrees (68°F.), the recovery can be accelerated by heating.

3. Join individual strips to provide a continuous seal; miter at about forty-five degrees (45°).

#### 3.4 SCHEDULE

- A. The following list constitutes a nominal schedule of sealant work and sealant use required under this Section. Furnish and install all sealants and caulking as scheduled, specified and as required.
  1. Exterior perimeters of sheet metal and other materials at the exterior walls or where an extreme temperature difference occurs: DowSil™ 795 silicone building sealant or Tremco Spectrem 2.

#### 3.5 CLEAN-UP

- A. Section 01 74 00 - Cleaning: Final cleaning.
- B. Clean adjacent surfaces free of sealant or caulking, using solvent or cleaning agent recommended by manufacturer. All finished work shall be left in a neat, clean condition.

#### 3.6 PROTECTION OF INSTALLED CONSTRUCTION

- A. Section 01 70 00 - Execution and Closeout Requirements: Protecting installed construction.
- B. Protect sealants from weather related debris until cured.

END OF SECTION

DIVISION

09

FINISHES

## DIVISION 09 - FINISHES

### SECTION 09 90 00

#### PAINTING AND COATING

##### PART 1 GENERAL

###### 1.1 SUMMARY

- A. The Contractor shall furnish all labor, materials, tools and equipment, and perform all work and services necessary for or incidental to the furnishing and application, complete, of **all surface preparation and painting** as shown on the Drawings and as specified, in accordance with provisions of the Contract Documents, and completely coordinated with work of all other trades.
- B. Although such work is not specifically shown or specified, furnish and install all supplementary or miscellaneous items, appurtenances and devices incidental to or necessary for a sound, secure and complete job.
- C. Section includes surface preparation and field application of paints.
- D. Terms "paint" and "painting" refer to all applied coatings except special coatings.
- E. Paint includes fillers, primers, sealers, emulsions, oils, alkyds, latex, enamels, thinners, stains and other applied coatings whether used as prime, intermediate or finish coat.
- F. The use of lacquer, shellac or sanding sealer is approved only as specified. Violation of this requirement will result in the Contractor replacing or repairing all damaged wood at no additional cost to the Owner.
- G. The Contractor shall examine the Specifications for the various other trades and shall thoroughly familiarize himself with all their provisions regarding their painting. He shall understand that all surfaces that are left unfinished by the requirements of other Specifications shall be painted or finished as part of this Contract.
- H. Work under this Section includes, but is not limited to:
  - 1. **Field painting of existing structural steel components along the roof deck edge, above windows, and architectural panels as indicated in the Drawings.**

###### 1.2 REFERENCES

- A. ASTM International:
  - 1. ASTM D16 - Standard Terminology Relating to Paint, Varnish, Lacquer, and Related Products.
  - 2. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- B. National Fire Protection Association:

1. NFPA 255 - Standard Method of Test of Surface Burning Characteristics of Building Materials.
- C. SSPC: The Society for Protective Coatings:
  1. SSPC - Steel Structures Painting Manual.
- D. Underwriters Laboratories Inc.:
  1. UL 723 - Tests for Surface Burning Characteristics of Building Materials.

### 1.3 DEFINITIONS

- A. Conform to ASTM D16 for interpretation of terms used in this section.

### 1.4 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Submittal procedures.
- B. Submit electronic copy of the manufacturer's specification data sheet for each product specified to the Architect for approval.
- C. Samples:
  1. Submit samples to Architect for approval not less than six (6) weeks before painting is to start. Resubmit rejected samples until approved. Obtain written approval before delivering materials. Step all samples to show coats.
    - a. Provide five (5) color samples, 3 inch by 5 inch minimum, of each color and texture selected and clearly labeled for areas to be painted.
    - b. Prepare other samples when requested by the Architect.
- D. Manufacturer's Installation Instructions: Submit special surface preparation procedures and substrate conditions requiring special attention.
- E. Provide mix formula for each paint system and color specified.

### 1.5 CLOSEOUT SUBMITTALS

- A. Section 01 70 00 - Execution and Closeout Requirements: Closeout procedures.
- B. Provide the Owner with the mix formula for each color of paint and stain.
- C. Operation and Maintenance Data: Submit data on cleaning, touch-up, and repair of painted and coated surfaces.

### 1.6 QUALITY ASSURANCE

- A. All paint manufacturers and products used shall be listed under the approved product list section of the Master Painters Institute (MPI) Painting Manual, latest edition, and as specified.
- B. Provide all Class A fire retardant materials as required for educational occupancy by the Nebraska State Fire Marshal's Office.

- C. Unspecified materials such as turpentine or linseed oil shall be "Best Grade" by reputable, recognized manufacturers and labeled.
- D. Paint colors shall be selected by the Owner.
- E. Surface Burning Characteristics:
  - 1. Fire Retardant Finishes: Maximum 25/450 flame spread/smoke developed index when tested in accordance with ASTM E84.

#### 1.7 QUALIFICATIONS

- A. Manufacturer Requirements: Company specializing in manufacturing products specified in this section with minimum five (5) years documented experience.
- B. Applicator: Company specializing in performing work of this section with minimum five (5) years' experience and approved by manufacturer.

#### 1.8 ENVIRONMENTAL REQUIREMENTS

- A. Section 01 60 00 - Product Requirements.
- B. Do not apply materials when surface and ambient temperatures are outside temperature ranges required by paint product manufacturer.
- C. Do not apply exterior coatings during rain or snow when relative humidity is outside humidity ranges, or moisture content of surfaces exceed those required by paint product manufacturer.
- D. Minimum Application Temperatures for Latex Paints: 45 degrees F for interiors; 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.
- E. Provide lighting level of 80 ft candle measured mid-height at substrate surface.

#### 1.9 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.
- B. Deliver materials in original unopened containers to the job site at least seven (7) working days prior to start of work for Architect's approval. Inspect to verify acceptability.
- C. Container Label shall include:
  - 1. Manufacturer's name.
  - 2. Type of paint.
  - 3. Brand name.
  - 4. Contents by volume of major constituents.
  - 5. Lot number.
  - 6. Brand code.
  - 7. Application instructions.
  - 8. Coverage.
  - 9. Surface preparation.



10. Drying time.
  11. Cleanup requirements.
  12. Color designation.
  13. Instructions for mixing and reducing.
- D. Paint Materials: Store at minimum ambient temperature of 45 degrees F and maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.
  - E. Protect from freezing or damage.
  - F. Store all materials in a single place safe from fire hazard and out of proximity of gas-fired or oil-fired heating equipment, automatic electric controls or other devices which might cause combustion of fumes by flame, heat or spark. Keep storage and work area neat and clean. Painting contractor shall make good any damage thereto or its surroundings.
  - G. All oily rags, waste, and accumulated materials, etc. shall be removed from the building every night and necessary precautions taken to avoid danger of fire. Provide fire protection.
  - H. Contractor shall store empty cans in orderly fashion outside the building and protect all surfaces until specific approval for removal is given by the Architect. Contractor shall be responsible for safe storage, clean-up and removal of all empty containers after observation of cans by Architect to confirm compliance with specifications.

#### 1.10 EXTRA MATERIALS

- A. Section 01 70 00 - Execution and Closeout Requirements: Spare parts and maintenance products.
- B. Provide Owner with a new, unopened one gallon container of each product in each color used on the project for maintenance purposes.
- C. Label each container showing color number and location of use with manufacturer's label intact and legible.

### PART 2 PRODUCTS

#### 2.1 PAINTS AND COATINGS

- A. Paint Materials shall be as manufactured by Tnemec (NO SUBSTITUTIONS):
  1. Solvents: Pure and of highest quality.
  2. Paint: Tinted, as specified.
  3. Tinting Materials: Provide as recommended by specified and/or approved manufacturer.
- B. Coatings: Ready mixed, except field catalyzed coatings. Prepare coatings:
  1. To soft paste consistency, capable of being readily and uniformly dispersed to homogeneous coating.
  2. For good flow and brushing properties.
  3. Capable of drying or curing free of streaks or sags.

- C. Application Equipment and Accessories:
  - 1. Application equipment is not required to be new but must be adequate and commensurate for work.
  - 2. Provide all ladders, scaffolding, drop cloths, maskings, tools and cleaning materials required to perform the work as specified.
- D. Accessory Materials: Linseed oil, turpentine, paint thinners and other materials not specifically indicated but required to achieve finishes specified; "Best Grade Commercial Quality".
- E. Patching Materials: Latex filler.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.
- B. The Contractor shall advise the Architect when material is stored and ready for observation, and no Work under this Section shall commence until this observation has been made and approval to proceed has been given by the Architect.
- C. Perform no work unless temperature in building is maintained at constant sixty-five degrees (65°F.) or above.
- D. Avoid wide variation in temperature which might result in condensation on freshly painted surfaces.
- E. Ensure adequate illumination exists in all areas where painting operations are in progress.
- F. Examine substrate and conditions under which finish is to be received. Examine surfaces carefully for defects which cannot be corrected after painting and which might prevent satisfactory results. Do not proceed until unsatisfactory conditions have been corrected.
- G. Commencing of work in a specific area constitutes acceptance of surfaces and responsibility for satisfactory work.
- H. During application, dew point temperature in space must be maintained at least 10 degrees lower than temperature of surface being painted.
- I. Test shop applied primer for compatibility with subsequent cover materials.

### 3.2 APPLICATION AND WORKMANSHIP

- A. Employ only skilled mechanics.
- B. Application may be by brush or roller. Spray only upon approval from the Architect, or as noted.
- C. Keep equipment in proper condition to provide a job commensurate with intent of Specification.

- D. Mix and apply materials as recommended by the manufacturer.
- E. Protect painted surfaces and all adjacent work and materials by suitable covering during progress of work.
- F. Remove or protect all adjacent surfaces, finishes and similar items, and provide ample in-place protection. Upon completion of painting, carefully replace all removed items and/or remove protection.
- G. Provide complete coverage of all paint systems. When color or undercoats show through, apply additional coats until paint film is of uniform finish and color, at no additional cost to the Owner.
- H. Assure that all coats are thoroughly dry before applying succeeding coats.
- I. Perform no exterior painting when surface temperature is below fifty degrees (50°F.), while surface is damp, or during cold, rainy or frosty weather. Avoid painting surfaces exposed to hot sun.

### 3.3 PREPARATION

- A. GENERAL
  - 1. Surface Appurtenances: Remove or mask electrical plates, hardware, light fixture trim, escutcheons, and fittings prior to preparing surfaces or finishing.
  - 2. Surfaces: Correct defects and clean surfaces capable of affecting work of this section. Remove or repair existing coatings exhibiting surface defects.
  - 3. Assure that surfaces are clean and dry, and free of foreign material which will affect adhesion or appearance.
  - 4. Remove mildew and neutralize surface.
  - 5. Correct efflorescence before painting.
  - 6. Remove surface rust from steel.
- B. Galvanized Metal Surfaces:
  - 1. Remove dirt and grease with Toluol and "0" grit steel wool and wipe dry.
  - 2. All galvanized metal surfaces shall be chemically treated with a compound designed for this purpose, such as "Preptek" or "Metal-Treat," in accordance with manufacturer's directions for use before applying first coat of paint.

### 3.4 APPLICATION

- A. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- B. Stipple finish shall be uniform in nature, and free from lap marks, brush marks, or hat bands.
- C. Final roll off of all materials shall be free from shadows, roller shedding, roller tailing, and sags.

- D. Final roll off of all materials shall be completed before installation of any wall hung equipment, devices, wall plates, hand rails, toilet room accessories, and miscellaneous specialties, typical.
- E. Sand metal surfaces lightly between coats to achieve required finish.
- F. Use tack cloth to remove dust and particles just prior to applying next coat.
- G. Clear finishes shall be brush or pad applied.
- H. Apply materials to provide total color and sheen uniformity on all surfaces regardless of number of coats necessary.
- I. Apply each coat to uniform appearance. Apply each coat of paint slightly darker than preceding coat unless specified otherwise.

### 3.5 FIELD QUALITY CONTROL

- A. Section 01 40 00 - Quality Requirements: Field inspecting, testing, adjusting, and balancing.
- B. Inspect and test questionable coated areas.

### 3.6 CLEANING

- A. Section 01 70 00 - Execution and Closeout Requirements: Final cleaning.
- B. Protect adjacent work, whether to be painted or not, against damage by painting and finishing work. Leave all such work undamaged. Clean, repair or replace, and repaint damaged work as directed by the Architect.
- C. Provide "Wet Paint" signs as required.
- D. Remove temporary protective wrappings, provided by others for protection of their work, after completion of painting operations.
- E. Remove any surplus materials. Legally dispose of all debris.
- F. Leave areas broom clean, neat, orderly and in perfect condition acceptable to the Architect.
- G. Collect waste material which may constitute fire hazard, place in closed metal containers, and remove daily from site.

### 3.7 SCHEDULE

- A. Metal Surfaces to be covered with Prefinished Sheet Metal:
  - 1. Exterior Metal:
    - a. Remove all surface rust and contamination and passivators by scrubbing with "0" grit steel wool and Toluol. Surfaces must be prepared to (SSPC - SP-7).

- b. Apply one coat of Tnemec, Series 66 Hi-Build Epoxoline, to provide a dry mil thickness of at least 2.5 to 3.5 mils.
- B. Metal Surfaces – to be left exposed:
  - 1. Exterior Metal:
    - a. Remove all surface rust and contamination and passivators by scrubbing with "0" grit steel wool and Toluol. Surfaces must be prepared to (SSPC - SP-7).
    - b. Apply one coat of Tnemec, Series 66 Hi-Build Epoxoline, to provide a dry mil thickness of at least 2.5 to 3.5 mils.
    - c. Finish with Tnemec, Series 290 Chemical-Resistant Urethane, to provide a dry mil thickness of at least 3.0 mils. to provide total color and sheen uniformity.

END OF SECTION

# APPENDIX

**APPENDIX “A”:**

**GRAPHIC PROJECT  
REQUIREMENTS**

**For**

**Peru State College – Centennial Complex**  
**CLAYBURN & MATHEWS**  
**ROOF REPLACEMENT**

**JJA #3645**

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- C1.2 ROOF ORIENTATION PLAN

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N1.1

PERU STATE COLLEGE  
CENTENNIAL COMPLEX - CLAYBURN AND MATHEWS  
ROOF REPLACEMENT  
PERU, NEBRASKA  
800 HOYT ST  
INDEX OF DRAWINGS AND PHOTOGRAPHS

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DATE: 01/02/2024  
DESIGN: E.R.K.  
DRAWN: A.B.M.  
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# GENERAL NOTES AND REQUIREMENTS

- A. THE EXISTING BUILDING SHALL REMAIN IN OPERATION DURING CONSTRUCTION OPERATIONS. THE OWNER MAY REQUIRE THE CONTRACTOR TO REFRAIN FROM PERFORMING CONSTRUCTION OPERATIONS DURING CERTAIN SCHEDULED EVENTS IN AND/OR AROUND THE BUILDING. THE OWNER WILL GIVE THE CONTRACTOR AS MUCH NOTICE AS POSSIBLE.
- B. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE THE SHUTDOWN AND DISCONNECTION OF ANY ROOF TOP EQUIPMENT WITH THE OWNER PRIOR TO DISCONNECTION, AS REQUIRED TO ACCOMMODATE THE OWNER'S CONTINUED USE OF THE BUILDING. THE CONTRACTOR SHALL VERIFY WITH THE OWNER THAT ALL ROOF TOP EQUIPMENT IS OPERATING AT THE COMPLETION OF THE ROOF REPLACEMENT OPERATIONS.
- C. ALL DIMENSIONS ASSOCIATED WITH THE EXISTING BUILDING ARE BASED ON LIMITED FIELD VERIFICATION. ALL DIMENSIONS ARE  $\pm$  AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO PERFORMING ANY DEMOLITION/CONSTRUCTION OPERATIONS. CONTRACTOR SHALL NOTIFY THE OWNER / ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH ANY MODIFICATIONS TO THE DRAWINGS OR SPECIFICATIONS.
- D. CONTRACTOR SHALL NOTIFY THE OWNER / ARCHITECT OF ANY EXISTING UNKNOWN BUILDING CONDITIONS THAT ARE NOT SHOWN OR INCORRECTLY DEPICTED IN THE ROOFING DETAILS PRIOR TO THE CONTRACTOR INSTALLING THE NEW ROOFING SYSTEM.
- E. CONTRACTOR SHALL NOTIFY THE OWNER / ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH ANY MODIFICATIONS TO THE DRAWINGS OR SPECIFICATIONS.
- F. CONTRACTOR SHALL PROTECT, AS REQUIRED, ALL MATERIALS AND FINISHES SCHEDULED TO REMAIN. IF MATERIALS/FINISHES SCHEDULED TO REMAIN ARE DAMAGED, THEY SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO MATCH THE EXIST. CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- G. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROTECTING ALL EXISTING PAVING AND LANDSCAPING, INCLUDING BUT NOT LIMITED TO PARKING LOTS, SIDEWALKS, DRIVES, SOD/SEED, TREES, SHRUBS, FLOWERS, ETC. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY ITEMS THAT ARE DAMAGED DURING CONSTRUCTION OPERATIONS TO MATCH THE EXISTING CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- H. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROTECTING THE BUILDING AND ITS CONTENTS DURING ROOF REPLACEMENT OPERATIONS. PUBLIC PROTECTION IS ALSO REQUIRED AT ALL ENTRANCES AND WALK PATHS.
- I. CONTRACTOR SHALL CLEAN THE EXISTING CONCRETE ROOF DECKS AS REQUIRED TO MEET THE ROOF MANUFACTURERS REQUIREMENTS TO MEET PROPER ADHESION OF THE ROOF INSULATION AND OBTAIN THE SPECIFIED WARRANTY.
- J. NO INSTALLATION OF MECHANICAL INSULATION FASTENERS INTO CONCRETE ROOF DECKS WILL BE ALLOWED, UNLESS THE CONTRACTOR RECEIVES APPROVAL FROM THE OWNER OR THEIR IS A FAILURE DURING ADHESION RELEASE TEST THAT REQUIRES A REVISION TO ANCHORING SYSTEM. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH OWNER'S AND ARCHITECTS PROJECT MANAGERS PRIOR TO APPLICATION OF BASE LAYER OF INSULATION TO ENSURE PROPER ADHESION.
- K. THE CONTRACTOR SHALL VERIFY THE LEVELNESS OF THE EXISTING CONCRETE ROOF DECK SYSTEM AND PROVIDE TESTING REPORT INFORMATION TO THE OWNER AND ARCHITECTS PROJECT MANAGERS PRIOR TO INSTALLATION OF NEW ROOF MATERIALS. UPON REVIEW OF THE RESULTS OF THE ROOF DECK LEVELNESS REPORTS, MODIFICATIONS TO THE NEW ROOF SYSTEM MAY BE RECOMMENDED TO PREVENT PONDING WATER. IF THE CONTRACTOR FAILS TO VERIFY THE ROOF DECK LEVELNESS, ANY MODIFICATIONS REQUIRED TO CORRECT PONDING WATER AFTER THE NEW ROOF SYSTEM IS INSTALLED, WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CORRECT AT NO ADDITIONAL COST TO THE OWNER.
- L. EXISTING BLOCKING SHOWN IS BASED OF OWNER PROVIDED DRAWINGS. CONTRACTOR TO FIELD VERIFY THE EXISTING CONFIGURATION & SIZE PRIOR TO START OF INSTALLATION OF NEW ROOF ASSEMBLY. MODIFICATIONS MIGHT BE REQUIRED.
- M. PROTECT ALL ROOF CABLING TO REMAIN. COORDINATE WITH OWNER ANY ABANDONED CABLES TO BE REMOVED.
- N. CUT ALL WALKWAY PAVERS AT VALLEYS WITH A MIN. DISTANCE OF 6" BETWEEN CUT PAVING PIECES TO ACCOMMODATE DRAINAGE.

## ALTERNATES AND UNIT PRICES

**ALTERNATE #1:** PROVIDE 90 MIL. EPDM MEMBRANE ROOFING AND ROOF INSULATION ADHERED SYSTEM WITH THE MANUFACTURER'S STANDARD 30 YEAR FULL SYSTEM WARRANTY AND INSTALLATION DETAILS. UPGRADE THE PRE-FINISHED METAL WARRANTY FROM 20 YEARS TO 30 YEARS.

**UNIT PRICE #1:** INSPECT ALL EXISTING WOOD BLOCKING SCHEDULED TO REMAIN. FIELD VERIFY THE EXISTING CONFIGURATION, HEIGHT AND CONDITION OF THE BLOCKING. CONTRACTOR SHALL NOTIFY THE OWNER AND ARCHITECT OF ANY DISCREPANCIES FROM THE DRAWINGS AND/OR DETERIORATED WOOD THAT NEEDS TO BE REPLACED PRIOR TO NEW ROOFING INSTALLATION. PROVIDE A UNIT PRICE COST FOR THE REMOVAL/REPLACEMENT OF ANY DETERIORATED WOOD BLOCKING SCHEDULED TO REMAIN.

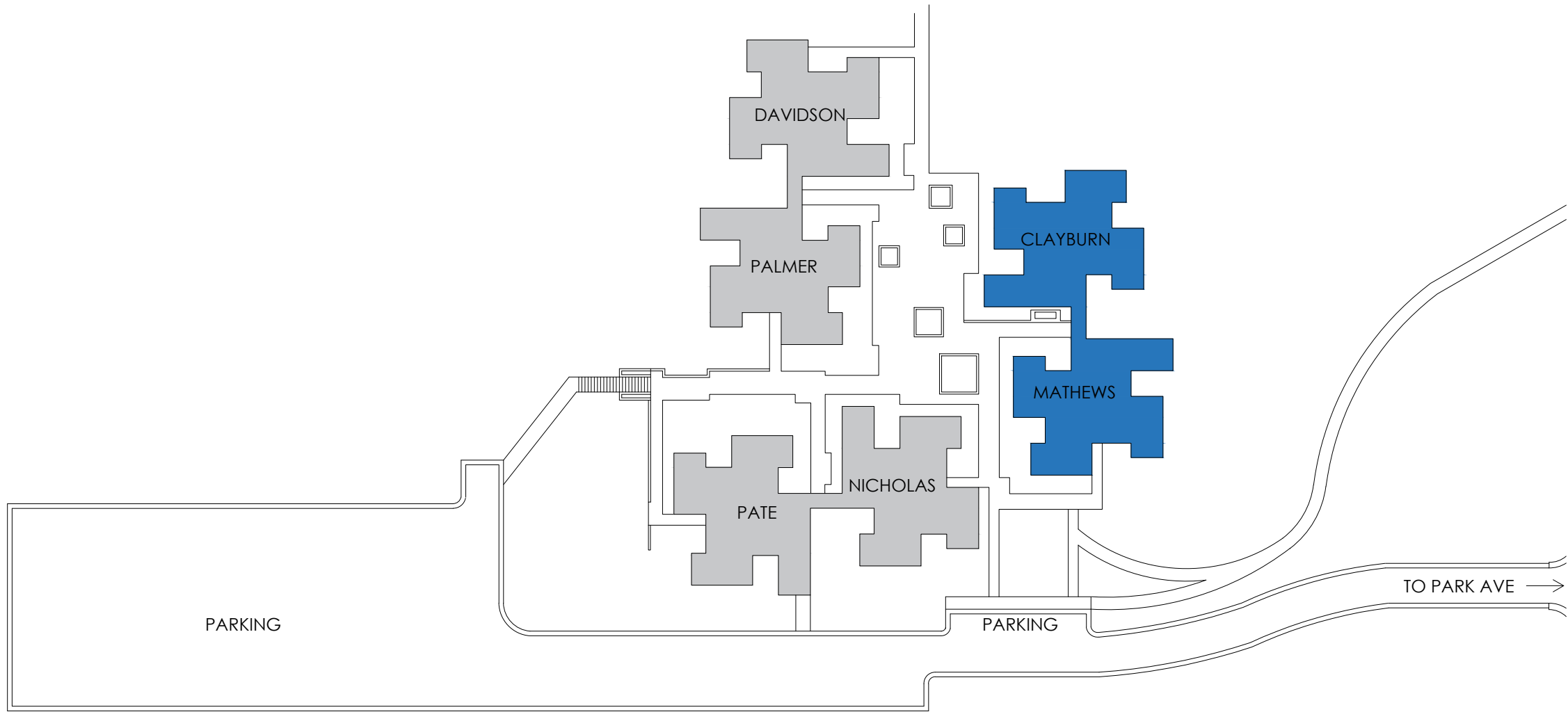
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PERU STATE COLLEGE  
CENTENNIAL COMPLEX - CLAYBURN AND MATHEWS  
ROOF REPLACEMENT  
800 HOYT ST  
PERU, NEBRASKA  
GENERAL NOTES AND REQUIREMENTS

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LEGEND

AREA OF WORK

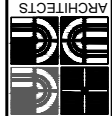


SITE PLAN  
SCALE: 1/64" = 1'-0"

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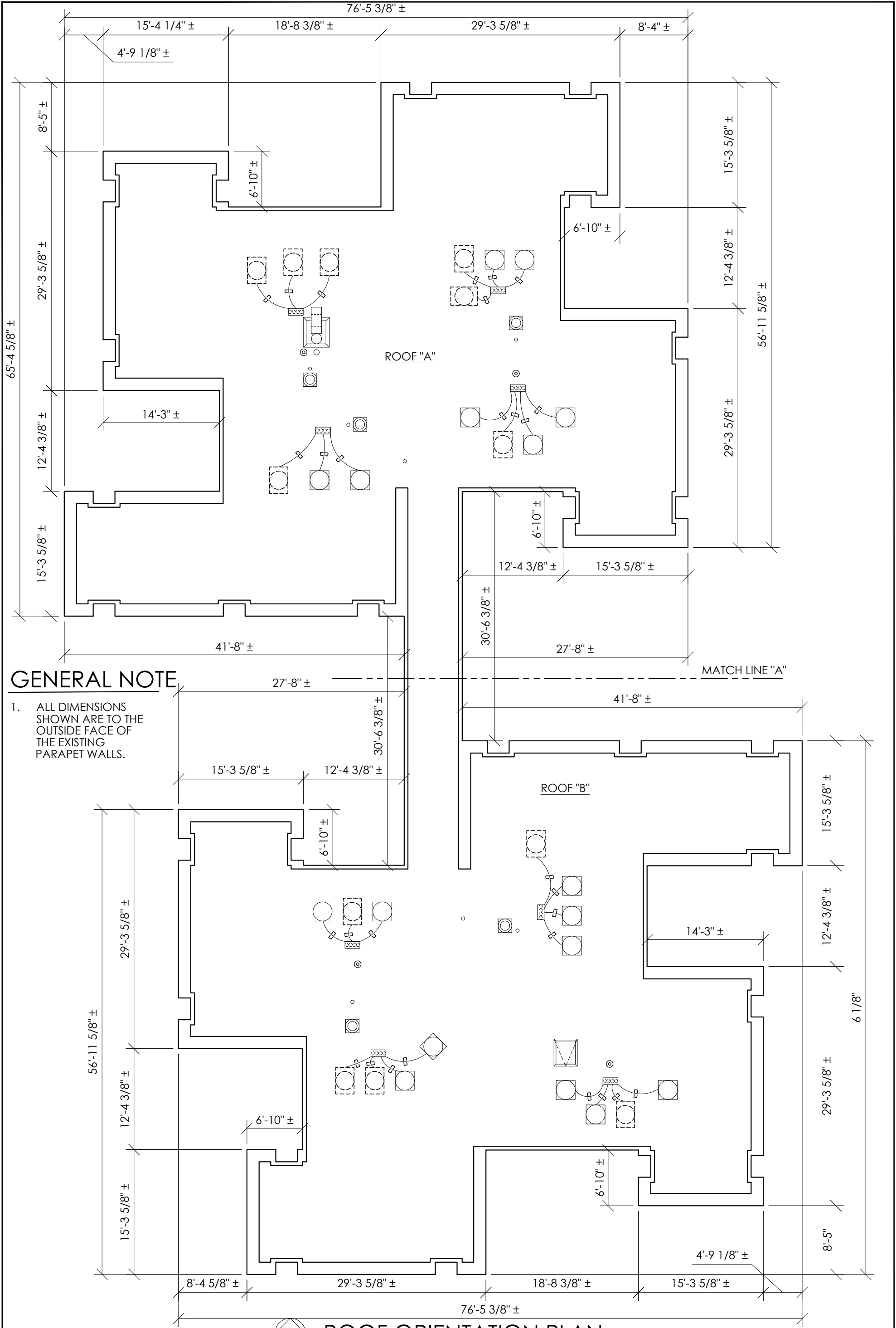
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| CHECKED:  | E.R.K.     |

PERU STATE COLLEGE  
CENTENNIAL COMPLEX - CLAYBURN AND MATHEWS  
ROOF REPLACEMENT  
PERU, NEBRASKA

C1.1  
SITE PLAN



GENERAL NOTE

1. ALL DIMENSIONS SHOWN ARE TO THE OUTSIDE FACE OF THE EXISTING PARAPET WALLS.



ROOF ORIENTATION PLAN

SCALE: 3/32" = 1'-0"

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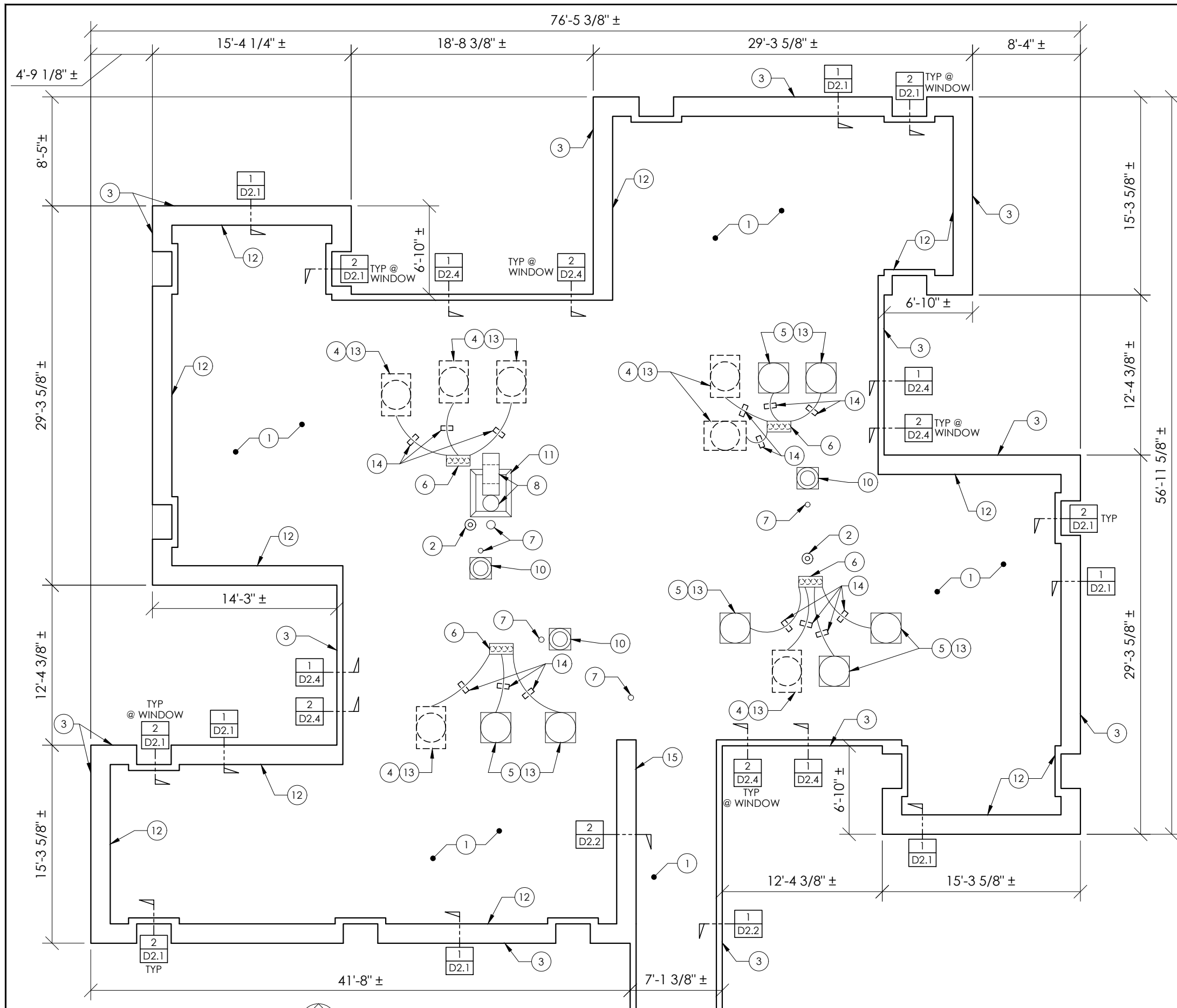
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| PERU STATE COLLEGE<br>CENTENNIAL COMPLEX - CLAYBURN AND MATHEWS<br>ROOF REPLACEMENT<br>PERU, NEBRASKA | ROOF ORIENTATION PLAN |
|-------------------------------------------------------------------------------------------------------|-----------------------|

C1.2



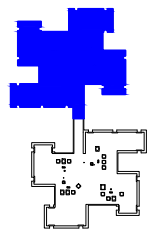
# DEMOLITION ROOF PLAN - AREA "A"

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

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D1.1

## KEYED NOTES

1. REMOVE EXISTING BUILT-UP ROOFING & TAPERED INSULATION SYSTEM IN ITS ENTIRETY DOWN TO THE EXISTING CONCRETE ROOF DECK, TYP.
2. EXISTING ROOF DRAIN LOCATION AND EXISTING DRAIN BODY, TO REMAIN. REMOVE AND REPLACE EXISTING PLASTIC STRAINER DOMES, CLAMPING RING, AND BOLTS.
3. REMOVE EXISTING PRE-FINISHED EDGE METAL FLASHING.
4. REMOVE AND REPLACE EXISTING HEAT PUMP UNITS WITH OWNER PROVIDE HEAT PUMPS. SALVAGE THE EXIST. ELEC. DISCONNECT TO BE REINSTALLED ON THE NEW HEAT PUMP UNIT. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.
5. REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.
6. EXISTING PIPING HOOD, TO REMAIN. REMOVE EXISTING ROOFING MATERIALS FROM CURB. REMOVE EXIST. CANT MATERIAL AROUND ALL MECHANICAL PIPING BOXES. MODIFY/RAISE EXISTING PIPING HOOD AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.
7. EXISTING VENT PIPE, TO REMAIN. REMOVE ALL EXISTING ROOFING MATERIALS FROM VENT PIPE.
8. OLD INCINERATOR INTAKE AND EXHAUST TO BE REMOVED & CAPPED DOWN BELOW THE ROOF DECK. EXISTING CURB, TO REMAIN. REFER TO DEMOLITION DETAIL 1/D2.3.
9. NOT USED ON THIS SHEET.
10. EXISTING EXHAUST HOOD TO REMAIN. REMOVE ALL ROOFING MATERIALS FROM EXISTING CURB & REMOVE CANT FROM AROUND CURB. MODIFY/RAISE EXISTING ROOF CURB IF REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT. REFER TO DEMOLITION DETAIL 2/D2.3.
11. EXISTING CURB TO REMAIN. REMOVE ALL METAL CAP FLASHING & ROOFING MATERIALS FROM EXISTING CURB & REMOVE CANT FROM AROUND PERIMETER OF CURB. MODIFY EXISTING ROOF CURB AS REQUIRED TO ACCOMMODATE THE NEW ROOF ASSEMBLY.
12. REMOVE EXISTING PERIMETER CANTS, TYP.
13. REMOVE & REPLACE ALL VIBRATION ISOLATION PADS, TYP. ALL UNITS.
14. REMOVE & REPLACE ALL 4x4 WOOD PIPE SUPPORTS.
15. EXISTING ROOF CURB TO REMAIN. REMOVE ALL CANT MATERIAL AROUND ALL EDGES, TYP.



## KEY PLAN

SCALE: N.T.S.

D1.1

PERU STATE COLLEGE  
CENTENNIAL COMPLEX - CLAYBURN AND MATHEWS  
ROOF REPLACEMENT

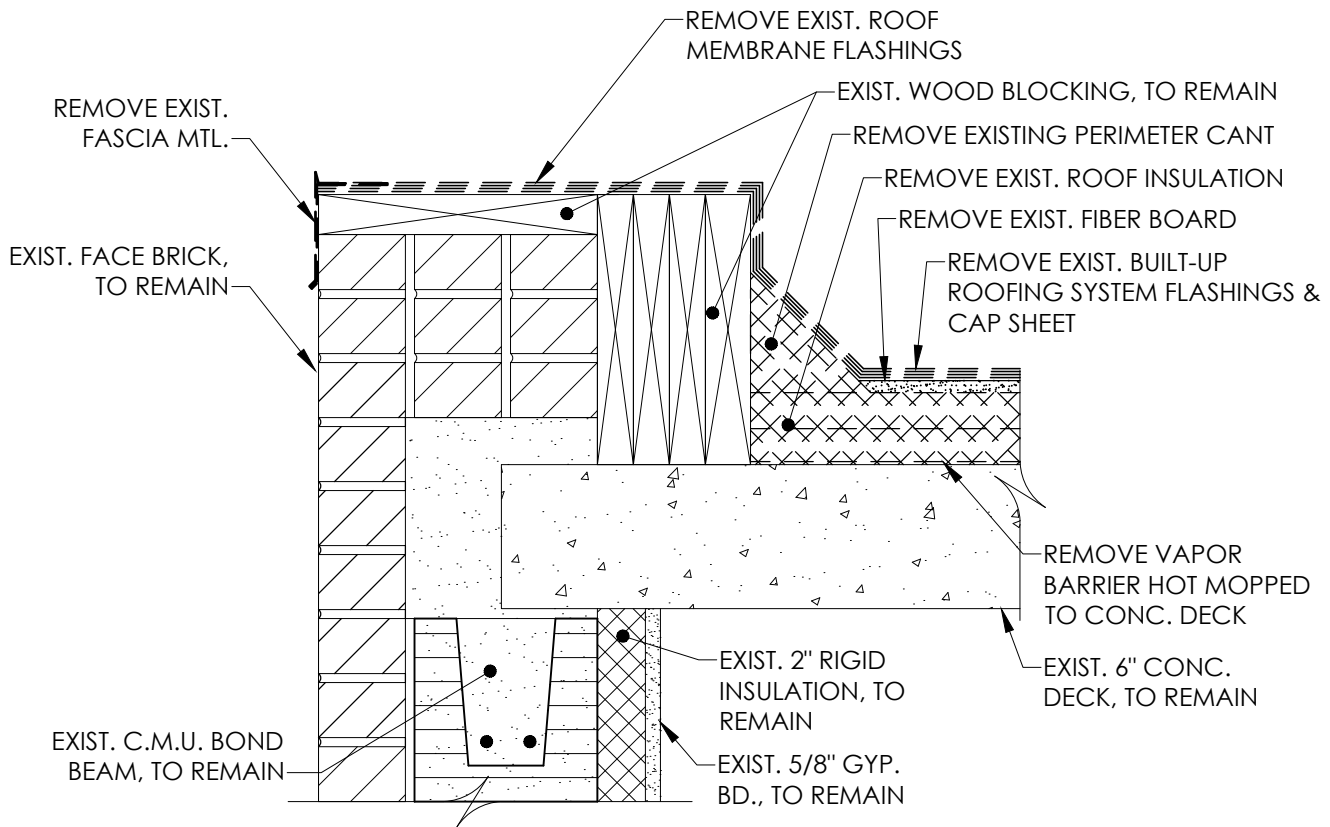
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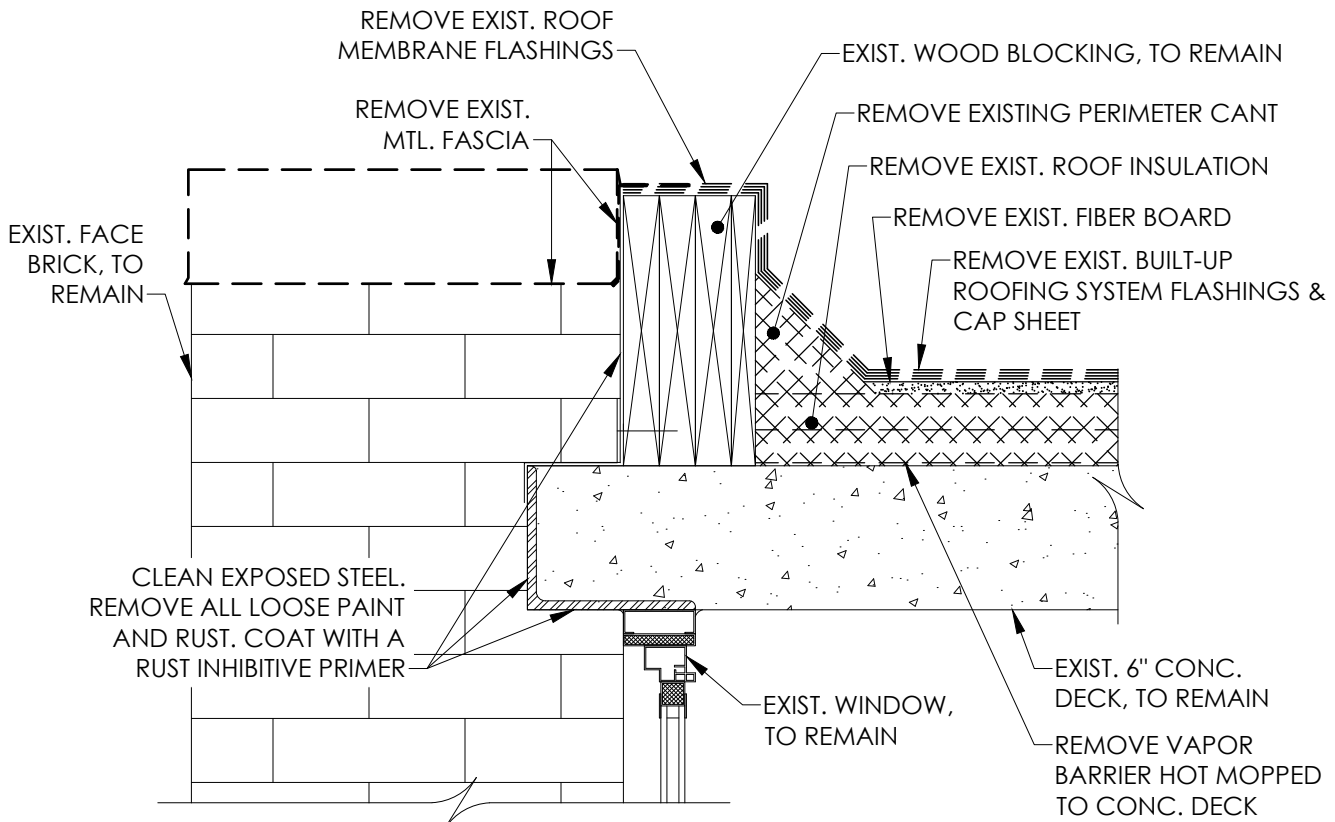




## DEMOLITION PARAPET WALL DETAIL

SCALE: 1 1/2" = 1'-0"

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| 1    |
| D2.1 |



## DEMOLITION PARAPET WALL DETAIL

SCALE: 1 1/2" = 1'-0"

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| 2    |
| D2.1 |

D2.1

PERU STATE COLLEGE  
CENTENNIAL COMPLEX - CLAYBURN AND MATHEWS  
ROOF REPLACEMENT  
PERU, NEBRASKA  
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DEMOLITION PARAPET WALL DETAILS

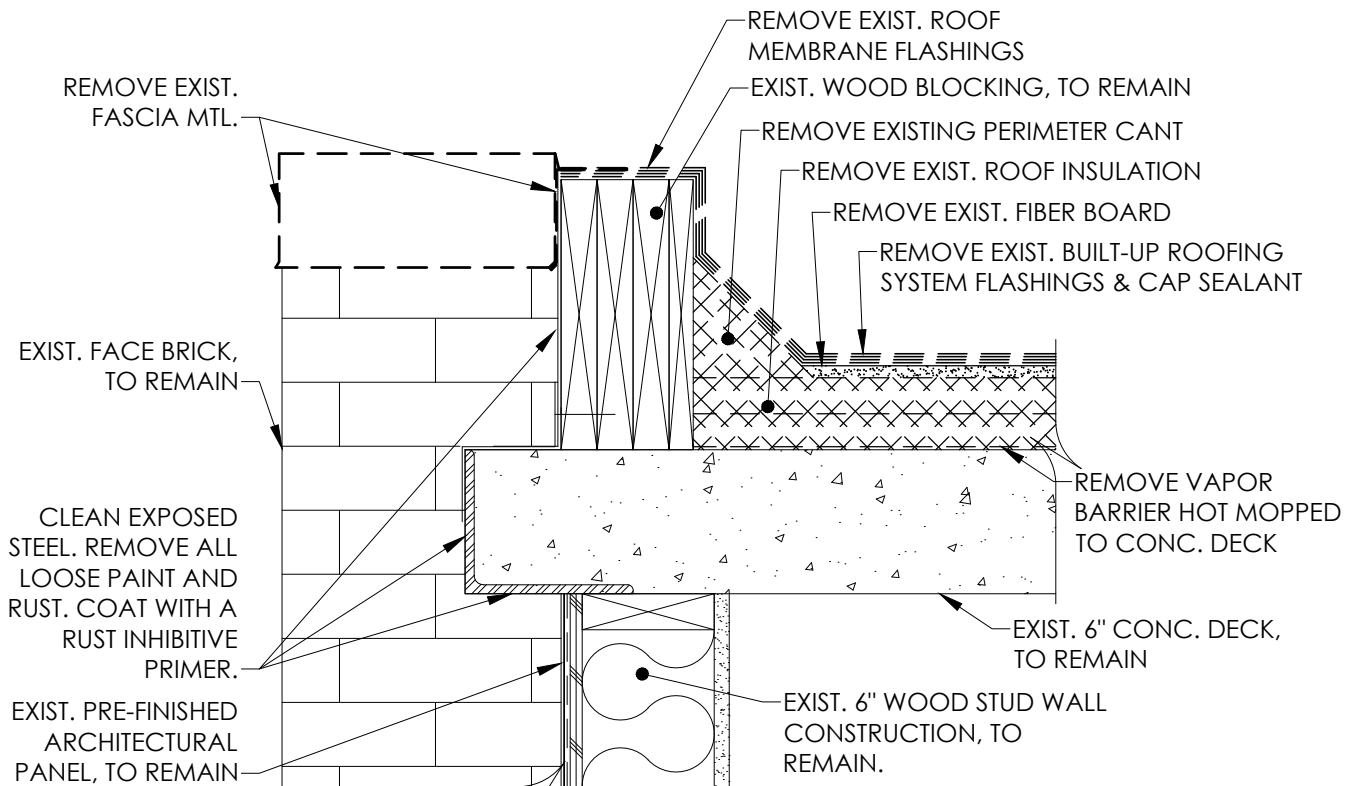
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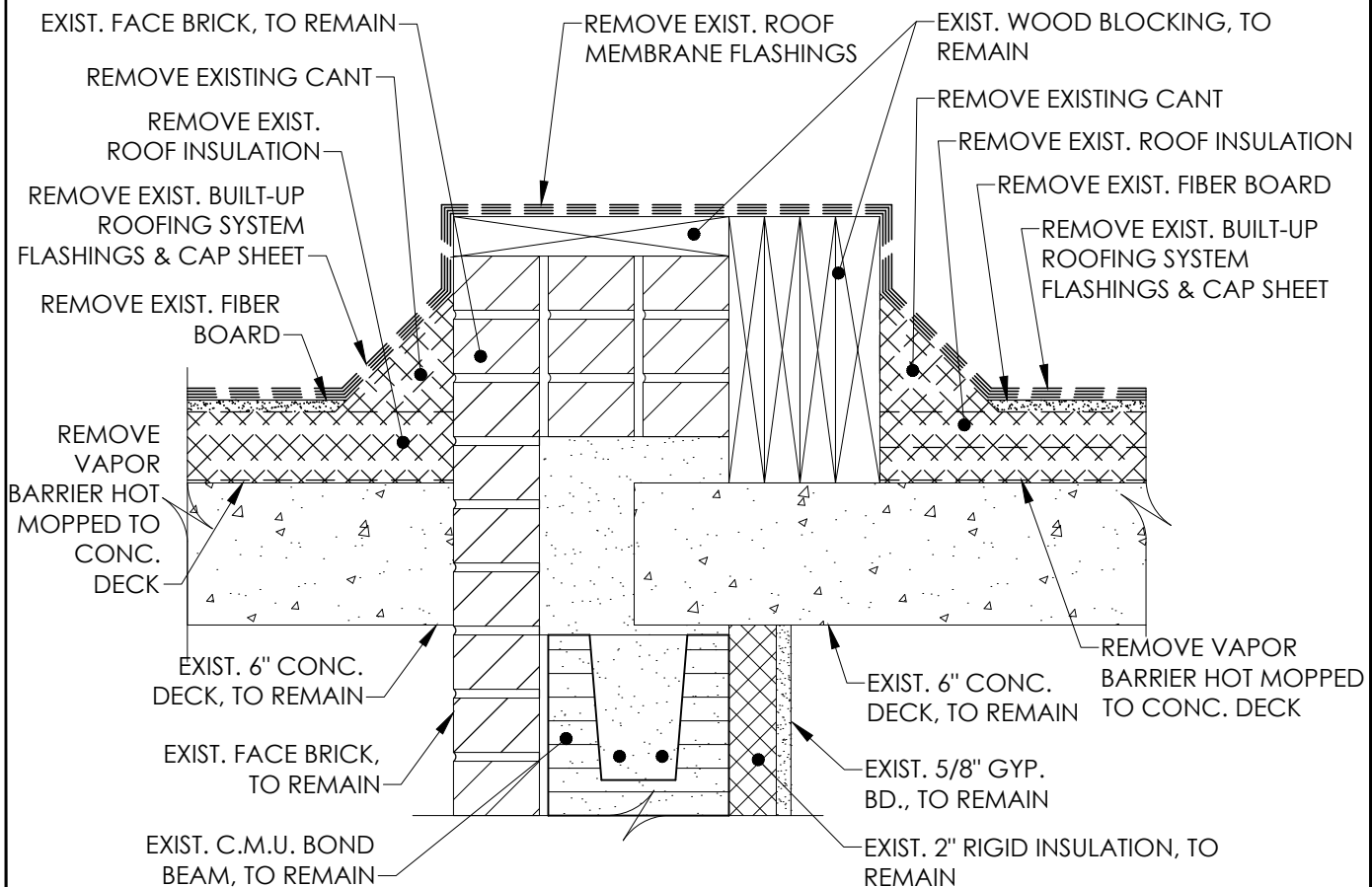
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| REV: |  |
| REV: |  |
| REV: |  |
| REV: |  |



## DEMOLITION PARAPET WALL DETAIL

SCALE: 1 1/2" = 1'-0"

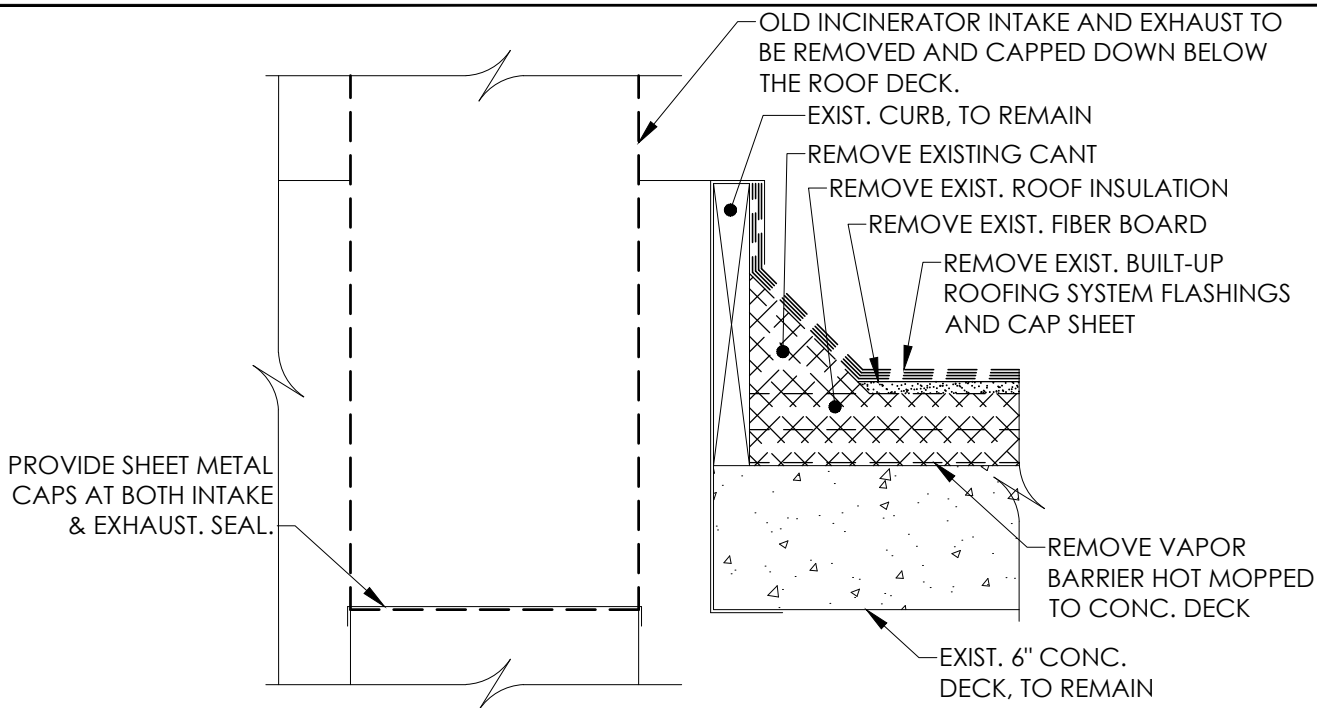
1  
D2.2



## DEMOLITION PARAPET WALL DETAIL

SCALE: 1 1/2" = 1'-0"

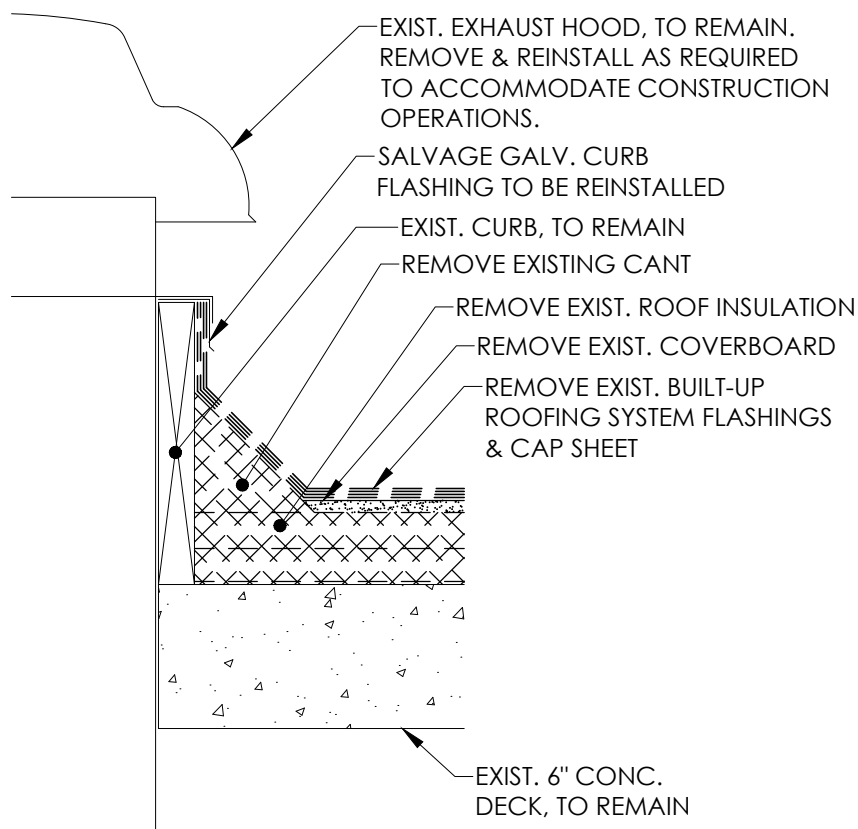
2  
D2.2



## DEMOLITION CURB DETAIL

SCALE: 1 1/2" = 1'-0"

1  
D2.3



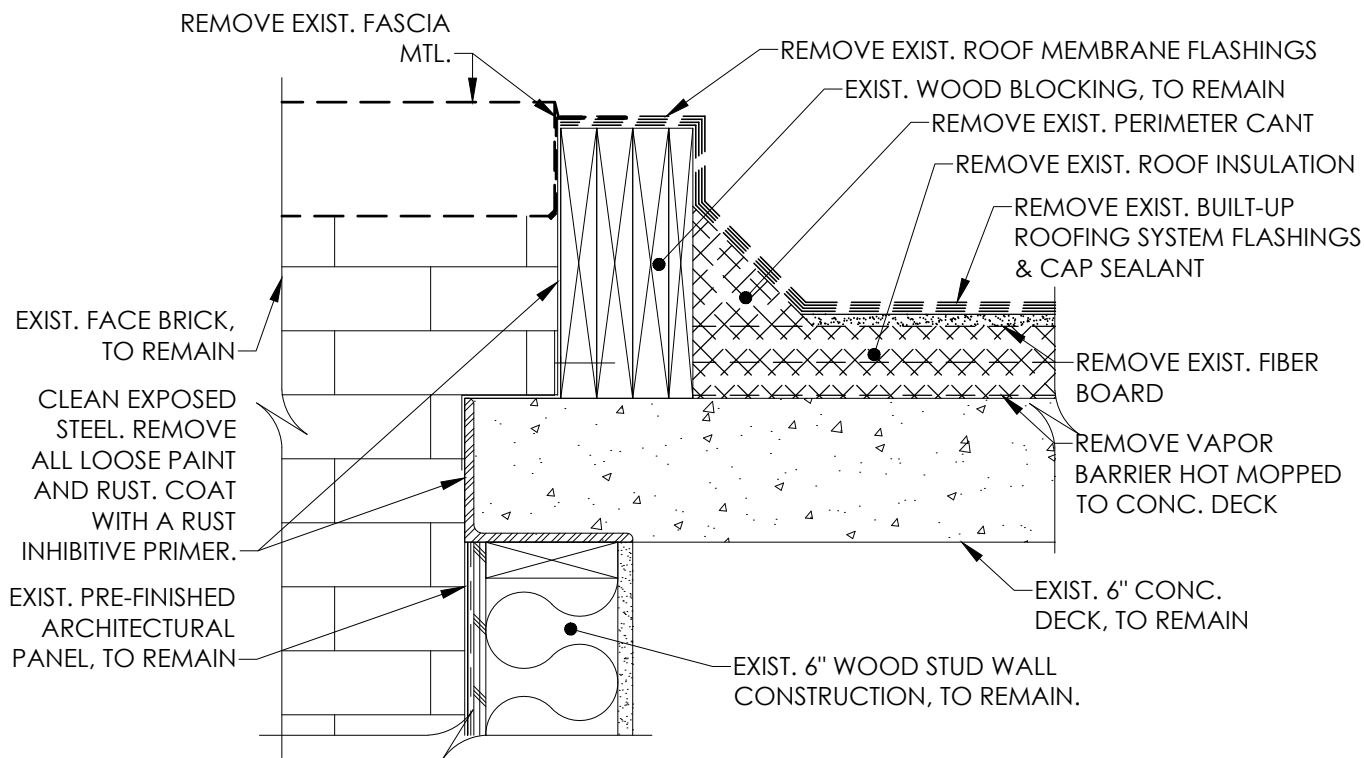
## DEMOLITION CURB DETAIL AT VENT HOOD

SCALE: 1 1/2" = 1'-0"

2  
D2.3

|                            |  |                    |  |                                           |  |                         |  |      |
|----------------------------|--|--------------------|--|-------------------------------------------|--|-------------------------|--|------|
| JOB NO. 3845               |  | DATE: 01/02/2024   |  | DESIGN: E.R.K.                            |  | PERU, NEBRASKA          |  | D2.3 |
| ARCHITECTS                 |  | PERU STATE COLLEGE |  | CENTENNIAL COMPLEX - CLAYBURN AND MATHEWS |  | ROOF REPLACEMENT        |  |      |
| JACKSON & ASSOCIATES, INC. |  | 100 HOYT ST        |  | PERU, NEBRASKA                            |  | DEMOLITION CURB DETAILS |  |      |
| REV.                       |  | REV.               |  | REV.                                      |  | REV.                    |  |      |
| REV.                       |  | REV.               |  | REV.                                      |  | REV.                    |  |      |
| REV.                       |  | REV.               |  | REV.                                      |  | REV.                    |  |      |
| REV.                       |  | REV.               |  | REV.                                      |  | REV.                    |  |      |

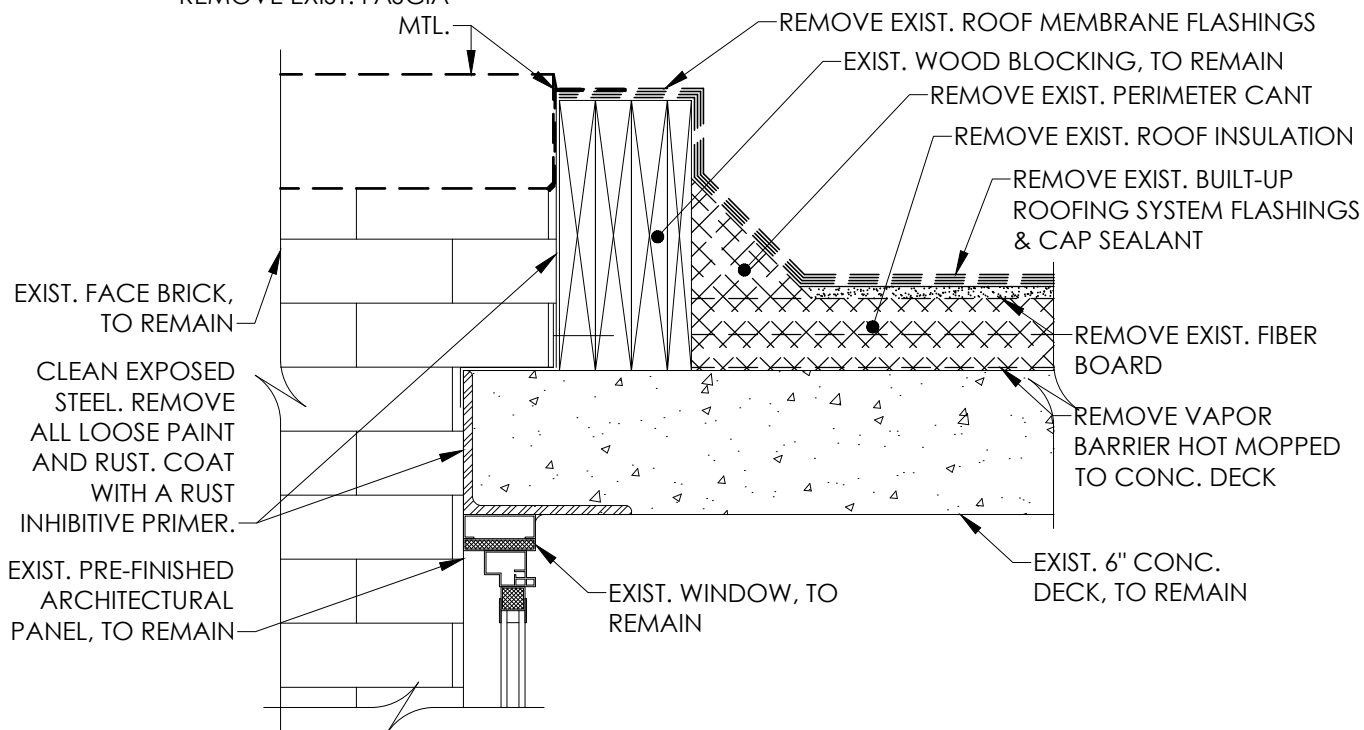




## DEMOLITION PARAPET WALL DETAIL

SCALE: 1 1/2" = 1'-0"

REMOVE EXIST. FASCIA MTL.



## DEMOLITION PARAPET WALL DETAIL

SCALE: 1 1/2" = 1'-0"

D2.4

PERU STATE COLLEGE  
CENTENNIAL COMPLEX - CLAYBURN AND MATTHEWS  
ROOF REPLACEMENT  
PERU, NEBRASKA  
100 HOYT ST  
DEMOLITION PARAPET WALL DETAILS

JOB NO. 3845  
DATE: 01/02/2024  
DESIGN: E.R.K.  
PR. BY: A.B.M.  
CHECKED: E.R.K.



JACKSON & ASSOCIATES, INC.  
1012 North 9th Street, Omaha, Nebraska 68102  
402.391.3000  
http://www.jacksonandassociates.com

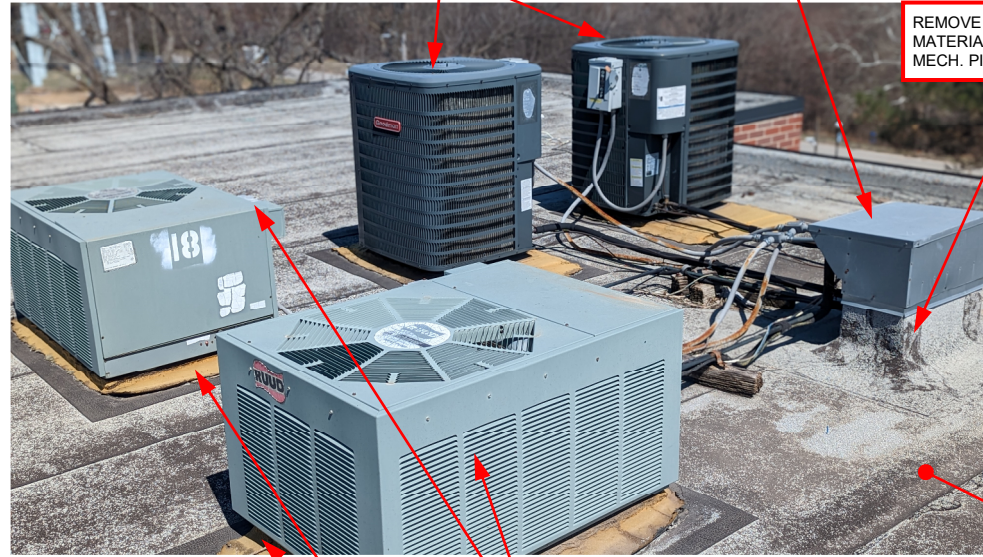
JACKSON & ASSOCIATES, INC.

|      |  |
|------|--|
| REV. |  |
| REV. |  |
| REV. |  |
| REV. |  |

1  
D2.4

2  
D2.4

Photo "A"



REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

EXISTING PIPING HOOD, TO REMAIN. REMOVE & REINSTALL AS REQUIRED TO ACCOMMODATE REMOVAL OF EXISTING ROOFING MATERIALS FROM CURB. MODIFY/RAISE EXISTING PIPING HOOD AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

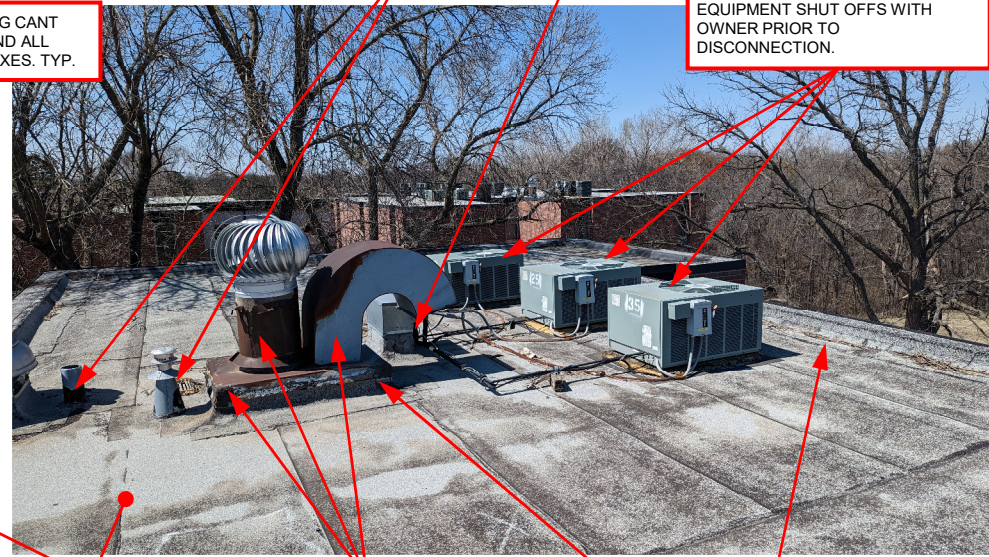
REMOVE EXISTING CANT MATERIAL AROUND ALL MECH. PIPING BOXES. TYP.

ROOF A (CLAYBURN) - NORTHEAST

REMOVE & REPLACE ALL VIBRATION ISOLATION PADS, TYP. ALL UNITS.

REMOVE AND REPLACE EXISTING HEAT PUMP UNITS WITH OWNER PROVIDED HEAT PUMPS. SALVAGE ELEC. DISCONNECTS AND REINSTALL ON NEW HEAT PUMP UNITS. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

Photo "B"



EXISTING VENT PIPE, TO REMAIN. REMOVE ALL EXISTING ROOFING MATERIALS FROM PIPE. EXTEND VENT PIPE AS REQUIRED TO PROVIDE A MIN. OF 12" ABOVE THE NEW INSULATION HEIGHT. FLASH VENT PIPE SIMILAR TO ELEVATE DETAIL P-EW-P-03.

EXISTING PIPING HOOD, TO REMAIN. REMOVE & REINSTALL AS REQUIRED TO ACCOMMODATE REMOVAL OF EXISTING ROOFING MATERIALS FROM CURB. MODIFY/RAISE EXISTING PIPING HOOD AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

REMOVE AND REPLACE EXISTING HEAT PUMP UNITS WITH OWNER PROVIDED HEAT PUMPS. SALVAGE ELEC. DISCONNECTS AND REINSTALL ON NEW HEAT PUMP UNITS. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

REMOVE EXISTING ROOFING & TAPERED INSULATION SYSTEM DOWN TO THE EXISTING CONCRETE ROOF DECK. REPLACE WITH 60 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM PER DRAWINGS AND SPECS. **ALTERNATE #1:** PROVIDE 90 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM & 30 YEAR WARRANTY DETAILS.

OLD INCINERATOR INTAKE AND EXHAUST TO BE REMOVED DOWN BELOW THE ROOF DECK. EXISTING CURB TO REMAIN. REFER TO DETAIL 2/A2.4 TO CAP CURB.

REMOVE EXIST. CANT AROUND ALL EQUIPMENT CURBS, TYP.

REMOVE EXISTING PERIMETER CANTS, TYP.

ROOF A (CLAYBURN) - NORTHWEST

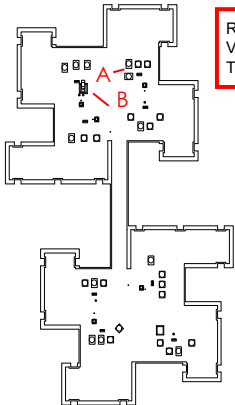




Photo "C"



REMOVE EXISTING MTL. FASCIA. REPLACE WITH SPECIFIED PREFIN. MTL. FASCIA SYSTEM.

REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

REMOVE EXIST. CANT AROUND ALL EQUIPMENT CURBS, TYP.

REMOVE EXISTING ROOFING & TAPERED INSULATION SYSTEM DOWN TO THE EXISTING CONCRETE ROOF DECK. REPLACE WITH 60 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM PER DRAWINGS & SPECS. **ALTERNATE #1:** PROVIDE 90 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM & 30 YEAR WARRANTY DETAILS.

EXIST. ROOF CURB TO REMAIN. REMOVE ALL CANT MATERIALS AROUND ALL EDGES, TYP.

EXISTING VENT PIPE, TO REMAIN. REMOVE ALL EXISTING ROOFING MATERIALS FROM VENT PIPE. EXTEND VENT PIPE AS REQUIRED TO PROVIDE A MIN. OF 12" ABOVE THE NEW INSULATION HEIGHT. FLASH VENT PIPE SIMILAR TO ELEVATE DETAIL P-EW-P-03.

ROOF A (CLAYBURN) - SOUTH

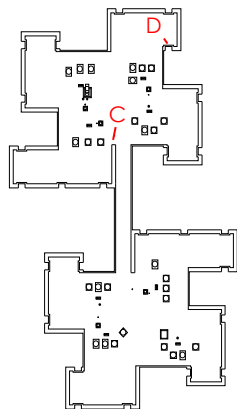
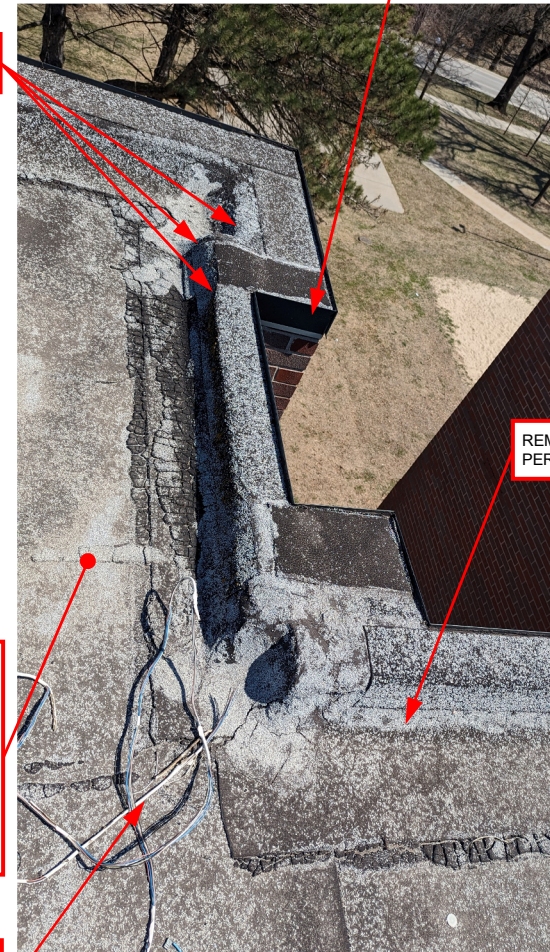


Photo "D"



REMOVE EXISTING MTL. FASCIA. REPLACE WITH SPECIFIED PREFIN. MTL. FASCIA SYSTEM.

REMOVE EXISTING MEMBRANE FLASHING

REMOVE ALL PERIMETER CANTS, TYP.

PROTECT ALL ROOF CABLING TO REMAIN. COORDINATE WITH OWNER ANY ABANDONED CABLES TO BE REMOVED.

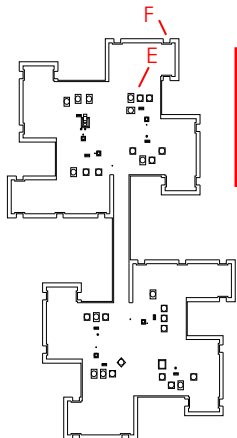
ROOF A (CLAYBURN) - NORTHEAST WINDOW



Photo "E"



ROOF A (CLAYBURN) –  
NORTHEAST LOOKING SOUTH



REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION, TYP.

REMOVE AND REPLACE EXISTING HEAT PUMP UNITS WITH OWNER PROVIDED HEAT PUMPS. SALVAGE ELEC. DISCONNECTS AND REINSTALL ON NEW HEAT PUMP UNITS. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

EXISTING VENT HOOD, TO REMAIN. REMOVE ALL ROOFING MATERIALS FROM EXISTING CURB & REMOVE CANT FROM AROUND CURB. MODIFY/RAISE EXISTING ROOF CURB IF REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

REMOVE EXIST. CANT AROUND ALL EQUIPMENT CURBS, TYP.

OLD INCINERATOR INTAKE AND EXHAUST TO BE REMOVED DOWN BELOW THE ROOF DECK. EXISTING CURB TO REMAIN. REFER TO DETAIL 2/A2.4 TO CAP CURB.

EXISTING CURB TO REMAIN. REMOVE ALL ROOFING MATERIALS FROM EXISTING CURB. MODIFY/RAISE EXISTING ROOF CURB AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

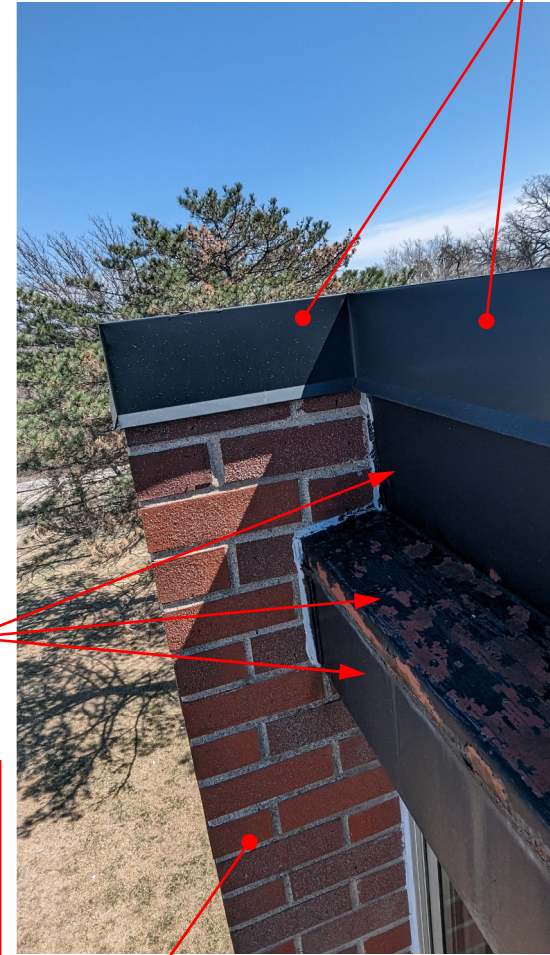
CLEAN EXPOSED STEEL. REMOVE ALL LOOSE PAINT AND RUST. COAT WITH A RUST INHIBITIVE PRIMER PRIOR TO WRAPPING WITH PREFIN. SHEET METAL.

REMOVE EXISTING ROOFING & TAPERED INSULATION SYSTEM, DOWN TO THE EXISTING CONCRETE ROOF DECK. REPLACE WITH 60 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM PER DRAWINGS & SPECS. **ALTERNATE #1:** PROVIDE 90 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM & 30 YEAR WARRANTY DETAILS.

PROTECT ALL ROOF CABLING TO REMAIN. COORDINATE WITH OWNER ANY ABANDONED CABLES TO BE REMOVED.

EXISTING PIPING HOOD, TO REMAIN. REMOVE & REINSTALL TO ACCOMMODATE REMOVAL OF EXISTING ROOFING MATERIALS FROM CURB. MODIFY/RAISE EXISTING PIPING HOOD AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

Photo "F"



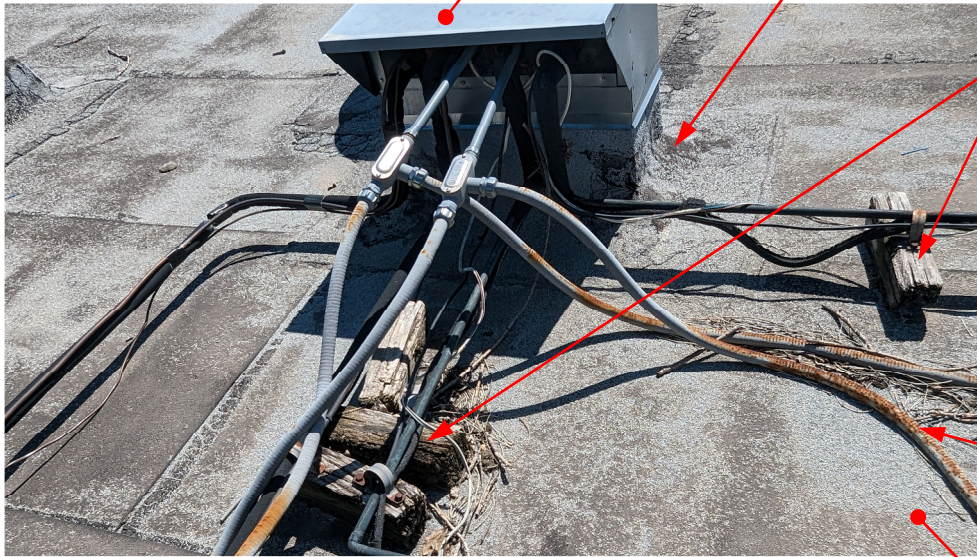
REMOVE EXIST. MTL. FASCIA. REPLACE WITH SPECIFIED PREFIN. MTL. FASCIA SYSTEM.

TYPICAL ROOF-WINDOW CONNECTION

EXIST. FACE BRICK, TO REMAIN.



Photo "G"



EXISTING PIPING HOOD, TO REMAIN. REMOVE & REINSTALL AS REQUIRED TO ACCOMMODATE REMOVAL OF EXISTING ROOFING MATERIALS FROM CURB, MODIFY/RAISE EXISTING PIPING HOOD AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

REMOVE EXISTING CANT MATERIAL AROUND ALL MECHANICAL PIPING BOXES, TYP.

REPLACE ALL 4x4 WOOD PIPE SUPPORTS WITH NEW DURA-BLOK PIPE SUPPORTS, PER SPECS.

REMOVE & REPLACE ALL VIBRATION ISOLATION PADS, TYP. ALL UNITS.

PROVIDE DURA-BLOK SUPPORTS AT CONDUITS & PIPING AS REQUIRED TO HOLD THEM ABOVE ROOF PLANE.

REMOVE EXISTING ROOFING & TAPERED INSULATION SYSTEM, DOWN TO THE EXISTING CONCRETE ROOF DECK. REPLACE WITH 60 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM PER DRAWINGS AND SPECS.  
**ALTERNATE #1:** PROVIDE 90 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM & 30 YEAR WARRANTY DETAILS.

ROOF A (CLAYBURN) – PIPING HOOD

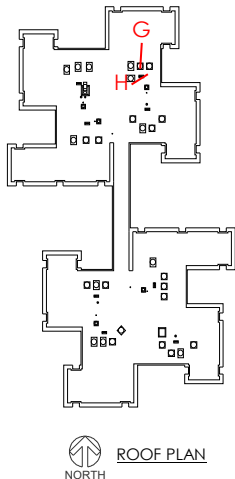
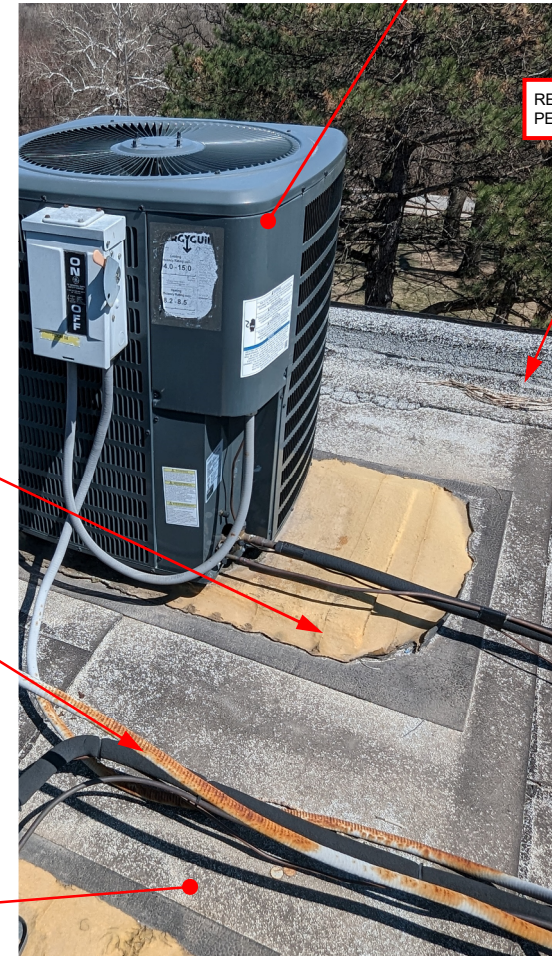


Photo "H"



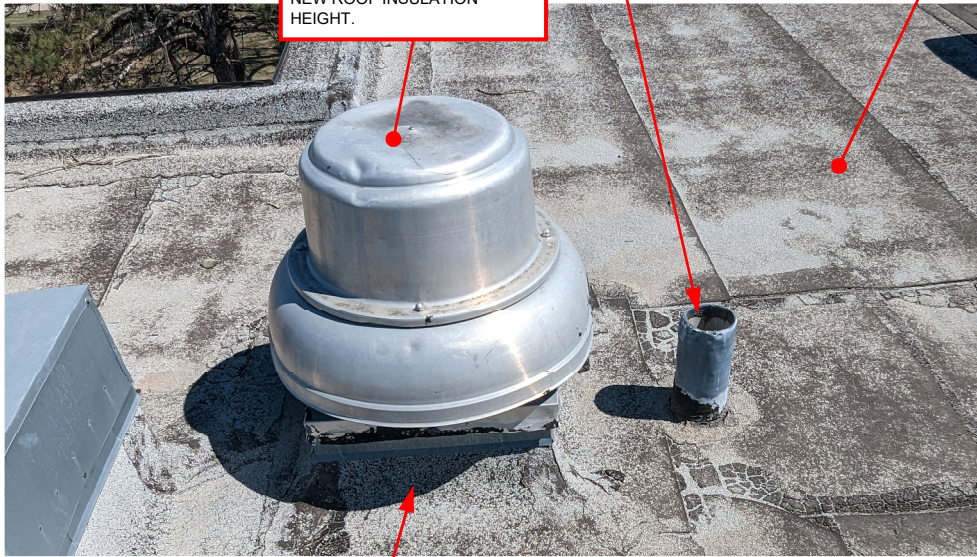
REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

REMOVE EXISTING PERIMETER CANTS, TYP.

ROOF A (CLAYBURN) – HEAT PUMP UNIT



Photo "I"



EXISTING VENT HOOD TO REMAIN. REMOVE & REINSTALL AS REQUIRED TO ACCOMMODATE REMOVAL OF ALL ROOFING MATERIALS FROM EXISTING CURB & REMOVE CANT FROM AROUND CURB. MODIFY/RAISE EXISTING ROOF CURB IF REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

EXISTING VENT PIPE, TO REMAIN. REMOVE ALL EXISTING ROOFING MATERIALS FROM VENT PIPE. EXTEND VENT PIPE AS REQUIRED TO PROVIDE A MIN. OF 12" ABOVE THE NEW INSULATION HEIGHT. FLASH VENT PIPE SIMILAR TO ELEVATE DETAIL P-EW-P-03.

REMOVE EXISTING ROOFING & TAPERED INSULATION SYSTEM, DOWN TO THE EXISTING CONCRETE ROOF DECK. REPLACE WITH 60 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM PER DRAWINGS & SPECS. **ALTERNATE #1:** PROVIDE 90 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM & 30 YEAR WARRANTY DETAILS.

ROOF A (CLAYBURN) –TYPICAL VENT HOOD AND VENT PIPE

REMOVE EXIST. CANT AROUND ALL EQUIPMENT CURBS, TYP.

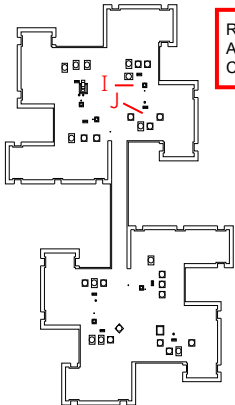
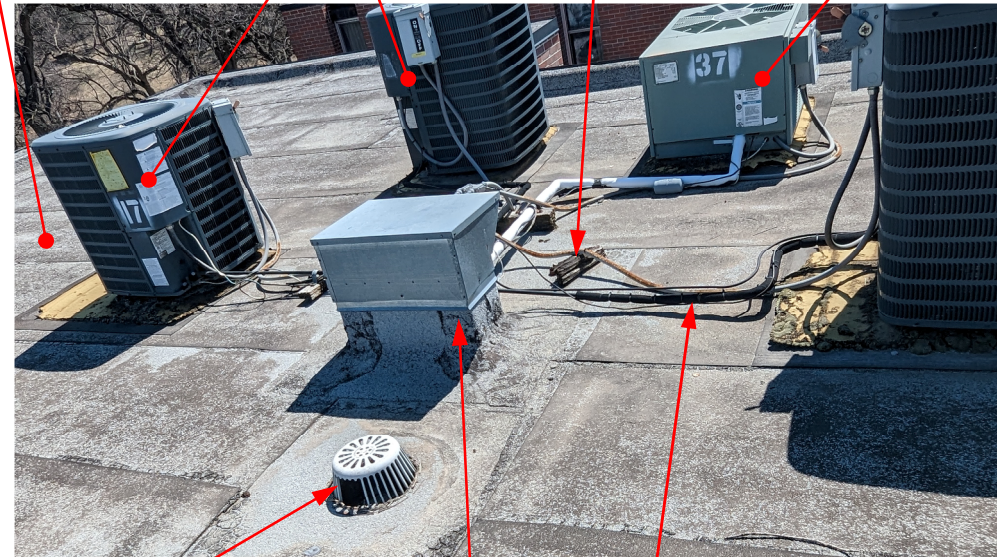


Photo "J"



REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

REPLACE ALL 4x4 WOOD PIPE SUPPORTS w/ NEW DURA-BLOK SUPPORTS PER SPEC.

REMOVE AND REPLACE EXISTING HEAT PUMP UNITS WITH OWNER PROVIDED HEAT PUMPS. SALVAGE ELEC. DISCONNECTS AND REINSTALL ON NEW HEAT PUMP UNITS. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

ROOF A (CLAYBURN) – SOUTHEAST

EXISTING ROOF DRAIN LOCATION AND EXISTING DRAIN BODY, TO REMAIN. REMOVE AND REPLACE EXISTING PLASTIC STRAINER DOME, CLAMPING RING, AND BOLTS COMPATIBLE WITH THE EXISTING DRAIN PARTS. PROVIDE A NEW 24"x24" FORMED SUMP. REFER TO ROOF DRAIN/SUMP PLAN AND DETAIL SHOWN ON SHEET A2.1.

EXISTING PIPING HOOD, TO REMAIN. REMOVE & REINSTALL AS REQUIRED TO ACCOMMODATE REMOVAL OF EXISTING ROOFING MATERIALS & CANT FROM CURB, MODIFY/RAISE EXISTING PIPING HOOD AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

PROTECT ALL PIPING, CONDUIT & CABLING ABOVE ROOF ASSEMBLY TO REMAIN. COORDINATE w/ OWNER ANY ABANDONED CABLES TO BE REMOVED, TYP.



Photo "K"



EXISTING ROOF DRAIN LOCATION AND EXISTING DRAIN BODY, TO REMAIN. REMOVE AND REPLACE EXISTING PLASTIC STRAINER DOME, CLAMPING RING, AND BOLTS COMPATIBLE WITH THE EXISTING DRAIN PARTS. PROVIDE A NEW 24"x24" FORMED SUMP. REFER TO ROOF DRAIN/SUMP PLAN AND DETAIL SHOWN ON SHEET A2.1.

REMOVE EXISTING ROOFING & TAPERED INSULATION SYSTEM, DOWN TO THE EXISTING CONCRETE ROOF DECK. REPLACE WITH 60 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM PER DRAWINGS & SPECS. **ALTERNATE #1:** PROVIDE 90 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM & 30 YEAR WARRANTY DETAILS.

REMOVE EXISTING MTL. FASCIA. REPLACE WITH SPECIFIED PREFIN. MTL. FASCIA SYSTEM.

REMOVE ALL PERIMETER CANTS, TYP.

EXIST. ROOF CURB TO REMAIN. REMOVE ALL CANT MATERIALS AROUND ALL EDGES.

REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPEMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

Photo "L"

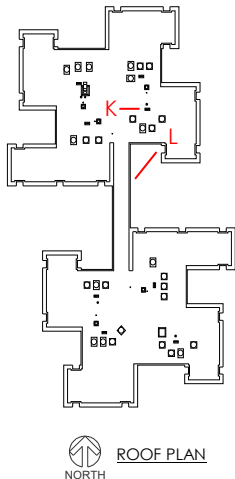


EXISTING PRE-FINISHED WALL PANELS, TO REMAIN. ADD ADDITIONAL FASTENERS @ TOP OF PANEL AS REQ'D TO ACCOMMODATE NEW PRE-FINISHED METAL FLASHING.

CLEAN EXPOSED STEEL. REMOVE ALL LOOSE PAINT AND RUST. COAT WITH A RUST INHIBITIVE PRIMER PRIOR TO WRAPPING WITH PREFIN. SHEET METAL, TYP.

CONNECTION BETWEEN ROOF A (CLAYBURN) AND ROOF B (MATHEWS)

TYPICAL ROOF DRAIN



JACKSON - JACKSON  
& ASSOCIATES, INC.



JOB NO: 3645  
DATE: 01/02/2024  
DESIGN: E.R.K.  
DR. BY: A.B.M.  
CHECKED: E.R.K.

PERU STATE COLLEGE  
CENTENNIAL COMPLEX - CLAYBURN AND MATHEWS  
ROOF REPLACEMENT  
PERU, NEBRASKA  
PHOTOS "K" & "L"



REMOVE AND REPLACE EXISTING HEAT PUMP UNITS WITH OWNER PROVIDED HEAT PUMPS. SALVAGE ELEC. DISCONNECTS AND REINSTALL ON NEW HEAT PUMP UNITS. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

Photo "M"



EXISTING PIPING HOOD, TO REMAIN. REMOVE & REINSTALL AS REQUIRED TO ACCOMMODATE REMOVAL OF EXISTING ROOFING MATERIALS FROM CURB. MODIFY/RAISE EXISTING PIPING HOOD AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

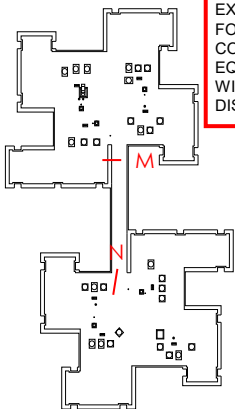
EXISTING VENT HOOD, TO REMAIN. REMOVE ALL ROOFING MATERIALS FROM EXISTING CURB & REMOVE CANT FROM AROUND CURB. MODIFY/RAISE EXISTING ROOF CURB IF REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

OLD INCINERATOR INTAKE AND EXHAUST TO BE REMOVED DOWN BELOW THE ROOF DECK. EXISTING CURB TO REMAIN. REFER TO DETAIL 2/A2.4 TO CAP CURB.

ROOF A (CLAYBURN) -  
SOUTHWEST

EXISTING VENT PIPE, TO REMAIN. REMOVE EXISTING ROOFING MATERIALS FROM CURB. MODIFY/RAISE EXISTING PIPING HOOD AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION, TYP.



ROOF PLAN  
NORTH

EXISTING PIPING HOOD, TO REMAIN. REMOVE & REINSTALL AS REQUIRED TO ACCOMMODATE REMOVAL OF EXISTING ROOFING MATERIALS FROM CURB. MODIFY/RAISE EXISTING PIPING HOOD AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

Photo "N"



REMOVE AND REPLACE EXISTING HEAT PUMP UNITS WITH OWNER PROVIDED HEAT PUMPS. SALVAGE ELEC. DISCONNECTS AND REINSTALL ON NEW HEAT PRIOR TO DISCONNECTION, TYP.

EXISTING VENT HOOD, TO REMAIN. REMOVE ALL ROOFING MATERIALS FROM EXISTING CURB & REMOVE CANT FROM AROUND CURB. MODIFY/RAISE EXISTING ROOF CURB IF REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

REMOVE AND REPLACE EXISTING HEAT PUMP UNITS WITH OWNER PROVIDED HEAT PUMPS. SALVAGE ELEC. DISCONNECTS AND REINSTALL ON NEW HEAT PUMP UNITS. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

REMOVE EXISTING ROOFING & TAPERED INSULATION SYSTEM DOWN TO THE EXISTING CONCRETE ROOF DECK. REPLACE WITH 60 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM PER DRAWINGS & SPECS.  
**ALTERNATE #1:** PROVIDE 90 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM & 30 YEAR WARRANTY DETAILS.

REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION, TYP.

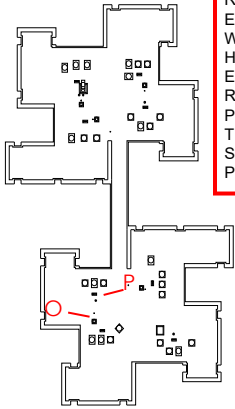
ROOF B (MATHIEWS) - NORTH  
LOOKING SOUTH



Photo "O"



ROOF B (MATHEWS) - SOUTHWEST



REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

EXISTING VENT HOOD, TO REMAIN. REMOVE ALL ROOFING MATERIALS FROM EXISTING CURB & REMOVE CANT FROM AROUND CURB. MODIFY/RAISE EXISTING ROOF CURB IF REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

EXISTING ROOF ACCESS HATCH AND CURB, TO REMAIN. REMOVE EXISTING ROOFING MATERIALS FROM CURB. MODIFY/RAISE EXISTING CURB AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

REMOVE EXISTING CANT AROUND ALL MECH. PIPING BOXES, TYP.

REMOVE AND REPLACE EXISTING HEAT PUMP UNITS WITH OWNER PROVIDED HEAT PUMPS. SALVAGE ELEC. DISCONNECTS AND REINSTALL ON NEW HEAT PUMP UNITS. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

EXISTING PIPING HOOD TO REMAIN. REMOVE & REINSTALL AS REQUIRED TO ACCOMMODATE REMOVAL OF EXISTING ROOFING MATERIALS FROM CURB. MODIFY/RAISE EXISTING PIPING HOOD AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

REMOVE EXISTING ROOFING & TAPERED INSULATION SYSTEM DOWN TO THE EXISTING CONCRETE ROOF DECK. REPLACE WITH 60 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM PER DRAWINGS & SPECS.  
**ALTERNATE #1:** PROVIDE 90 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM & 30 YEAR WARRANTY DETAILS.

Photo "P"



ROOF B (MATHEWS) - NORTHEAST

EXISTING VENT PIPE, TO REMAIN. REMOVE ALLEXISTING ROOFING MATERIALS FROM VENT PIPE AS REQUIRED TO PROVIDE A MIN. OF 12" ABOVE THE NEW INSULATION HEIGHT. FLASH VENT PIPE SIMILAR TO ELEVATE DETAIL P-EW-P-03.

EXISTING ROOF DRAIN LOCATION AND EXISTING DRAIN BODY, TO REMAIN. REMOVE AND REPLACE EXISTING PLASTIC STRAINER DOME, CLAMPING RING AND BOLTS COMPATIBLE WITH THE EXISTING DRAIN PARTS. PROVIDE A NEW 24"x24" FORMED SUMP. REFER TO ROOF DRAIN/SUMP PLAN AND DETAIL SHOWN ON SHEET A2.1.

REMOVE AND REPLACE EXISTING HEAT PUMP UNITS WITH OWNER PROVIDED HEAT PUMPS. SALVAGE ELEC. DISCONNECTS AND REINSTALL ON NEW HEAT PUMP UNITS. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

EXISTING PIPING HOOD TO REMAIN. REMOVE & REINSTALL AS REQUIRED TO ACCOMMODATE REMOVAL OF EXISTING ROOFING MATERIALS FROM CURB. MODIFY/RAISE EXISTING PIPING HOOD AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION, TYP.

PROTECT ALL PIPING, CONDUIT & CABLING ABOVE ROOF ASSEMBLY TO REMAIN. COORDINATE W/ OWNER ANY ABANDONED CABLES TO BE REMOVED, TYP.



PROTECT ALL PIPING, CONDUIT & CABLING ABOVE ROOF ASSEMBLY TO REMAIN. COORDINATE W/ OWNER ANY ABANDONED CABLES TO BE REMOVED, TYP.

REMOVE AND REPLACE EXISTING HEAT PUMP UNITS WITH OWNER PROVIDED HEAT PUMPS. SALVAGE ELEC. DISCONNECTS AND REINSTALL ON NEW HEAT PUMP UNITS. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

EXISTING VENT HOOD, TO REMAIN. REMOVE ALL ROOFING MATERIALS FROM EXISTING CURB & REMOVE CANT FROM AROUND CURB. MODIFY/RAISE EXISTING ROOF CURB IF REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

EXISTING VENT PIPE, TO REMAIN. REMOVE ALL EXISTING ROOFING MATERIALS FROM VENT PIPE. EXTEND VENT PIPE AS REQUIRED TO PROVIDE A MIN. OF 12" ABOVE THE NEW INSULATION HEIGHT. FLASH VENT PIPE SIMILAR TO ELEVATE DETAIL P-EW-P-03.

REMOVE AND REPLACE EXISTING HEAT PUMP UNITS WITH OWNER PROVIDED HEAT PUMPS. SALVAGE ELEC. DISCONNECTS AND REINSTALL ON NEW HEAT PUMP UNITS. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

EXISTING VENT HOOD, TO REMAIN. REMOVE ALL ROOFING MATERIALS FROM EXISTING CURB & REMOVE CANT FROM AROUND CURB. MODIFY/RAISE EXISTING ROOF CURB IF REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

Photo "Q"



Photo "R"



## ROOF B (MATHEWS) - SOUTHWEST

REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

EXISTING PIPING HOOD TO REMAIN. REMOVE EXISTING ROOFING MATERIALS FROM CURB. MODIFY/RAISE EXISTING PIPING HOOD AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

REPLACE ALL 4x4 WOOD PIPE SUPPORTS W/ NEW DURA-BLOK SUPPORTS PER SPEC.

REMOVE EXISTING ROOFING & TAPERED INSULATION SYSTEM DOWN TO THE EXISTING CONCRETE ROOF DECK. REPLACE WITH 60 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM PER DRAWINGS & SPECS. **ALTERNATE #1:** PROVIDE 90 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM & 30 YEAR WARRANTY DETAILS.

EXISTING VENT HOOD, TO REMAIN. REMOVE ALL ROOFING MATERIALS FROM EXISTING CURB AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

EXISTING PIPING HOOD TO REMAIN. REMOVE & REINSTALL AS REQUIRED TO ACCOMMODATE REMOVAL OF EXISTING ROOFING MATERIALS FROM CURB. MODIFY/RAISE EXISTING PIPING HOOD AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION, TYP.

## ROOF B (MATHEWS) - SOUTHWEST

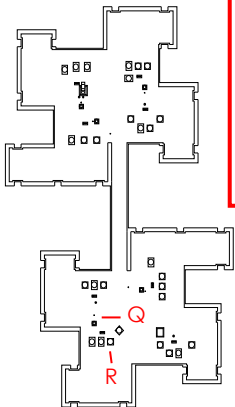




Photo "S"

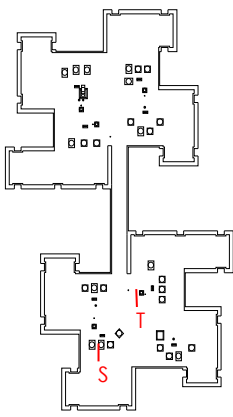


Photo "T"



**ROOF B (MATHEWS) –  
SOUTHWEST LOOKING  
NORTH**

**ROOF B (MATHEWS) –  
NORTHEAST LOOKING  
NORTH**



REMOVE EXIST. MTL. FASCIA. REPLACE WITH SPECIFIED PREFIN. MTL. FASCIA SYSTEM.

REMOVE AND REPLACE EXISTING HEAT PUMP UNITS WITH OWNER PROVIDED HEAT PUMPS. SALVAGE ELEC. DISCONNECTS AND REINSTALL ON NEW HEAT PUMP UNITS. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION, TYP.

EXISTING PIPING HOOD, TO REMAIN. REMOVE & REINSTALL AS REQUIRED TO ACCOMMODATE REMOVAL OF EXISTING ROOFING MATERIALS FROM CURB. MODIFY/RAISE EXISTING PIPING HOOD AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

PROVIDE DURA-BLOK SUPPORTS AT CONDUITS & PIPING AS REQUIRED TO HOLD THEM ABOVE ROOF PLANE.

REMOVE ALL PERIMETER CANTS, TYP.

REMOVE EXIST. MTL. FASCIA. REPLACE WITH SPECIFIED PREFIN. MTL. FASCIA SYSTEM.

EXISTING VENT HOOD, TO REMAIN. REMOVE ALL ROOFING MATERIALS FROM EXISTING CURB & REMOVE CANT FROM AROUND CURB. MODIFY/RAISE EXISTING ROOF CURB IF REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

PROTECT ALL PIPING, CONDUIT & CABLING ABOVE ROOF ASSEMBLY TO REMAIN. COORDINATE W/ OWNER ANY ABANDONED CABLES TO BE REMOVED, TYP.

REMOVE ALL PERIMETER CANTS, TYP.

REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION, TYP.

EXISTING VENT HOOD, TO REMAIN. REMOVE ALL ROOFING MATERIALS FROM EXISTING CURB & REMOVE CANT FROM AROUND CURB. MODIFY/RAISE EXISTING ROOF CURB IF REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

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EXIST. ROOF CURB TO REMAIN. REMOVE ALL CANT MATERIAL AROUND ALL EDGES, TYP.

EXISTING VENT PIPE, TO REMAIN. REMOVE ALL EXISTING ROOFING MATERIALS FROM VENT PIPE. EXTEND VENT PIPE AS REQUIRED TO PROVIDE A MIN OF 12" ABOVE THE NEW INSULATION HEIGHT. FLASH VENT PIPE SIMILAR TO ELEVATE DETAIL P-EW-P-03.



REMOVE AND REPLACE EXISTING HEAT PUMP UNITS WITH OWNER PROVIDED HEAT PUMPS. SALVAGE ELEC. DISCONNECTS AND REINSTALL ON NEW HEAT PUMP UNITS. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

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REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION, TYP.

REPLACE ALL WOOD 4x4 PIPE SUPPORTS WITH NEW DURA-BLOK PIPE SUPPORTS.

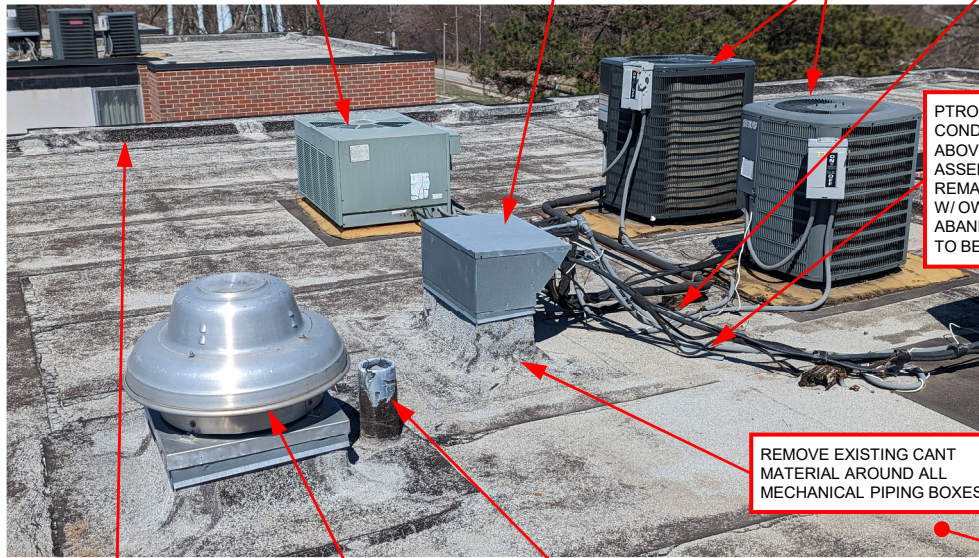
REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION, TYP.

REMOVE EXISTING PERIMETER CANTS, TYP.

EXISTING VENT HOOD, TO REMAIN. REMOVE ALL ROOFING MATERIALS FROM EXISTING CURB & REMOVE CANT FROM AROUND CURB. MODIFY/RAISE EXISTING ROOF CURB IF REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

Photo "U"

Photo "V"



PROTECT ALL PIPING, CONDUIT & CABLING ABOVE ROOF ASSEMBLY TO REMAIN. COORDINATE W/ OWNER ANY ABANDONED CABLES TO BE REMOVED, TYP.

REMOVE EXISTING CANT MATERIAL AROUND ALL MECHANICAL PIPING BOXES, TYP.

REMOVE EXISTING PERIMETER CANTS, TYP.

EXISTING VENT HOOD, TO REMAIN. REMOVE ALL ROOFING MATERIALS FROM EXISTING CURB & REMOVE CANT FROM AROUND CURB. MODIFY/RAISE EXISTING ROOF CURB IF REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

### ROOF B (MATHEWS) - NORTHEAST

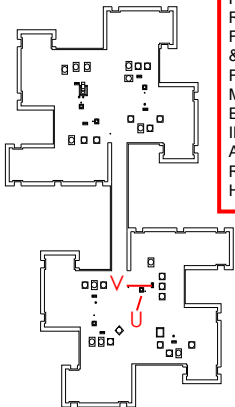
EXISTING VENT PIPE, TO REMAIN. REMOVE ALL EXISTING ROOFING MATERIALS FROM VENT PIPE. EXTEND VENT PIPE AS REQUIRED TO PROVIDE A MIN. OF 12" ABOVE THE NEW INSULATION HEIGHT. FLASH VENT PIPE SIMILAR TO ELEVATE DETAIL P-EW-P-03.

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EXISTING PIPING HOOD, TO REMAIN. REMOVE & REINSTALL AS REQUIRED TO ACCOMMODATE REMOVAL OF EXISTING ROOFING MATERIALS FROM CURB. MODIFY/RAISE EXISTING PIPING HOOD AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

REMOVE & REPLACE ALL VIBRATION ISOLATION PADS, TYP. ALL UNITS.

### ROOF B (MATHEWS) - NORTHEAST





EXISTING PIPING HOOD, TO REMAIN. REMOVE & REINSTALL AS REQUIRED TO ACCOMMODATE REMOVAL OF EXISTING ROOFING MATERIALS FROM CURB. MODIFY/RAISE EXISTING PIPING HOOD AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION, TYP.

REMOVE AND REPLACE EXISTING HEAT PUMP UNITS WITH OWNER PROVIDED HEAT PUMPS. SALVAGE ELEC. DISCONNECTS AND REINSTALL ON NEW HEAT PUMP UNITS. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION, TYP.

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PROVIDE DURA-BLOK SUPPORTS AT CONDUITS & PIPING AS REQUIRED TO HOLD THEM ABOVE ROOF PLANE.

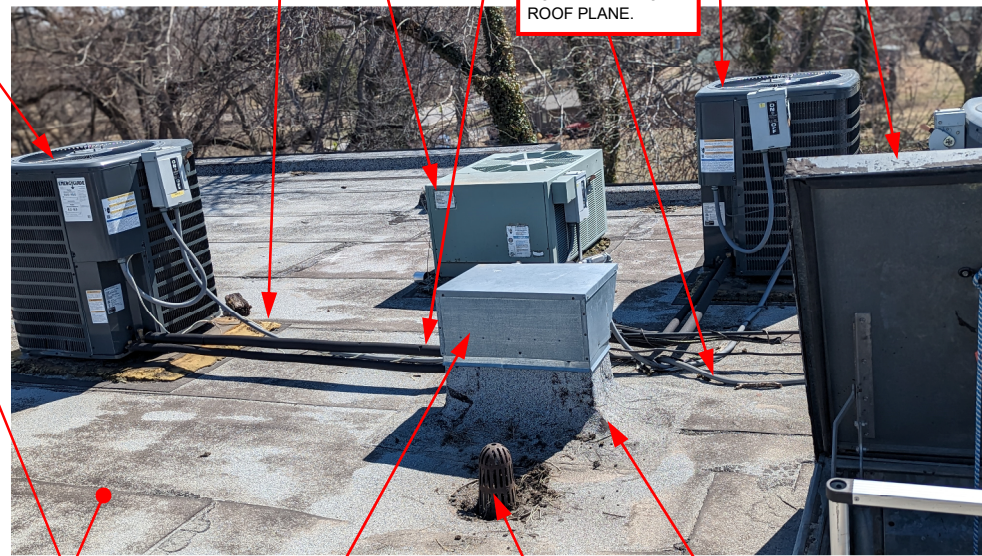
REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION, TYP.

EXISTING ROOF ACCESS HATCH AND CURB, TO REMAIN. REMOVE EXISTING ROOFING MATERIALS FROM CURB. RAISE/MODIFY EXISTING CURB AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

Photo "W"



Photo "X"



REMOVE EXISTING PERIMETER CANTS, TYP.

**ROOF B (MATHEWS) - NORTHWEST**

REMOVE EXISTING MTL. FASCIA. REPLACE WITH SPECIFIED PREFIN. MTL. FASCIA SYSTEM

EXISTING PRE-FINISHED WALL PANELS, TO REMAIN. ADD ADDITIONAL FASTENERS @ TOP OF PANEL AS REQUIRED TO ACCOMMODATE NEW PRE-FINISHED METAL FLASHING.

CLEAN EXPOSED STEEL. REMOVE ALL LOOSE PAINT AND RUST. COAT WITH A RUST INHIBITIVE PRIMER PRIOR TO WRAPPING WITH PREIN. SHEET METAL, TYP.

REMOVE EXISTING ROOFING & TAPERED INSULATION SYSTEM DOWN TO THE EXISTING CONCRETE ROOF DECK. REPLACE WITH 60 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM PER DRAWINGS & SPECS.  
**ALTERNATE #1:** PROVIDE 90 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM & 30 YEAR WARRANTY DETAILS.

EXISTING PIPING HOOD, TO REMAIN. REMOVE & REINSTALL AS REQUIRED TO ACCOMMODATE REMOVAL OF EXISTING ROOFING MATERIALS FROM CURB. MODIFY/RAISE EXISTING PIPING HOOD AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

EXISTING ROOF DRAIN LOCATION AND EXISTING DRAIN BODY, TO REMAIN. REMOVE AND REPLACE EXISTING CLAMPING RING, AND BOLTS COMPATIBLE WITH THE EXISTING DRAIN PARTS. CAST IRON STRAINER DOME CAN BE REUSED. PROVIDE A NEW 24"x24" FORMED SUMP. REFER TO ROOF DRAIN/SUMP PLAN AND DETAIL SHOWN ON SHEET A2.1.

REMOVE EXISTING CANT MATERIAL AROUND ALL MECHANICAL PIPING BOXES, TYP.

**ROOF B (MATHEWS) - SOUTHEAST**

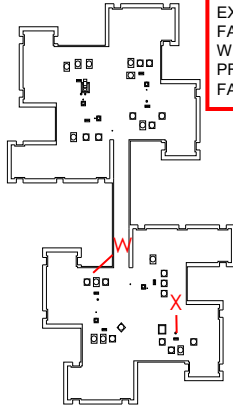




Photo "Y"

REMOVE AND SALVAGE EXISTING HEAT PUMP UNIT FOR REINSTALLATION. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION, TYP.

REMOVE AND REPLACE EXISTING HEAT PUMP UNITS WITH OWNER PROVIDED HEAT PUMPS. SALVAGE ELEC. DISCONNECTS AND REINSTALL ON NEW HEAT PUMP UNITS. COORDINATE TEMPORARY EQUIPMENT SHUT OFFS WITH OWNER PRIOR TO DISCONNECTION.

EXISTING ROOF DRAIN LOCATION AND EXISTING DRAIN BODY, TO REMAIN. REMOVE AND REPLACE EXISTING CLAMPING RING AND BOLTS COMPATIBLE WITH THE EXISTING DRAIN PARTS. CAST IRON STRAINER DOME CAN BE REUSED. PROVIDE A NEW 24"x24" FORMED SUMP. REFER TO ROOF DRAIN/SUMP PLAN AND DETAIL SHOWN ON SHEET A2.1.

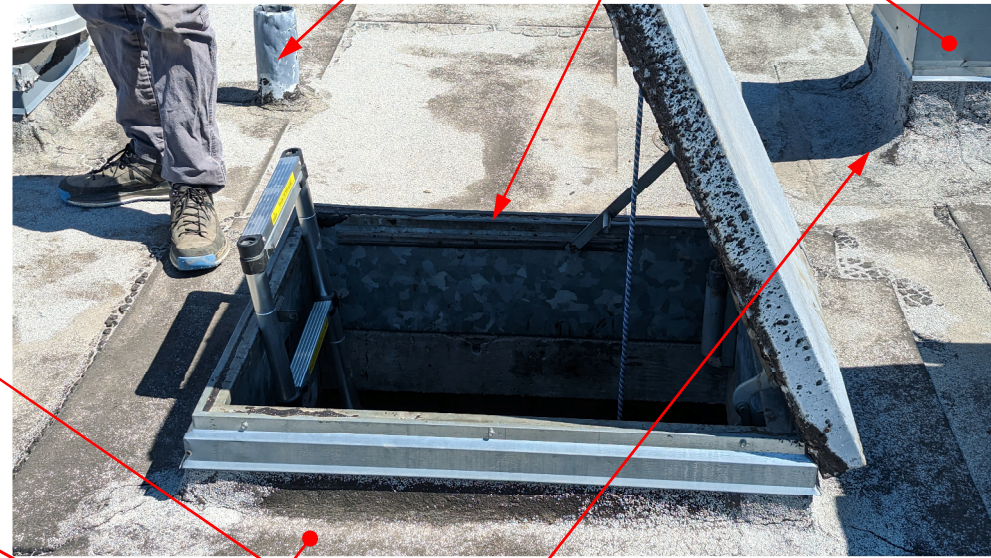


Photo "Z"

EXISTING VENT PIPE, TO REMAIN. REMOVE ALL EXISTING ROOFING MATERIALS FROM VENT PIPE. EXTEND VENT PIPE AS REQUIRED TO PROVIDE A MIN. OF 12" ABOVE THE NEW INSULATION HEIGHT. FLASH VENT PIPE SIMILAR TO ELEVATE DETAIL P-EW-P-03.

EXISTING ROOF ACCESS HATCH AND CURB, TO REMAIN. REMOVE EXISTING ROOFING MATERIALS FROM CURB. RAISE/MODIFY EXISTING CURB AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.

EXISTING PIPING HOOD, TO REMAIN. REMOVE & REINSTALL AS REQUIRED TO ACCOMMODATE REMOVAL OF EXISTING ROOFING MATERIALS FROM CURB. MODIFY/RAISE EXISTING PIPING HOOD AS REQUIRED TO ACCOMMODATE NEW ROOF INSULATION HEIGHT.



### ROOF B (MATHEWS) - SOUTHEAST

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PROVIDE DURA-BLOK SUPPORTS AT CONDUITS & PIPING AS REQUIRED TO HOLD THEM ABOVE ROOF PLANE.

REMOVE EXISTING ROOFING & TAPERED INSULATION SYSTEM DOWN TO THE EXISTING CONCRETE ROOF DECK. REPLACE WITH 60 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM PER DRAWINGS & SPECS. **ALTERNATE #1:** PROVIDE 90 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM & 30 YEAR WARRANTY DETAILS.

REMOVE EXISTING CANT MATERIAL AROUND ALL MECHANICAL PIPING BOXES, TYP.

### ROOF B (MATHEWS) - ROOF HATCH

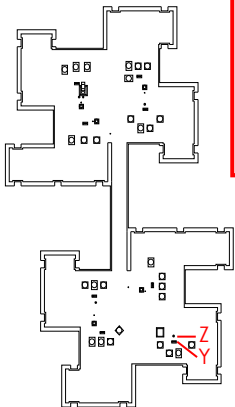




Photo "AA"

CLEAN EXPOSED STEEL. REMOVE ALL LOOSE PAINT AND RUST. COAT WITH A RUST INHIBITIVE PRIMER PRIOR TO WRAPPING WITH PREFIN. SHEET METAL, TYP.

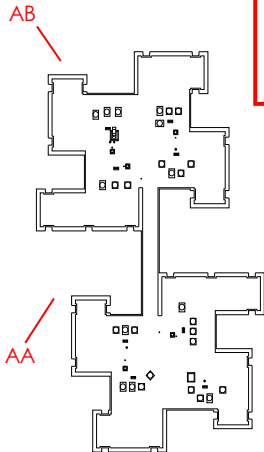
EXISTING PRE-FINISHED WALL PANELS, TO REMAIN. ADD ADDITIONAL FASTENERS @ TOP OF PANEL AS REQUIRED TO ACCOMMODATE NEW PRE-FINISHED METAL FLASHING.

CLEAN EXPOSED STEEL. REMOVE ALL LOOSE PAINT AND RUST. COAT WITH A RUST INHIBITIVE PRIMER PRIOR TO WRAPPING WITH PREFIN. SHEET METAL, TYP.



PROTECT ALL EXISTING CONC. PAVING & LANDSCAPING AROUND BUILDINGS. REPLACE ALL DAMAGED FINISHES TO MATCH EXISTING.

## CONNECTION BETWEEN CLAYBURN AND MATHEWS



ROOF PLAN  
NORTH

Photo "AB"

CLEAN EXPOSED STEEL. REMOVE ALL LOOSE PAINT AND RUST. COAT WITH A RUST INHIBITIVE PRIMER PRIOR TO WRAPPING WITH PREFIN. SHEET METAL, TYP.

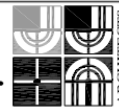


PROTECT ALL EXISTING CONC. PAVING & LANDSCAPING AROUND BUILDINGS. REPLACE ALL DAMAGED FINISHES TO MATCH EXISTING.

EXISTING PRE-FINISHED WALL PANELS, TO REMAIN. ADD ADDITIONAL FASTENERS @ TOP OF PANEL AS REQUIRED TO ACCOMMODATE NEW PRE-FINISHED METAL FLASHING.

## CLAYBURN - NORTHWEST

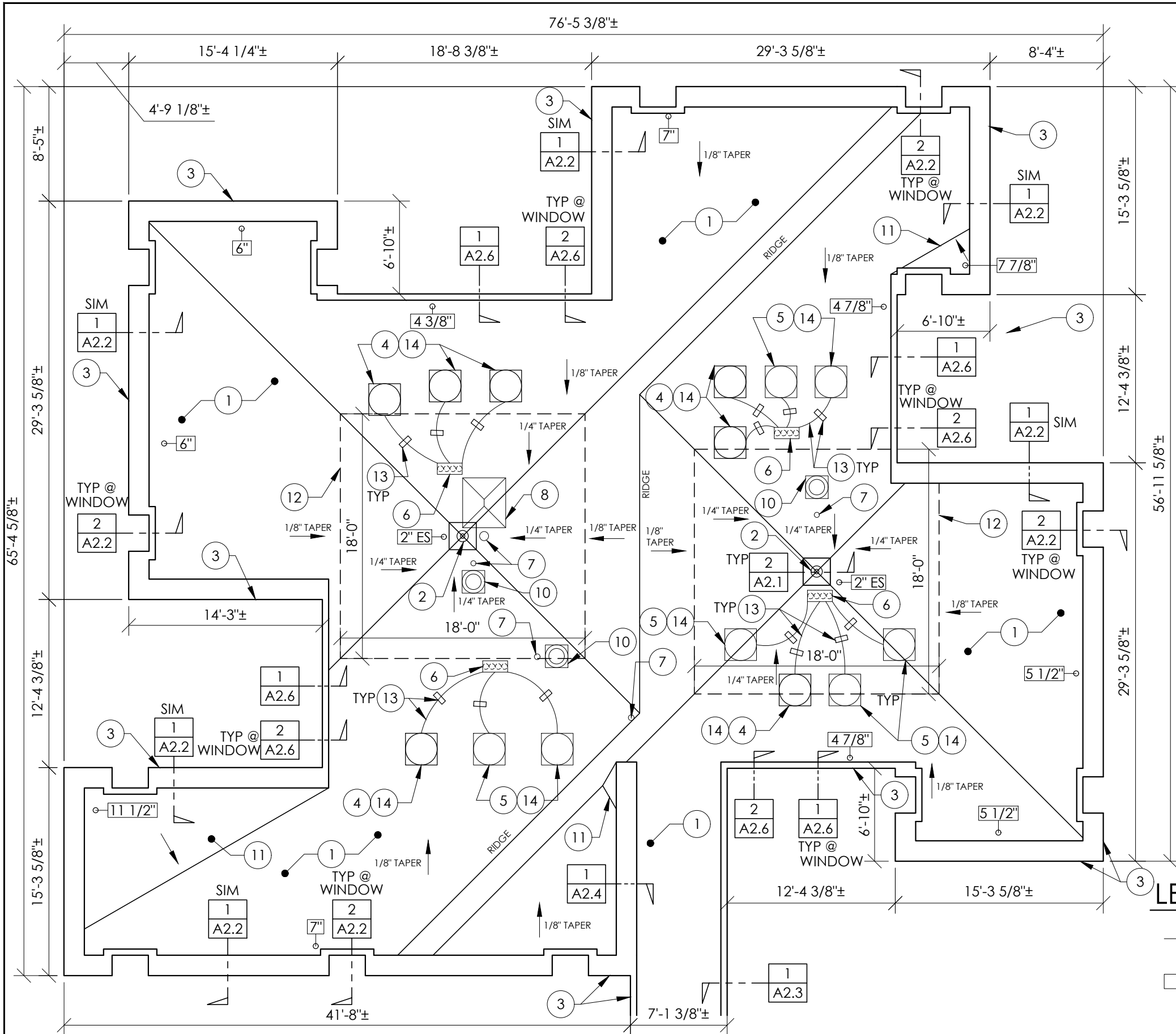
JACKSON - JACKSON  
& ASSOCIATES, INC.



JOB NO: 3645  
DATE: 01/02/2024  
DESIGN: E.R.K.  
DR. BY: A.B.M.  
CHECKED: E.R.K.

PERU STATE COLLEGE  
CENTENNIAL COMPLEX - CLAYBURN AND MATHEWS  
ROOF REPLACEMENT  
600 HOYT ST  
PERU, NEBRASKA  
PHOTOS "AA" & "AB"

P1.14

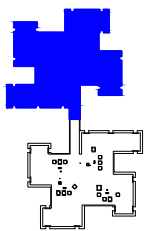


## KEYED NOTES

- 60 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM PER DRAWINGS AND SPECIFICATIONS. **ALTERNATE #1:** PROVIDE 90 MIL. FULLY ADHERED EPDM MEMBRANE SYSTEM AND 30 YEAR WARRANTY DETAILS.
- EXISTING ROOF DRAIN LOCATION. INSTALL NEW CAST IRON STRAINER DOME, CLAMPING RING, AND BOLTS COMPATIBLE WITH THE EXISTING DRAIN PARTS. PROVIDE A NEW 24"x24" FORMED SUMP. REFER TO ROOF DRAIN/SUMP PLAN AND DETAIL SHOWN ON SHEET A2.1.
- NEW PRE-FINISHED EDGE METAL SYSTEM AS SPECIFIED, TYPICAL.
- INSTALL NEW OWNER PROVIDED HEAT PUMP UNIT. PROVIDE 4"x4" TREATED LUMBER SUPPORT RAILS WITH SLIP SHEET BETWEEN LUMBER AND VIBRATION ISOLATION PAD. REINSTALL THE EXISTING ELEC. DISCONNECT ON THE NEW HEAT PUMP UNIT.
- REINSTALL HEAT PUMP UNIT. PROVIDE NEW 4"x4" TREATED LUMBER SUPPORT RAILS WITH SLIP SHEET BETWEEN LUMBER AND VIBRATION ISOLATION PAD.
- EXISTING PIPING HOOD. REINSTALL AS REQUIRED IF REMOVED TO ACCOMMODATE NEW ROOF INSULATION HEIGHTS.
- EXISTING VENT PIPE. EXTEND VENT PIPE AS REQUIRED TO PROVIDE A MIN. OF 12" ABOVE THE NEW INSULATION HEIGHT. FLASH VENT PIPE SIMILAR TO ELEVATE DETAIL P-EW-P-03.
- EXISTING OLD INCINERATOR INTAKE AND EXHAUST CURB TO REMAIN. REFER TO DETAIL 2/A2.4 TO CAP CURB.
- NOT USED ON THIS SHEET.
- EXISTING EXHAUST HOOD.
- 1/2" TAPERED POLYISO. INSUL. CRICKET.
- TRANSITION OF TAPER FROM 1/4" TAPERED POLYISO. INSULATION TO 1/8" TAPERED POLYISO INSULATION.
- NEW DURA-BLOK PIPE SUPPORTS TO REPLACE 4x4 WOOD SUPPORTS. PROVIDE DURA-BLOK SUPPORTS AT CONDUITS AND PIPING TO HOLD THEM ABOVE ROOF PLANE, REFER TO SPECS.
- NEW VIBRATION ISOLATION PAD, TYP. ALL UNITS, REFER TO SPECS.

## LEGEND

- WATER FLOW DIRECTION OF TAPERED INSULATION SYSTEM
- X" INDICATES DISTANCE FROM TOP OF ROOF DECK TO THE TOP OF THE 1/2" COVER BOARD.
- ES THICKNESS OF INSULATION BOARD AND 1/2" COVER BOARD AT EDGE OF SUMP



ROOF PLAN - AREA "A"

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

1  
A1.1



KEY PLAN

NORTH SCALE: N.T.S.

A1.1

PERU STATE COLLEGE  
CENTENNIAL COMPLEX - CLAYBURN AND MATHEWS  
ROOF REPLACEMENT  
PERU, NEBRASKA

3645  
DATE: 01/02/2024  
DESIGN: E.B.K. 400 HOYT ST  
BY: A.B.M.  
CHECKED: E.B.K.

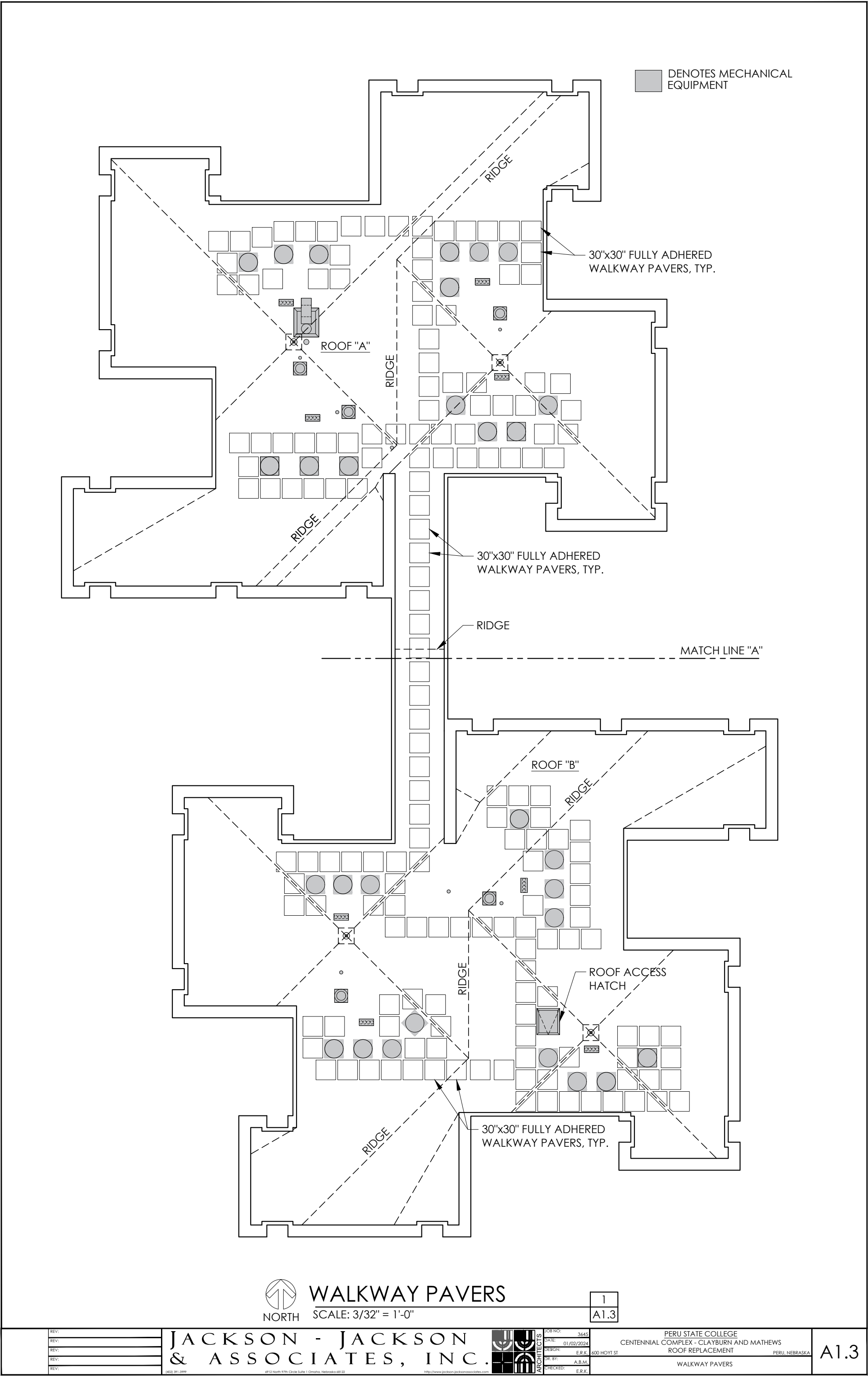


JACKSON - JACKSON & ASSOCIATES, INC.  
ARCHITECTS  
1875 NORTH 77TH STREET, SUITE 300, CHICAGO, ILLINOIS 60632  
407.731.3999  
http://www.jackson-jackson.com

REV: 1  
REV: 2  
REV: 3  
REV: 4







■ DENOTES MECHANICAL EQUIPMENT

ROOF "A"

30"x30" FULLY ADHERED WALKWAY PAVERS, TYP.

30"x30" FULLY ADHERED WALKWAY PAVERS, TYP.

MATCH LINE "A"

ROOF "B"

ROOF ACCESS HATCH

30"x30" FULLY ADHERED WALKWAY PAVERS, TYP.



# WALKWAY PAVERS

SCALE: 3/32" = 1'-0"

1  
A1.3

|      |  |
|------|--|
| REV: |  |
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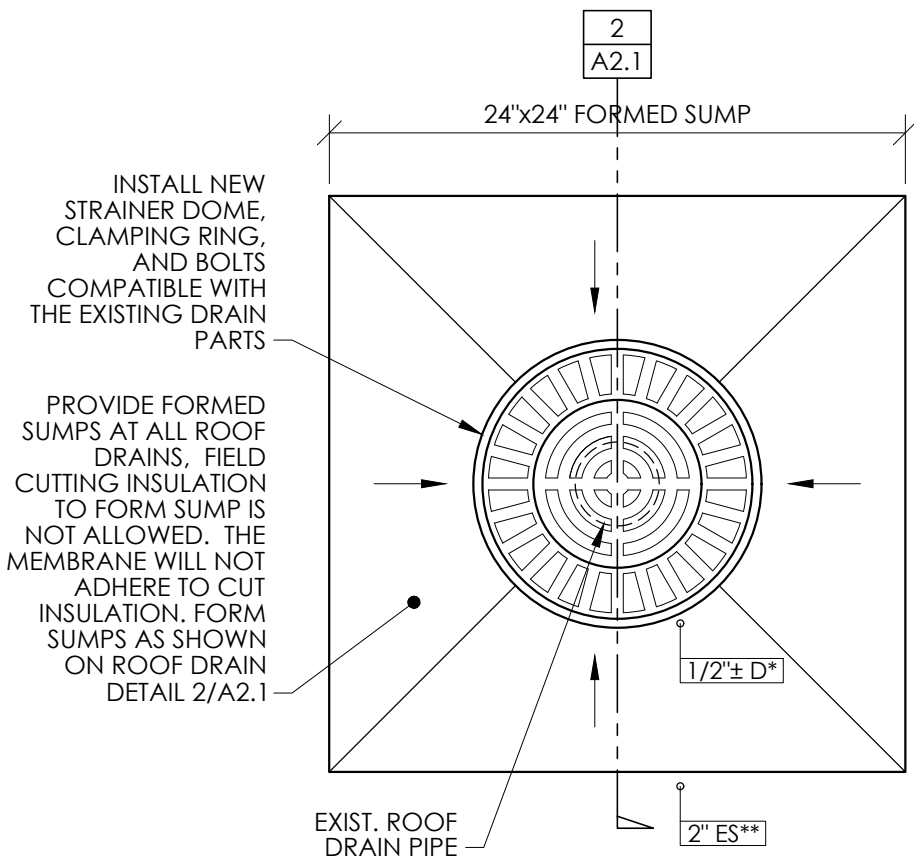
JACKSON - JACKSON  
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|          |            |
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| DR. BY:  | A.B.M.     |
| CHECKED: | E.R.K.     |

|                                           |                |
|-------------------------------------------|----------------|
| PERU STATE COLLEGE                        | PERU, NEBRASKA |
| CENTENNIAL COMPLEX - CLAYBURN AND MATHEWS |                |
| ROOF REPLACEMENT                          |                |
| WALKWAY PAVERS                            |                |

A1.3



## ROOF DRAIN / SUMP PLAN

SCALE: 1 1/2" = 1'-0"

1  
A2.1

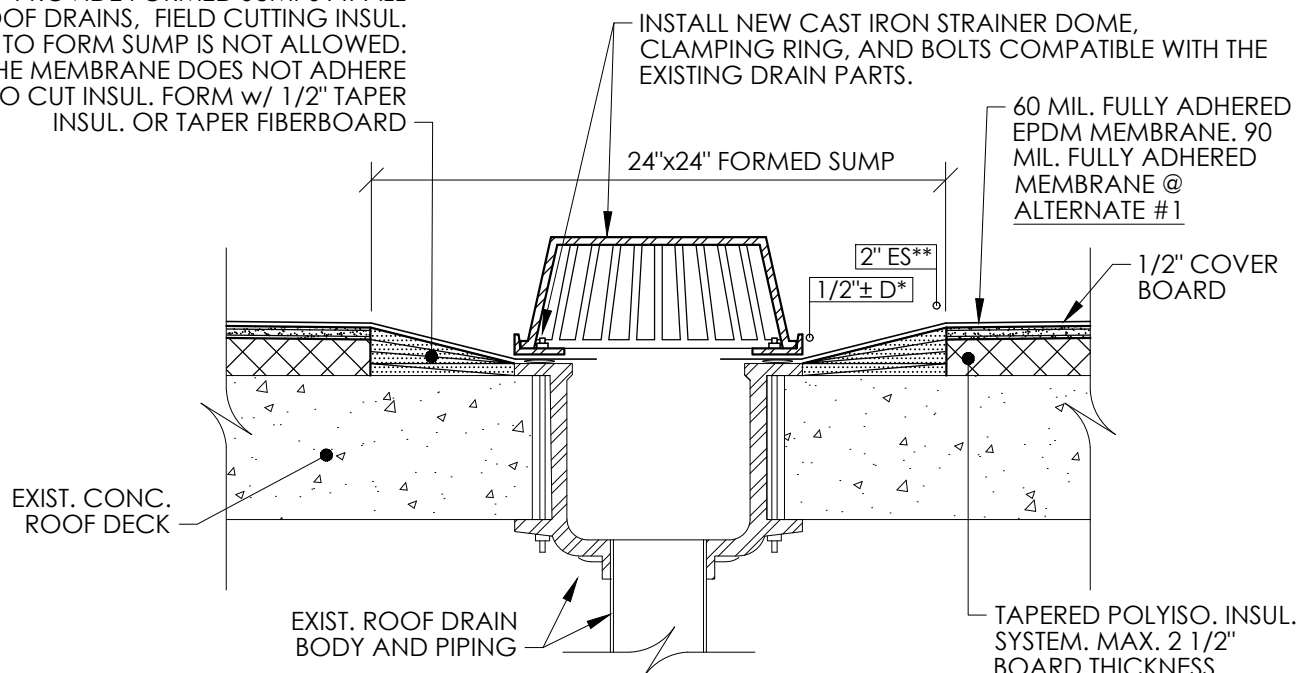
## LEGEND

- WATER FLOW DIRECTION OF FORM DRAIN SUMP
- X" INDICATES DISTANCE FROM TOP OF ROOF DECK TO THE TOP OF THE 1/2" COVER BOARD.
- D THICKNESS OF INSULATION BOARD AT EDGE OF DRAIN
- ES THICKNESS OF INSULATION BOARD AND 1/2" COVER BOARD AT EDGE OF SUMP

### DETAIL NOTES:

- \* EXACT HEIGHT OF EXIST. DRAIN BODY IS UNKNOWN. THE CONTRACTOR SHALL ADJUST INSULATION/TAPER BOARD AT SUMP AS REQUIRED TO ACCOMM. ACTUAL DRAIN HEIGHT/LOCATION.
- \*\* PROVIDE AN AREA-WEIGHTED R-VALUE OF R-30 THERMAL RESISTANCE OVER ALL CONDITIONED SPACES AS REQUIRED BY THE NEBRASKA DEPARTMENT OF ENERGY.

PROVIDE FORMED SUMPS AT ALL ROOF DRAINS, FIELD CUTTING INSUL. TO FORM SUMP IS NOT ALLOWED. THE MEMBRANE DOES NOT ADHERE TO CUT INSUL. FORM w/ 1/2" TAPER INSUL. OR TAPER FIBERBOARD



## ROOF DRAIN / SUMP DETAIL

SCALE: 1 1/2" = 1'-0"

2  
A2.1

A2.1

PERU STATE COLLEGE  
CENTENNIAL COMPLEX - CLAYBURN AND MATHEWS  
ROOF REPLACEMENT  
PERU, NEBRASKA  
800 HOYT ST  
ROOF DRAIN / SUMP PLAN AND DETAIL

LOG NO: 3645  
DATE: 01/02/2024  
DESIGN: E.R.K.  
DRAWN: A.B.M.  
CHECKED: E.R.K.

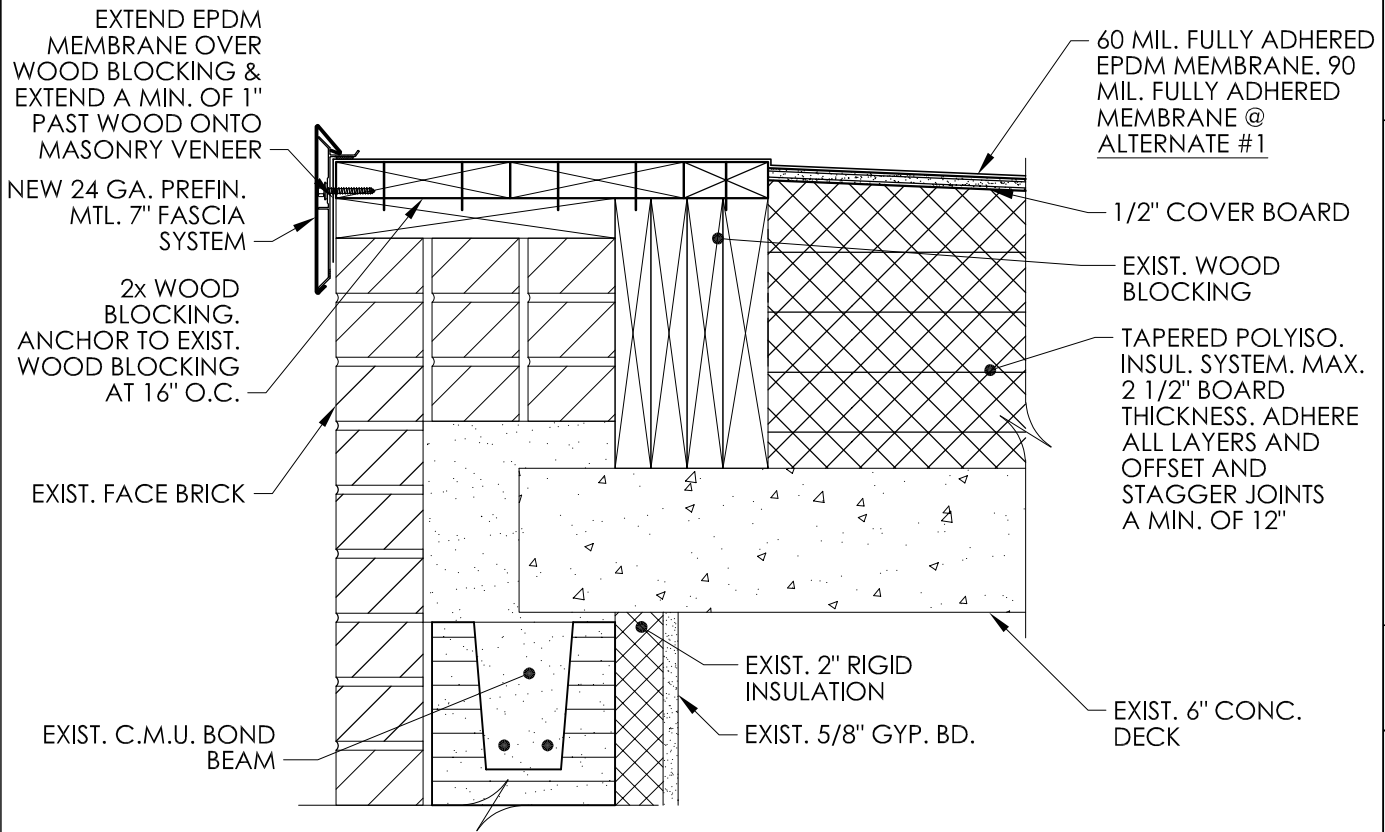


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http://www.jackson-jackson.com

8912 North 97th Circle Suite 1 Omaha, Nebraska 68122

603.391.3089

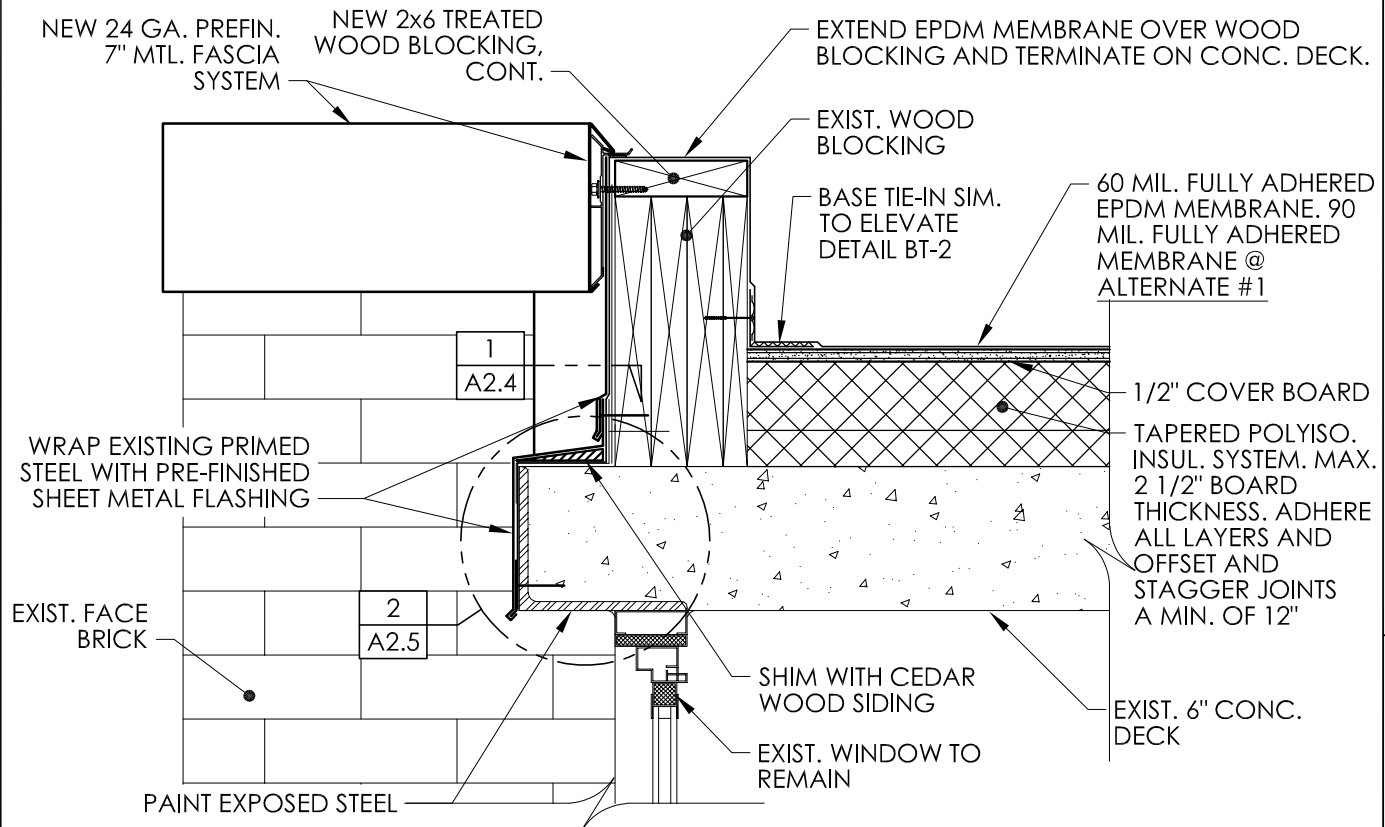
REV: 1  
REV: 2  
REV: 3  
REV: 4



## PARAPET WALL DETAIL

SCALE: 1 1/2" = 1'-0"

1  
A2.2



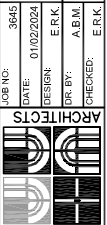
## PARAPET WALL DETAIL

SCALE: 1 1/2" = 1'-0"

2  
A2.2

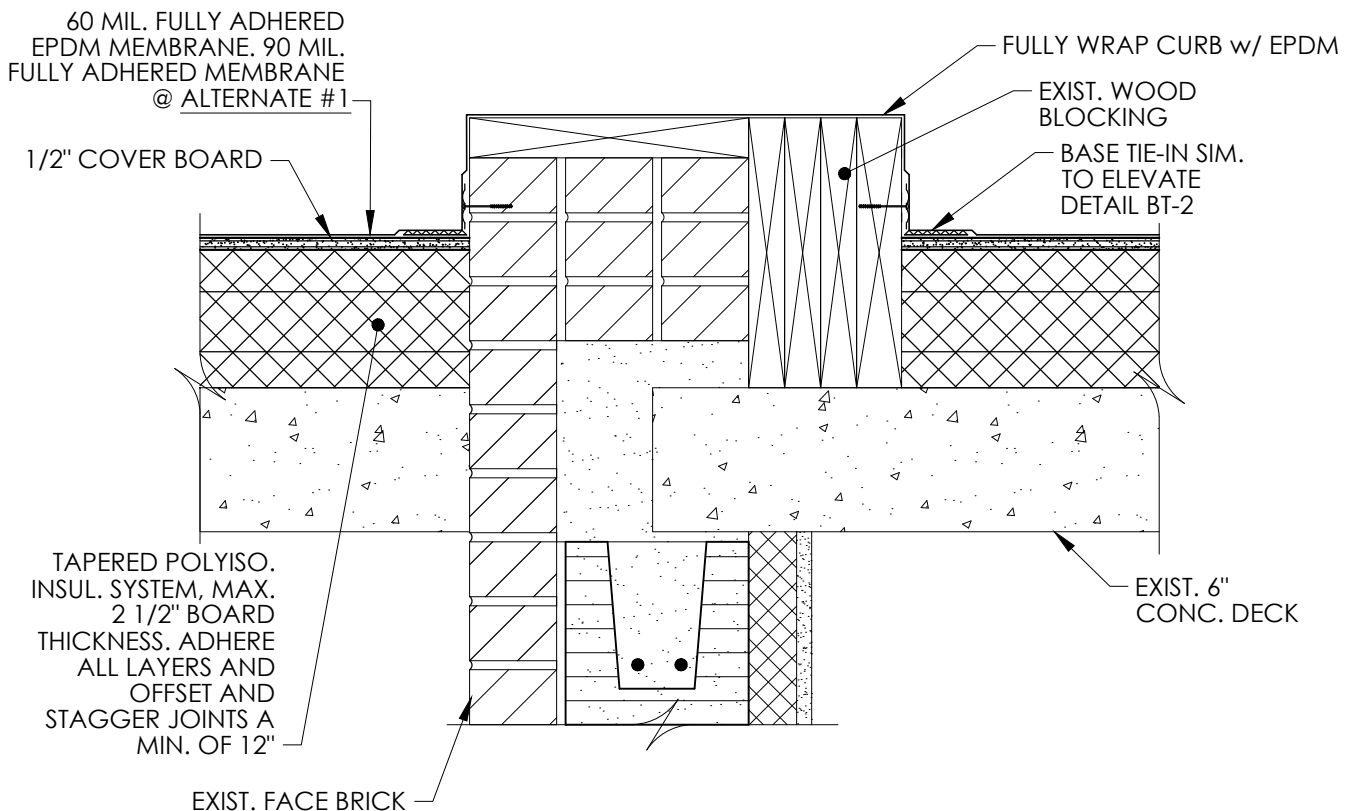
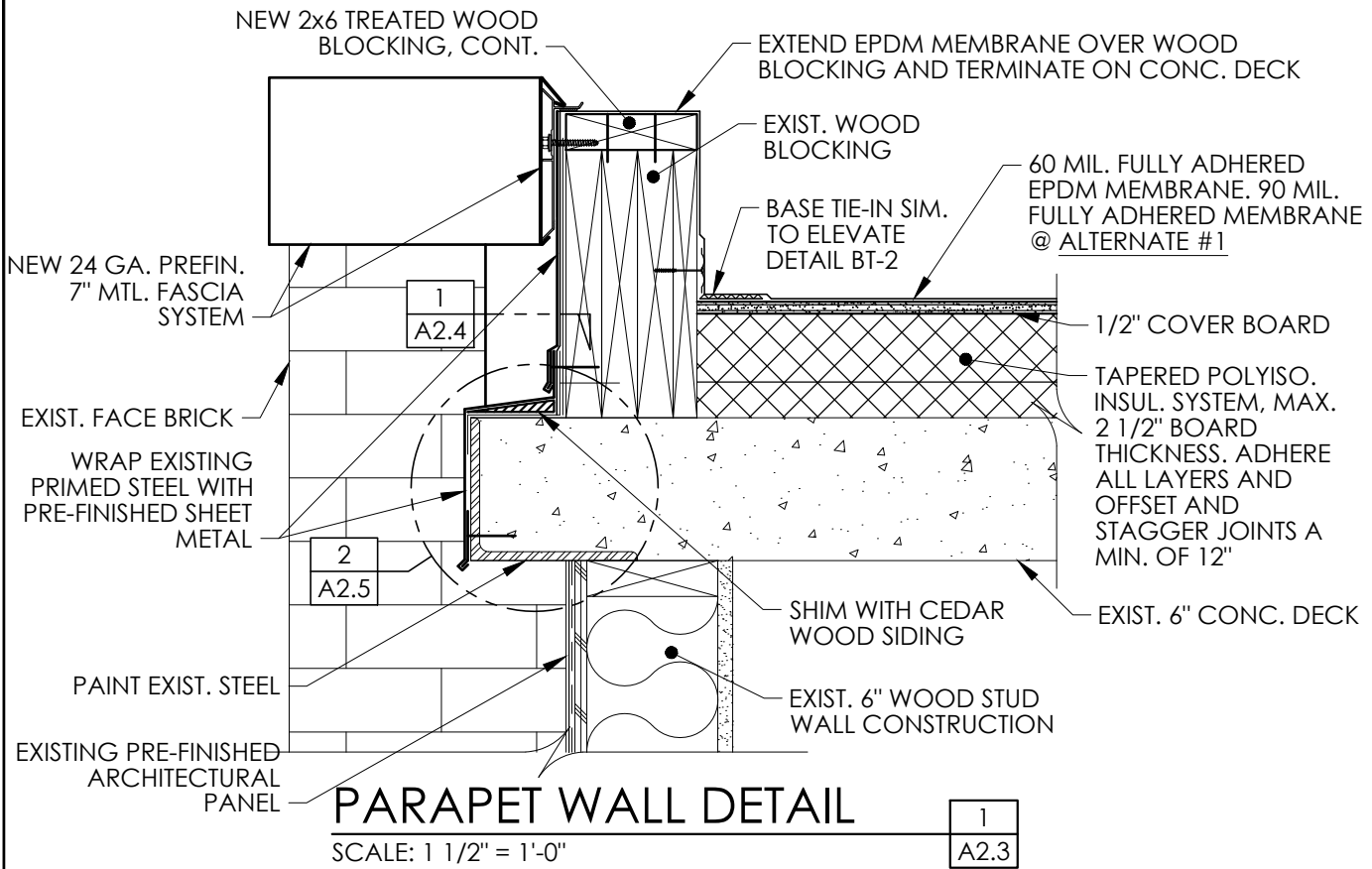
A2.2

PERU STATE COLLEGE  
CENTENNIAL COMPLEX - CLAYBURN AND MATTHEWS  
ROOF REPLACEMENT  
PERU, NEBRASKA  
1000 HOYT ST  
ARCHITECTS  
DESIGN  
DATE: 01/02/2024  
JOB NO: 3845  
CHECKED: E.R.K.  
PER: A.B.M.



JACKSON & ASSOCIATES, INC.  
1812 Maple Street, Suite 100, Omaha, Nebraska 68102  
402.341.0000  
info@jacksonandassociates.com

|      |  |
|------|--|
| REV: |  |
| REV: |  |
| REV: |  |
| REV: |  |



A2.3

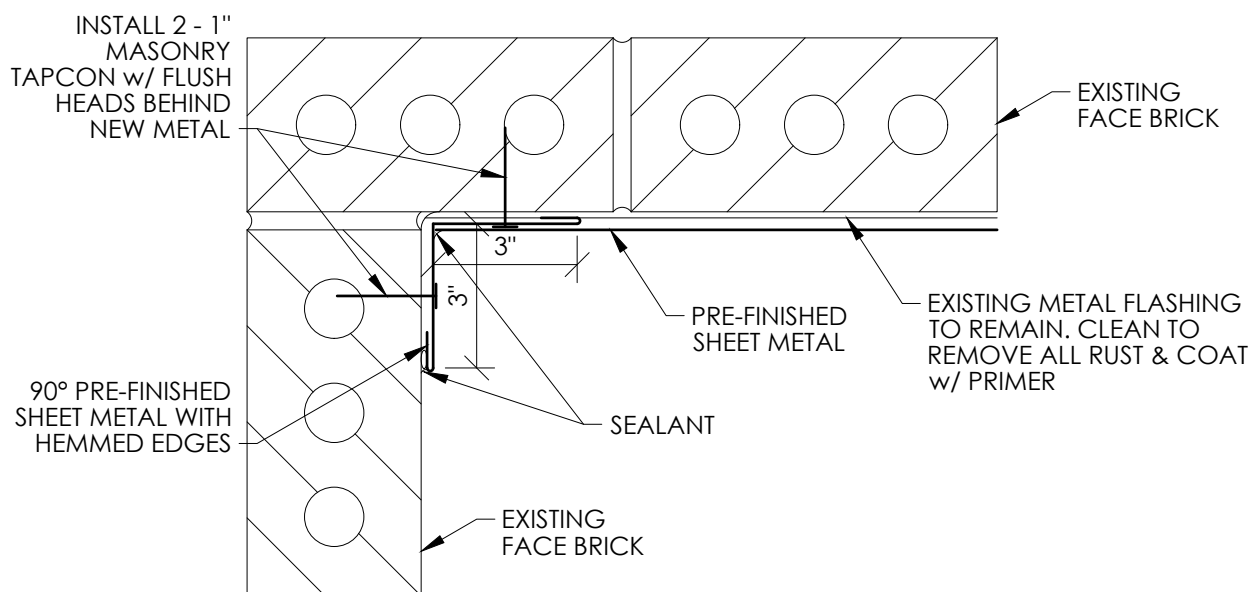
PERU STATE COLLEGE  
CENTENNIAL COMPLEX - CLAYBURN AND MATTHEWS  
ROOF REPLACEMENT  
PERU, NEBRASKA

JOB NO. 3845  
DATE: 01/02/2024  
DESIGN: E.R.K.  
PR. BY: A.B.M.  
CHECKED: E.R.K.



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ARCHITECTS  
4012 North 8th Street, Omaha, Nebraska 68132  
402.341.3000  
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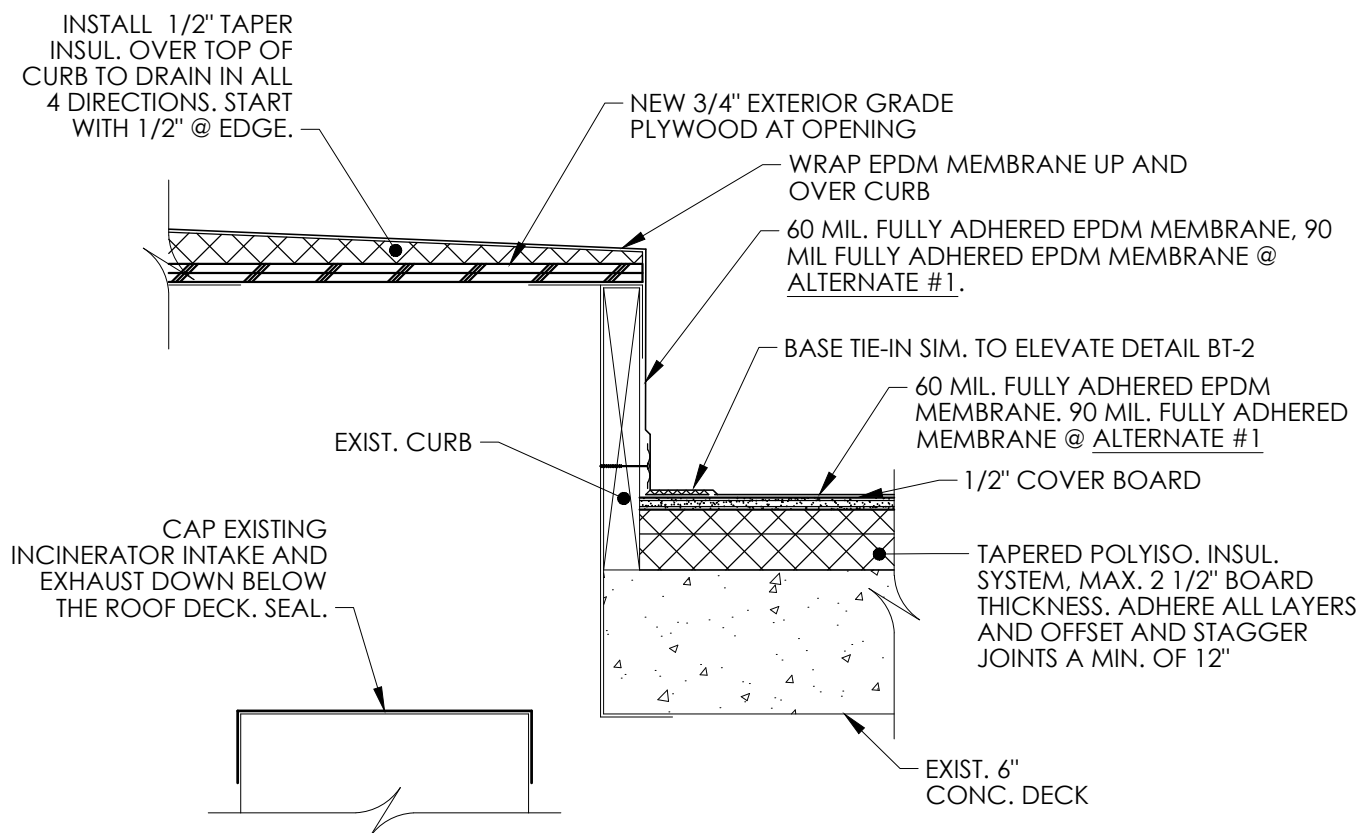
|      |  |
|------|--|
| REV. |  |
| REV. |  |
| REV. |  |
| REV. |  |



## 90 ° CONNECTION DETAIL

SCALE: 3" = 1'-0"

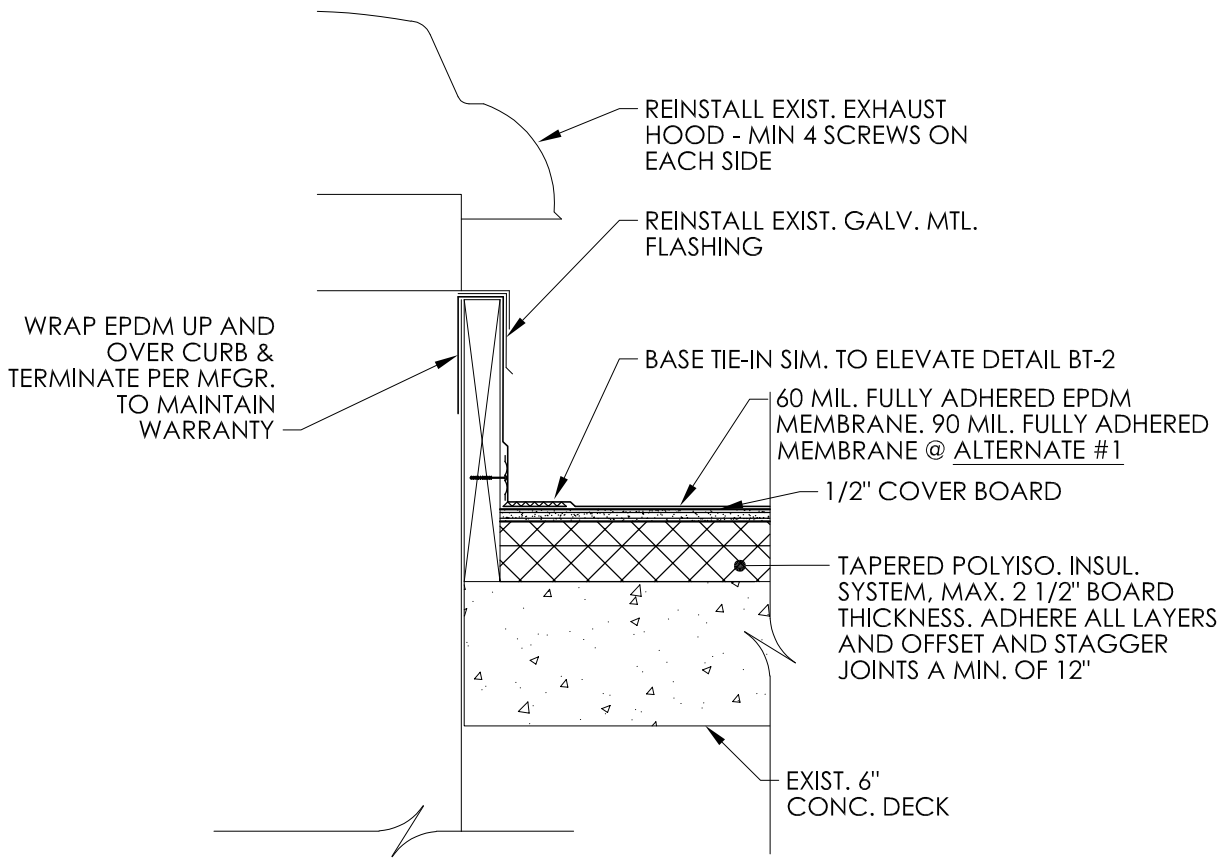
1  
A2.4



## CURB CAP DETAIL

SCALE: 1 1/2" = 1'-0"

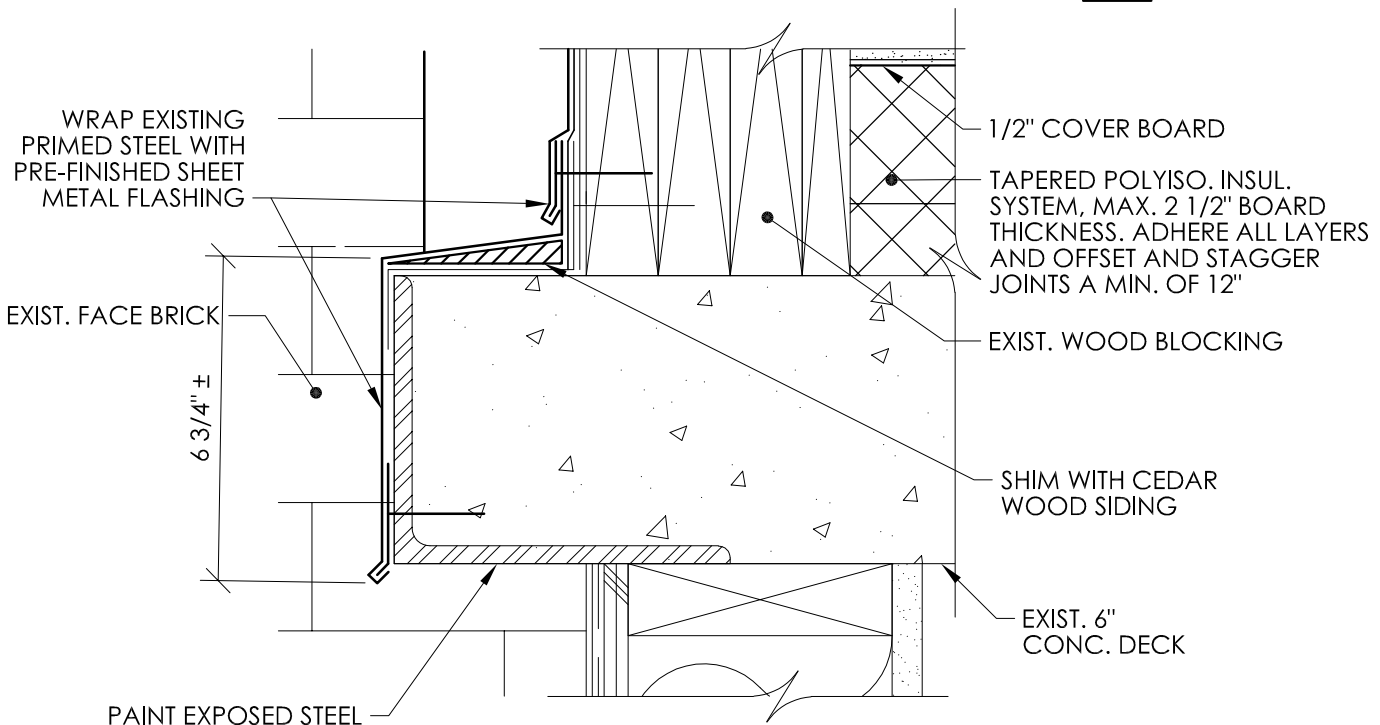
2  
A2.4



## CURB DETAIL AT EXHAUST HOOD

SCALE: 1 1/2" = 1'-0"

|      |
|------|
| 1    |
| A2.5 |



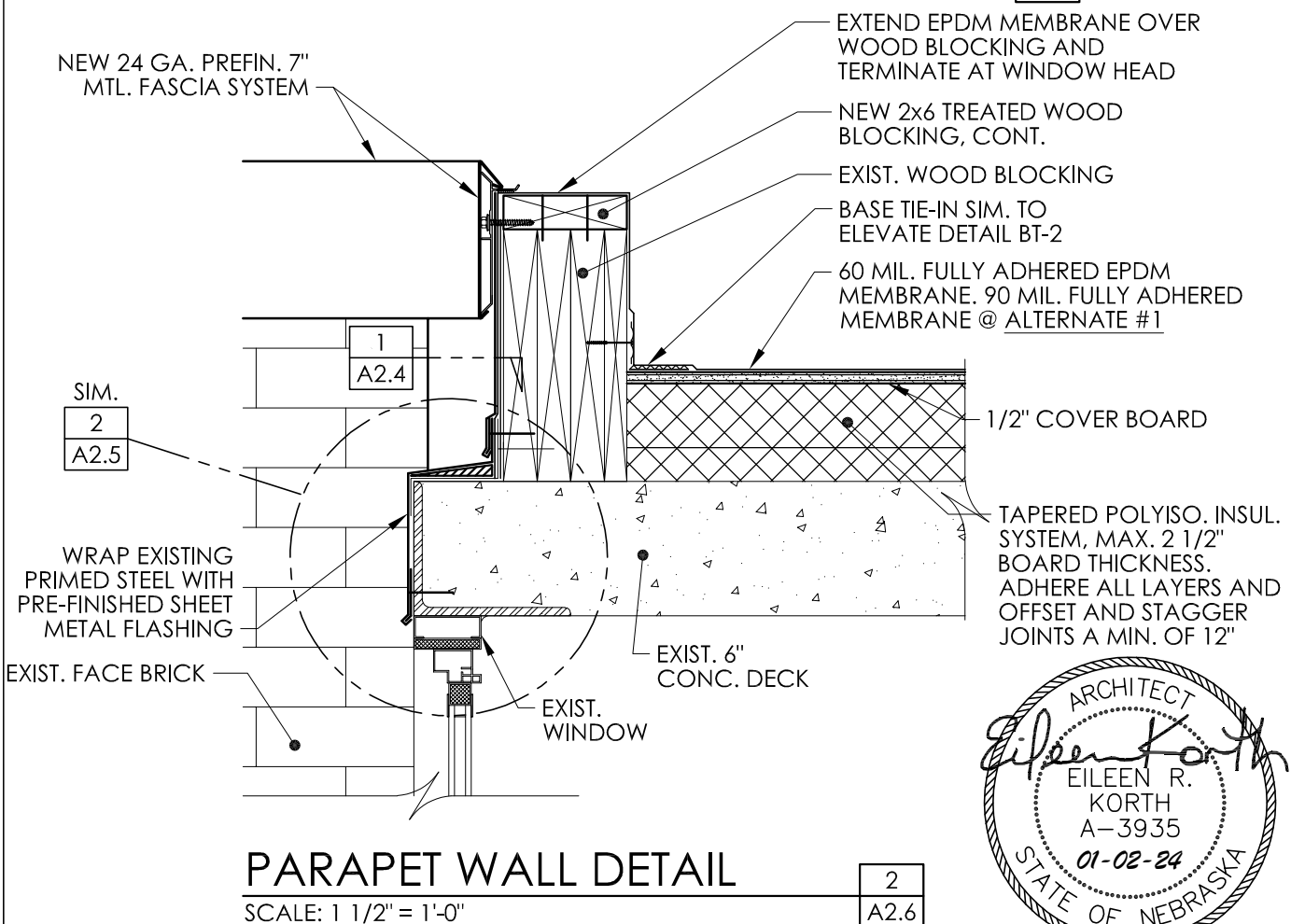
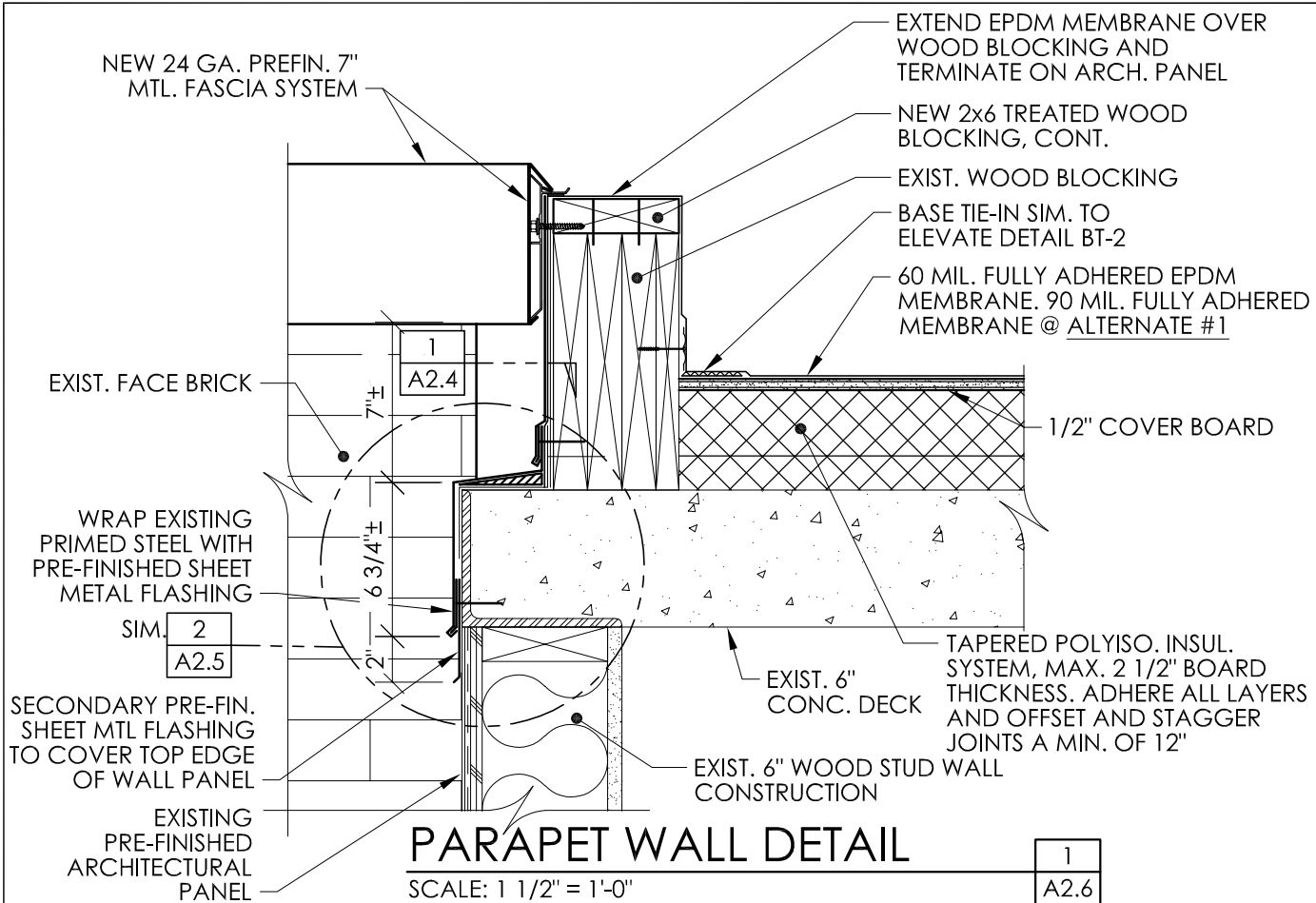
## ENLARGED DETAIL AT FLASHING

SCALE: 1 1/2" = 1'-0"

|      |
|------|
| 2    |
| A2.5 |

|                                                                                                                                            |      |                                            |            |                                                           |            |
|--------------------------------------------------------------------------------------------------------------------------------------------|------|--------------------------------------------|------------|-----------------------------------------------------------|------------|
| PERU STATE COLLEGE                                                                                                                         |      | CENTENNIAL COMPLEX - CLAYBURN AND MATTHEWS |            | PERU, NEBRASKA                                            |            |
| ARCHITECTS                                                                                                                                 |      | ROOF REPLACEMENT                           |            | CURB DETAIL AT EXHAUST HOOD & ENLARGED DETAIL AT FLASHING |            |
| JOB NO:                                                                                                                                    | 3845 | DATE:                                      | 01/02/2024 | DESIGN:                                                   | ERK        |
| BY:                                                                                                                                        | ERK  | CHECKED:                                   | ABM        | DATE:                                                     | 01/02/2024 |
|                                                                                                                                            |      |                                            |            |                                                           |            |
| <b>JACKSON &amp; ASSOCIATES, INC.</b><br><small>1812 Maple Street, Suite 100, Omaha, Nebraska 68102</small><br><small>402.341.0000</small> |      |                                            |            |                                                           |            |
| REV:                                                                                                                                       | REV: | REV:                                       | REV:       | REV:                                                      | REV:       |

A2.5



|                                                 |  |                                            |  |                |  |
|-------------------------------------------------|--|--------------------------------------------|--|----------------|--|
| PERU STATE COLLEGE                              |  | CENTENNIAL COMPLEX - CLAYBURN AND MATTHEWS |  | PERU, NEBRASKA |  |
| ROOF REPLACEMENT                                |  | 1000 HOYT ST                               |  | PERU, NEBRASKA |  |
| ARCHITECTS                                      |  | DATE: 01/02/2024                           |  | JOB NO: 3845   |  |
| DESIGN                                          |  | E.R.K.                                     |  | A.B.M.         |  |
| CHECKED                                         |  | E.R.K.                                     |  | A.B.M.         |  |
| JACKSON - JACKSON & ASSOCIATES, INC.            |  |                                            |  |                |  |
| 1012 Main St. Suite 100 - Omaha, Nebraska 68102 |  |                                            |  |                |  |
| REV: _____                                      |  |                                            |  |                |  |
| REV: _____                                      |  |                                            |  |                |  |
| REV: _____                                      |  |                                            |  |                |  |
| REV: _____                                      |  |                                            |  |                |  |