

**TOOELE CITY
WATER RECLAMATION FACILITY
TOOELE WRF 2026 UPGRADES PROJECT - SOLAR DRYER PROCUREMENT**

**ADDENDUM NO. 3
February 6, 2026**

To All Plan Holders:

You are hereby notified that the following changes, clarifications, and/or corrections have been made to the Drawings, Specifications, or Contract Documents for the above referenced project.

The bid opening date is NOT changed by the addendum. The bid opening location and time are NOT changed by this addendum.

ADDENDUM NO. 3 consists of the following:

1. Questions and Clarifications

- a. Question from bidder: The provided specification plans appear to be missing electrical drawings and detailed instrumentation drawings. Huber is not able to provide a firm proposal until such drawings are made available, and therefore requests an extension to the bid deadline.
 - i. Answer: Please see attached for the drawings, which includes electrical and instrumentation drawings.
- b. Question from bidder: 004100-5.01: Bidder requests that the limit on the Special Services price be raised to 10% of the total Contract Price.
 - i. Answer: This is acceptable. Please see attached for revised document.
- c. Question from bidder: 004100-5.01: Please confirm that sales tax is only applicable to the Goods price as listed in the first line of the Bid Form, and that all other items such as Special Services and listed optional items are tax exempt. Bidder reserves the right to request a change order if above tax exemption is changed.
 - i. Answer: This is acceptable. Please see attached for revised document.
- d. Question from bidder: 005200-5.03.A., The final sentence outlines the maximum liquidated damages for the project. Bidder requests that the cap of liquidated damages be lowered to 10% of the contract price.
 - i. Answer: This is acceptable, but note that liquidated damages are Seller's sole liability and Buyer's exclusive remedy for delay. Please see attached for revised document.
- e. Question from bidder: 005200-6.01.D. states that the contract price must be held for 365 days from final approval of shop drawings. Bidder requests that the starting date of the 365 days be from the date of bid opening.
 - i. Answer: This is acceptable. Please see attached for revised document.
- f. Question from bidder: 005200-7.02.A.: Huber requests that the payment terms for the Solar Dryer equipment be revised to the following milestones:
 - a. 20% Notice to Commence of Initial Fabrication of equipment
 - b. 70% for Delivery to Point of Destination of equipment
 - c. 5% Completion of commissioning, startup, field services and O&M Manuals

- d. 5% Successful completion of performance testing and Services After Startup
If items b., c., or d. above are not acceptable they may be adjusted. Item a. above should not be changed from 20%.
- ii. Answer: This is acceptable. Please see attached for revised document.
- g. Question from bidder: 008000, SC-4.02.H.4.: Bidder requests that this line be removed from the conditions. Bidder's standard insurance is that of a manufacturer and equipment supplier, and does not include Professional Liability coverage.
- i. Answer: This is acceptable. Please see attached for revised document.
- h. Question from bidder: EJCDC P-700, Article 5.06.C.1.a. Please add the following to this article section, "Actual and physical field measurements shall be the responsibility of the Buyer, Engineer and/or Contractor (once assigned)."
- i. Answer: This is acceptable and has been noted in EJCDC C-800 Supplementary Conditions. Please see attached for revised document.
- i. Question from bidder: EJCDC P-700, Article 8.01.A.2. Bidder would like to request that these costs shall be the responsibility of the Buyer and/or the installing General Contractor. We respectfully ask that this section is deleted in its entirety.
- i. Answer: Reimbursement and obligation to reimburse shall not exceed \$2,000.00 and has been noted in EJCDC C-800 Supplementary Conditions. Please see attached for revised document.
- j. Question from bidder: EJCDC P-700, Article 8.02.A. Bidder would like to request that this clause shall be deleted in its entirety and replace with the following, "If, on the basis of inspections and testing prior to delivery, the Goods and Special Services are found to be non-conforming, or if at any time after Buyer has acknowledged receipt of delivery and before the expiration of the correction period described in Paragraph 8.03, Buyer determines that the Goods and Special Services are non-conforming, then Seller shall promptly, without cost to Buyer and in response to written instructions from Buyer, correct such non-conforming Goods and Special Services."
- i. Answer: This is acceptable. Please see attached for revised document.
- k. Question from bidder: Bidder requests confirmation that the requirements for Variable Frequency Drives outlined in Section 26 29 23 are not applicable for the VFDs included as part of the Solar Dryer turners as specified in Section 46 76 70. The VFDs are part of a pre-engineered equipment package and should not be substituted.
- i. Answer: Huber standard VFDs will be acceptable, so long as they meet the specifications other than brand and make.
- l. Question from bidder: Bidder requests confirmation that the requirements for Human-Machine Interfaces outlined in Section 40 94 33 are not applicable for the HMIs included as part of the Solar Dryer turners as specified in Section 46 76 70. The HMIs are part of a pre-engineered equipment package and should not be substituted.
- i. Answer: Please provide an alternate additive price to provide the specified HMI as part of the proposal.
- m. Question from bidder: Bidder requests clarification that the control requirements outlined in Div. 40 do not supersede the standard control system design outlined in Section 46 76 70. The SRT control panel system is a pre-engineered design which should not be modified.
- i. Answer: Further information will be required to respond to this request. We will need a panel submittal and bill of materials to make sure it meets the intent of the design.

- n. Section 40 94 43-2.1.F. makes mention of factory acceptance testing for vendor supplied PLCs. Will witnessed factory testing be required for the SRT control panels?
 - i. Answer: Yes, witnessed FAT testing will be required for two engineers to attend (One from SKM one from JUB) and one owner rep.
 - o. Section 40 94 43-2.6.A. outlines PLC spare parts. Are these spare parts to be provided with the SRT main control panels?
 - i. Answer: We will need further information to respond to this question. If the owner does not have the same hardware and spare parts, spare parts will be required.
- 2. Changes to the Contract Documents**
- a. See attached for the revised contract documents. Revisions are noted in **red text with (Addendum 3) in parentheses.**
- 3. Changes to the Drawings**
- a. See attached for the updated drawings set.
- 4. Changes to the Technical Specifications:**
- a. None.

This ADDENDUM #3 shall become a part of the Contract and all provisions of the Contract shall apply thereto. BIDDERS shall acknowledge receipt of this ADDENDUM in the space provided in the BID FORM.

Sincerely,

J-U-B ENGINEERS, INC.



Andrew Hobson, P.E.
Project Engineer

00 41 00 – BID FORM

SOLAR DRYER - EQUIPMENT PROCUREMENT

(ADDENDUM #3)

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ARTICLE 1 - BID RECIPIENT

1.01 This Bid is submitted to:

**Room 227
Tooele City Corporation
90 N MAIN ST
TOOELE, UT 84074**

(Refer to Section 00 20 00 - Instructions to Bidders for submittal requirements)

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into a Contract with Buyer in the form included in the Bidding Documents to furnish the Goods and Special Services as specified or indicated in the Bidding Documents, for the prices and within the times indicated in this Bid, and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 - BIDDER’S ACKNOWLEDGMENTS

2.01 Bidder accepts all of the terms and conditions of the Bidding Documents, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for **90** days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Buyer.

2.02 Bidder accepts the provisions of the Agreement as to the assignment of the Contract for furnishing Goods and Special Services.

2.03 Bidder accepts that the Buyer retains the right to issue a Notice to Commence Fabrication for the **Solar Dryer Equipment**. The Bidder acknowledges that until the Notice to Commence Fabrication is issued; the Buyer is not obligated to any monetary commitment associated with this Contract beyond that associated with the Special Services. A Notice to Commence Fabrication may be issued by the Buyer as established in 00 52 00 Agreement.

ARTICLE 3 - BIDDER’S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, the related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged:

Addendum No.	Addendum Date
_____	_____
_____	_____
_____	_____

B. Bidder has visited the Point of Destination and site where the Goods are to be installed or Special Services will be provided and become familiar with and is satisfied as to the observable local conditions that may affect cost, progress, or the furnishing of Goods and Special Services, if, in Bidder's judgment, any local condition may affect cost, progress, or the furnishing of Goods and Special Services.

C. Bidder is familiar with and is satisfied as to all Laws and Regulations in effect as of the date of the Bid that may affect cost, progress, and the furnishing of Goods and Special Services.

D. Bidder has carefully studied, considered, and correlated the information known to Bidder; information commonly known to sellers of similar goods doing business in the locality of the Point of Destination and the site where the Goods will be installed or where Special Services will be provided; information and observations obtained from Bidder's visits, if any, to the Point of Destination and the site where the Goods will be installed or where Special Services will be provided; and any reports and drawings identified in the Bidding Documents regarding the Point of Destination and the site where the Goods will be installed or where Special Services will be provided, with respect to the effect of such information, observations, and documents on the cost, progress, and performance of Seller's obligations under the Bidding Documents.

E. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution (if any) thereof by Engineer is acceptable to Bidder.

F. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for furnishing the Goods and Special Services for which this Bid is submitted.

ARTICLE 4 - BIDDER'S CERTIFICATIONS

4.01 Bidder certifies that:

A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;

B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;

C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and

D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:

1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;
2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Buyer, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Buyer of the benefits of free and open competition;

3. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Buyer, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process.

ARTICLE 5 - BASIS OF BID

5.01 Bidder will furnish the Goods and Special Services in accordance with the Contract Documents for the following price(s):

Item	No. Units	Unit	Unit Price (\$ numerals)	Total Price (\$ numerals)
Goods¹: Solar Dryer Equipment, as described in Specification 46 76 70.	1	LS		
Special Services: to prepare complete shop drawings and related submittals and coordinate with Owner and Engineer and during design. The Contract Price for the Special Services shall not exceed 5% 10% (Addendum #3) of the total Contract Price.	1	LS		
Sales Tax on Goods at 7.0% (Special Services and any items outside of Goods are Tax Exempt – Addendum #3)	1	LS		
			Base Bid Total (\$ numerals)	
OPTIONAL BID ITEMS				
Performance Bond per Section 00 61 00	1	LS		
Payment Bond per Section 00 61 50	1	LS		
3-Year Extended Warranty ²	1	LS		
Recommended Spare Parts ³	1	LS		
Bid Total including all optional items (\$ numerals)				

- (1) Goods to include all appurtenances, panels, controls, startup services as specified for Vendor Unit Responsibility. Price to include all related costs including any bonds, insurance, shipping, lading at point of fabrication and Point of Destination, and O&M Manuals, as described in the Contract Documents.
- (2) Provide a cost for an extended warranty on all equipment furnished by Bidder for the duration noted. The extended warranty shall commence upon completion of the standard warranty noted in the Procurement Bidding Documents.
- (3) Provide a cost for one-year supply of recommended spare parts.

ARTICLE 6 - TIME OF COMPLETION

6.01 Bidder agrees that the furnishing of Goods and Special Services will conform to the schedule set forth in Article 5 of the Agreement.

6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 - ATTACHMENTS TO THIS BID

7.01 The following documents are attached to and made a condition of this Bid:

- A. The Bid Requirements as described in Section 00 31 00.

ARTICLE 8 - DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 - BID SUBMITTAL

9.01 This Bid submitted by:

If Bidder is:

An Individual

Name (typed or printed): _____

By: _____
(Individual's signature)

Doing business as: _____

Business address: _____

Phone: _____ Facsimile: _____

E-mail address: _____

A Partnership

Partnership Name: _____
(SEAL)

By: _____
(Signature of general partner - attach evidence of authority to sign)

Name (typed or printed): _____
Business address: _____

Phone: _____ Facsimile: _____
E-mail address: _____

A Corporation

Corporation Name: _____
State of Incorporation: _____
Type (General Business, Professional, Service, other): _____

By: _____
(Signature - attach evidence of authority to sign)

Name (typed or printed): _____
Title: _____

(CORPORATE SEAL)

Attest _____
(Signature of Corporate Secretary)

Business address: _____

Phone: _____ Facsimile: _____
E-mail address: _____

A Limited Liability Company (LLC)

LLC Name: _____
State in which organized: _____

By: _____
(Signature - attach evidence of authority to sign)

Name (typed or printed): _____
Title: _____

Business address: _____

Phone: _____ Facsimile: _____
E-mail address: _____

A Joint Venture

First Joint Venturer Name: _____ (SEAL)

By: _____

(Signature - attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Business address: _____

Phone: _____ Facsimile: _____

E-mail address: _____

Second Joint Venturer Name: _____ (SEAL)

By: _____

(Signature - attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Business address: _____

Phone: _____ Facsimile: _____

E-mail address: _____

Phone and Facsimile Number and Address for receipt of official communications to Joint Venture: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership, corporation, and limited liability company that is a party to the joint venture should be in the manner indicated above.)

00 52 00 - AGREEMENT BETWEEN BUYER AND SELLER

SOLAR DRYER - EQUIPMENT PROCUREMENT

(ADDENDUM #3)

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ARTICLE 5 – CONTRACT TIMES

5.01 *Time of the Essence*

A. All time limits for Milestones, if any, including the submittal of Shop Drawings and Samples, the delivery of Goods, and the furnishing of Special Services as stated in the Contract Documents, are of the essence of the Contract.

5.02 *Milestones*

A. *Days for Submittal of Shop Drawings and Samples.* Seller shall submit all Shop Drawings and Samples required by the Contract Documents to Buyer for Engineer’s Review in accordance with the following schedule. It is the intent of the parties that submittals be in accordance with Section 01 33 00.

Special Services				
Item	Notice to Begin Contract Times	Maximum	Contract	Time
		Beyond Notice (Days)		
Seller’s First Shop Drawing Submittal	Effective Date of Agreement		10	
First Shop Drawing Returned to Seller	Effective Date of Agreement		20	
Seller’s Second Shop Drawing Submittal	Effective Date of Agreement		30	
Second Shop Drawing Returned to Seller	Effective Date of Agreement		40	
Final Shop Drawing Submittal for Approval	Effective Date of Agreement		60	

B. *Days to Achieve Delivery of Goods.* The Goods are to be delivered to the Point of Destination and ready for Buyer’s receipt in accordance with the following schedule.

Goods				
Item	Notice to Begin Contract Times	Maximum	Contract	Time
		Beyond Notice (Days)		
SOLAR DRYER EQUIPMENT Delivery	Notice to Commence Fabrication of System		270	

- C. The Seller shall not commence manufacture of any Goods until the Buyer issues a Notice to Commence Fabrication. Goods shall be delivered in accordance with Article 6 of the General Conditions.
- D. It is Buyer's intent to issue a Notice to Fabricate for **SOLAR DRYER EQUIPMENT** within 365 days following final approval of shop drawings and submittals as part of the Special Services.

5.03 *Liquidated Damages*

- A. Buyer and Seller recognize that Buyer will suffer financial loss if the Goods are not delivered at the Point of Destination and ready for receipt of delivery by Buyer within the times specified in Paragraph 5.02 above, plus any extensions thereof allowed in accordance with Article 7 of the General Conditions. The parties also recognize that the timely performance of services by others involved in the Project is materially dependent upon Seller's specific compliance with the requirements of Paragraph 5.02. Further, they recognize the delays, expense, and difficulties involved in proving the actual loss suffered by Buyer if complete acceptable Goods are not delivered on time. Accordingly, instead of requiring such proof, Buyer and Seller agree that as liquidated damages for delay (but not as a penalty) Seller shall pay Buyer \$350 for each day that expires after the time specified in Paragraph 5.02.A for delivery of Special Services items and \$600 for each day that expires after the time specified in Paragraph 5.02.B. The total aggregate amount of liquidated damages to be paid Seller under this Agreement shall not, in any event, exceed ~~50%~~ 10% of the Contract Price actually paid to the Buyer hereunder. **Liquidated damages are Seller's sole liability and Buyer's exclusive remedy for delay. (Addendum #3)**

ARTICLE 6 – CONTRACT PRICE

- 6.01 Buyer shall pay Seller for furnishing the Goods and Special Services in accordance with the Contract Documents as follows:
 - A. A Lump Sum of \$_____ for the Special Services.
 - B. A Lump Sum of \$_____ for the Goods.
 - C. The Contract Price for Goods and Special Services shall remain valid if the Buyer issues a Notice to Commence Fabrication within the timeframe noted in Article 5.02.D.
 - D. Adjustment of the contract price for the Goods may be made if the Notice to Commence Fabrication is issued after the 365 days ~~following final approval of Shop Drawings and Samples~~ following the date of bid opening (Addendum #3). The contract price will be adjusted through Change Order based on the ratio of the Producers Price Index for Finished Goods of the month the Notice to Commence Fabrication is issued to the month of the Effective Date of the Agreement.

ARTICLE 7 – PAYMENT PROCEDURES

7.01 *Submittal and Processing of Payment*

A. Seller shall submit Applications for Payment in accordance with Article 10 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

7.02 *Progress Payments for Special Engineering Services*

A. Buyer shall make progress payments on account of the Contract Price on the basis of Seller’s Applications for Payment as follows:

Special Services		
Payment	Contract Milestone	Maximum Allowable Payment Amount
First Special Services Payment	Execution of Agreement including delivery of bonds and insurance	25 percent of the Contract price for Special Services
Second Payment Special Services	Engineer’s completed review of all submittals/shop drawings with a response of No Exceptions Taken.	75 percent of the Contract price for Special Services

Goods		
Payment	Contract Milestone	Maximum Allowable Payment Amount
First Goods Payment	Notice to Commence Fabrication of all equipment	40 20 percent of the Contract price for the Goods (Addendum #3)
Second Goods Payment	Delivery to Point of Destination of all equipment.	70 percent of the Contract price for the Goods
Third Goods Payment	Completion of commissioning, startup, field services and O&M Manuals.	40 5 percent of the Contract price for the Goods (Addendum #3)
Fourth (Final) Goods Payment	Successful completion of performance testing and Services After Startup.	40 5 percent of the Contract price for the Goods (Addendum #3)

ARTICLE 8 – INTEREST

- 8.01 All monies not paid when due as provided in Article 10 of the General Conditions shall bear interest at the statutory rate.

ARTICLE 9 – SELLER’S REPRESENTATIONS

- 9.01 In order to induce Buyer to enter into this Agreement, Seller makes the following representations:
- A. Seller has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents, as applicable to Seller's obligations identified in Article 1 above.
 - B. If, in Seller’s judgment, any local condition may affect cost, progress, or the furnishing of the Goods and Special Services, Seller has visited the Point of Destination and site where the Goods are to be installed or Special Services will be provided and become familiar with and is satisfied as to the observable local conditions that may affect cost, progress, and the furnishing of the Goods and Special Services.
 - C. Seller is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and the furnishing of the Goods and Special Services.
 - D. Seller has carefully studied, considered, and correlated the information known to Seller; information commonly known to sellers of similar goods doing business in the locality of the Point of Destination and the site where the Goods will be installed or where Special Services will be provided; information and observations obtained from Seller’s visits, if any, to the Point of Destination and site where the Goods are to be installed or Services will be provided; and any reports and drawings identified in the Bidding Documents regarding the Point of Destination and the site where the Goods will be installed or where Special Services will be provided, with respect to the effect of such information, observations, and documents on the cost, progress, and performance of Seller's obligations under the Contract Documents.
 - E. Seller has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Seller has discovered in the Contract Documents, and the written resolution (if any) thereof by Engineer is acceptable to Seller.
 - F. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for furnishing Goods and Special Services.

ARTICLE 10 – CONTRACT DOCUMENTS

10.01 *Contents*

- A. The Contract Documents consist of the following:
 - 1. This Agreement

2. Performance Bond
3. Payment Bond
4. General Conditions
5. Supplementary Conditions
6. Specifications as listed in the table of contents of the Project Manual;
7. Drawings, with each sheet bearing the following general title:

SOLAR DRYER EQUIPMENT PROCUREMENT

8. Addenda (Numbers ____ to ____, inclusive); Exhibits to this Agreement (enumerated as follows):
 - a. Exhibit A-1 to Agreement between Buyer and Seller dated _____, Assignment of Contract; Consent to Assignment; and Acceptance of Assignment.
 - b. Exhibit A-2 to Agreement between Buyer and Seller dated _____, Agreement to Assignment by Seller's Surety.
 - c. Seller's Bid, solely as to the prices set forth therein (pages ___ to ___, inclusive);
 - d. Documentation submitted by Seller prior to Notice of Award (pages ___ to ___, inclusive);
 - e. _____ ;
9. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
 - a. Notice of Award
 - b. Notice to Commence Fabrication;
 - c. Change Order(s);
 - d. Work Change Directive(s).
- B. The documents listed in Paragraph 10.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 10.
- D. The Contract Documents may only be amended or supplemented as provided in Paragraph 3.04 of the General Conditions.

ARTICLE 11 – MISCELLANEOUS

11.01 *Terms*

- A. Terms used in this Agreement will have the meanings indicated in the General Conditions and the Supplementary Conditions.

11.02 *Assignment of Contract*

- A. Buyer has the right to assign this Contract for furnishing Goods and Special Services, but only to a person or entity with sufficient ability to satisfy all of Buyer's obligations under this Contract, and Seller hereby consents to such assignment. Forms documenting the assignment of the Contract, and consent of Seller's surety to the assignment, have been executed by Buyer, Seller, and Seller's surety, and are attached as exhibits to this Agreement.
 - 1. The Contract will be executed in the name of Buyer initially and will be assigned to a construction contractor designated by Buyer. Such construction contractor's responsibilities will include the installation of the Goods. The assignment is expected to occur following final approval of shop drawings and submittals as part of the Special Services. As of the date of acceptance of assignment by the construction contractor, all references in the Contract Documents to Buyer shall mean the designated construction contractor.
 - 2. The assignment of the Contract shall relieve the assignor from all further obligations and liabilities under this Contract. After assignment, Seller shall become a subcontractor or supplier to the assignee and, except as noted herein, all rights, duties, and obligations of Buyer under the Contract shall become the rights, duties, and obligations of the assignee.
 - 3. After assignment:
 - a. All performance warranties, guarantees, and indemnifications required by the Contract Documents will continue to run for the benefit of assignor and, in addition, for the benefit of the assignee. However, if assignor and assignee make the same warranty or guarantee claim, then Seller shall only be liable once for such claim.
 - b. Except as provided in this Paragraph 11.02.A.3.b, all rights, duties, and obligations of Engineer to assignee and Seller under this Contract will cease.
 - 1) Engineer will review Seller's Applications for Payment and make recommendations to assignee for payments as provided in Paragraphs 10.02 and 10.06 of the General Conditions.
 - 2) Upon the written request of either the assignee or Seller, Engineer will issue with reasonable promptness clarifications or interpretations of the Contract Documents pursuant to the terms of Paragraph 9.02.A of the General Conditions.

- B. No other assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound. Specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by Laws and Regulations). Unless specifically stated to the contrary in any written consent to such an assignment, such an assignment will not release or discharge the assignor from any duty or responsibility under the Contract Documents.

11.03 *Successors and Assigns*

- A. Buyer and Seller each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

11.04 *Severability*

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Buyer and Seller. The Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

11.05 *Seller's Certifications*

- A. Seller certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 11.05:
1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Buyer, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Buyer of the benefits of free and open competition;
 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Buyer, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

11.06 *Limitations*

- A. Buyer and Seller waive against each other, and against the other's officers, directors, members, partners, employees, agents, consultants, and subcontractors, any and all claims for or entitlement to incidental, indirect, or consequential damages arising out of, resulting from, or related to the Contract. Upon assignment the terms of this Paragraph 11.06.A shall be binding upon the assignee with respect to Seller and assignor. The terms of this mutual waiver do not apply to or limit any claim by either Buyer or Seller against the other based on any of the following: (a) contribution or indemnification, (b) costs, losses, or damages attributable to personal or bodily injury, sickness, disease, or death, or to injury to or destruction of the tangible property of others, (c) intentional or reckless wrongful conduct, or (d) rights conferred by any bond provided by Seller under this Contract.
- B. Upon assignment the terms of this Paragraph 11.06.B shall be binding upon both the assignor and assignee with respect to Seller's liability, and upon Seller with respect to both assignor's and assignee's liabilities. The terms of this mutual limitation do not apply to or limit any claim by either Buyer or Seller against the other based on any of the following: (a) contribution or indemnification with respect to third-party claims, losses, and damages; (b) costs, losses, or damages attributable to personal or bodily injury, sickness, disease, or death, or to injury to or destruction of the tangible property of others, (c) intentional or reckless wrongful conduct, or (d) rights conferred by any bond provided by Seller under this Contract.

IN WITNESS WHEREOF, Buyer and Seller have signed this Agreement. Counterparts have been delivered to Buyer and Seller. All portions of the Contract Documents have been signed or identified by Buyer and Seller or on their behalf.

This Agreement will be effective on _____ (which is the Effective Date of the Agreement).

Buyer: _____ Seller: _____

By: _____ By: _____

Attest: _____ Attest: _____

Address for giving notice: _____

Address for giving notice: _____

Agent for service of process:

(If Seller is a corporation or a partnership, attach evidence of authority to sign.)

Designated Representative:
Name: _____
Title: _____
Address: _____
Phone: _____
Facsimile: _____

Designated Representative:
Name: _____
Title: _____
Address: _____
Phone: _____
Facsimile: _____

EXHIBIT A-1 to Agreement Between
Buyer and Seller dated ____

**ASSIGNMENT OF CONTRACT; CONSENT TO ASSIGNMENT;
AND ACCEPTANCE OF ASSIGNMENT**

This assignment will be effective on the Effective Date of the Agreement between Buyer and Construction Contractor.

The Contract between Tooele City Corporation ("Buyer") and _____ ("Seller")

for furnishing Goods and Special Services under the Contract Documents entitled **SOLAR DRYER EQUIPMENT PROCUREMENT**

is hereby assigned, transferred, and set over to _____ ("Construction Contractor"). Construction Contractor shall be totally responsible for the performance of Seller and for the duties, rights and obligations of Buyer, not otherwise retained by Buyer, under the terms of the Contract between Buyer and Seller.

ASSIGNMENT DIRECTED BY:

Tooele City Corporation

Buyer

(If Buyer is a corporation, attach evidence of authority to sign. If Buyer is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of Buyer-Seller Agreement.)

By: _____

(Signature)

(Title)

ASSIGNMENT

ACKNOWLEDGED AND ACCEPTED BY:

Seller

(If Seller is a corporation, attach evidence of authority to sign.)

By: _____

(Signature)

(Title)

ASSIGNMENT ACCEPTED BY:

Construction Contractor

(If Construction Contractor is a corporation, attach evidence of authority to sign.)

By: _____

**EXHIBIT A-2 to Agreement Between
Buyer and Seller dated _____**

AGREEMENT TO ASSIGNMENT BY SELLER'S SURETY

Surety hereby acknowledges and agrees that the Contract for furnishing Goods and Special Services under the Contract Documents entitled **SOLAR DRYER EQUIPMENT PROCUREMENT** by and between

_____ **Tooele City Corporation** _____ (“Buyer”) and
_____ (“Seller”) may be
assigned, transferred, and set over to _____ (“Construction
Contractor”), in accordance with Paragraph 11.02 of Agreement between Buyer and Seller.

Surety further agrees that, upon assignment of the Contract, the Construction Contractor shall have all the rights of the Buyer under the Performance Bond.

(Corporate Seal)

Surety

Company: _____

By: _____

Signature and Title
(Attach Power of Attorney)

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00 80 00 – SUPPLEMENTARY CONDITIONS

SOLAR DRYER EQUIPMENT PROCUREMENT

(ADDENDUM #3)

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added thereto.

ARTICLE 1- DEFINITIONS AND TERMINOLOGY

SC--1.01 Defined Terms

Add the following definition to Paragraph 1.01.A:

37. *Contractor*: Contractor will lead the Construction Phase and be responsible for installing the Goods furnished by Seller.

ARTICLE 2 – PRELIMINARY MATTERS

SC-2.03 Copies of Documents

Amend the first sentence of Paragraph 2.03.A. to read as follows:

- A. The Owner shall furnish to the Seller electronic copies of the Contract Documents in .pdf format.

ARTICLE 4 – BONDS AND INSURANCE

Modify Article 4.01 to read as follows.

SC-4.01 Bonds

- D. Prior to OWNER executing the Agreement (00520), CONTRACTOR shall file with the OWNER a good and sufficient performance Bond and a payment Bond, each in the sum of not less than 100 percent of the Contract Price.

The Bonds shall be executed by the CONTRACTOR and secured by a company duly and regularly authorized to do a general surety business in the State of Utah and either (i) named in the current U.S. Treasury Department's listing of approved sureties (Department Circular 570) (as amended) with an underwriting limitation equal to or greater than the Contract Price which the Bond guarantees, or (ii) with a current "A-" rating or better in A.M. Best Co., Inc's. Best Insurance Reports, Property and Casualty Edition.

The Performance Bond shall guarantee the faithful performance of the Construction Contract by the CONTRACTOR and the payment Bond shall guarantee the payment of

labor and materials. The Bonds shall inure by their terms to the benefit of the OWNER. Neither this nor any other provision requiring a performance Bond shall be construed to create any rights in any third party Claimant as against the OWNER for performance of the Work under the Construction Contract.

- E. If the surety on any Bond furnished by CONTRACTOR is subject to any proceeding under the Bankruptcy Code (Title 11, United States Code) or becomes insolvent or its right to do business is terminated in the State of Utah or it ceases to meet the requirements of this Article, CONTRACTOR shall, within 15 days thereafter, substitute another Bond and surety, both of which must be acceptable to OWNER.

SC-4.02 Seller's Liability Insurance

Add the following paragraphs immediately after Paragraph 4.02.E:

- F. Seller shall purchase and maintain such liability and other insurance as is appropriate for the furnishing of Goods and Special Services and as will provide protection from claims set forth below which may arise out of or result from Seller's furnishing of the Goods or Special Services and Seller's other obligations under the Contract Documents, whether the furnishing of Goods and Special Services or other obligations are to be performed by Seller, any subcontractor or supplier, or by anyone directly or indirectly employed by any of them to furnish the Goods and Special Services, or by anyone for whose acts any of them may be liable:
1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;
 2. claims for damages because of bodily injury, occupational sickness or disease, or death of Seller's employees;
 3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Seller's employees;
 4. claims for damages insured by reasonably available personal injury liability coverage which are sustained: (i) by any person as a result of an offense directly or indirectly related to the employment of such person by Seller, or (ii) by any other person for any other reason;
 5. claims for damages, other than to the Goods, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
 6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.
- G. The policies of insurance so required by this Paragraph 4.02 to be purchased and maintained shall:
1. with respect to insurance required by Paragraphs SC-4.02.F.3 through SC-4.02.F.6 inclusive, include as additional insureds (subject to any customary exclusion in respect of professional liability) Buyer, Engineer, their consultants, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

2. include at least the specific coverages and be written for not less than the limits of liability provided below or required by Laws or Regulations, whichever is greater;
 3. include completed operations insurance;
 4. include contractual liability insurance covering Seller's indemnity obligations under Paragraphs 5.09 and 12.02.
 5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least thirty days prior written notice has been given to Buyer and Seller and to each other additional insured identified in these Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Seller pursuant to Paragraph SC-4.02.I will so provide);
 6. remain in effect at least until final payment and at all times thereafter when Seller may be correcting, removing, or replacing non-conforming Goods in accordance with Paragraph 8.03;
 7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment (and Seller shall furnish Buyer and each other additional insured identified in these Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Buyer and any such additional insured of continuation of such insurance at final payment and one year thereafter); and
 8. with respect to any delegation of professional design services to Seller pursuant to Paragraph 5.10 of the General Conditions, include professional liability coverage by endorsement or otherwise.
- H. The limits of liability for the insurance required by Paragraph SC-4.02.F shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:
1. Workers' Compensation, and related coverages under Paragraphs SC-4.02.F.1 and F.2:
 - a. State: Statutory
 - b. Applicable Federal
(e.g., Longshoreman's): Statutory
 - c. Employer's Liability: \$1,000,000
 2. Seller's General Liability under Paragraphs SC-4.02.F.3 through F.6 which shall include completed operations and product liability coverages and eliminate the exclusion with respect to property under the care, custody and control of Seller:
 - a. General Aggregate \$2,000,000
 - b. Products - Completed
 - 1) Operations Aggregate \$2,000,000
 - c. Personal and Advertising
 - 1) Injury \$1,000,000
 - d. Each Occurrence
(Bodily Injury and Property Damage) \$1,000,000

- e. Property Damage liability insurance will provide Explosion, Collapse, and Underground coverages where applicable.
- f. Excess or Umbrella Liability
 - 1) General Aggregate \$5,000,000
 - 2) Each Occurrence \$5,000,000
- 3. Automobile Liability under Paragraph SC-4.02. F.6:
 - a. Bodily Injury:
 - 1) Each person \$1,000,000
 - 2) Each Accident \$1,000,000
 - b. Property Damage:
 - 1) Each Accident \$1,000,000
 - 2) Combined Single Limit of \$1,000,000

~~4. Professional Liability (if professional services have been delegated to Seller pursuant to Paragraph 5.10): \$2,000,000 (Addendum #3)~~

- I. Seller shall deliver to Buyer, with copies to each additional insured identified in these Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Buyer or any other additional insured) which Seller is required to purchase and maintain.
- J. If Buyer has any objection to the coverage afforded by or other provisions of the insurance required to be purchased and maintained on the basis of non-conformance with the Contract Documents, Buyer shall notify Seller in writing within 10 days after receipt of the certificates or other evidence required by Paragraph SC-4.02. E. Seller shall provide such additional information in respect to insurance as Buyer shall reasonably request.

Add the following paragraphs immediately after Paragraph 4.02.J:

- K. In General: All policies of insurance provided shall be issued by insurance companies qualified to do business in the State of Utah and listed on the U.S. Treasury Department's current listing of approved sureties (Department of Circular 570) (as amended), or having a general policy holder's rating of not less than "A-" in the most current available A.M. Best Co, Inc.'s, Best Insurance Report. Except in the case of worker's compensation insurance, the City, their Engineer and Agents of the City shall be included as additional named insureds in all insurance policies. CONTRACTOR shall furnish copies of certificates of insurance concurrent with or prior to the signing of the Agreement (00520). The certificates shall name the OWNER as the certificate holder and as an additional insured (except in the case of workers compensation insurance). If requested, CONTRACTOR shall also furnish copies of the insurance policies secured for the Work.
- L. Worker's Compensation Insurance: In addition to other required insurance, the CONTRACTOR shall obtain and maintain during the life of the Construction Contract worker's compensation insurance as required by Laws and Regulations for all of CONTRACTOR's employees employed at the site of the Work, and in case any Work is subcontracted, the CONTRACTOR shall require the Subcontractor similarly to provide worker's compensation

insurance for all of the latter's employees, unless such employees are covered by protection as required by Laws and Regulations.

M. Public Liability and Property Damage Insurance: CONTRACTOR shall secure and maintain during the life of the Construction Contract and at all times thereafter when CONTRACTOR may be correcting, removing or replacing Defective Work, a comprehensive general public liability and property damage insurance policy. The policy shall protect the CONTRACTOR, the OWNER, the ENGINEER, and any Subcontractor performing work covered by the Construction Contract from claims for damages for personal injury, including accidental death, and from claims for property damage which may arise from CONTRACTOR's operations under this Construction Contract, whether such operations be by the CONTRACTOR itself or by any Subcontractor or by anyone directly or indirectly employed by either of them. Unless specified otherwise in the Supplementary Conditions, the minimum amounts of such insurance shall be \$1,000,000 for each occurrence, and \$2,000,000 general aggregate and \$2,000,000 products/completed operations aggregate.

N. Automotive Public Liability Insurance: Whenever CONTRACTOR or any Subcontractor shall use and operate owned, hired, or non-owned automobiles, trucks or other vehicles on public streets and highways in complying with the terms and conditions of the Construction Contract, CONTRACTOR or each Subcontractor shall carry automobile public liability insurance with limits not less than \$1,000,000.00 per occurrence.

O. Insurance Non-cancelable for 30 Days: Each policy of insurance provided pursuant to the Contract Documents shall be absolutely non-cancelable for a period of not less than 30 days after notice of cancellation and shall contain the following provision or one substantially the same as the following:

"This policy shall not be subject to cancellation, change, or reduction of coverage by the other party or parties hereto, unless notice, as defined herein, is sent to the OWNER, with a copy to the ENGINEER and the OWNER's attorney."

P. Builder's Risk: CONTRACTOR agrees to and assumes the risk of loss for any damage or loss to the Work and Project by any means or occurrence until Substantial Completion. CONTRACTOR further agrees to obtain builder's risk or course of construction insurance in the total amount of the Contract Price.

ARTICLE 5 – SELLER’S RESPONSIBILITIES

Add the following sentence to 5.06.C.1.a:

Actual and physical field measurements shall be the responsibility of the Buyer, Engineer and/or Contractor (once assigned). (Addendum #3)

ARTICLE 8 – BUYER’S RIGHTS

Replace section 8.01.A.2 with the following paragraph:

Seller shall reimburse Buyer for all expenses, except for travel, lodging, and subsistence expenses of Buyer's and Engineer's representatives, for inspections and tests specified in the Contract Documents. If as the result of any such specified testing the Goods are determined to be non-conforming, then Seller shall reimburse the reasonable travel, lodging, and subsistence expenses of Buyer's and Engineer's representatives, and expenses of re-inspection or retesting, which reimbursement and obligation to reimburse shall not exceed \$2,000.00. (Addendum #3)

Replace section 8.01.A.3 with the following paragraph:

Buyer shall bear all expenses of inspections and tests that are not specified in the Contract Documents (other than any re-inspection or retesting resulting from a determination of non-conformity, as set forth in Paragraph 8.01.A.2 immediately above); provided, however, that if as the result of any such non-specified inspections or testing the Goods are determined to be non-conforming, then Seller shall reimburse all reasonable expenses of such inspections and testing, and of any necessary re-inspection and retesting, which reimbursement and obligation to reimburse shall not exceed \$2,000.00. (Addendum #3)

~~Add the following final sentence to 8.02.A:~~

~~—The Seller shall in no way be excused from correcting, removing or replacing Defective Work on the grounds that such correction, replacement or removal would constitute economic waste or subject the Seller to financial or economic hardship.~~

Replace section 8.02.A with the following paragraph:

If, on the basis of inspections and testing prior to delivery, the Goods and Special Services are found to be non-conforming, or if at any time after Buyer has acknowledged receipt of delivery and before the expiration of the correction period described in Paragraph 8.03, Buyer determines that the Goods and Special Services are non-conforming, then Seller shall promptly, without cost to Buyer and in response to written instructions from Buyer, correct such non-conforming Goods and Special Services. (Addendum #3)

ARTICLE 10 – PAYMENT

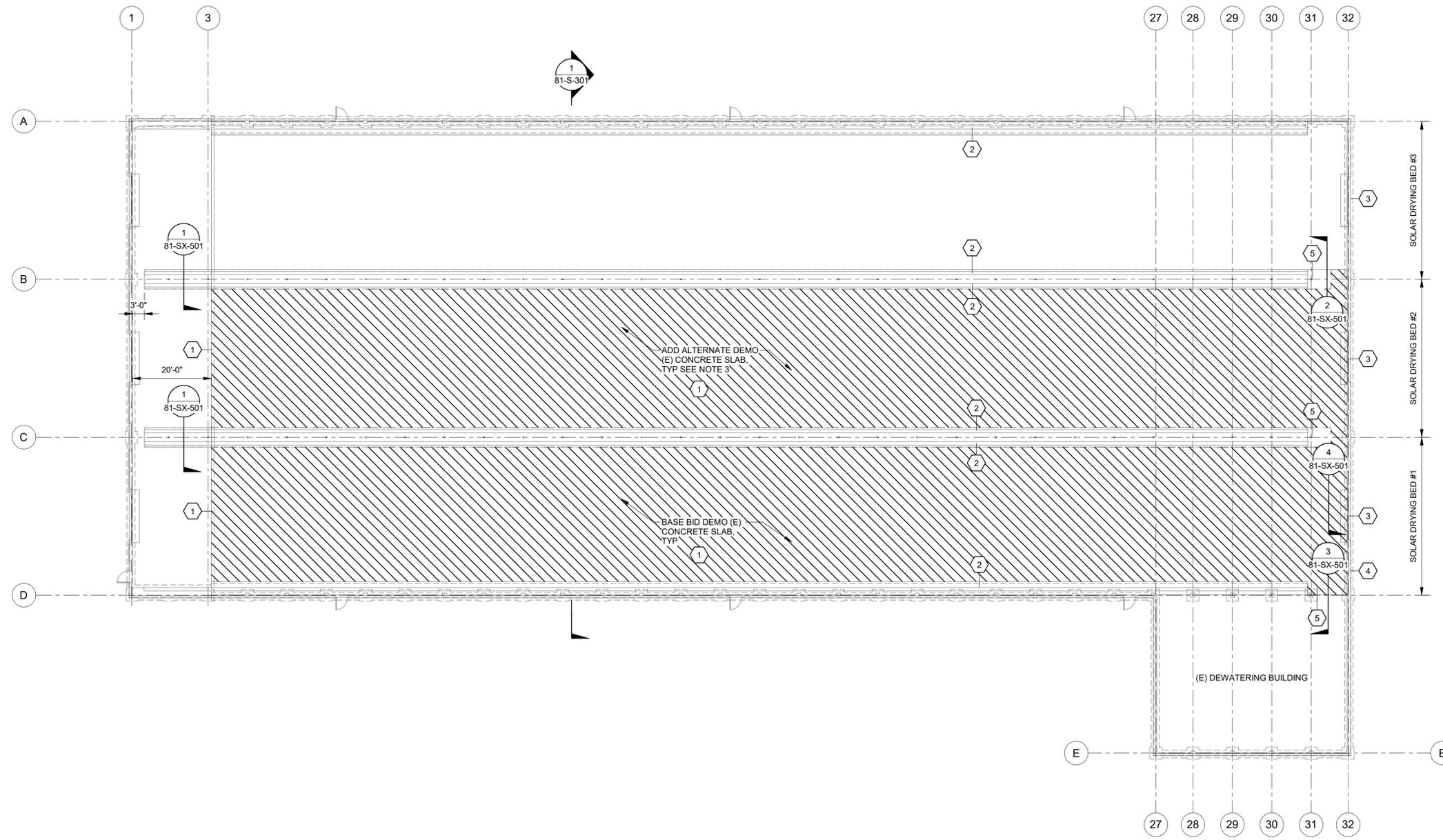
SC-10.01 Applications for Progress Payments

Add the following paragraph as 10.01.B

- B. Seller shall submit proof reasonably acceptable to Owner and Engineer in conjunction with progress payments and the final payment that all claims by suppliers of labor, materials and services incorporated in the Goods for which payment is being sought have been satisfied including, but not limited to, lien releases or waivers. Seller shall defend, indemnify, and hold Owner free and harmless from and against any and all claims by the suppliers of labor, materials and services performed and/or provided in connection with the Goods.

END OF SECTION

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



DEMO PLAN NOTES

1. CONTRACTOR TO COORDINATE & VERIFY ALL DIMENSIONS & ELEVATIONS WITH CIVIL, MECHANICAL, & EXISTING CONDITIONS.
2. SEE SHEETS S-001 - S-003 FOR THE GENERAL STRUCTURAL NOTES REQUIREMENTS.
3. IN THE CASE THAT ADD ALTERNATE FOR SOLAR DRYING BED #2 IS NOT INCLUDED, PRESERVE & PROTECT IN-PLACE THE (E) CONCRETE FLOOR AND STEEL GUIDE RAILS.

SHEET KEYED NOTES

1	DEMO (E) CONCRETE SLAB WHERE INDICATED ON PLAN, EXTENDING TO OUTSIDE EDGE OF (E) RETAINING WALL. SEE PHOTO 1/81-SX-501 AND DETAILS
2	PRESERVE & PROTECT IN-PLACE THE (E) STEEL GUIDE RAILS. SEE PHOTOS ON SHEET 81-SX-501
3	PRESERVE & PROTECT IN-PLACE THE (E) DOORS AND (E) BUILDING, SEE PHOTOS ON SHEET 81-SX-501
4	PRESERVE & PROTECT IN-PLACE THE (E) FOUNDATION WALL
5	PRESERVE & PROTECT IN-PLACE THE (E) SLAB AND FOUNDATIONS AT (E) COLUMNS, POSTS, BASE PLATES, AND EQUIPMENT PADS. DEMO EXTENDS TO CONTROL JOINTS ADJACENT TO THOSE LISTED.

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Salt Lake City, UT 84107
Phone: 801.966.9052
www.jub.com

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PRELIMINARY PLANS

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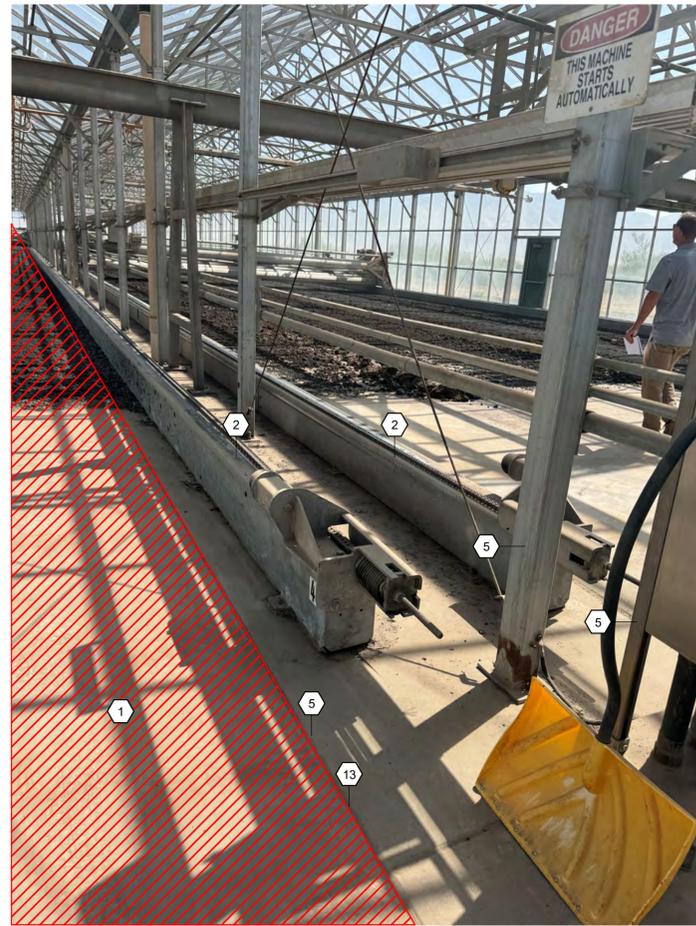
WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE

STRUCTURAL (S)
81 - SOLAR DRYER GREENHOUSE
DEMOLITION PLAN

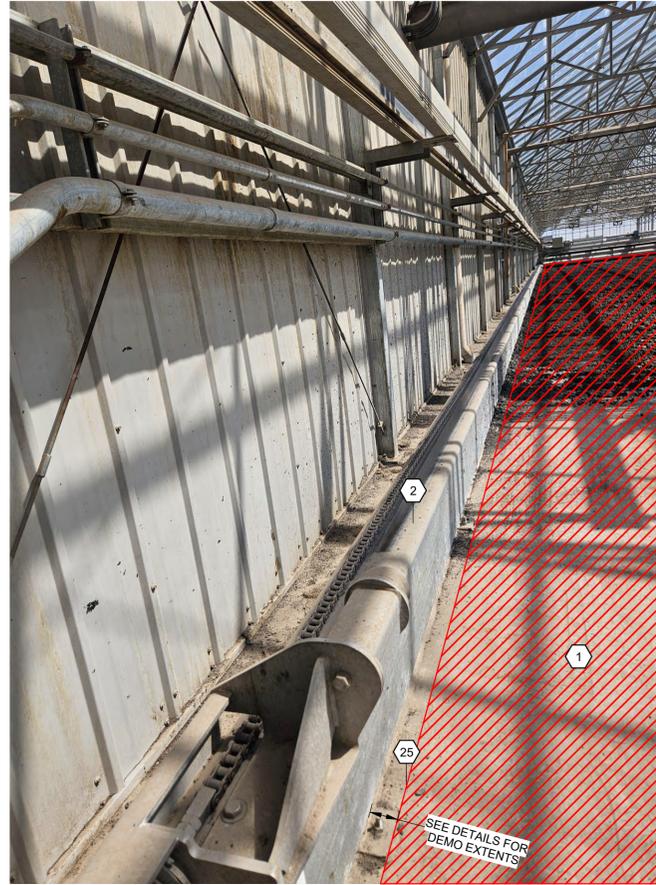
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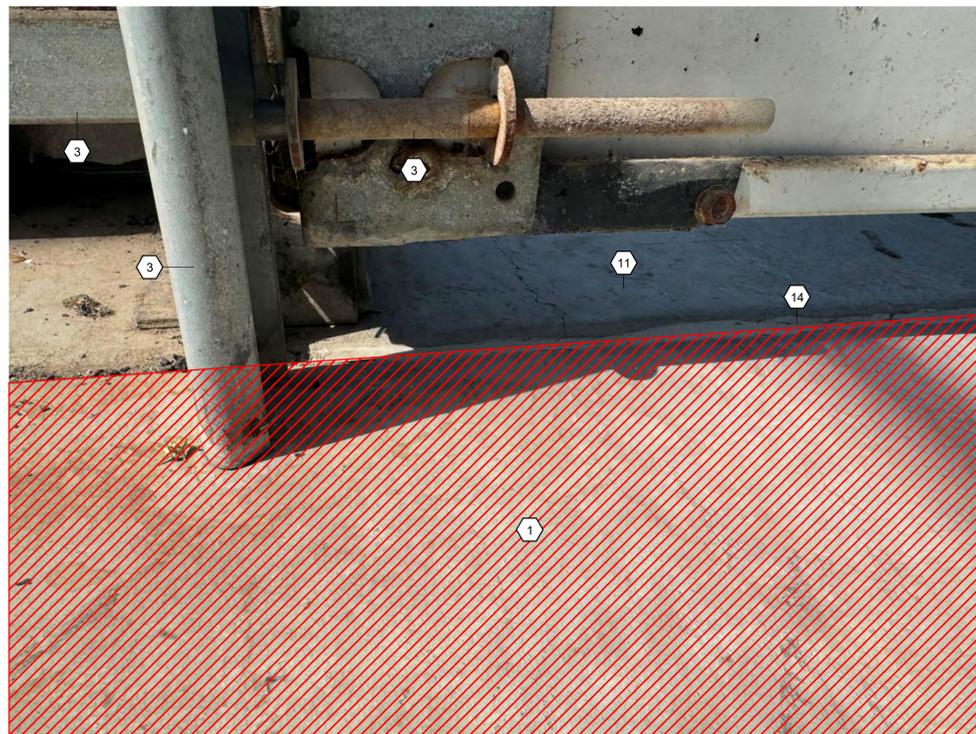
1 DEMO SLAB EXTENTS
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2 DEMO AT GUIDE RAILS
81-SX-101 SCALE: NTS



3 DEMO AT GUIDE RAILS
81-SX-101 SCALE: NTS



4 DEMO AT EXTERIOR DOORS
81-SX-101 SCALE: NTS

SHEET KEYED NOTES	
1	DEMO (E) CONCRETE SLAB WHERE INDICATED ON PLAN, EXTENDING TO OUTSIDE EDGE OF (E) RETAINING WALL, SEE PHOTO 1/81-SX-501 AND DETAILS
2	PRESERVE & PROTECT IN-PLACE THE (E) STEEL GUIDE RAILS, SEE PHOTOS ON SHEET 81-SX-501
3	PRESERVE & PROTECT IN-PLACE THE (E) DOORS AND (E) BUILDING, SEE PHOTOS ON SHEET 81-SX-501
5	PRESERVE & PROTECT IN-PLACE THE (E) SLAB AND FOUNDATIONS AT (E) COLUMNS, POSTS, BASE PLATES, AND EQUIPMENT PADS, DEMO EXTENDS TO CONTROL JOINTS ADJACENT TO THOSE LISTED.
10	(E) RETAINING WALL
11	PRESERVE & PROTECT IN-PLACE THE (E) FOUNDATION STEM WALL
12	PRESERVE & PROTECT IN-PLACE THE (E) SLAB
13	(E) CONSTRUCTION JOINT, SEE DETAILS FOR MAXIMUM EXTENTS WHERE THERE IS NO JOINT
14	(E) ISOLATION JOINT
25	SEE DETAILS FOR MAXIMUM EXTENTS WHERE THERE IS NO JOINT

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PRELIMINARY PLANS
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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
STRUCUTRAL (S)
81 - SOLAR DRYER GREENHOUSE
DEMO AND EXISTING CONDITIONS

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DESIGN BY:	Designer
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SHEET:	OF

SHEET KEYED NOTES	
3	PRESERVE & PROTECT IN-PLACE THE (E) DOORS AND (E) BUILDING, SEE PHOTOS ON SHEET 81-SX-501
6	EQUIPMENT, RE: PROCESS MECHANICAL



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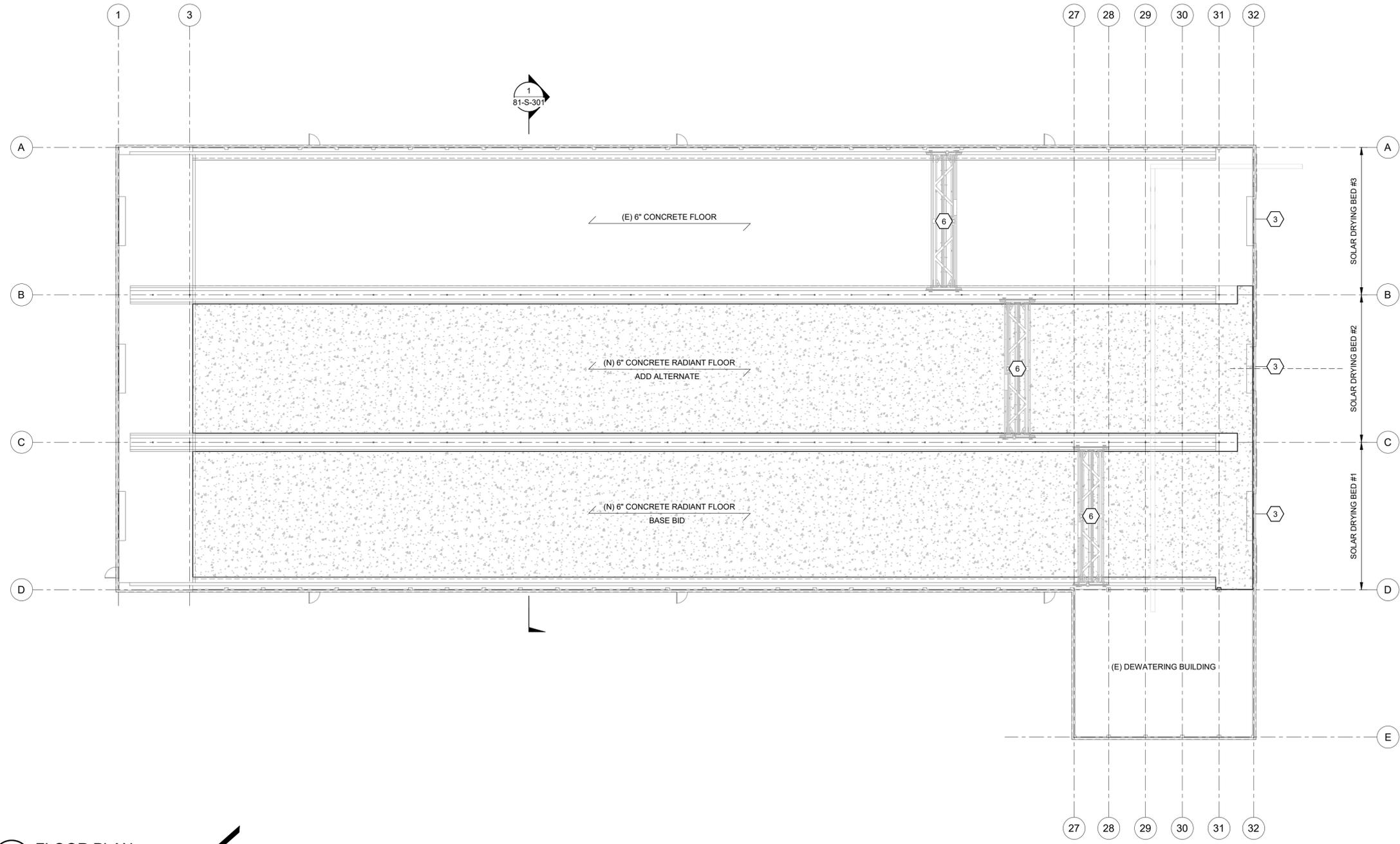
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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
STRUCUTRAL (S)
81 - SOLAR DRYER GREENHOUSE
FLOOR PLAN

FILE:	JUB PROJ. #93-25-005
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DESIGN BY:	Designer
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LAST UPDATED:	
DRAWING:	81-S-101
SHEET:	OF



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

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FOUNDATION PLAN NOTES

- CONTRACTOR TO COORDINATE & VERIFY ALL DIMENSIONS & ELEVATIONS WITH CIVIL, MECHANICAL, & EXISTING CONDITIONS.
- SEE SHEETS S-001 - S-003 FOR THE GENERAL STRUCTURAL NOTES REQUIREMENTS.
- PROVIDE FLOOR HARDENER, SEE SPECIFICATIONS.
- SLAB ON GRADE SHALL BE 6" THICK WITH #4 @ 12" O.C. EACH WAY PLACED 2" CLEAR FROM THE TOP OF CONCRETE. PLACE REINFORCEMENT BELOW RADIANT TUBING

⬡ SHEET KEYED NOTES

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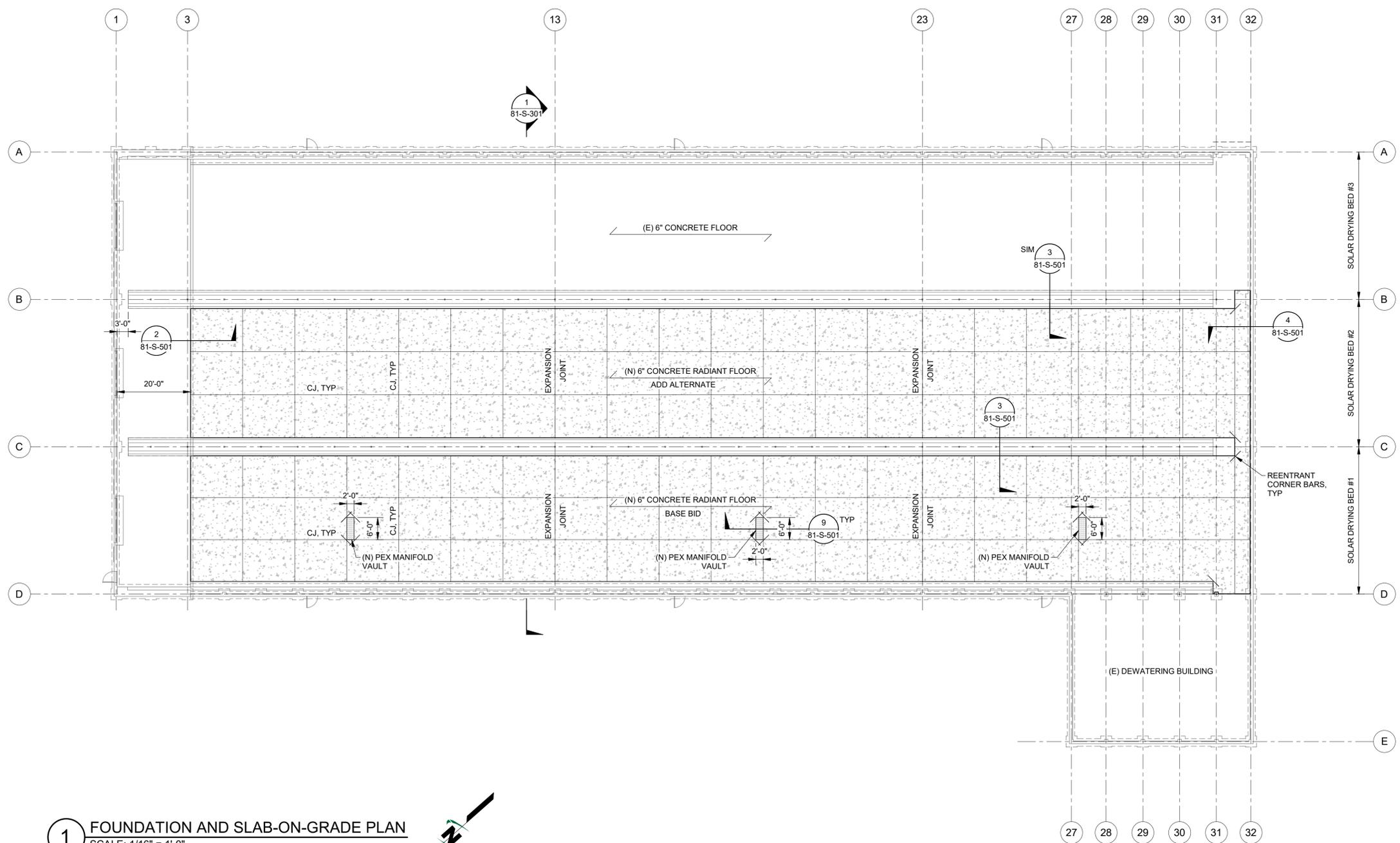
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NO.	REVISION	DESCRIPTION	BY	APP.	DATE

WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
 STRUCTURAL (S)
 81 - SOLAR DRYER GREENHOUSE
 FOUNDATION PLAN

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 CHECKED BY: Checker
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81-S-102
 SHEET: OF



1 FOUNDATION AND SLAB-ON-GRADE PLAN
 SCALE: 1/16" = 1'-0"



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SHEET KEYED NOTES	
2	PRESERVE & PROTECT IN-PLACE THE (E) STEEL GUIDE RAILS, SEE PHOTOS ON SHEET 81-SX-501
12	PRESERVE & PROTECT IN-PLACE THE (E) SLAB
15	PRESERVE & PROTECT IN-PLACE (E) EXTERIOR WALL
16	PRESERVE & PROTECT IN-PLACE (E) COLUMN
17	(E) FOOTING
18	EXCAVATION LIMITS, DO NOT UNDERMINE (E) FOUNDATION
20	PRESERVE & PROTECT IN-PLACE (E) ROOF TRUSS
21	TOP OF SLAB TO BOTTOM OF TRUSS, CONTRACTOR TO FIELD VERIFY
22	BASE BID (N) 6" THICK CONCRETE W/ RADIANT SYSTEM
23	ADD ALTERNATE (N) 6" THICK CONCRETE W/ RADIANT SYSTEM
24	PRESERVE & PROTECT IN-PLACE (E) FOUNDATION



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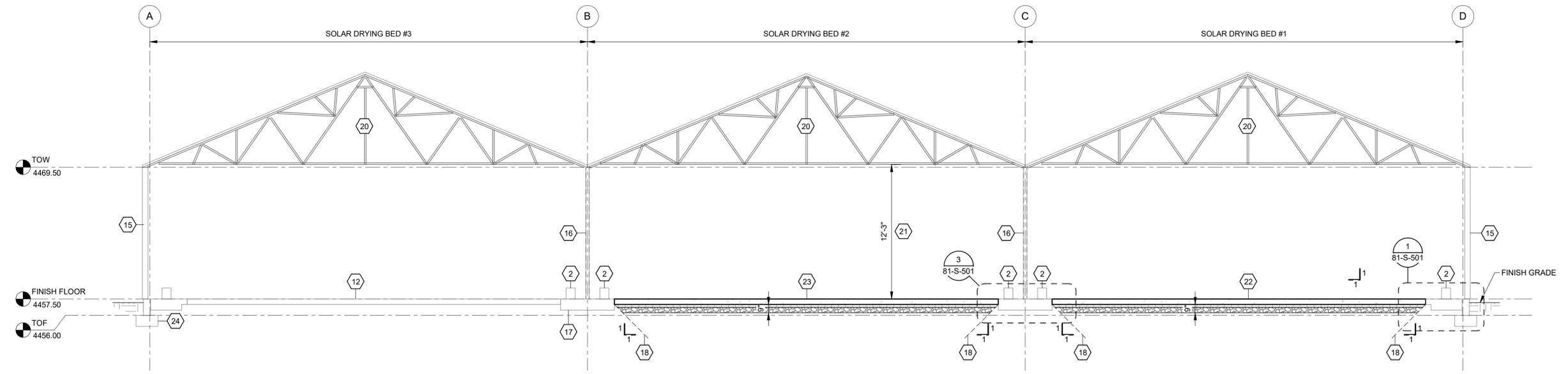
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NO.	DESCRIPTION	BY	APP.	DATE

WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
 STRUCTURAL (S)
 81 - SOLAR DRYER GREENHOUSE
 BUILDING SECTION

FILE:	JUB PROJ. #93-25-005
DRAWN BY:	Author
DESIGN BY:	Designer
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ONE INCH	AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY
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DRAWING:	81-S-301
SHEET:	OF



1 BUILDING SECTION
 81-S-101 SCALE: 3/16" = 1'-0"

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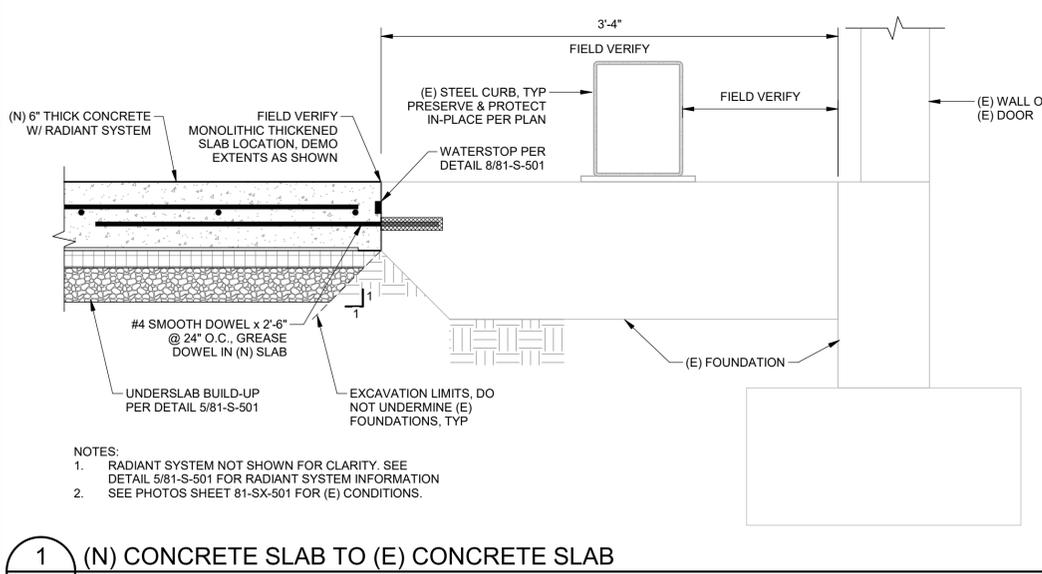
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PRELIMINARY PLANS
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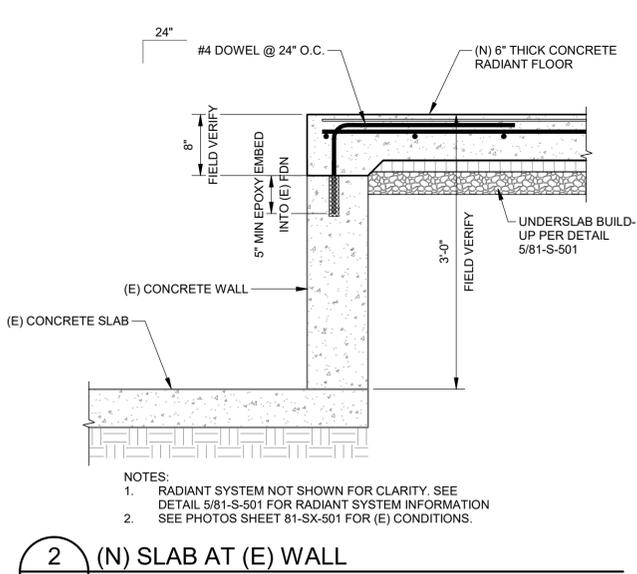
NO.	DESCRIPTION	BY	APP.	DATE

WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
 STRUCTURAL (S)
 81 - SOLAR DRYER GREENHOUSE
 CONCRETE DETAILS

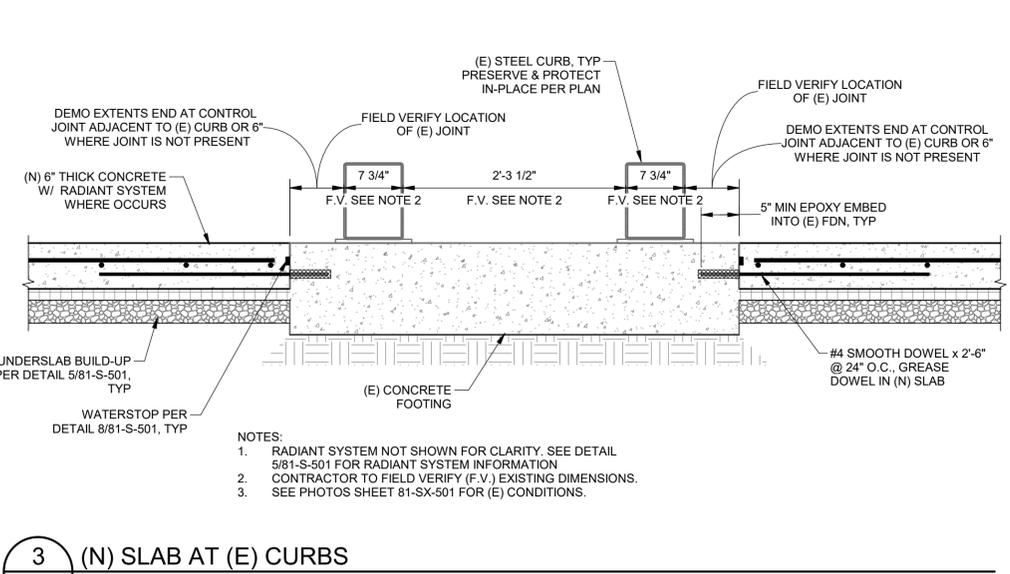
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 DRAWING:
81-S-501
 SHEET: OF



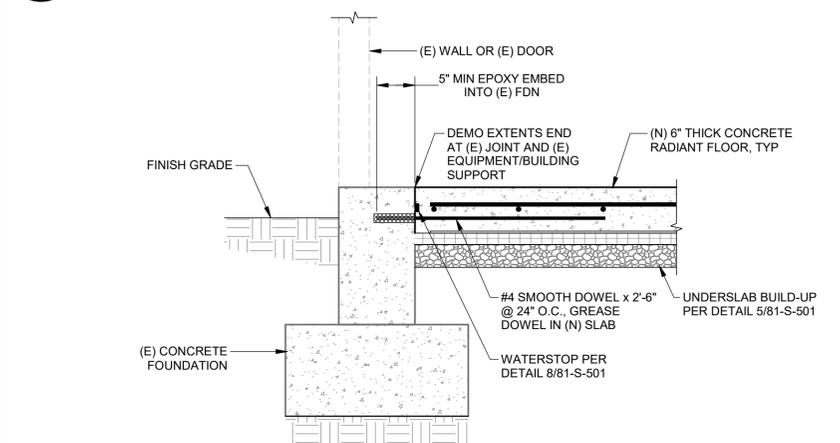
1 (N) CONCRETE SLAB TO (E) CONCRETE SLAB
 81-S-301 SCALE: NTS



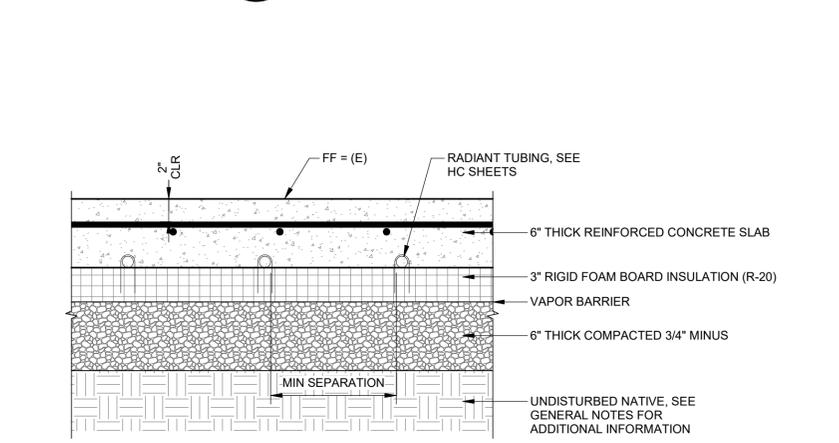
2 (N) SLAB AT (E) WALL
 81-S-102 SCALE: NTS



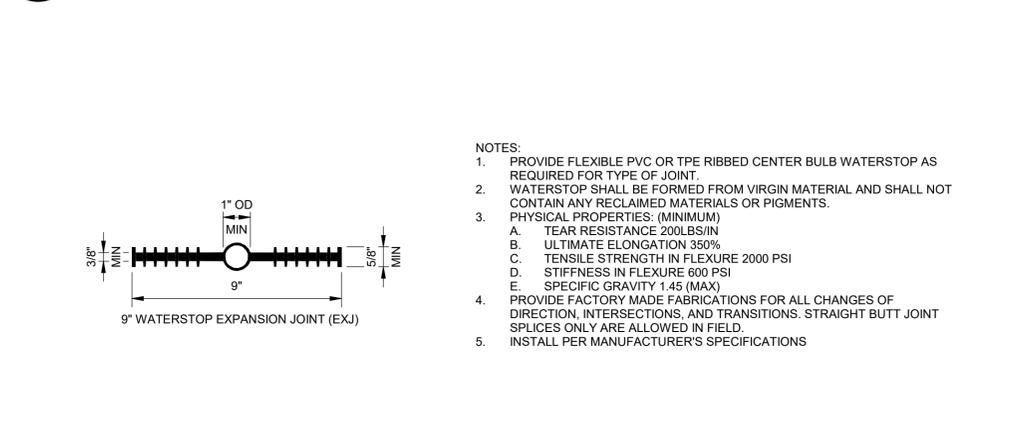
3 (N) SLAB AT (E) CURBS
 81-S-102 SCALE: NTS



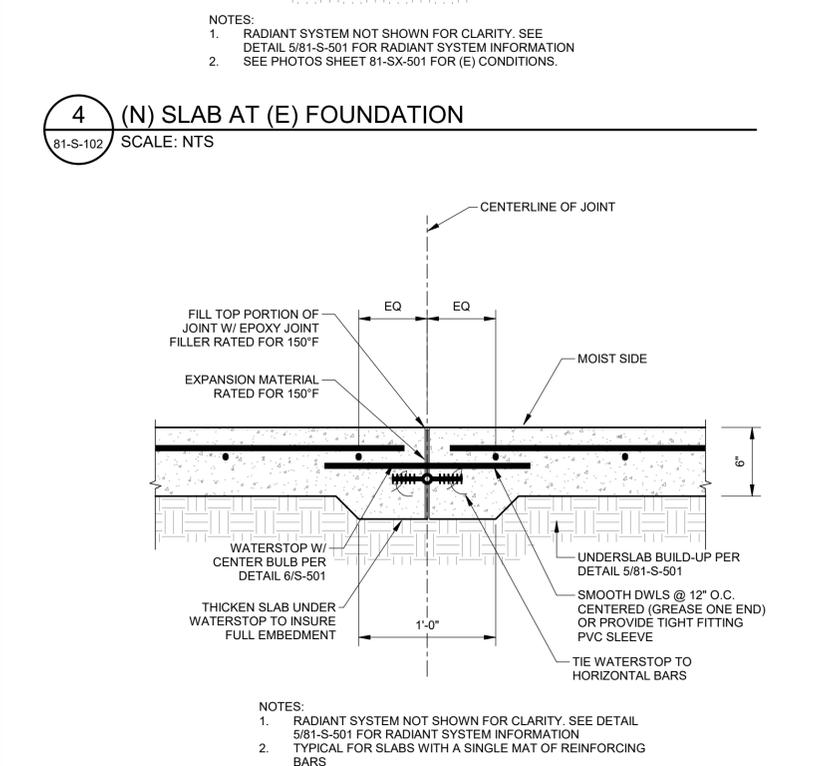
4 (N) SLAB AT (E) FOUNDATION
 81-S-102 SCALE: NTS



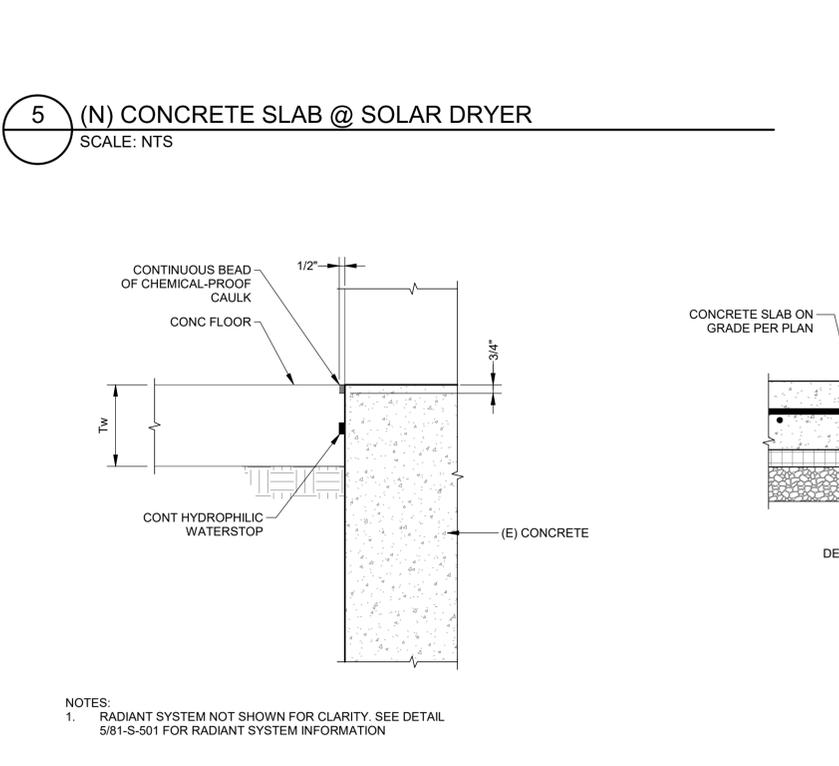
5 (N) CONCRETE SLAB @ SOLAR DRYER
 81-S-102 SCALE: NTS



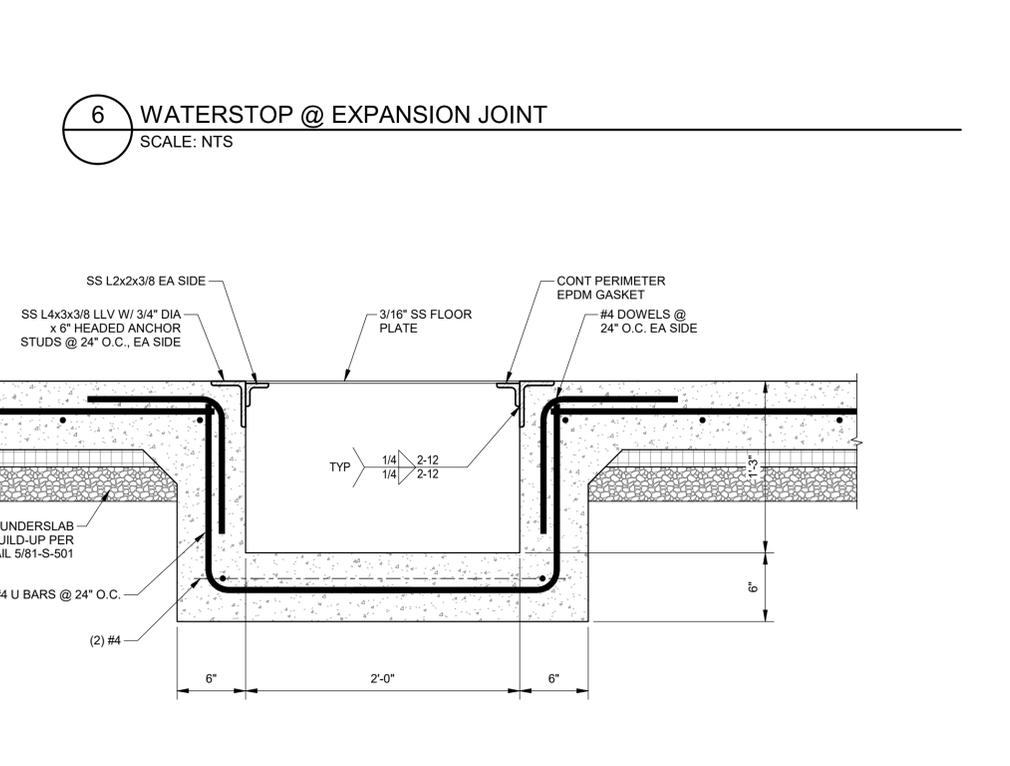
6 WATERSTOP @ EXPANSION JOINT
 81-S-102 SCALE: NTS



7 TYPICAL EXPANSION JOINT
 81-S-102 SCALE: NTS



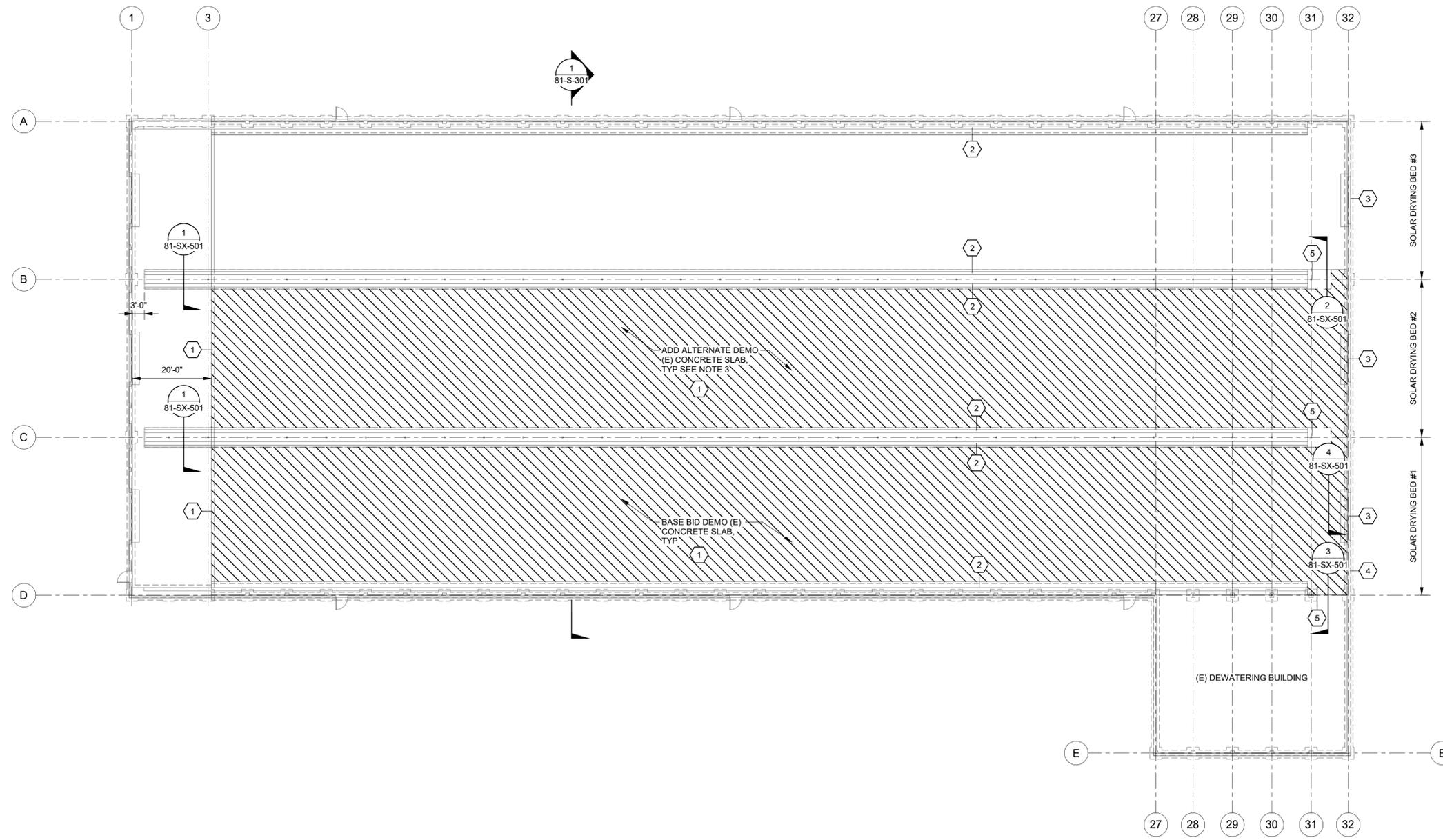
8 WATERSTOP AT (E) WALL OR (E) FDN JOINT
 81-S-102 SCALE: NTS



9 (N) PEX MANIFOLD VAULT
 81-S-102 SCALE: NTS

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



DEMO PLAN NOTES

- CONTRACTOR TO COORDINATE & VERIFY ALL DIMENSIONS & ELEVATIONS WITH CIVIL, MECHANICAL, & EXISTING CONDITIONS.
- SEE SHEETS S-001 - S-003 FOR THE GENERAL STRUCTURAL NOTES REQUIREMENTS.
- IN THE CASE THAT ADD ALTERNATE FOR SOLAR DRYING BED #2 IS NOT INCLUDED, PRESERVE & PROTECT IN-PLACE THE (E) CONCRETE FLOOR AND STEEL GUIDE RAILS.

SHEET KEYED NOTES

1	DEMO (E) CONCRETE SLAB WHERE INDICATED ON PLAN, EXTENDING TO OUTSIDE EDGE OF (E) RETAINING WALL. SEE PHOTO 1/81-SX-501 AND DETAILS
2	PRESERVE & PROTECT IN-PLACE THE (E) STEEL GUIDE RAILS. SEE PHOTOS ON SHEET 81-SX-501
3	PRESERVE & PROTECT IN-PLACE THE (E) DOORS AND (E) BUILDING, SEE PHOTOS ON SHEET 81-SX-501
4	PRESERVE & PROTECT IN-PLACE THE (E) FOUNDATION WALL
5	PRESERVE & PROTECT IN-PLACE THE (E) SLAB AND FOUNDATIONS AT (E) COLUMNS, POSTS, BASE PLATES, AND EQUIPMENT PADS. DEMO EXTENDS TO CONTROL JOINTS ADJACENT TO THOSE LISTED.

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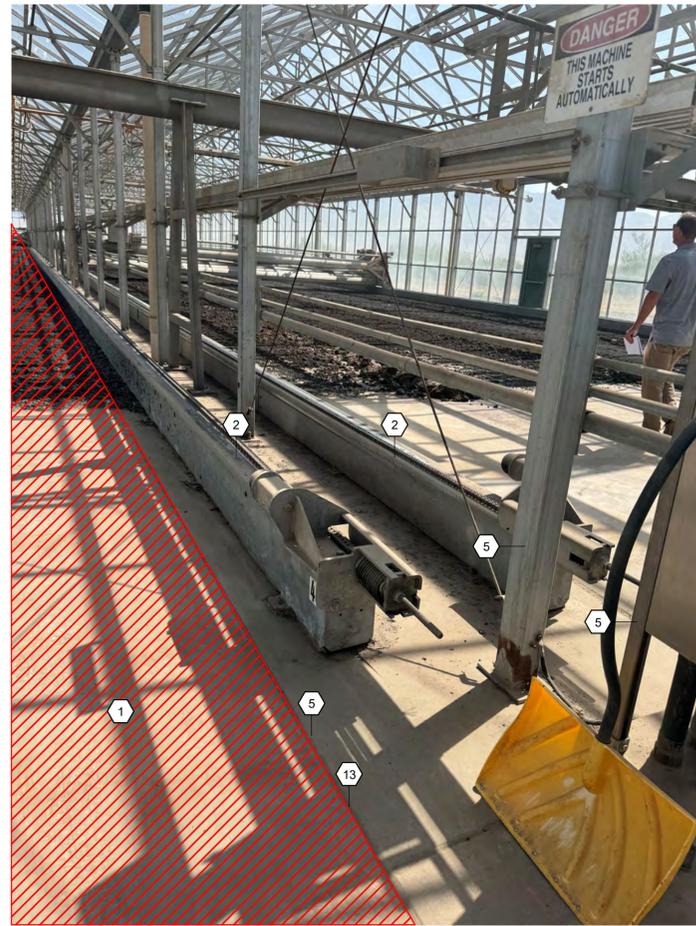
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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
STRUCTURAL (S)
81 - SOLAR DRYER GREENHOUSE
DEMOLITION PLAN

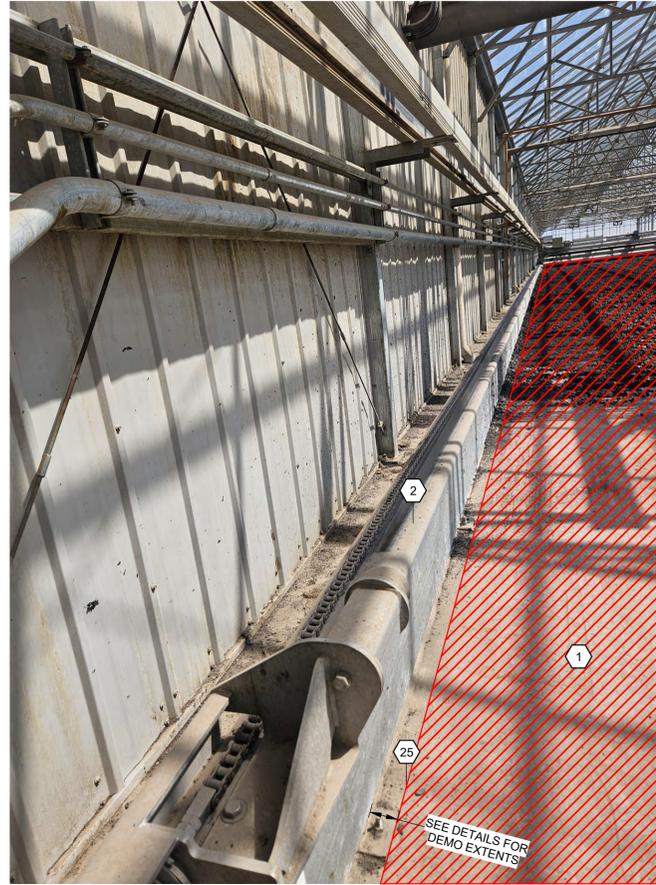
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DESIGN BY:	Designer
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LAST UPDATED:	
DRAWING:	81-SX-101
SHEET:	OF



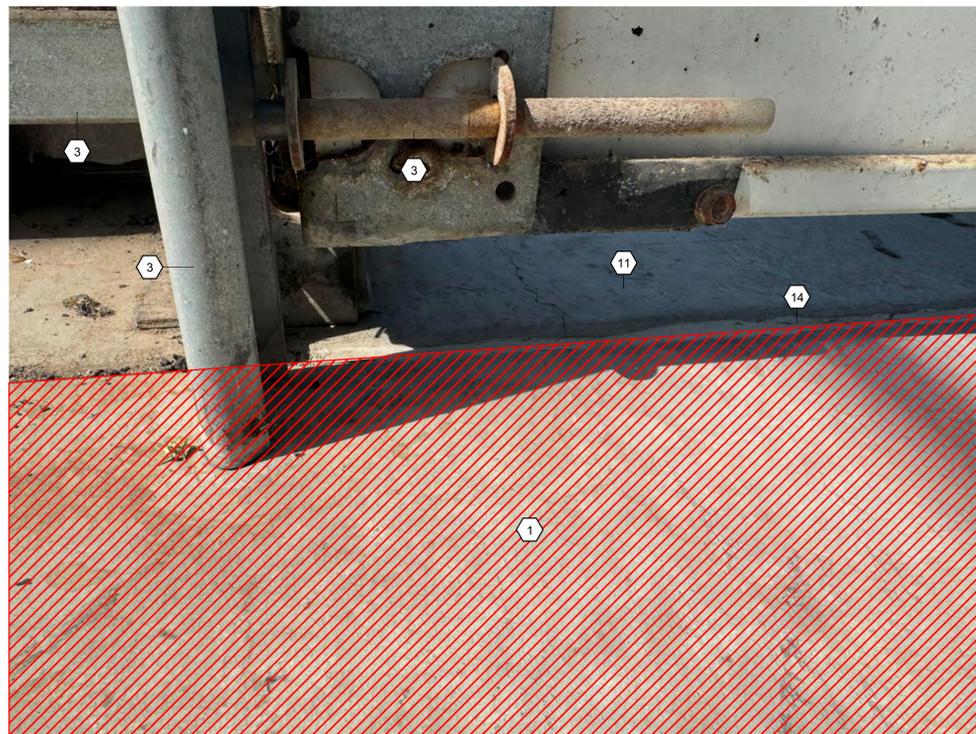
1 DEMO SLAB EXTENTS
81-SX-101 SCALE: NTS



2 DEMO AT GUIDE RAILS
81-SX-101 SCALE: NTS



3 DEMO AT GUIDE RAILS
81-SX-101 SCALE: NTS



4 DEMO AT EXTERIOR DOORS
81-SX-101 SCALE: NTS

SHEET KEYED NOTES	
1	DEMO (E) CONCRETE SLAB WHERE INDICATED ON PLAN, EXTENDING TO OUTSIDE EDGE OF (E) RETAINING WALL, SEE PHOTO 1/81-SX-501 AND DETAILS
2	PRESERVE & PROTECT IN-PLACE THE (E) STEEL GUIDE RAILS, SEE PHOTOS ON SHEET 81-SX-501
3	PRESERVE & PROTECT IN-PLACE THE (E) DOORS AND (E) BUILDING, SEE PHOTOS ON SHEET 81-SX-501
5	PRESERVE & PROTECT IN-PLACE THE (E) SLAB AND FOUNDATIONS AT (E) COLUMNS, POSTS, BASE PLATES, AND EQUIPMENT PADS, DEMO EXTENDS TO CONTROL JOINTS ADJACENT TO THOSE LISTED.
10	(E) RETAINING WALL
11	PRESERVE & PROTECT IN-PLACE THE (E) FOUNDATION STEM WALL
12	PRESERVE & PROTECT IN-PLACE THE (E) SLAB
13	(E) CONSTRUCTION JOINT, SEE DETAILS FOR MAXIMUM EXTENTS WHERE THERE IS NO JOINT
14	(E) ISOLATION JOINT
25	SEE DETAILS FOR MAXIMUM EXTENTS WHERE THERE IS NO JOINT

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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
STRUCUTRAL (S)
81 - SOLAR DRYER GREENHOUSE
DEMO AND EXISTING CONDITIONS

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LAST UPDATED:	
DRAWING:	
81-SX-501	
SHEET:	OF

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SHEET KEYED NOTES	
3	PRESERVE & PROTECT IN-PLACE THE (E) DOORS AND (E) BUILDING, SEE PHOTOS ON SHEET 81-SX-501
6	EQUIPMENT, RE: PROCESS MECHANICAL



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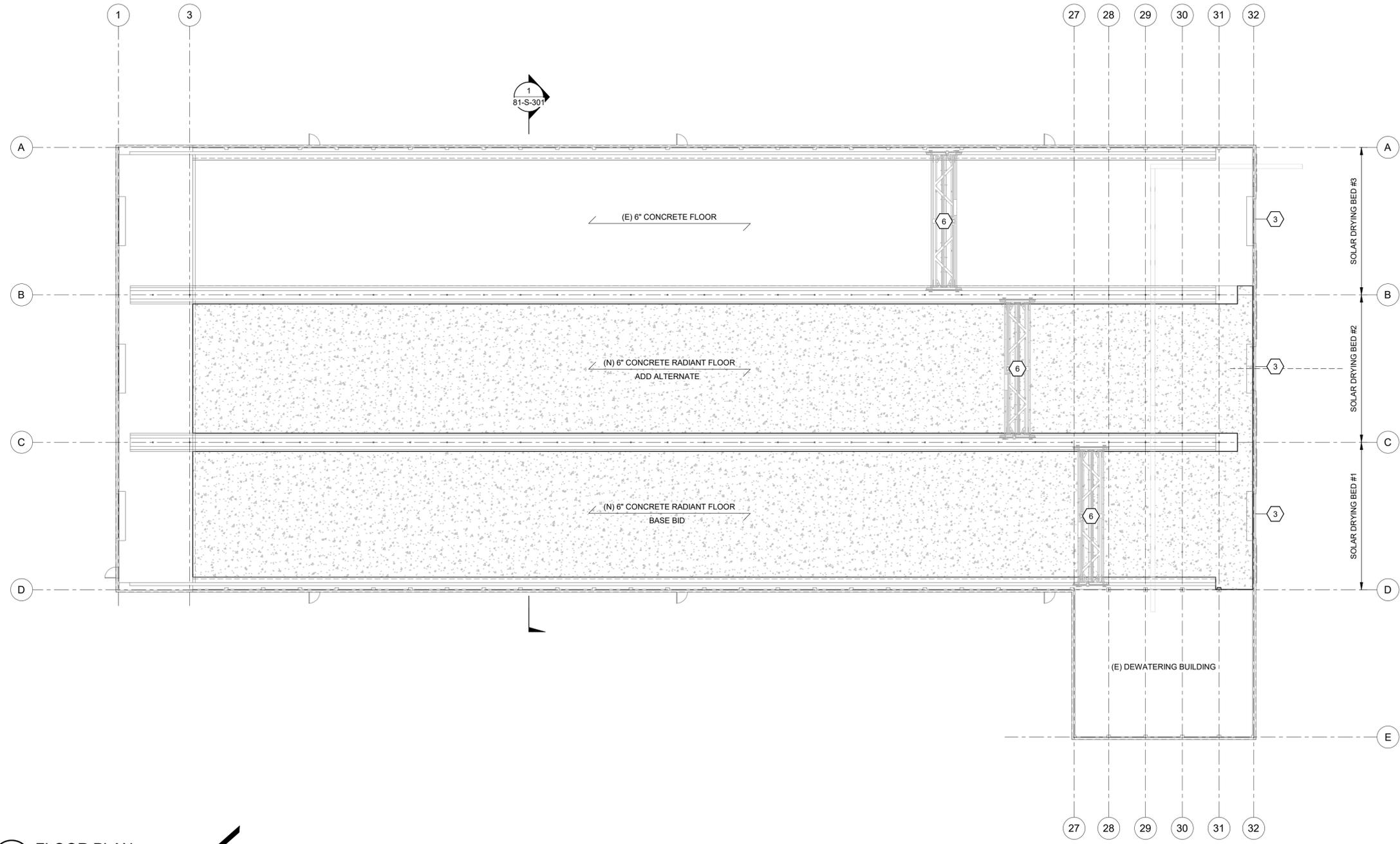
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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
 STRUCUTRAL (S)
 81 - SOLAR DRYER GREENHOUSE
 FLOOR PLAN

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SCALE:	ONE INCH AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY
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DRAWING:	81-S-101
SHEET:	OF



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



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FOUNDATION PLAN NOTES

- CONTRACTOR TO COORDINATE & VERIFY ALL DIMENSIONS & ELEVATIONS WITH CIVIL, MECHANICAL, & EXISTING CONDITIONS.
- SEE SHEETS S-001 - S-003 FOR THE GENERAL STRUCTURAL NOTES REQUIREMENTS.
- PROVIDE FLOOR HARDENER, SEE SPECIFICATIONS.
- SLAB ON GRADE SHALL BE 6" THICK WITH #4 @ 12" O.C. EACH WAY PLACED 2" CLEAR FROM THE TOP OF CONCRETE. PLACE REINFORCEMENT BELOW RADIANT TUBING

⬡ SHEET KEYED NOTES

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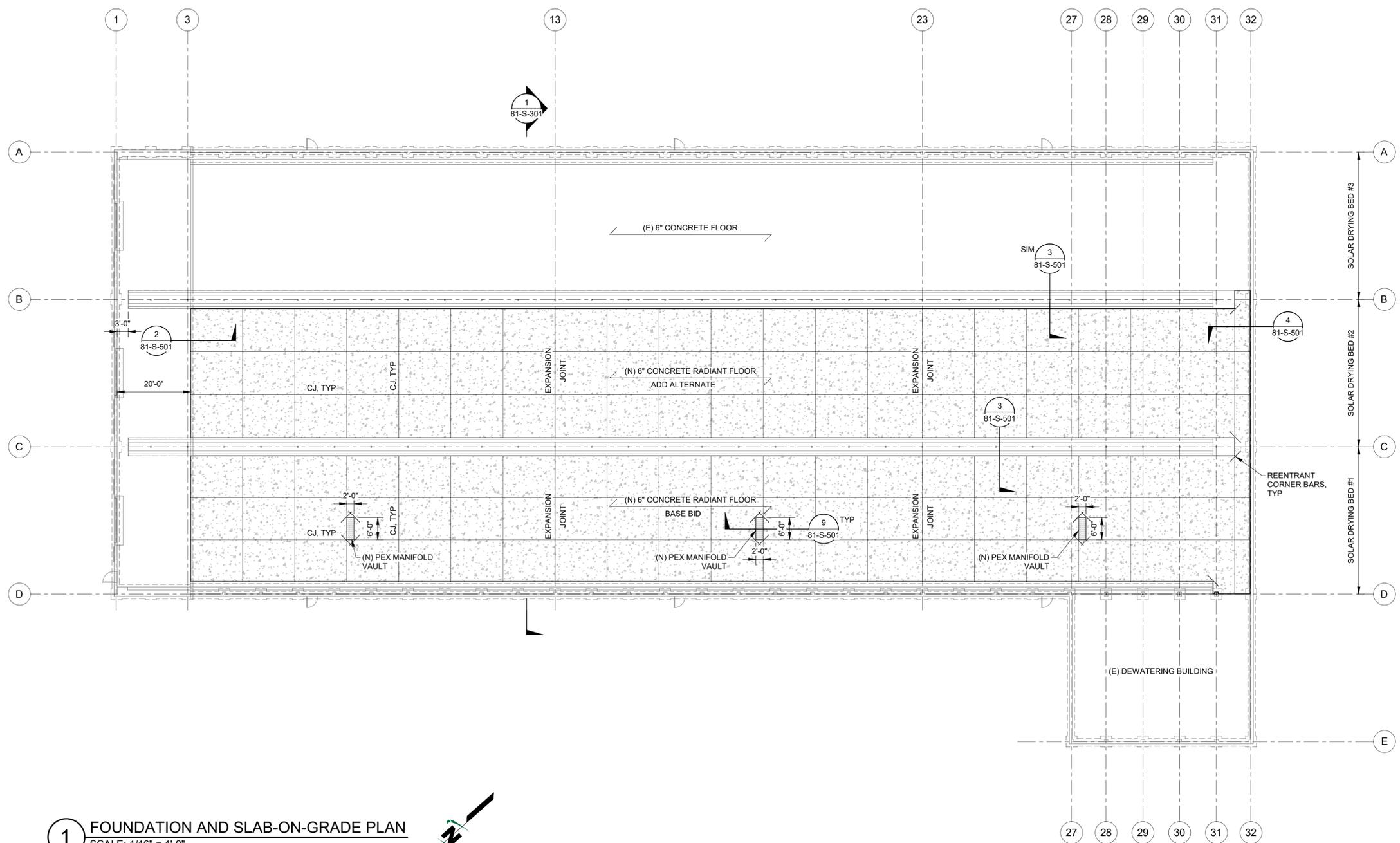
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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
 STRUCTURAL (S)
81 - SOLAR DRYER GREENHOUSE
FOUNDATION PLAN

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SCALE:	ONE INCH = 12 FEET AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY
LAST UPDATED:	
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SHEET:	OF



1 FOUNDATION AND SLAB-ON-GRADE PLAN
 SCALE: 1/16" = 1'-0"



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SHEET KEYED NOTES	
2	PRESERVE & PROTECT IN-PLACE THE (E) STEEL GUIDE RAILS, SEE PHOTOS ON SHEET 81-SX-501
12	PRESERVE & PROTECT IN-PLACE THE (E) SLAB
15	PRESERVE & PROTECT IN-PLACE (E) EXTERIOR WALL
16	PRESERVE & PROTECT IN-PLACE (E) COLUMN
17	(E) FOOTING
18	EXCAVATION LIMITS, DO NOT UNDERMINE (E) FOUNDATION
20	PRESERVE & PROTECT IN-PLACE (E) ROOF TRUSS
21	TOP OF SLAB TO BOTTOM OF TRUSS, CONTRACTOR TO FIELD VERIFY
22	BASE BID (N) 6" THICK CONCRETE W/ RADIANT SYSTEM
23	ADD ALTERNATE (N) 6" THICK CONCRETE W/ RADIANT SYSTEM
24	PRESERVE & PROTECT IN-PLACE (E) FOUNDATION



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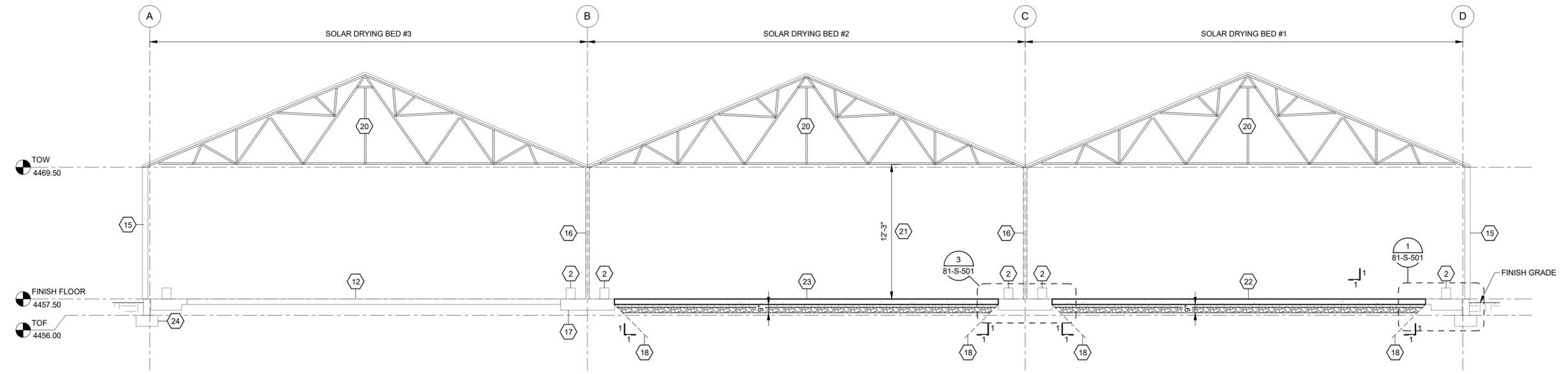
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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
 STRUCTURAL (S)
 81 - SOLAR DRYER GREENHOUSE
 BUILDING SECTION

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DRAWING:	81-S-301
SHEET:	OF



1 BUILDING SECTION
 81-S-101 SCALE: 3/16" = 1'-0"

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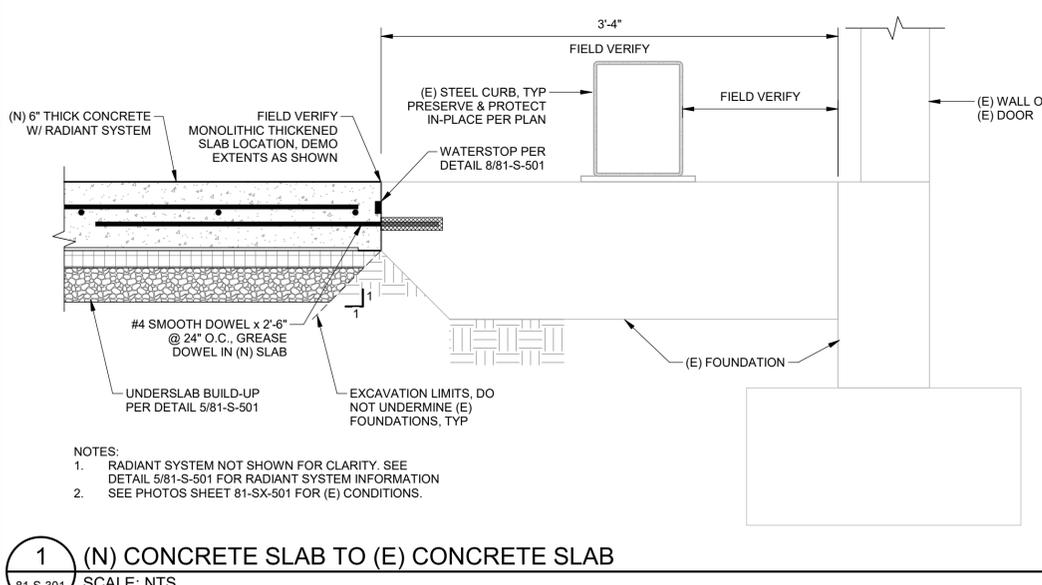
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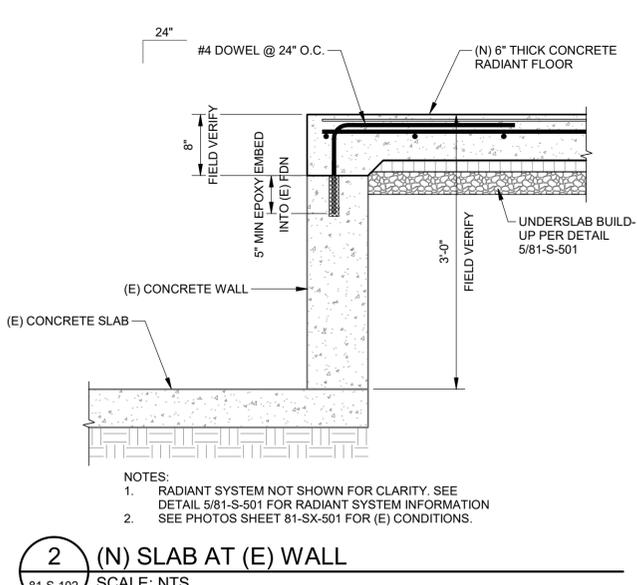
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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
STRUCUTRAL (S)
81 - SOLAR DRYER GREENHOUSE
CONCRETE DETAILS

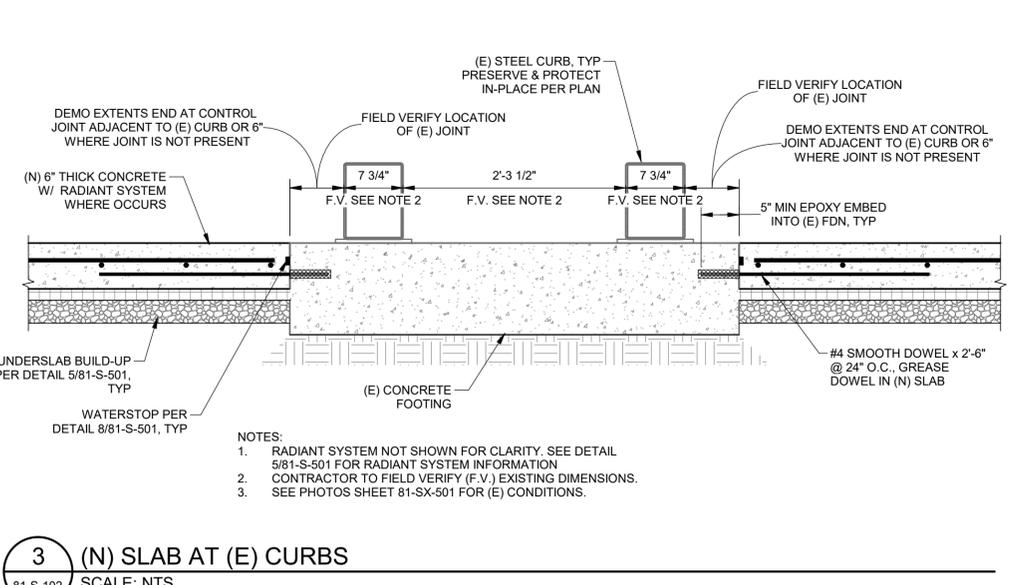
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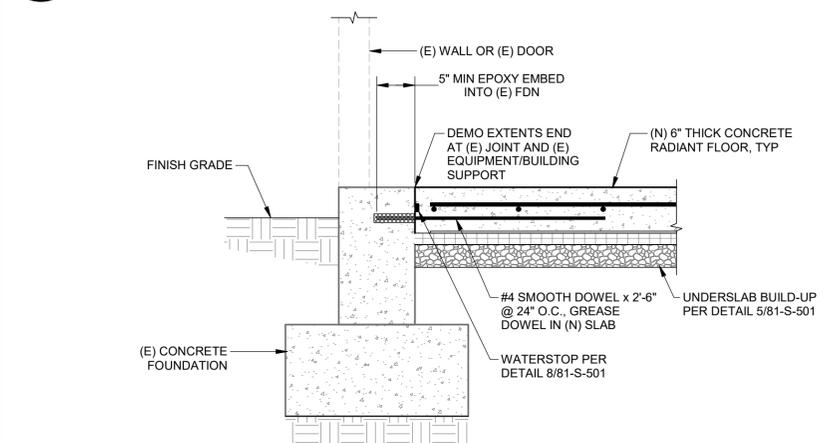
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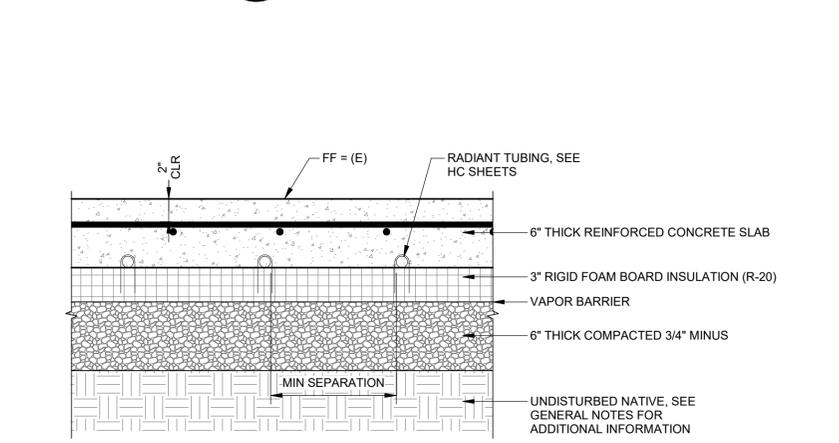
2 (N) SLAB AT (E) WALL
 81-S-102 SCALE: NTS



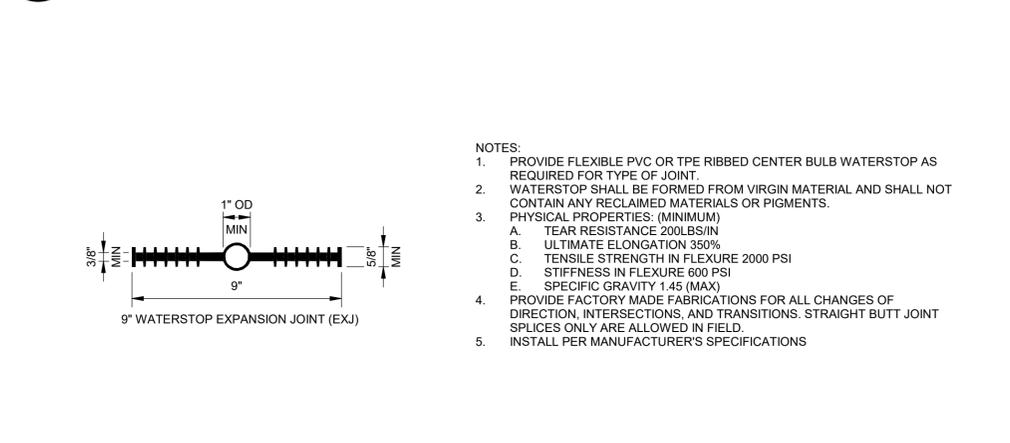
3 (N) SLAB AT (E) CURBS
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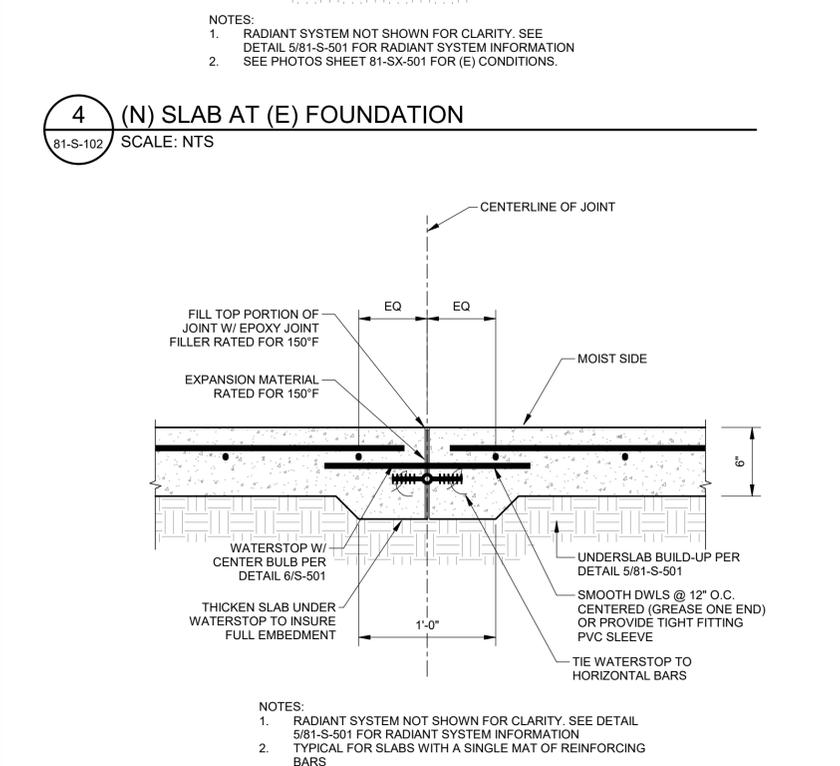
4 (N) SLAB AT (E) FOUNDATION
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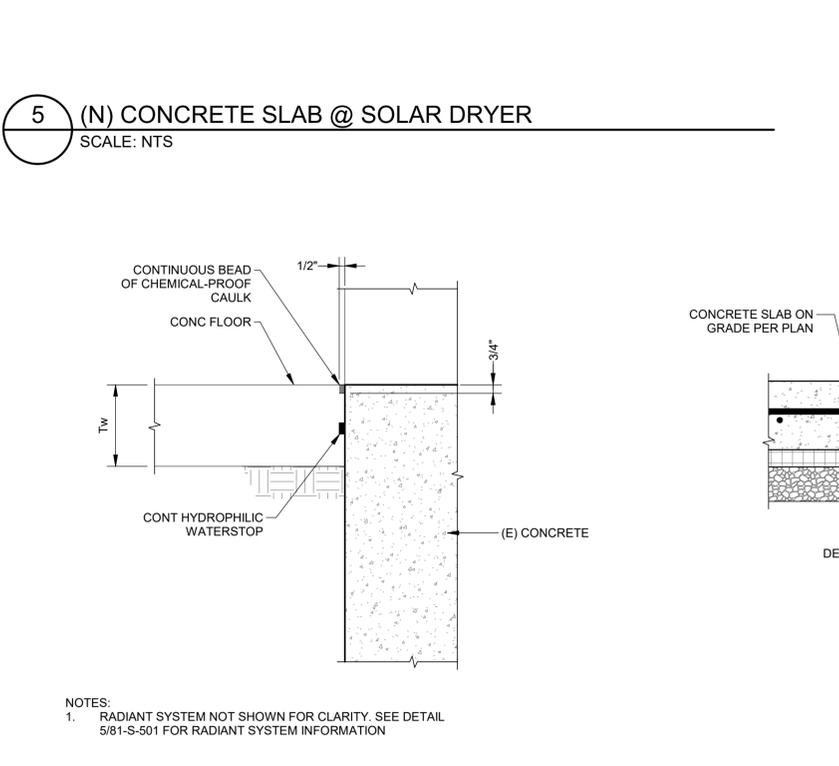
5 (N) CONCRETE SLAB @ SOLAR DRYER
 SCALE: NTS



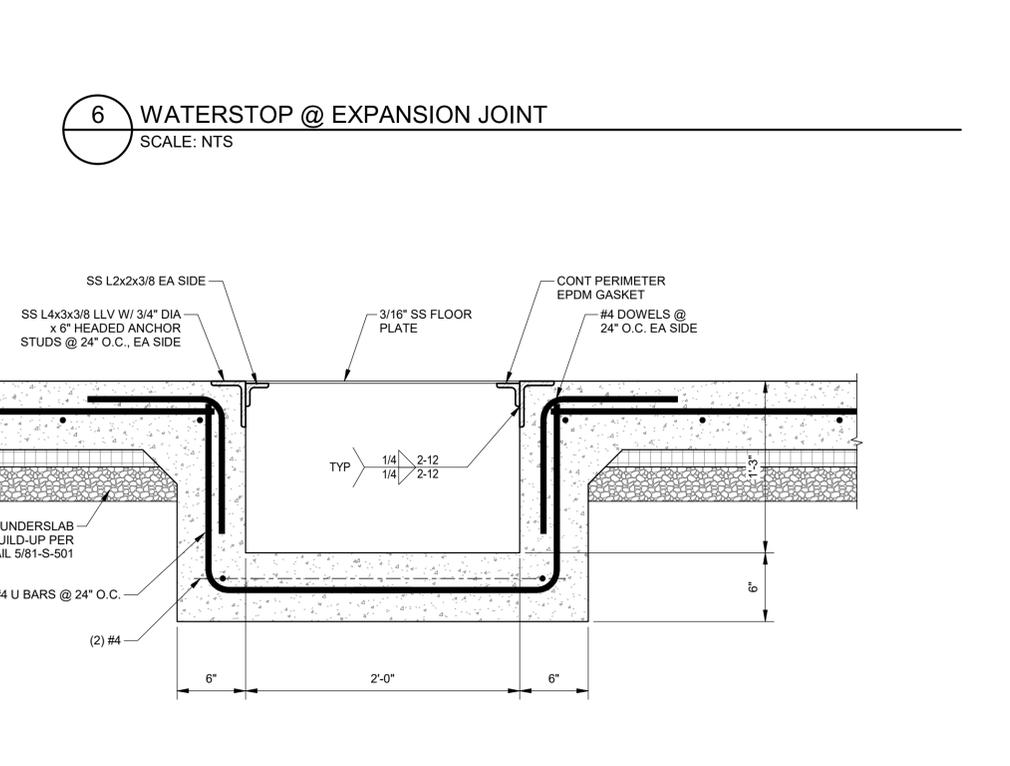
6 WATERSTOP @ EXPANSION JOINT
 SCALE: NTS



7 TYPICAL EXPANSION JOINT
 SCALE: NTS



8 WATERSTOP AT (E) WALL OR (E) FDN JOINT
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9 (N) PEX MANIFOLD VAULT
 81-S-102 SCALE: NTS

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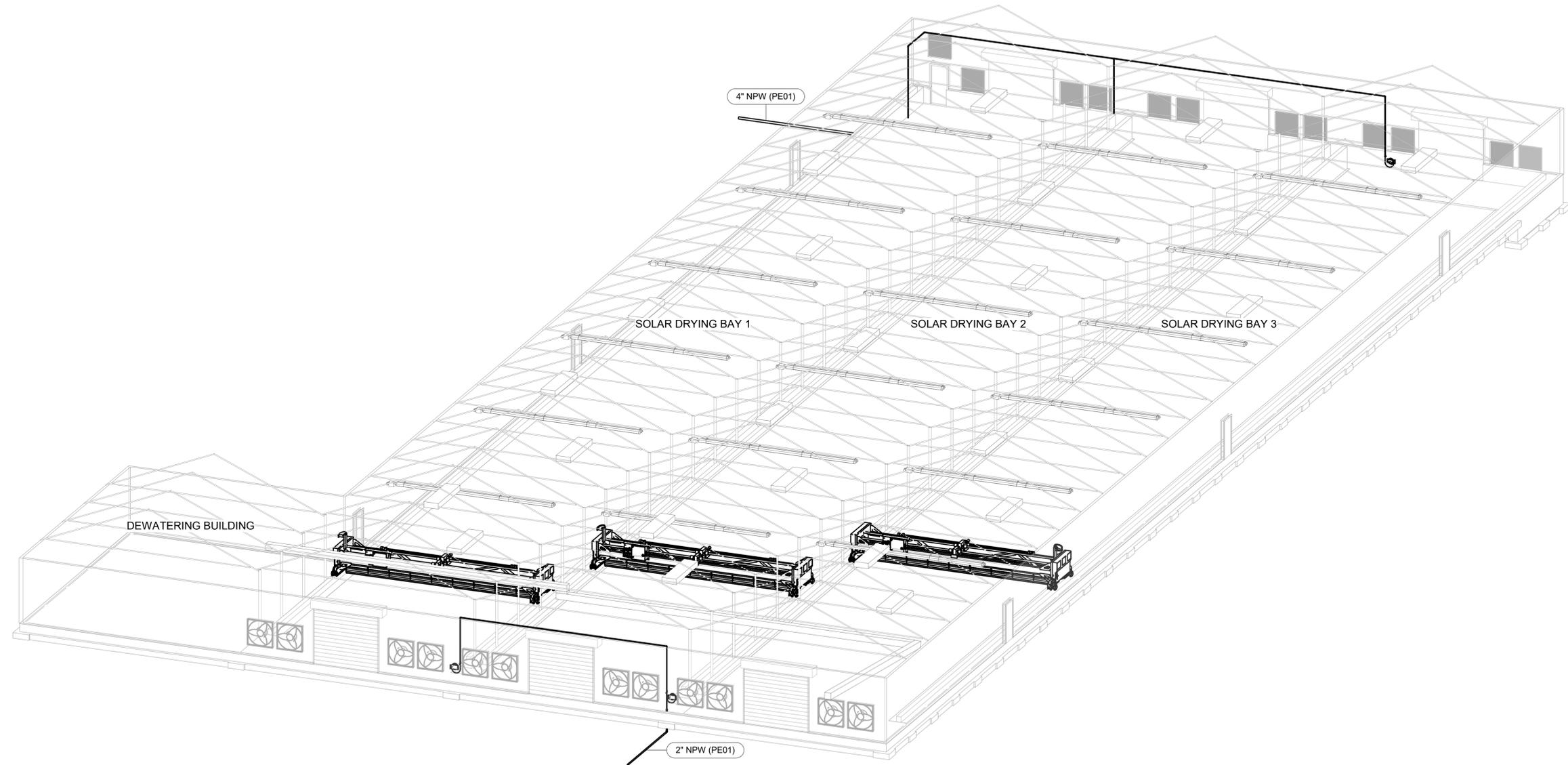
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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE

PROCESS MECHANICAL
81 - SOLAR DRYER GREENHOUSE
3D ISOMETRIC

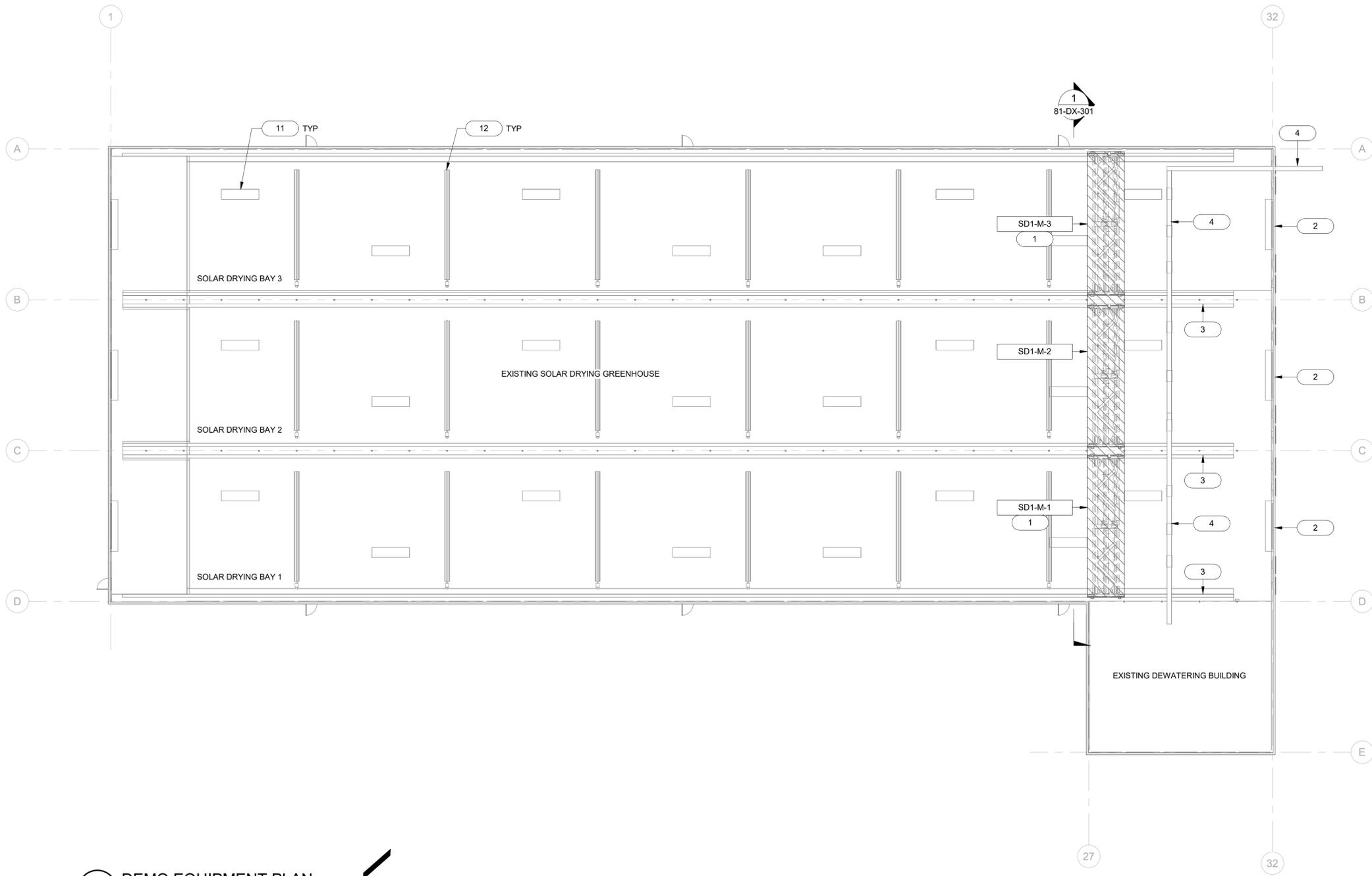
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81-D-100
SHEET: OF



SOLAR DRYER GREENHOUSE

SCALE:

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1 DEMO EQUIPMENT PLAN
SCALE: 1/16" = 1'-0"



GENERAL NOTES

1. THESE DRAWINGS ARE INTENDED TO CONVEY THE GENERAL INTENT AND ARRANGEMENT OF THE SYSTEMS, EQUIPMENT, AND RELATED COMPONENTS. CERTAIN ITEMS OR DETAILS MAY NOT BE INCLUDED OR MAY BE SHIFTED OR OMITTED FROM CERTAIN VIEWS FOR CLARITY. REFER TO MANUFACTURER DRAWINGS AND INSTALLATION INSTRUCTIONS FOR ADDITIONAL DETAILS AND SCOPE OF SUPPLY.
2. NOT ALL STRUCTURAL, ARCHITECTURAL, MECHANICAL HVAC, AND ELECTRICAL/INSTRUMENTATION COMPONENTS SHOWN. REFERENCE RELATED DISCIPLINES FOR ADDITIONAL DETAILS.
3. REFERENCE YARD PIPING SHEETS (03-C SERIES) FOR CONTINUATION OF PIPING.
4. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH EQUIPMENT SUPPLIERS.
5. REFER TO P&IDS FOR CORRESPONDING VALVE, INSTRUMENT AND EQUIPMENT TAGS.
6. OWNER HAS PRE-PROCURED THE SOLAR DRYER EQUIPMENT FOR THE SOLAR DRYER GREENHOUSE. ENGINEER RELIED ON GENERAL ARRANGEMENT DRAWINGS PROVIDED BY THE VENDOR WHEN PREPARING THE PLANS; SOME DEVIATIONS MAY EXIST BETWEEN VENDOR SUBMITTALS AND THE GENERAL ARRANGEMENT DRAWINGS USED HEREIN. REFERENCE PRE-PROCURED EQUIPMENT PACKAGES INCLUDED IN THE SPECIFICATIONS FOR EQUIPMENT DETAILS. CONNECTING DETAILS (LOCATIONS, SIZES, FITTING REQUIREMENTS, ETC.) LOOSE-SHIPED EQUIPMENT DETAILS TO BE INSTALLED BY CONTRACTOR, ETC. SEE SPECIFICATION 01 60 25.
7. COORDINATE DEMO AND SALVAGE REQUIREMENTS WITH OWNER.
8. PIPE SUPPORTS AND HANGARS SHOWN ARE A GENERALIZATION. PIPE SUPPORTS AND HANGARS SHALL BE DESIGNED BY THE CONTRACTOR AND SUBMITTED WITH THE PIPING SHOP DRAWINGS. PROVIDE PIPE SUPPORTS AND HANGARS IN ACCORDANCE WITH THE STANDARD DETAILS AND AS REQUIRED TO ADEQUATELY SUPPORT AND STABILIZE THE PIPING.

SHEET KEYED NOTES

1	DEMO EXISTING SOLAR DRYER TURNER EQUIPMENT FOR INSTALLATION OF NEW TURNERS. COORDINATE SALVAGE REQUIREMENTS WITH OWNER.
2	EXISTING OVERHEAD DOOR. PROTECT IN PLACE.
3	EXISTING STEEL GUIDE RAILS. PROTECT IN PLACE. RAILS TO BE REUSED WITH NEW SOLAR DRYER EQUIPMENT.
4	EXISTING SOLIDS DISTRIBUTING CONVEYOR AND ACTUATED DROP GATES, PROTECT IN PLACE.
11	EXISTING EXHAUST FAN, PROTECT IN PLACE, TYP
12	EXISTING RADIANT HEATER, PROTECT IN PLACE, TYP

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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
PROCESS MECHANICAL
81 - SOLAR DRYER GREENHOUSE
SOLAR DRYING EQUIPMENT DEMO PLAN

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SHEET:	OF

GENERAL NOTES

1. REFER TO 81-DX-101 FOR GENERAL NOTES.

SHEET KEYED NOTES

1	DEMO EXISTING SOLAR DRYER TURNER EQUIPMENT FOR INSTALLATION OF NEW TURNERS. COORDINATE SALVAGE REQUIREMENTS WITH OWNER.
3	EXISTING STEEL GUIDE RAILS. PROTECT IN PLACE. RAILS TO BE REUSED WITH NEW SOLAR DRYER EQUIPMENT.
4	EXISTING SOLIDS DISTRIBUTING CONVEYOR AND ACTUATED DROP GATES, PROTECT IN PLACE.
11	EXISTING EXHAUST FAN, PROTECT IN PLACE, TYP
12	EXISTING RADIANT HEATER, PROTECT IN PLACE, TYP
13	TEMPERED GLASS ROOF SYSTEM, PROTECT IN PLACE, TYP
14	EXISTING ENERGY CHAIN RAIL, PROTECT IN PLACE
17	EXISTING CONVEYOR SUPPORTS, PROTECT IN PLACE



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**WATER RECLAMATION FACILITY 2026 UPGRADES
 CITY OF TOOELE**

**PROCESS MECHANICAL
 81 - SOLAR DRYER GREENHOUSE
 SOLAR DRYING EQUIPMENT DEMO SECTION**

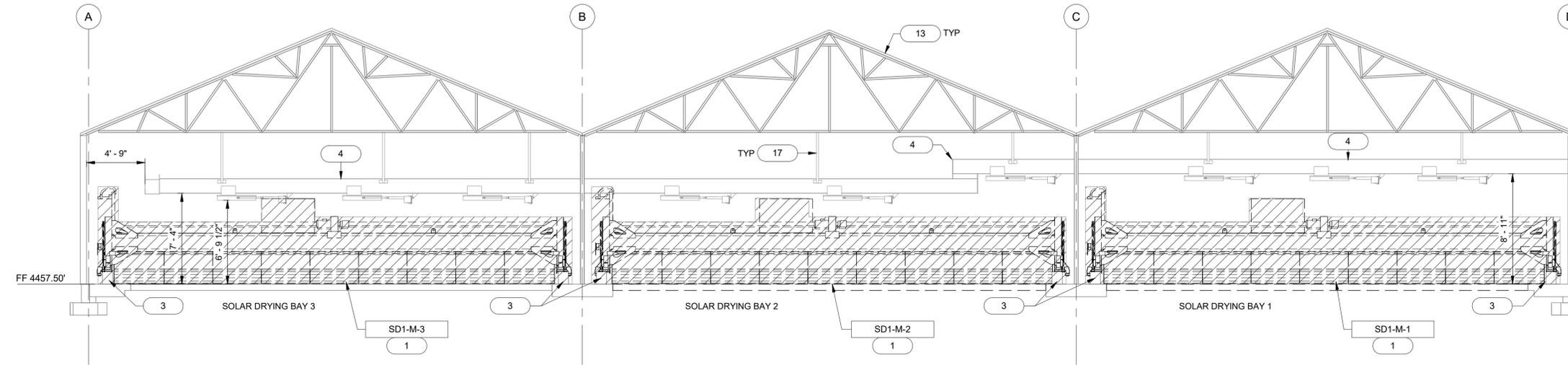
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81-DX-301

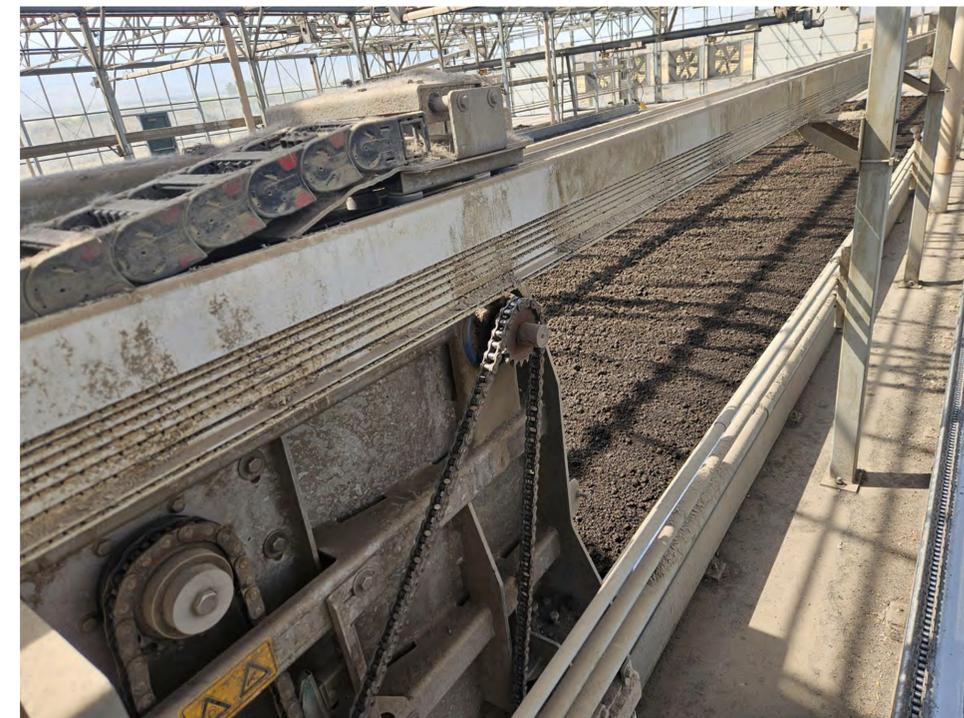
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1 DEMO EQUIPMENT SECTION
 81-DX-101 SCALE: 3/16" = 1'-0"



2 DEMO EQUIPMENT SECTION - BAY 2
 SCALE: 1" = 1'-0"



3 DEMO EQUIPMENT SECTION - ENERGY CHAIN
 SCALE: 3/16" = 1'-0"

GENERAL NOTES

1. REFER TO 81-DX-101 FOR GENERAL NOTES.

SHEET KEYED NOTES

- 2 EXISTING OVERHEAD DOOR. PROTECT IN PLACE.
- 3 EXISTING STEEL GUIDE RAILS. PROTECT IN PLACE. RAILS TO BE REUSED WITH NEW SOLAR DRYER EQUIPMENT.
- 4 EXISTING SOLIDS DISTRIBUTING CONVEYOR AND ACTUATED DROP GATES, PROTECT IN PLACE.
- 5 NEW SOLAR DRYER TURNER. REFERENCE VOLUME IV PRE-PROCURED EQUIPMENT DOCUMENTS FOR MANUFACTURER INSTALLATION DETAILS.
- 10 PROVIDE FLOOR DRAIN TIE IN TO EXISTING GUTTER DROP FOR ALL BAYS. TYP OF 28 GUTTER DROPS.
- 11 EXISTING EXHAUST FAN, PROTECT IN PLACE, TYP
- 12 EXISTING RADIANT HEATER, PROTECT IN PLACE, TYP



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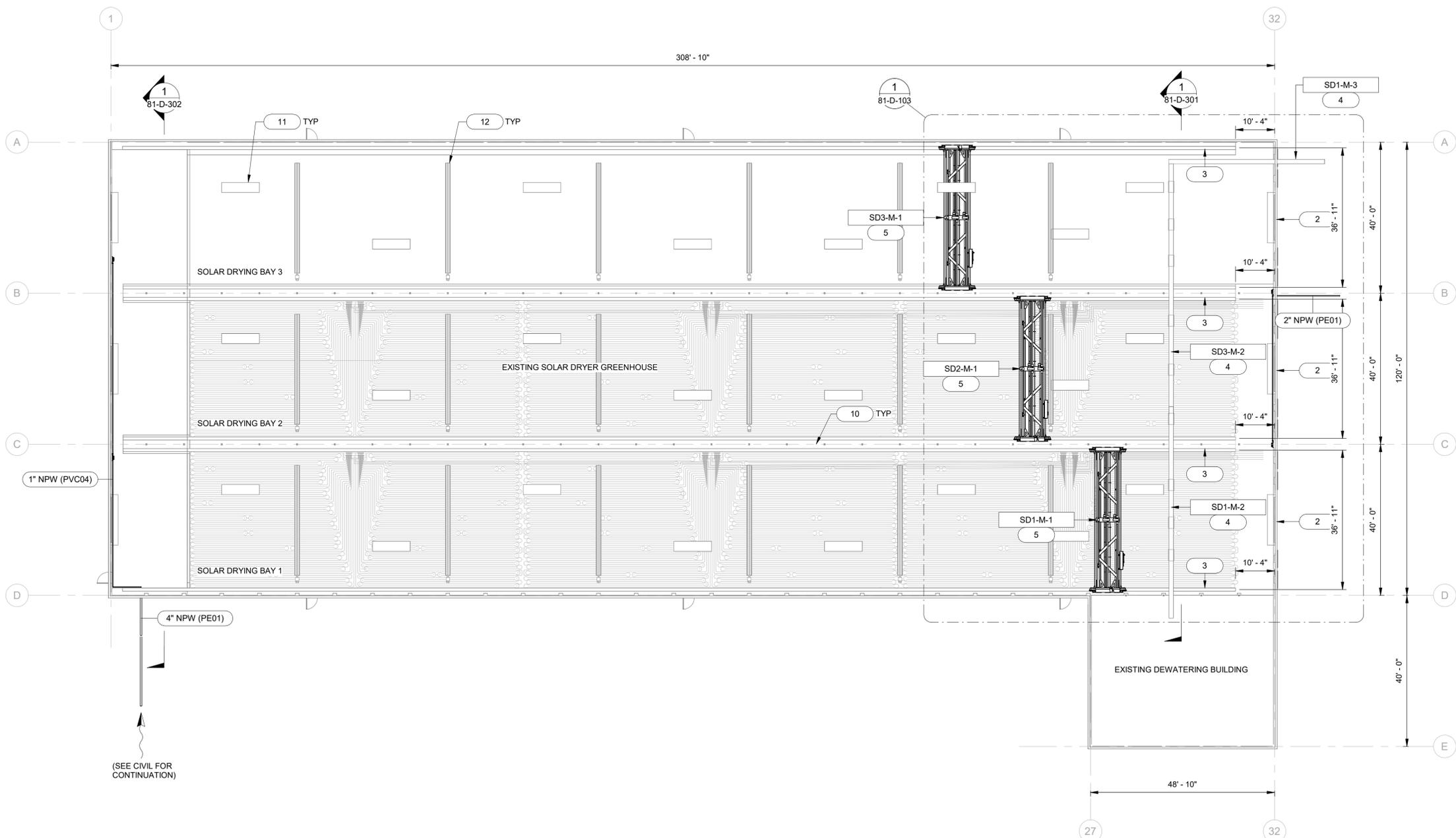
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WATER RECLAMATION FACILITY 2026 UPGRADES
 CITY OF TOOELE
 PROCESS MECHANICAL
 81 - SOLAR DRYER GREENHOUSE
 SOLAR DRYING EQUIPMENT PLAN

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



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GENERAL NOTES

1. REFER TO 81-DX-101 FOR GENERAL NOTES.

SHEET KEYED NOTES

- 2 EXISTING OVERHEAD DOOR, PROTECT IN PLACE.
- 3 EXISTING STEEL GUIDE RAILS, PROTECT IN PLACE. RAILS TO BE REUSED WITH NEW SOLAR DRYER EQUIPMENT.
- 4 EXISTING SOLIDS DISTRIBUTING CONVEYOR AND ACTUATED DROP GATES, PROTECT IN PLACE.
- 10 PROVIDE FLOOR DRAIN TIE IN TO EXISTING GUTTER DROP FOR ALL BAYS, TYP OF 28 GUTTER DROPS.
- 11 EXISTING EXHAUST FAN, PROTECT IN PLACE, TYP
- 12 EXISTING RADIANT HEATER, PROTECT IN PLACE, TYP



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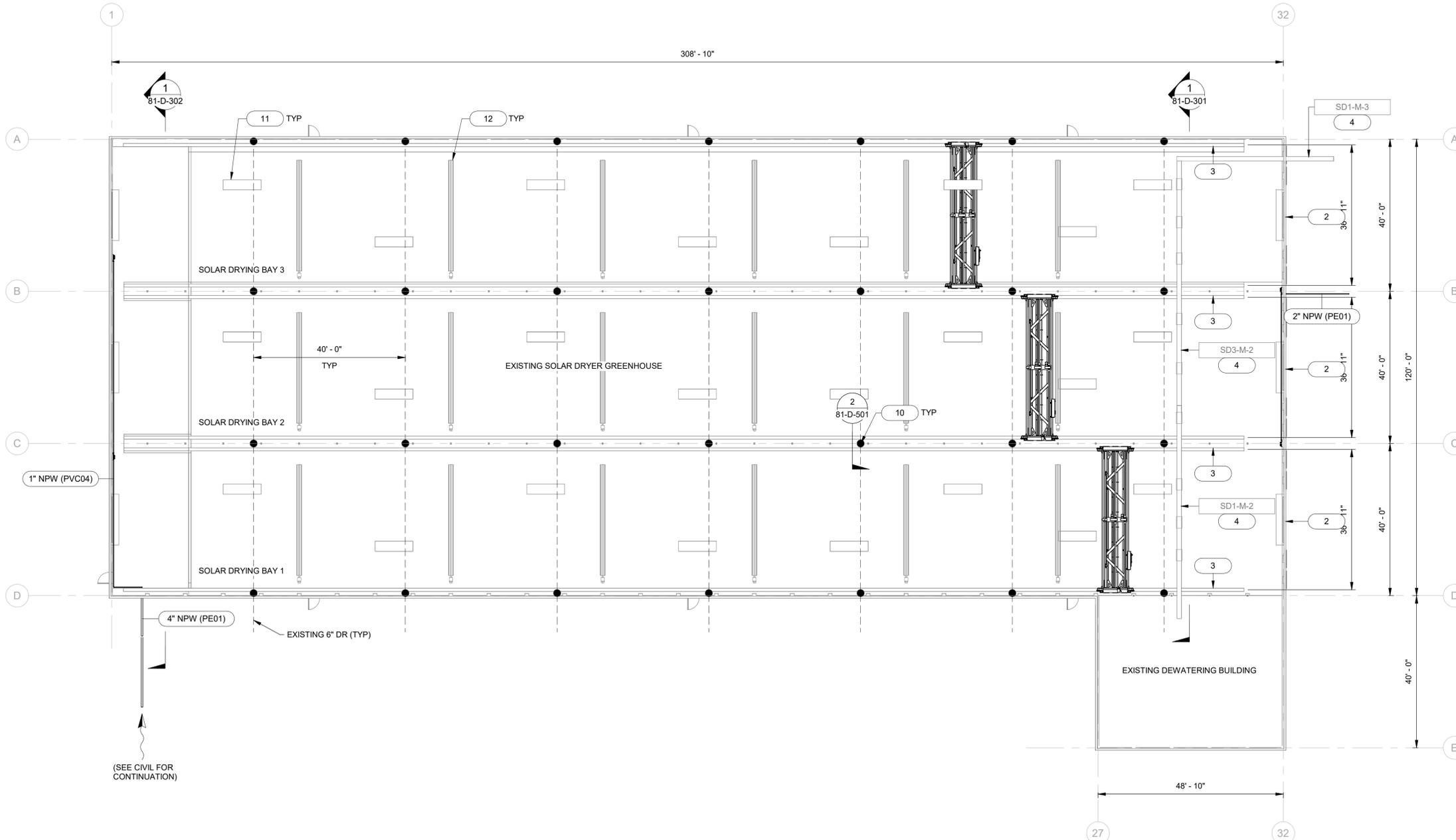
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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE

PROCESS MECHANICAL
81 - SOLAR DRYER GREENHOUSE
DRAINAGE PLAN

FILE:	JUB PROJ. #93-25-005
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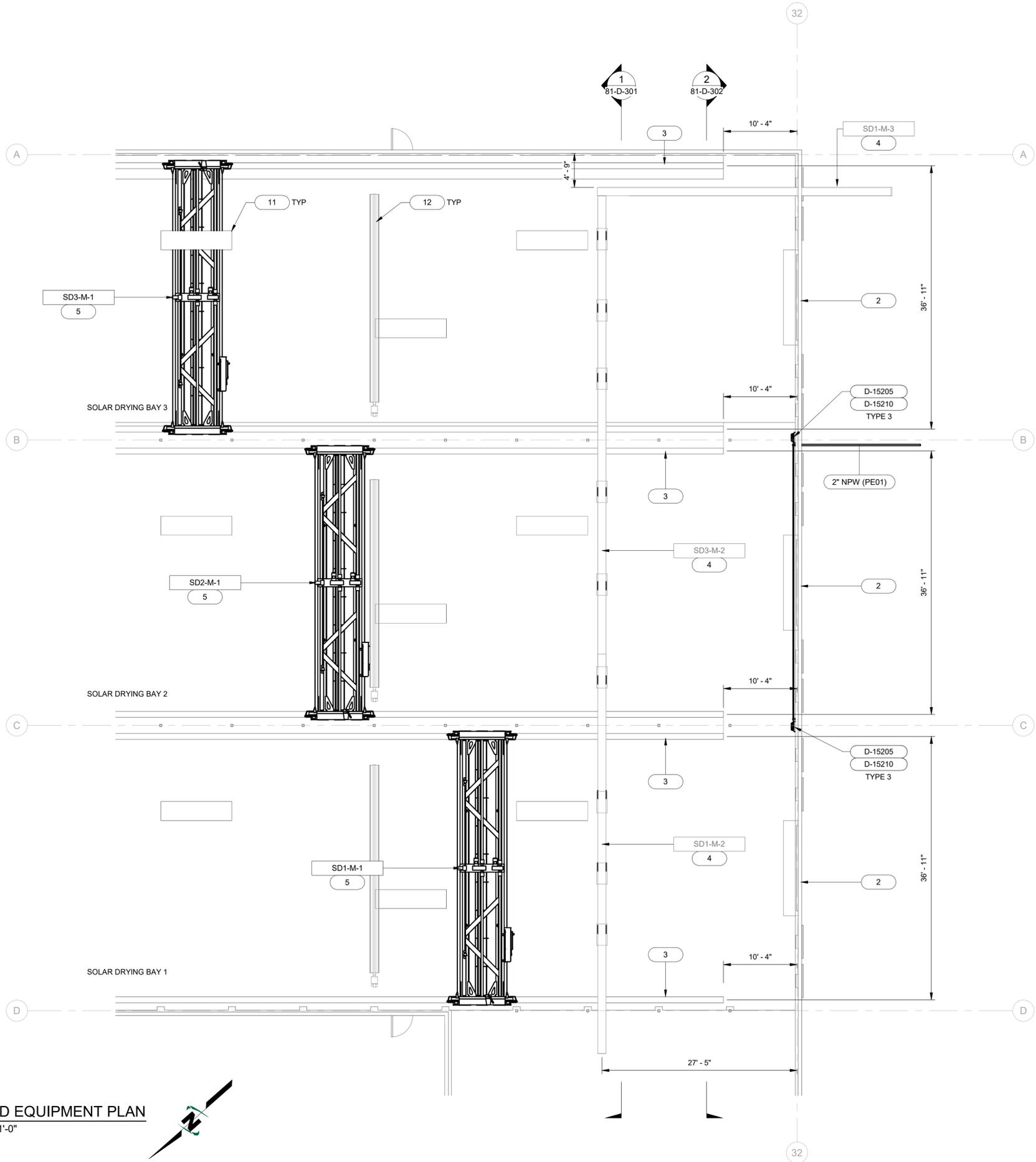


1 DRAINAGE PLAN
SCALE: 1/16" = 1'-0"



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GENERAL NOTES

- REFER TO 81-DX-101 FOR GENERAL NOTES.

SHEET KEYED NOTES

- EXISTING OVERHEAD DOOR, PROTECT IN PLACE.
- EXISTING STEEL GUIDE RAILS, PROTECT IN PLACE. RAILS TO BE REUSED WITH NEW SOLAR DRYER EQUIPMENT.
- EXISTING SOLIDS DISTRIBUTING CONVEYOR AND ACTUATED DROP GATES, PROTECT IN PLACE.
- NEW SOLAR DRYER TURNER, REFERENCE VOLUME IV PRE-PROCURED EQUIPMENT DOCUMENTS FOR MANUFACTURER INSTALLATION DETAILS.
- EXISTING EXHAUST FAN, PROTECT IN PLACE, TYP
- EXISTING RADIANT HEATER, PROTECT IN PLACE, TYP

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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
PROCESS MECHANICAL
81 - SOLAR DRYER GREENHOUSE
SOLAR DRYING ENLARGED EQUIPMENT PLAN

1 ENLARGED EQUIPMENT PLAN
 81-D-101 SCALE: 1/8" = 1'-0"



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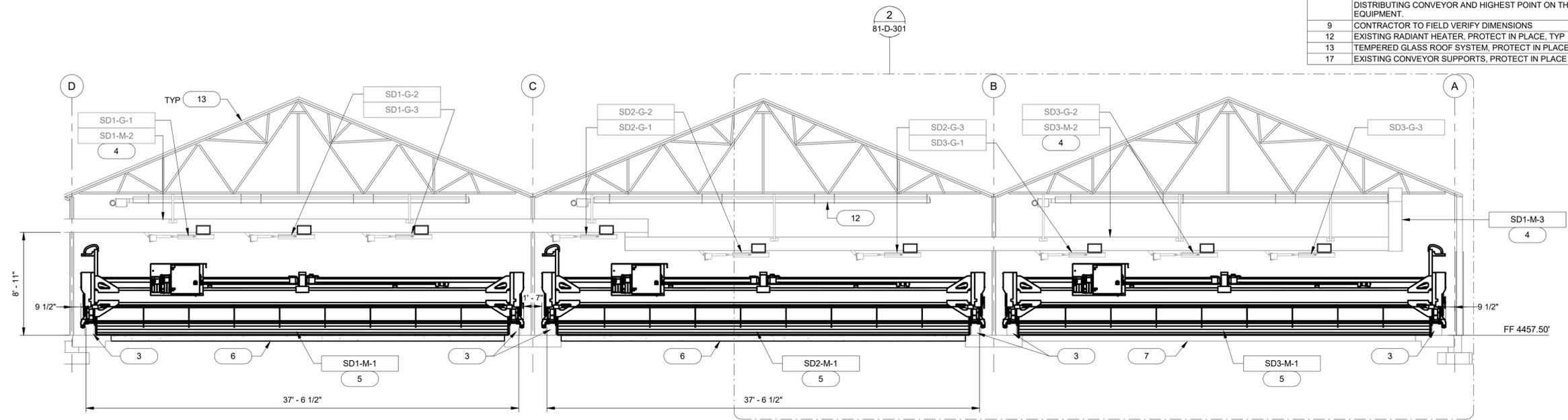
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GENERAL NOTES

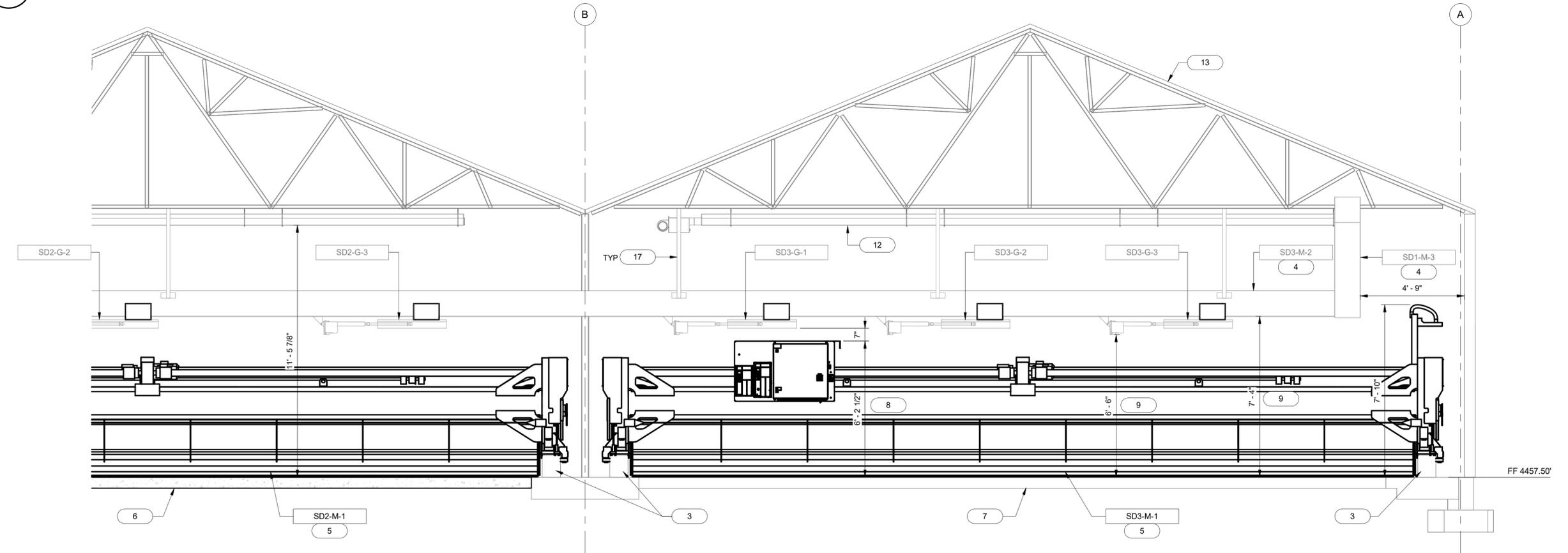
1. REFER TO 81-DX-101 FOR GENERAL NOTES.

SHEET KEYED NOTES

- 3 EXISTING STEEL GUIDE RAILS. PROTECT IN PLACE. RAILS TO BE REUSED WITH NEW SOLAR DRYER EQUIPMENT.
- 4 EXISTING SOLIDS DISTRIBUTING CONVEYOR AND ACTUATED DROP GATES, PROTECT IN PLACE.
- 5 NEW SOLAR DRYER TURNER. REFERENCE VOLUME IV PRE-PROCURED EQUIPMENT DOCUMENTS FOR MANUFACTURER INSTALLATION DETAILS.
- 6 NEW CONCRETE SLAB WITH RADIANT IN FLOOR HEATING. SEE STRUCTURAL SHEETS
- 7 EXISTING CONCRETE SLAB. PROTECT IN PLACE
- 8 12" CLEARANCE IS REQUIRED BETWEEN THE LOWEST POINT ON THE SOLIDS DISTRIBUTING CONVEYOR AND HIGHEST POINT ON THE NEW SOLAR DRYER TURNER EQUIPMENT.
- 9 CONTRACTOR TO FIELD VERIFY DIMENSIONS
- 12 EXISTING RADIANT HEATER, PROTECT IN PLACE, TYP
- 13 TEMPERED GLASS ROOF SYSTEM, PROTECT IN PLACE, TYP
- 17 EXISTING CONVEYOR SUPPORTS, PROTECT IN PLACE



1 EQUIPMENT SECTION
 81-D-101 SCALE: 3/16" = 1'-0"



2 EQUIPMENT SECTION - BAY 3
 81-D-301 SCALE: 3/8" = 1'-0"

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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
PROCESS MECHANICAL
81 - SOLAR DRYER GREENHOUSE
SOLAR DRYING EQUIPMENT SECTION

FILE:	JUB PROJ. #93-25-005
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GENERAL NOTES

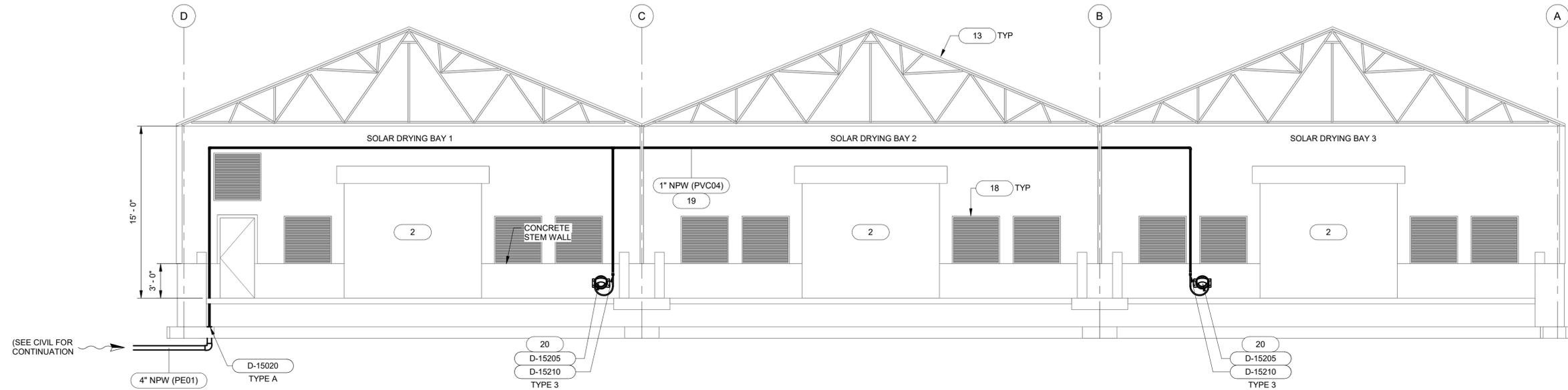
1. REFER TO 81-DX-101 FOR GENERAL NOTES.

SHEET KEYED NOTES

- 2 EXISTING OVERHEAD DOOR. PROTECT IN PLACE.
- 4 EXISTING SOLIDS DISTRIBUTING CONVEYOR AND ACTUATED DROP GATES, PROTECT IN PLACE.
- 11 EXISTING EXHAUST FAN. PROTECT IN PLACE. TYP
- 13 TEMPERED GLASS ROOF SYSTEM, PROTECT IN PLACE. TYP
- 18 EXISTING MOTORIZED INLET LOUVERS, PROTECT IN PLACE
- 19 CONNECT PIPE TO EXISTING STRUCTURE WITH UNISTRUT, NO ATTACHMENT TO GLASS ALLOWED
- 20 CONNECT HOSE BIBB AND RACK TO EXISTING STRUCTURE WITH UNISTRUT, NO ATTACHMENT TO GLASS ALLOWED



Subconsultant:



1 SECTION VIEW - NORTH ELEVATION
81-D-101 SCALE: 3/16" = 1'-0"

PRELIMINARY PLANS
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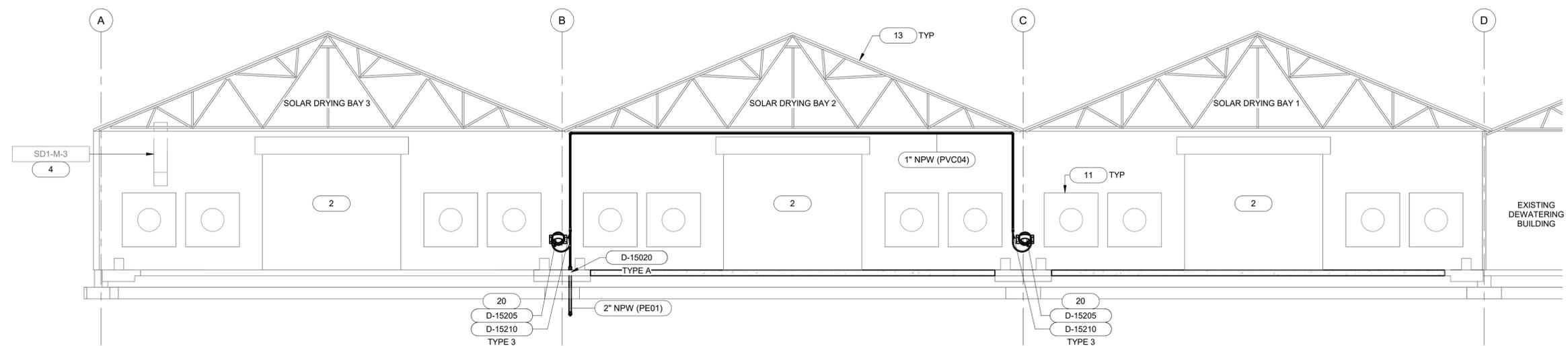
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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
PROCESS MECHANICAL
81 - SOLAR DRYER GREENHOUSE
EQUIPMENT SECTION

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SHEET:	OF



2 SECTION VIEW - SOUTH ELEVATION
81-D-103 SCALE: 3/16" = 1'-0"

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GENERAL NOTES

1. REFER TO 81-DX-101 FOR GENERAL NOTES.

SHEET KEYED NOTES

16 EXISTING 6" PVC ROOF DRAIN PIPE, TYP



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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
PROCESS MECHANICAL
81 - SOLAR DRYER GREENHOUSE
DETAILS

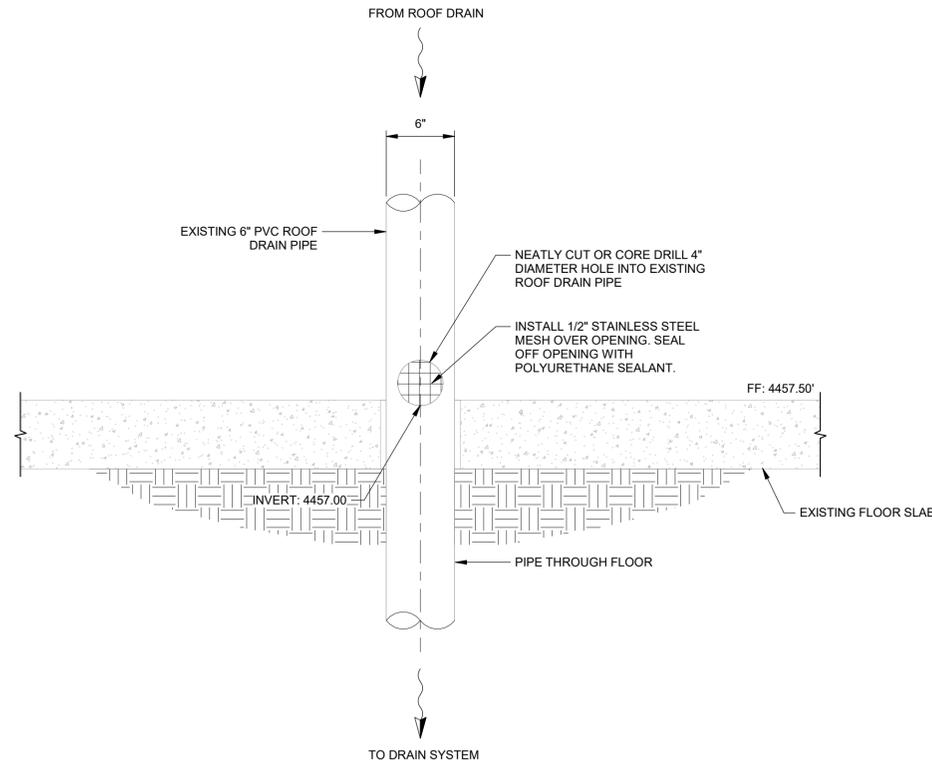
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SHEET: OF

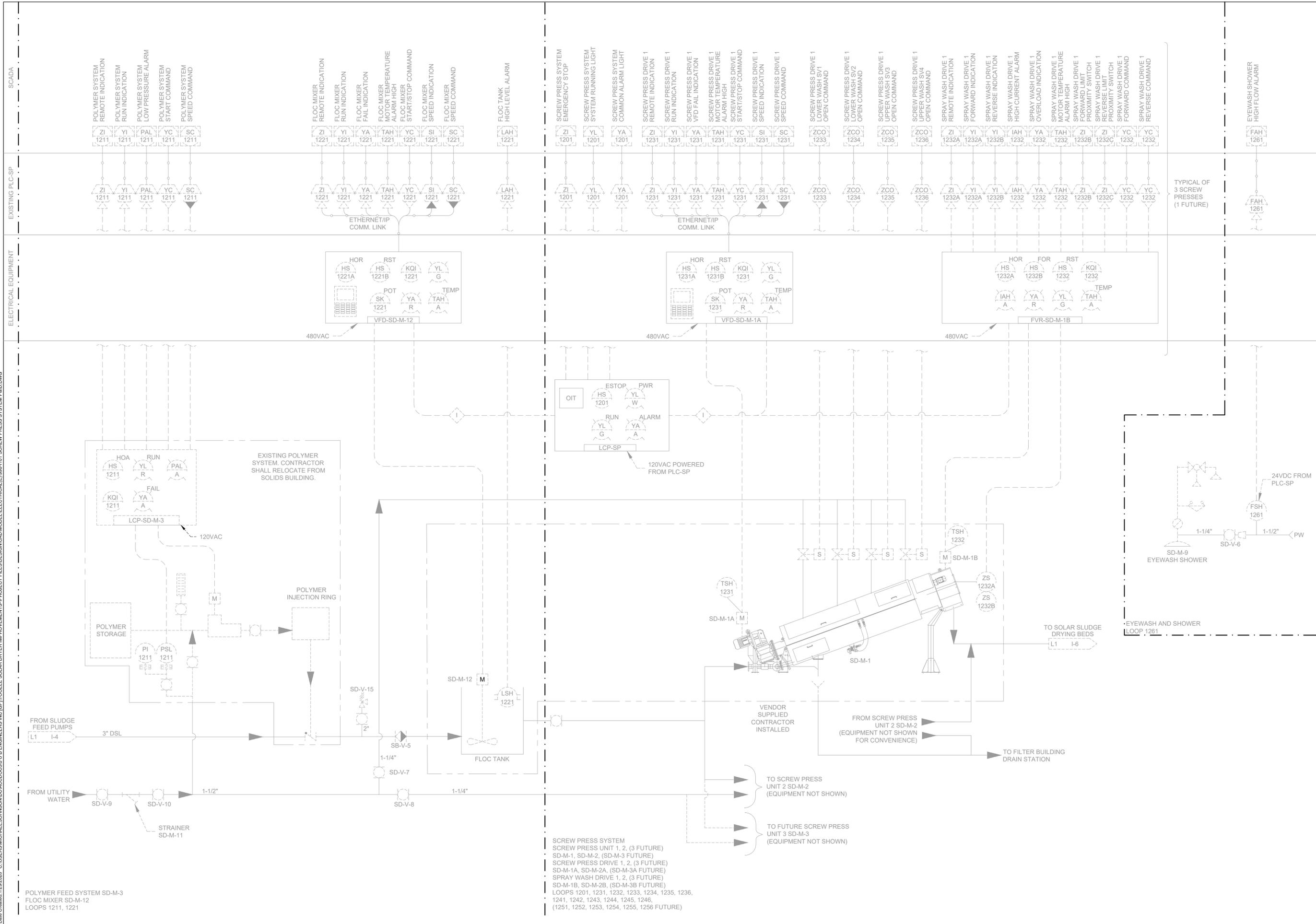


1 PHOTO DETAIL - ROOF DRAIN SLICING
SCALE: 1/16" = 1'-0"



2 DETAIL - ROOF DRAIN PIPE PENETRATION
SCALE: 1 1/2" = 1'-0"

Plot Date: 1/29/2026 2:51 PM Plotted By: Michael Johnson
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POLYMER FEED SYSTEM SD-M-3
 FLOC MIXER SD-M-12
 LOOPS 1211, 1221

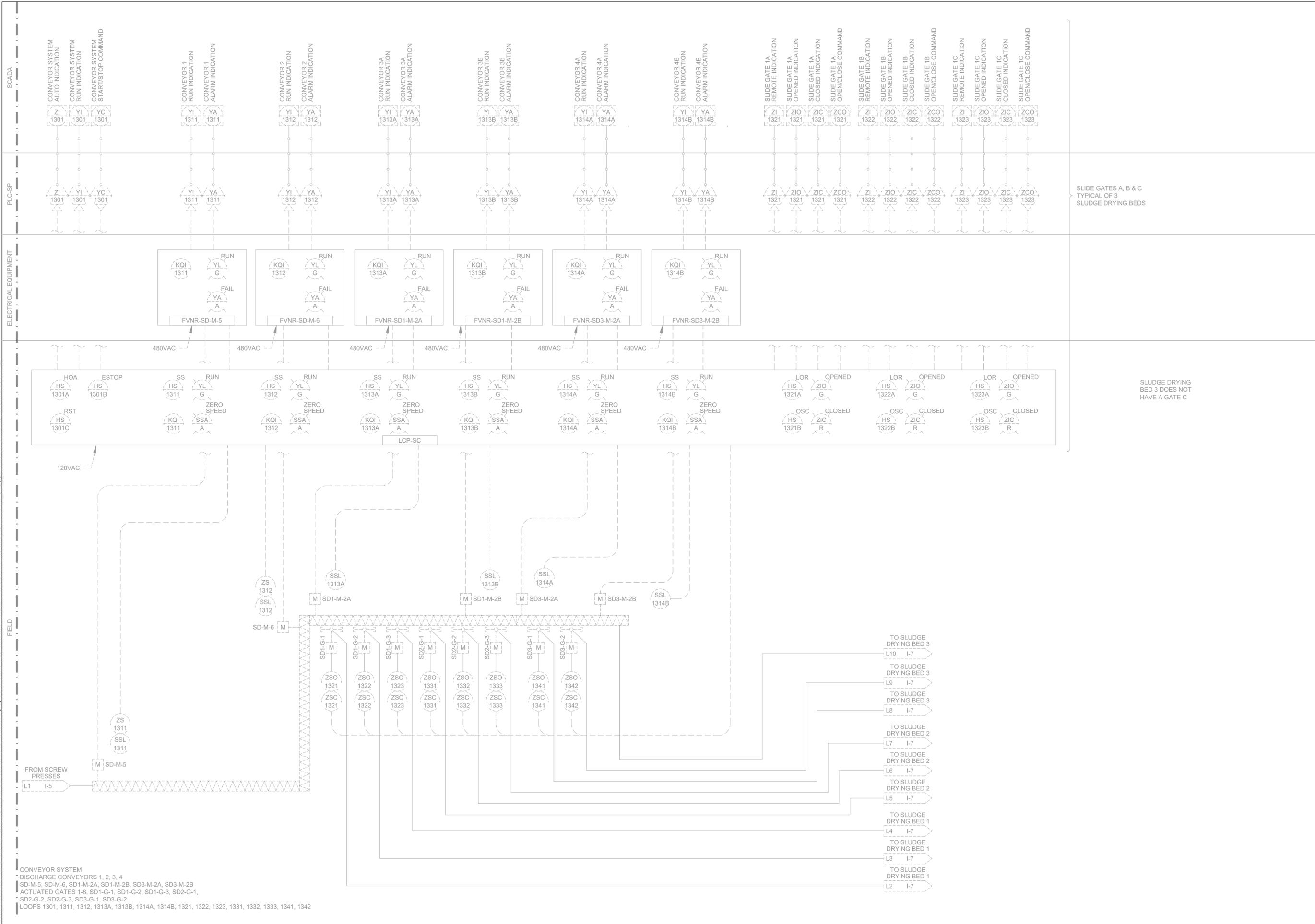
SCREW PRESS SYSTEM
 SCREW PRESS UNIT 1, 2, (3 FUTURE)
 SD-M-1, SD-M-2, (SD-M-3 FUTURE)
 SCREW PRESS DRIVE 1, 2, (3 FUTURE)
 SD-M-1A, SD-M-2A, (SD-M-3A FUTURE)
 SPRAY WASH DRIVE 1, 2, (3 FUTURE)
 SD-M-1B, SD-M-2B, (SD-M-3B FUTURE)
 LOOPS 1201, 1231, 1232, 1233, 1234, 1235, 1236,
 1241, 1242, 1243, 1244, 1245, 1246,
 (1251, 1252, 1253, 1254, 1255, 1256 FUTURE)

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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
INSTRUMENTATION - P&IDS
SCREW PRESS SYSTEM P&ID

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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
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SLUDGE CONVEYOR SYSTEM P&ID

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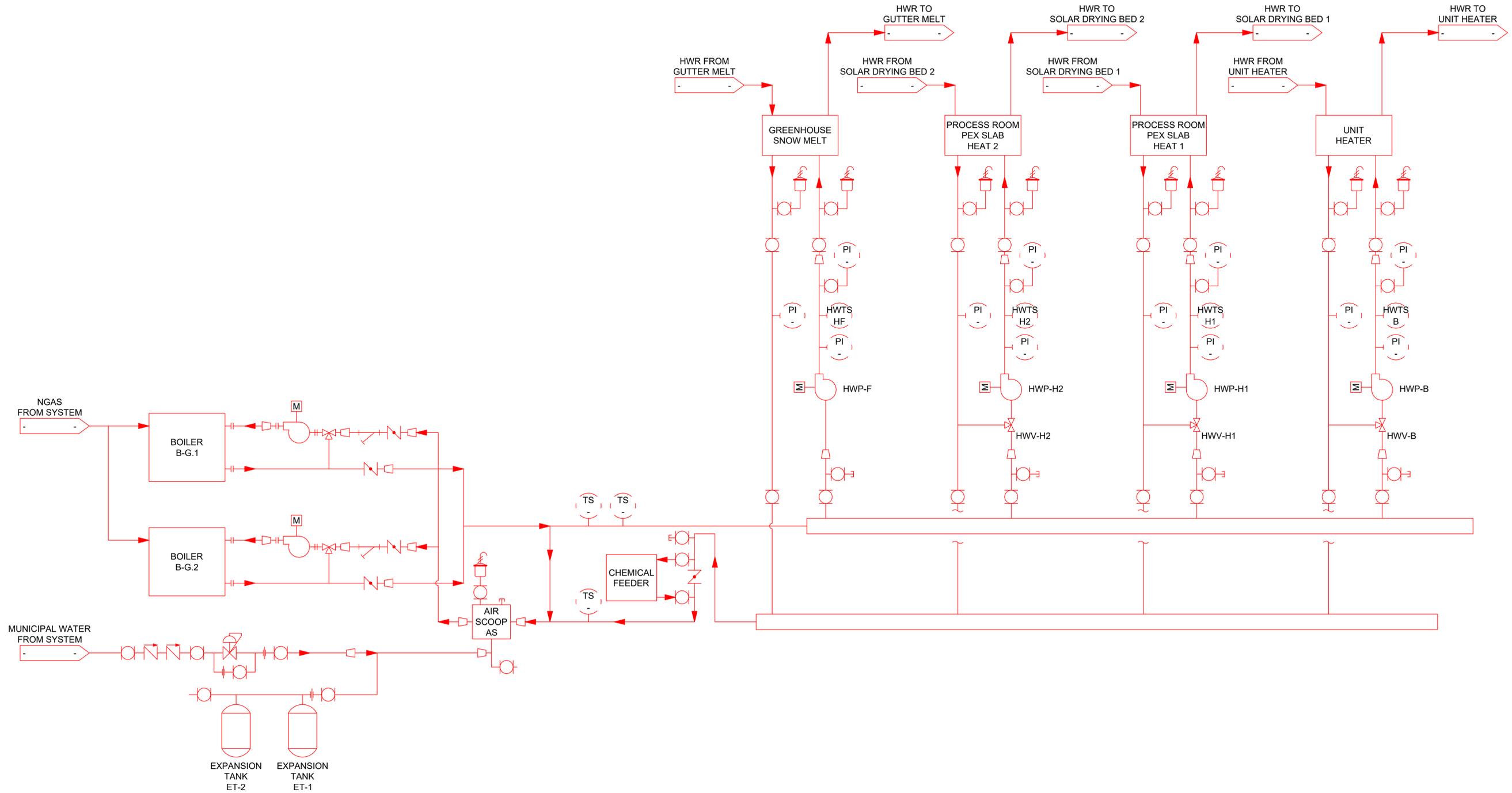
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WATER RECLAMATION FACILITY 2026 UPGRADES
 CITY OF TOOLEE

INSTRUMENTATION - P&IDS
 BOILER SYSTEM P&ID

FILE:
 JUB PROJ. #: 93-25-005
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 SHEET: OF





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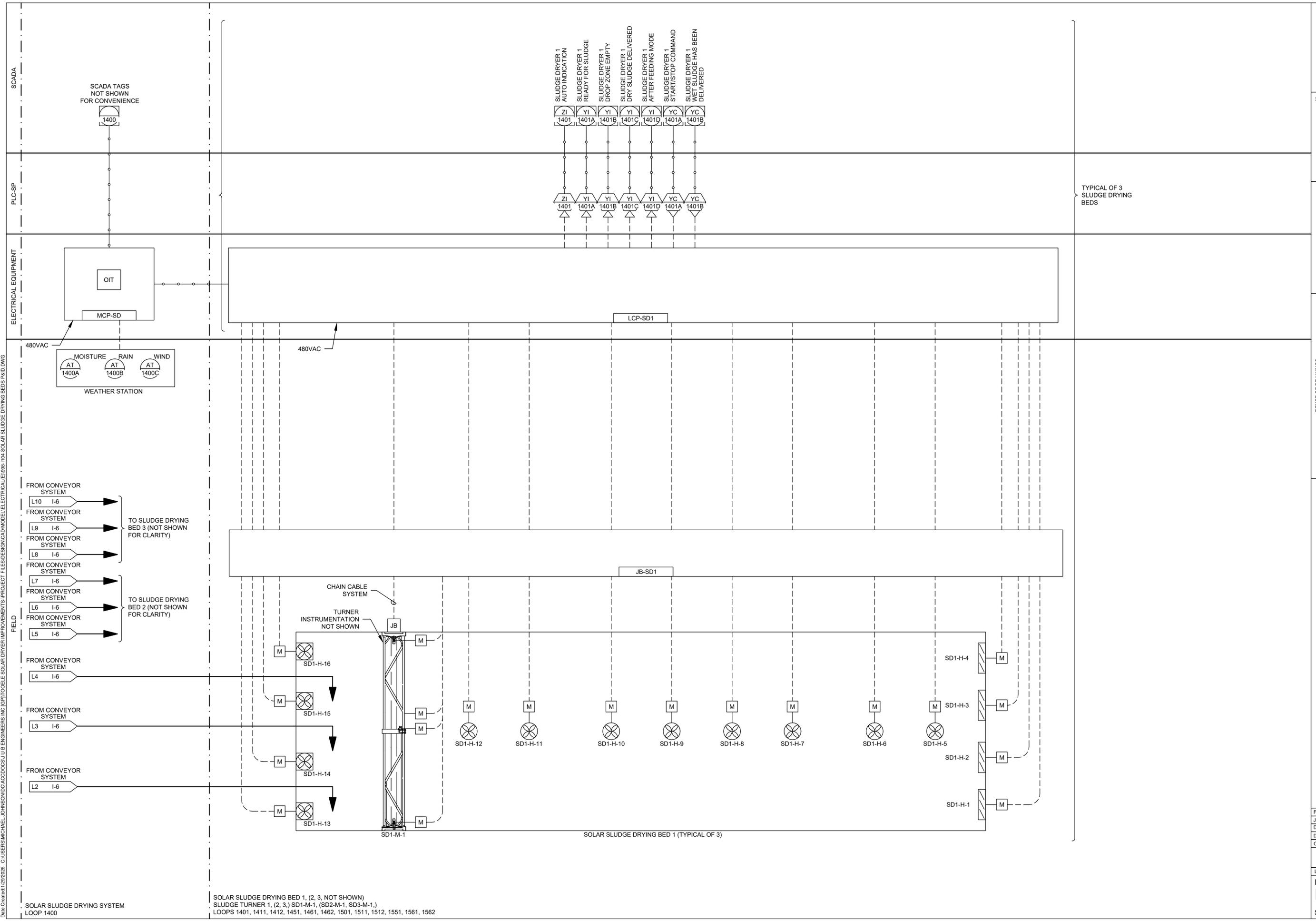
WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE

INSTRUMENTATION - P&IDs
SOLAR SLUDGE DRYING BEDS P&ID

FILE:
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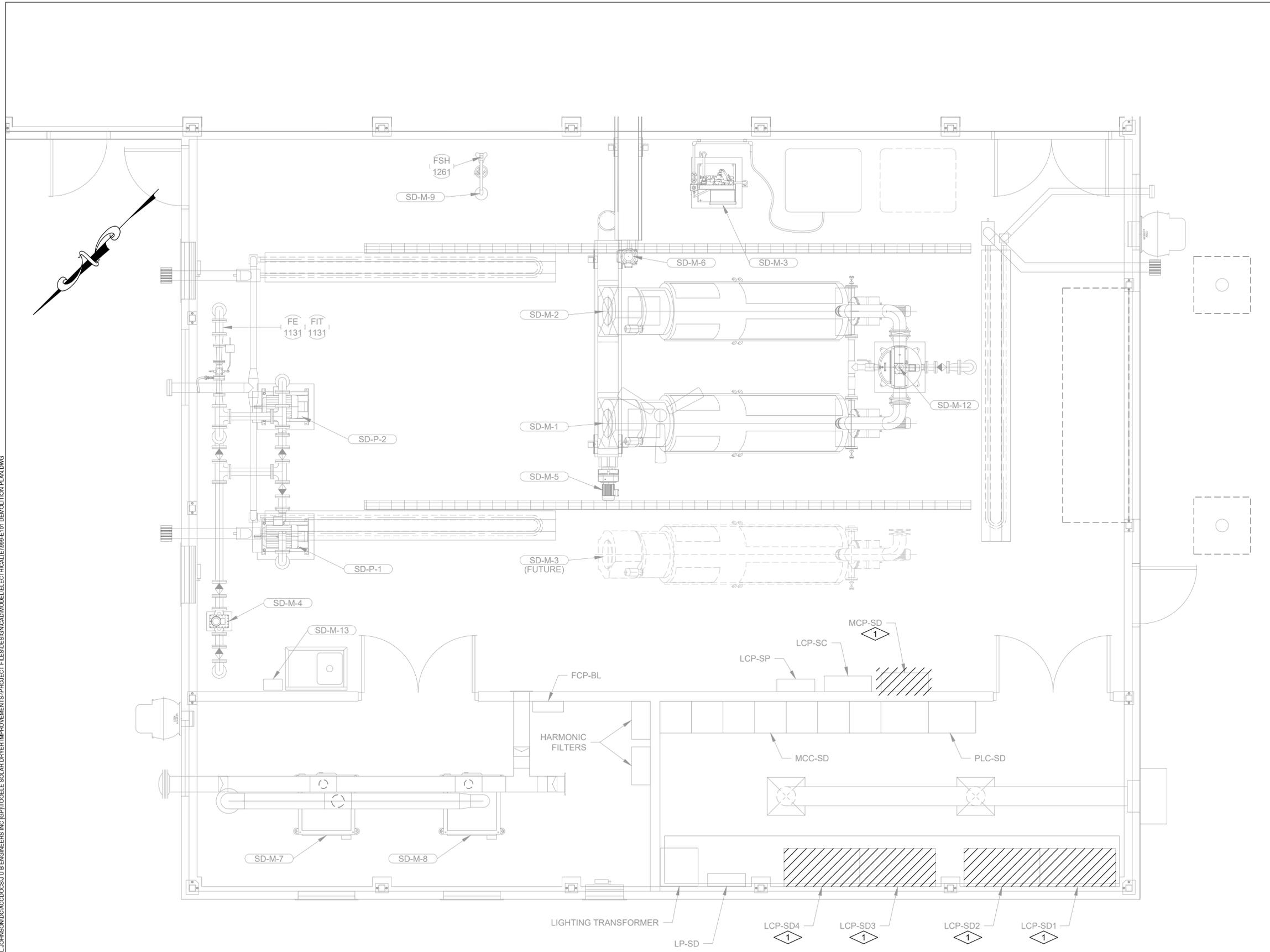


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SOLAR SLUDGE DRYING SYSTEM LOOP 1400

SOLAR SLUDGE DRYING BED 1, (2, 3, NOT SHOWN)
SLUDGE TURNER 1, (2, 3,) SD1-M-1, (SD2-M-1, SD3-M-1.)
LOOPS 1401, 1411, 1412, 1451, 1461, 1462, 1501, 1511, 1512, 1551, 1561, 1562

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DEWATERING BUILDING DEMOLITION PLAN

SCALE: 3/8" = 1'-0"
 0 2 4
 Scale in Feet

GENERAL NOTES

1. SIZE AND LOCATION OF EXISTING INFRASTRUCTURE IS BASED ON INFORMATION PROVIDED TO THE ENGINEER AND SHOULD NOT BE RELIED UPON AS COMPLETE AND ACCURATE. THE CONTRACTOR SHALL FIELD VERIFY THIS INFORMATION PRIOR TO START OF WORK.
2. UNLESS NOTED OTHERWISE, ALL ELECTRICAL EQUIPMENT AND MATERIALS REMOVED SHALL BE DISPOSED BY THE CONTRACTOR LEGALLY AND IN ACCORDANCE WITH LOCAL LAWS.



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KEY NOTES

1. REMOVE AND DISPOSE OF SOLAR DRYER LOCAL CONTROL PANELS. REUSE CONDUIT AND WIRE WITH NEW PANELS.

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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
ELECTRICAL - DEMOLITION
DEWATERING BUILDING DEMOLITION PLAN

FILE:
 JUB PROJ. #: 93-25-005
 DRAWN BY: DCL
 DESIGN BY: JCG
 CHECKED BY: MPJ
 AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
 LAST UPDATED: 1/29/2026
DRAWING: E101
 SHEET: OF



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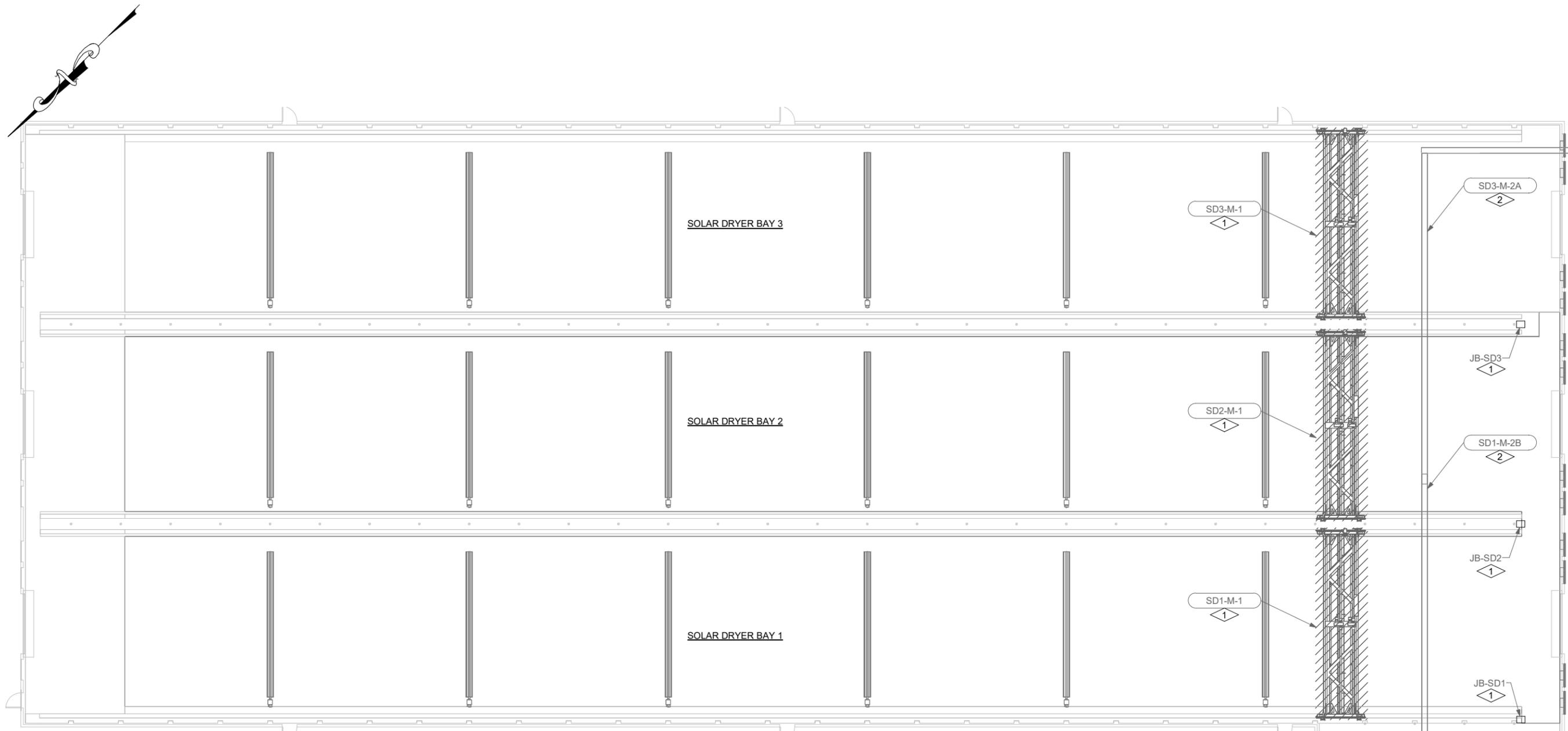
WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE

ELECTRICAL - DEMOLITION
SOLAR DRYER BLDG DEMOLITION PLAN

FILE:
JUB PROJ. #93-25-005
DRAWN BY: Author
DESIGN BY: Designer
CHECKED BY: Checker

AT FULL SIZE, IF NOT ONE
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LAST UPDATED: 12/09/2025

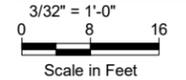
DRAWING:
E102
SHEET: OF



- NOTES:**
1. SIZE AND LOCATION OF EXISTING INFRASTRUCTURE IS BASED ON INFORMATION PROVIDED TO THE ENGINEER AND SHOULD NOT BE RELIED UPON AS COMPLETE AND ACCURATE. THE CONTRACTOR SHALL FIELD VERIFY THIS INFORMATION PRIOR TO START OF WORK.
 2. UNLESS NOTES OTHERWISE, ALL ELECTRICAL EQUIPMENT AND MATERIALS REMOVED SHALL BE DISPOSED BY THE CONTRACTOR LEGALLY AND IN ACCORDANCE WITH LOCAL LAWS.

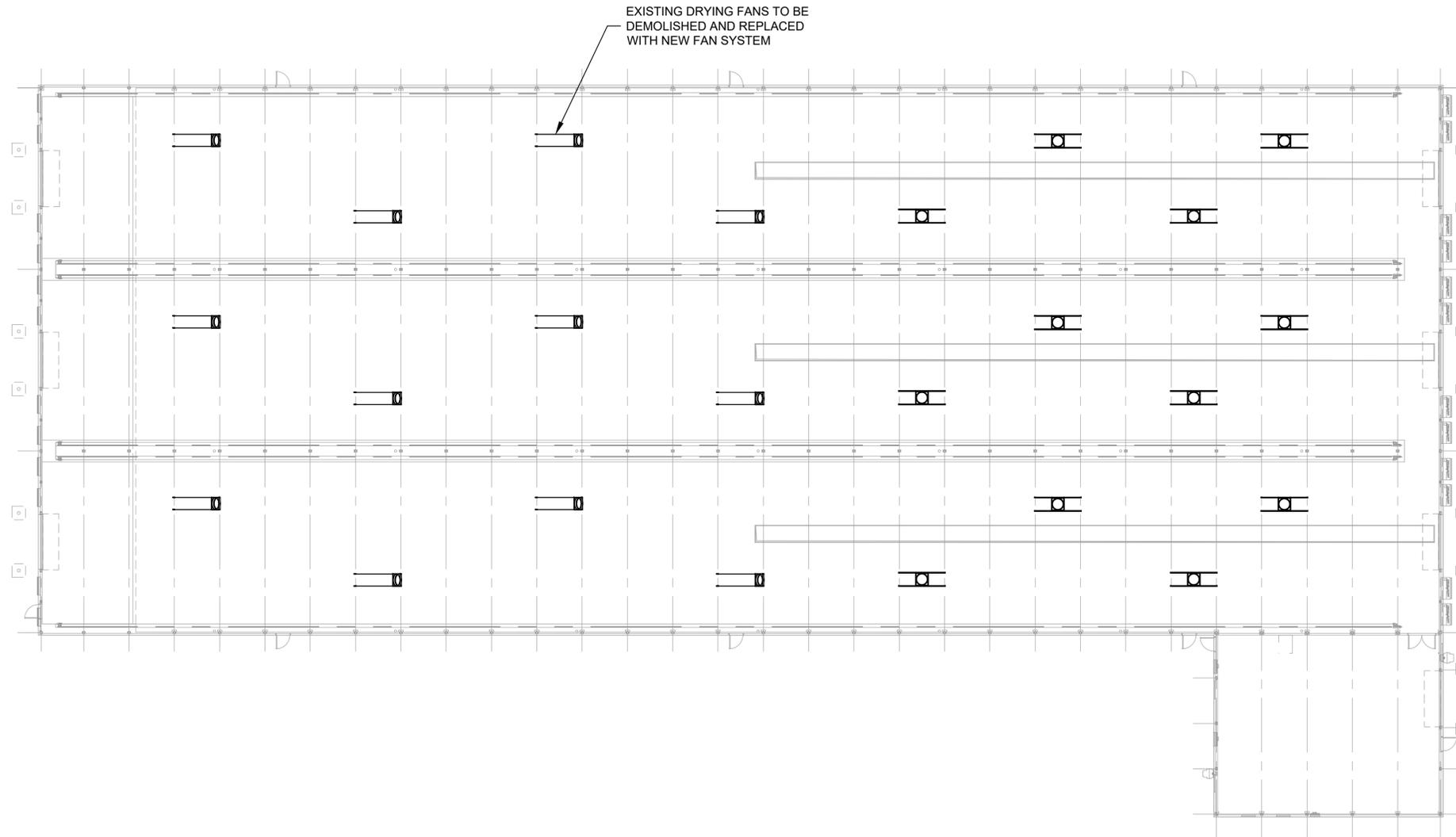
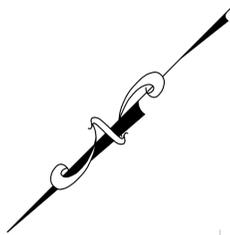
- KEYNOTES:**
1. REMOVE SOLAR DRYER TURNER EQUIPMENT. PROTECT IN PLACE JUNCTION BOXES, CONDUIT AND WIRE FOR INSTALLATION OF NEW TURNERS.
 2. PROTECT IN PLACE EXISTING EQUIPMENT.

SOLAR DRYER BLDG DEMOLITION PLAN



Autodesk Docs://Tooele Solar Dryer Improvements /Solar Dryer Electrical_V25.rvt

Plot Date: 1/12/2026 5:42 PM Plotted By: Michael Johnson
 Date Created: 1/13/2026 C:\USERS\MICHAEL.JOHNSON\Documents\JUB ENGINEERS, INC\PROJECTS\SOLAR DRYER IMPROVEMENTS\PROJECT FILES\DESIGN\CAD\MODEL\ELECTRICAL\E102 SOLAR DRYING BUILDING DEMOLITION PLAN.DWG



SOLAR DRYING BUILDING DEMOLITION PLAN

SCALE: 1/16" = 1'-0"
 0 16 32
 Scale in Feet

GENERAL NOTES

1. SIZE AND LOCATION OF EXISTING INFRASTRUCTURE IS BASED ON INFORMATION PROVIDED TO THE ENGINEER AND SHOULD NOT BE RELIED UPON AS COMPLETE AND ACCURATE. THE CONTRACTOR SHALL FIELD VERIFY THIS INFORMATION PRIOR TO START OF WORK.
2. UNLESS NOTED OTHERWISE, ALL ELECTRICAL EQUIPMENT AND MATERIALS REMOVED SHALL BE DISPOSED BY THE CONTRACTOR LEGALLY AND IN ACCORDANCE WITH LOCAL LAWS.

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PRELIMINARY PLANS
NOT FOR CONSTRUCTION

KEY NOTES

1. REMOVE AND DISPOSE OF SOLAR DRYER LOCAL CONTROL PANELS. REUSE CONDUIT AND WIRE WITH NEW PANELS.

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NO.	REVISION	DESCRIPTION	BY	DATE

WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
 ELECTRICAL - DEMOLITION
 SOLAR DRYING BUILDING DEMOLITION PLAN

FILE:
 JUB PROJ. #: 93-25-005
 DRAWN BY: DCL
 DESIGN BY: JCG
 CHECKED BY: MPJ

ONE INCH
 AT FULL SIZE. IF NOT ONE INCH, SCALE ACCORDINGLY

LAST UPDATED: 1/31/2026

DRAWING:
E102
 SHEET: OF

Subconsultant:

**PRELIMINARY
PLANS**

**NOT FOR
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NO.	REVISION	DESCRIPTION	BY	DATE

**WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE**

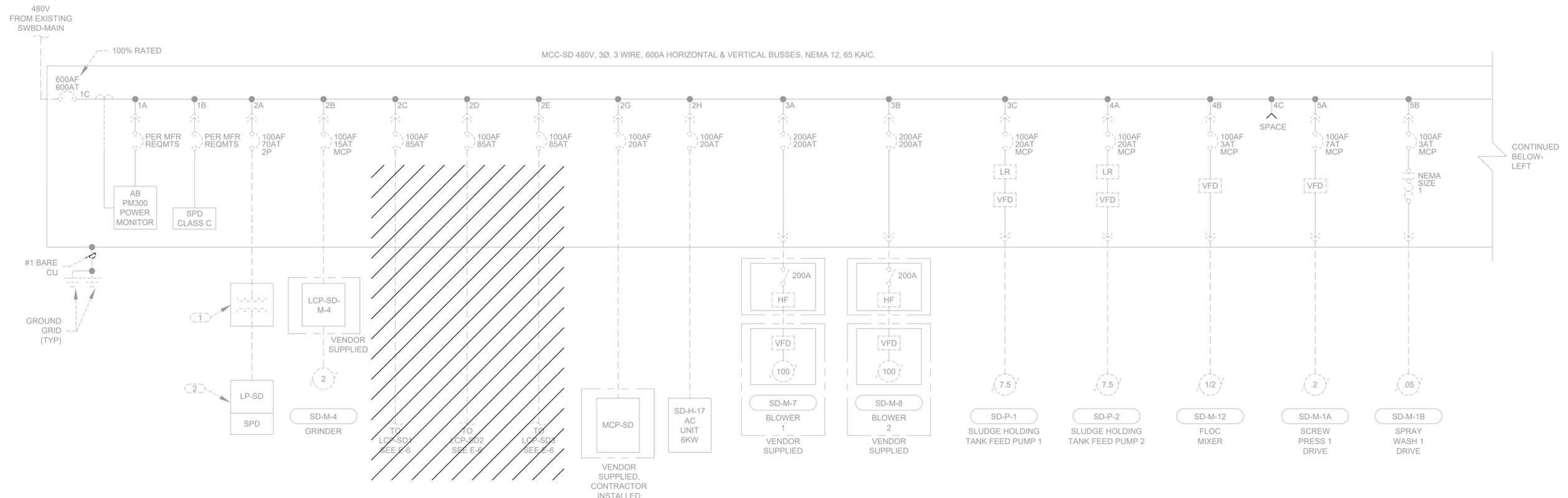
**ELECTRICAL - DEMOLITION
MCC-SD ONLINE DEMOLITION DIAGRAM**

FILE:
JUB PROJ. #: 93-25-005
DRAWN BY: DCL
DESIGN BY: JCG
CHECKED BY: MPJ

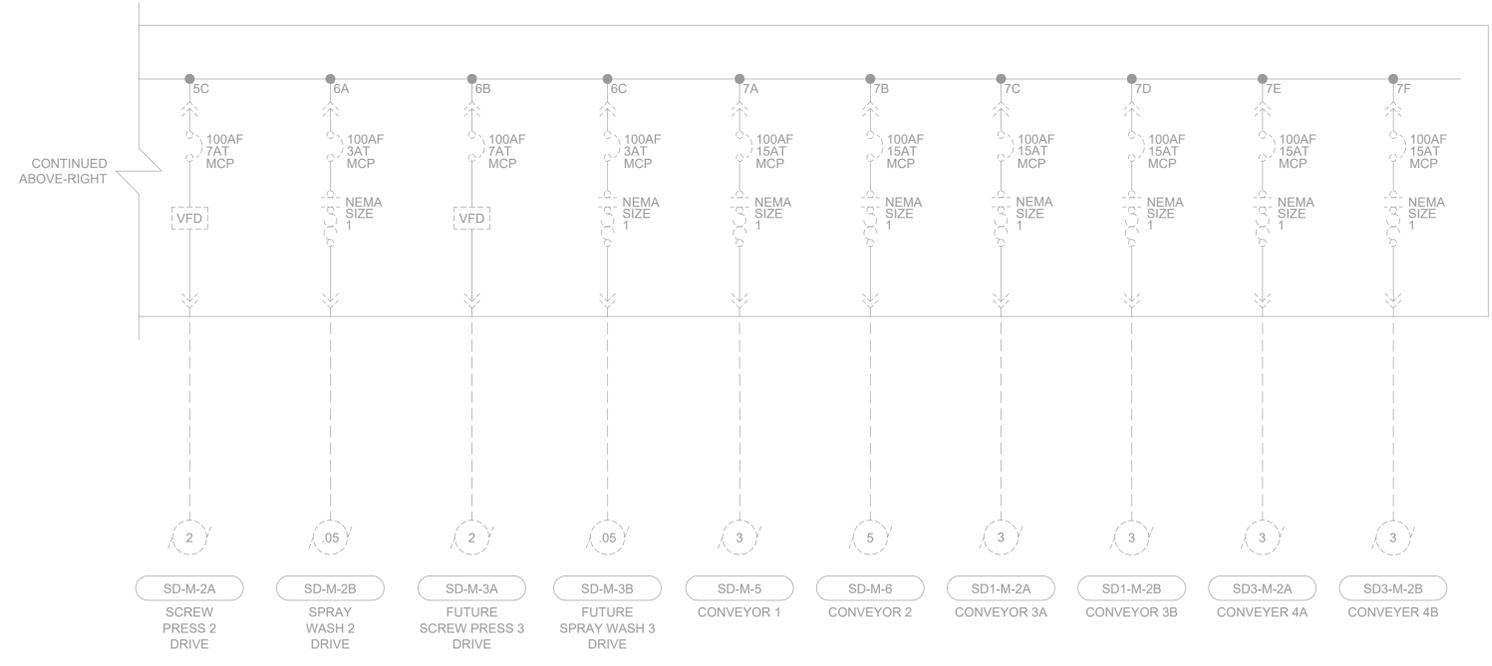
AT FULL SIZE, IF NOT ONE
INCH, SCALE ACCORDINGLY
LAST UPDATED: 1/29/2026

DRAWING:
E103

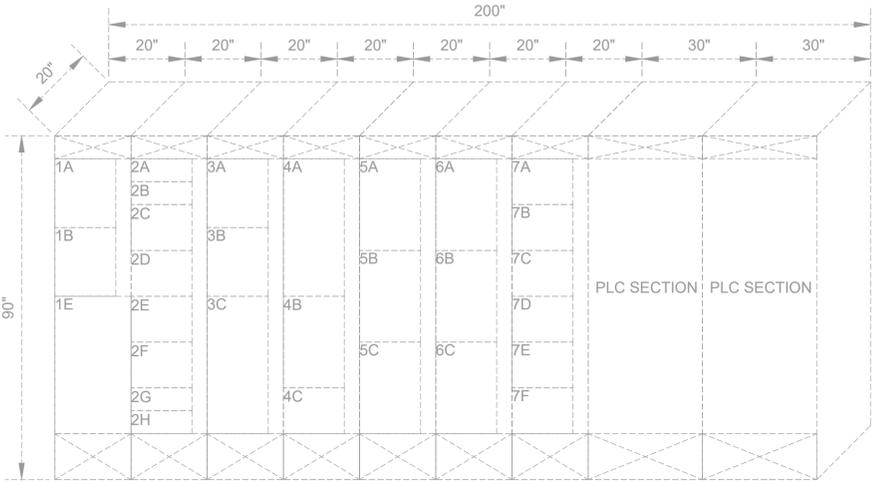
SHEET: OF



MCC-SD SINGLE-LINE DIAGRAM



- NOTES:
- 1 45KVA XFMR, 480V PRIMARY, 120V/208V SEC., FLOOR MOUNTED NEMA 1.
 - 2 LIGHTING PANEL LP-SD, 120V/208V 3Ø, 4W, 125A NEMA 1, 22KAIC.



MCC-SD SECTION
SCALE: 1/2" = 1'



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NO.	REVISION	DESCRIPTION	BY	DATE

WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE

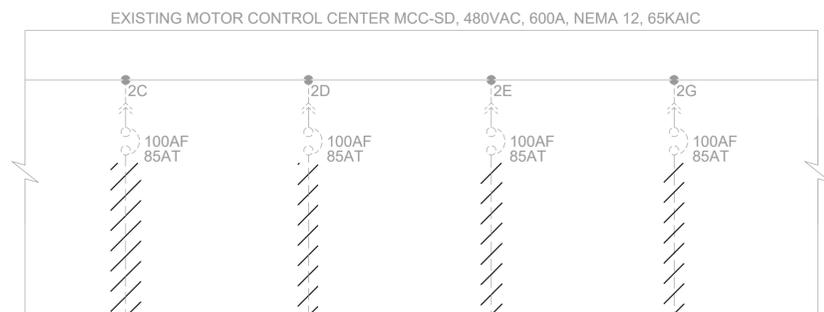
ELECTRICAL - DEMOLITION
DEMOLITION ONELINE DIAGRAM

FILE:
JUB PROJ. # : 93-25-005
DRAWN BY: DCL
DESIGN BY: JCG
CHECKED BY: MPJ

ONE INCH
AT FULL SIZE. IF NOT ONE
INCH, SCALE ACCORDINGLY
LAST UPDATED: 1/29/2026

DRAWING:
E104
SHEET: OF

Plot Date: 2/23/2026 6:54 PM Plot By: Michael Johnson
Date Created: 7/2/2026 C:\USERS\MICHAELJOHNSON\Documents\2026\2026\PROJECT FILES\DESIGN\CAD\MODEL\ELECTRICAL\E104 DEMOLITION ONELINE DIAGRAM.DWG



EXISTING MCC-SD



SD1-H5 THRU SD1-H-12

SD1-H-13 THRU SD1-H-16



SD2-H5 THRU SD2-H-12

SD2-H-13 THRU SD2-H-16

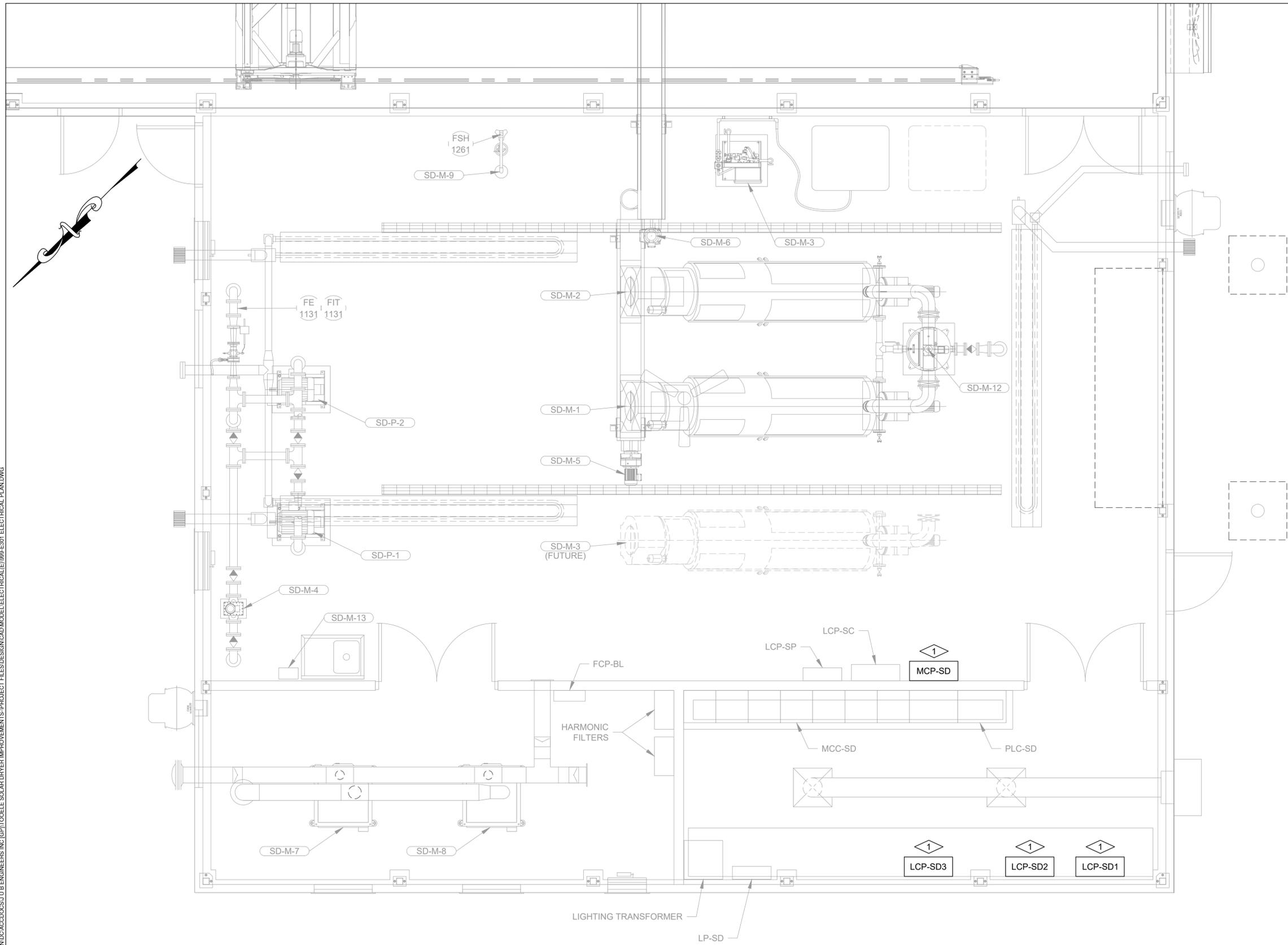


SD3-H5 THRU SD3-H-12

SD3-H-13 THRU SD3-H-16

DEMOLITION ONELINE DIAGRAM

Plot Date: 12/28/2025 4:07 PM Plotted By: Michael Johnson
 Date Created: 12/22/25 C:\USERS\MICHAEL.JOHNSON\Documents\JUB ENGINEERS, INC\PROJECTS\TOOELE SOLAR DRYER IMPROVEMENTS\PROJECT FILES\DESIGN\CAD\MODEL\ELECTRICAL\E301 ESD1 ELECTRICAL PLANDWG



DEWATERING BUILDING ELECTRICAL PLAN
 SCALE: 3/8" = 1'-0"

 Scale in Feet

GENERAL NOTES

- CONDUIT SHALL ONLY RUN EXPOSED WHERE NECESSARY. ALL EXPOSED CONDUIT SHALL BE PVC COATED. PANELS SHALL BE STAINLESS STEEL NEMA 4X.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING CONDUIT DETAILS AND A CONDUIT ROUTING PLAN TO THE ELECTRICAL ENGINEER FOR APPROVAL.
- LIMIT EXPOSED CONDUITS, 90° BENDS AND WALL PENETRATIONS. MAINTAIN SEPARATION BETWEEN SIGNAL AND POWER-CARRYING CONDUITS.



PRELIMINARY PLANS
NOT FOR CONSTRUCTION

KEY NOTES

- CONTRACTOR TO BOND PANELS TO EXISTING GROUND.

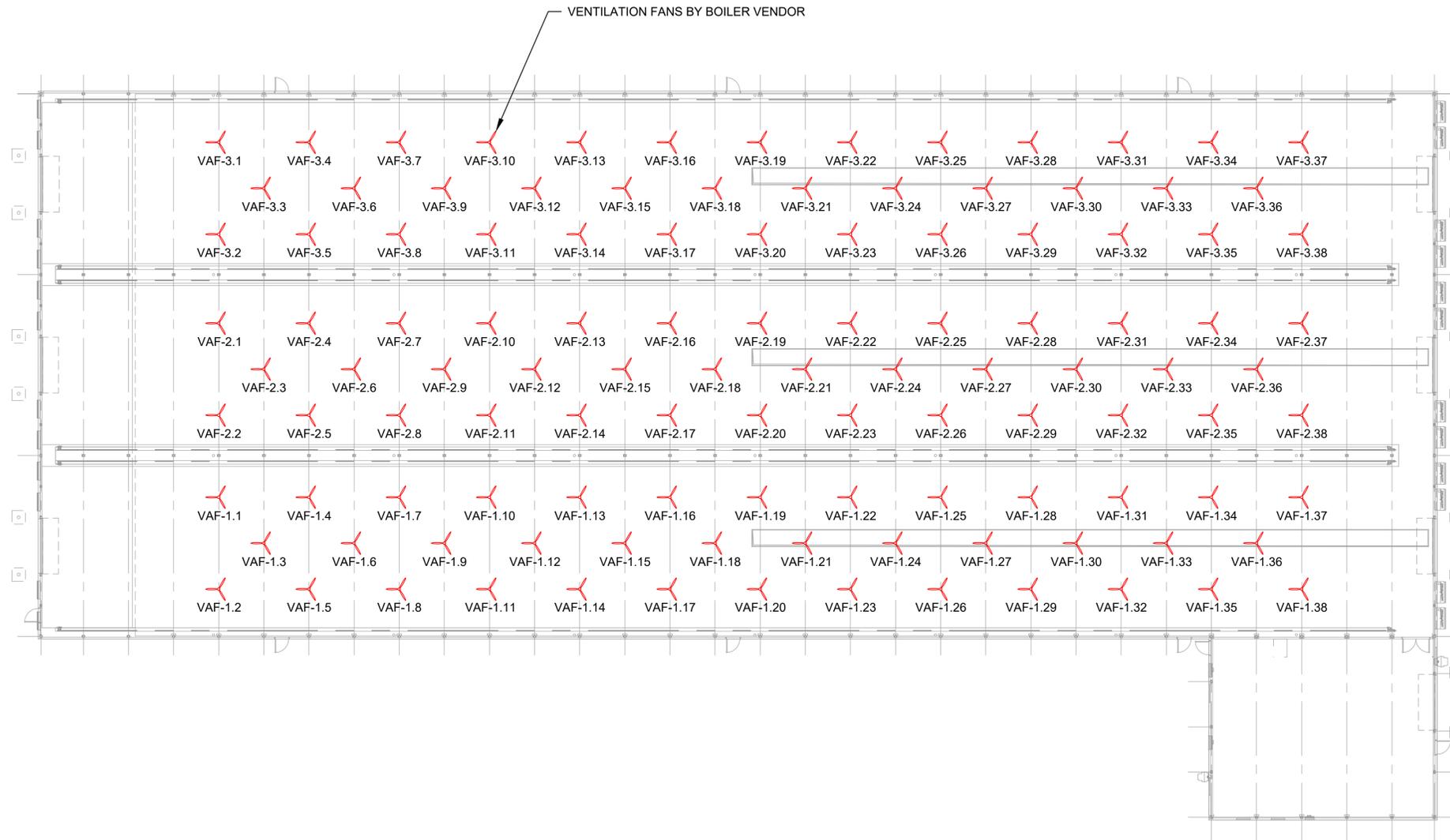
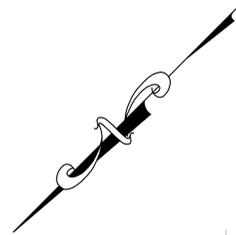
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NO.	REVISION	DESCRIPTION	BY	APPR.	DATE

WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
ELECTRICAL - LAYOUT
DEWATERING BUILDING ELECTRICAL PLAN

FILE: JUB PROJ. # : 93-25-005
 DRAWN BY: DCL
 DESIGN BY: JCG
 CHECKED BY: MPJ
 AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
 LAST UPDATED: 12/22/25
DRAWING: E301
 SHEET: OF

Plot Date: 2/23/2026 5:12 PM Plotted By: Michael Johnson
 Date Created: 7/31/2026 C:\USERS\MICHAELJOHNSON\Documents\JUB ENGINEERS, INC\PROJECTS\IMPROVEMENTS-PROJECT FILES\DESIGN\CAD\MODEL\ELECTRICAL\999-E302 SOLAR DRYING BUILDING LAYOUT PLAN.DWG



SOLAR DRYING BUILDING LAYOUT PLAN

SCALE: 1/16" = 1'-0"
 0 16 32
 Scale in Feet

GENERAL NOTES

1. SIZE AND LOCATION OF EXISTING INFRASTRUCTURE IS BASED ON INFORMATION PROVIDED TO THE ENGINEER AND SHOULD NOT BE RELIED UPON AS COMPLETE AND ACCURATE. THE CONTRACTOR SHALL FIELD VERIFY THIS INFORMATION PRIOR TO START OF WORK.
2. UNLESS NOTED OTHERWISE, ALL ELECTRICAL EQUIPMENT AND MATERIALS REMOVED SHALL BE DISPOSED BY THE CONTRACTOR LEGALLY AND IN ACCORDANCE WITH LOCAL LAWS.

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PRELIMINARY PLANS
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KEY NOTES

1. REMOVE AND DISPOSE OF SOLAR DRYER LOCAL CONTROL PANELS. REUSE CONDUIT AND WIRE WITH NEW PANELS.

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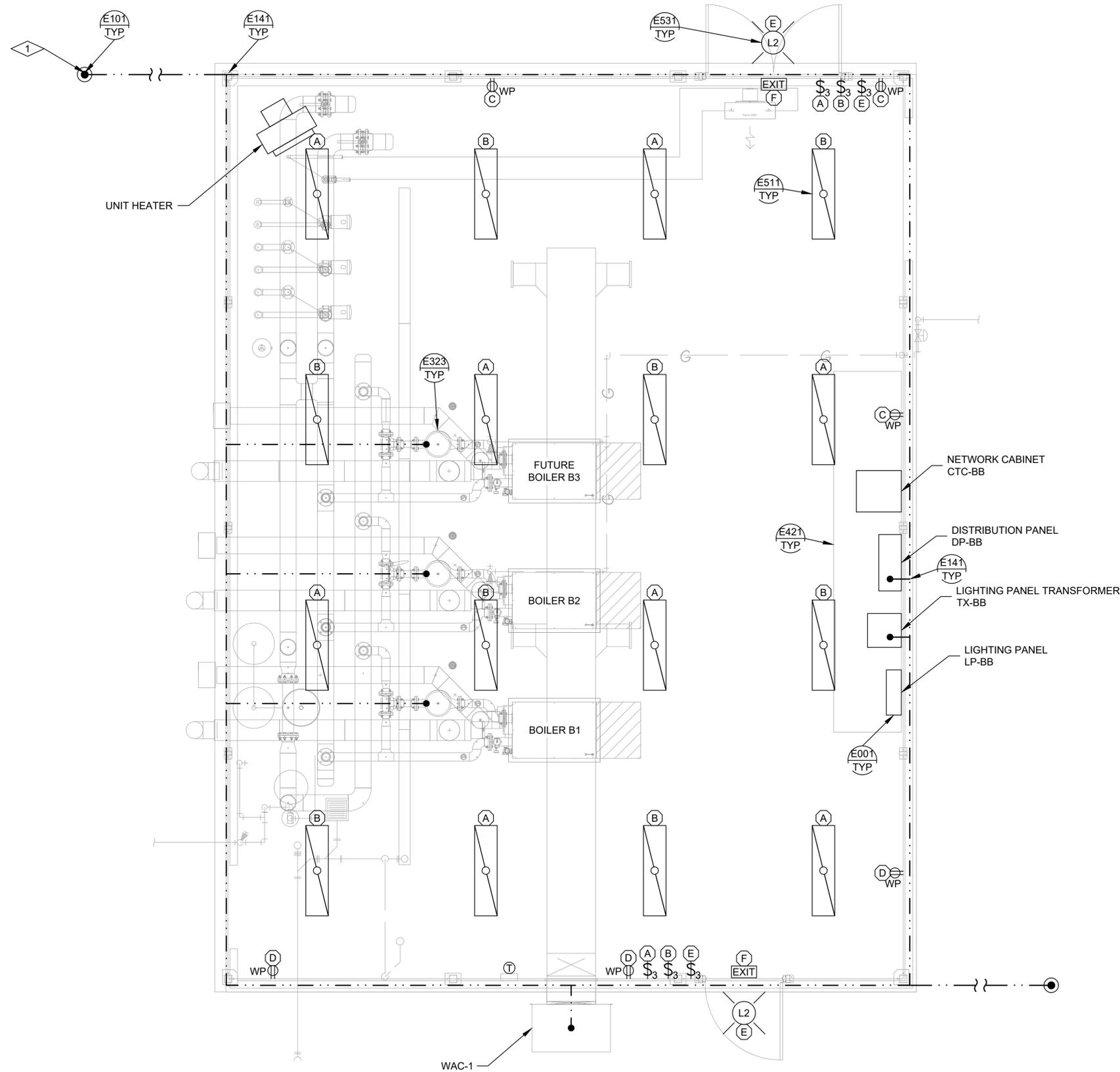
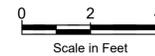
WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
ELECTRICAL - LAYOUT
SOLAR DRYING BUILDING LAYOUT PLAN

FILE:	JUB PROJ. # : 93-25-005
DRAWN BY:	DCL
DESIGN BY:	JCG
CHECKED BY:	MPJ
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY	ONE INCH
LAST UPDATED:	1/31/2026
DRAWING:	E302
SHEET:	OF

Plot Date: 1/13/2026 5:02 PM Plotted By: Michael Johnson
 Date Created: 1/13/2026 C:\USERS\MICHAELJOHNSON\Documents\JUB ENGINEERS, INC\PROJECTS\BOILER BUILDING ELECTRICAL\PROJECT FILES\DESIGN\CAD\MODEL\ELECTRICAL\E303-BOILER BUILDING ELECTRICAL PLAN.DWG

BOILER BUILDING ELECTRICAL PLAN

3/8" = 1'-0"



GENERAL NOTES

- CONDUIT SHALL ONLY RUN EXPOSED WHERE NECESSARY. ALL EXPOSED CONDUIT SHALL BE PVC COATED. PANELS SHALL BE STAINLESS STEEL NEMA 4X.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING CONDUIT DETAILS AND A CONDUIT ROUTING PLAN TO THE ELECTRICAL ENGINEER FOR APPROVAL.
- LIMIT EXPOSED CONDUITS. 90° BENDS AND WALL PENETRATIONS. MAINTAIN SEPARATION BETWEEN SIGNAL AND POWER-CARRYING CONDUITS.

KEY NOTES

- CONTRACTOR SHALL INSTALL (2) 10'X3/4"Ø COPPER GROUND RODS 10' MINIMUM SPACING AND 10' MINIMUM FROM BUILDING.
- BOND ALL BUILDING STEEL TO GROUND PER NEC.

LEGEND

- DAY-BRITE 47W 1'X4' WET LOCATION LED FIXTURE WITH EMERGENCY DRIVER. MODEL DWAE51840-4-UNV-EMLED OR APPROVED EQUAL
- PHILIPS GARDCO 121-16L-1000-WW-G4-4-UNV-PCB-BZ 55W 5476 LUMENS LED WALL SCONCE, TYPE 4 DARK BRONZE, WITH BUILT IN PHOTO CELL OPERATION, OR APPROVED EQUAL
- DUPLEX OUTLET
G: GFCI PROTECTED OUTLET
WP: WEATHER-PROOF GFCI OUTLET
- CIRCUIT CALLOUT. DEVICES WITH THE SAME LETTER DESIGNATION IN THE CIRCUIT CALLOUT ARE POWERED BY THE SAME CIRCUIT BREAKER.
- WEATHER PROOF LIGHT SWITCH. THE NUMBER 3 DESIGNATION INDICATES A 3 WAY SWITCH.
- DAY-BRITE VE SERIES EXIT SIGN. MODEL VEGW OR APPROVED EQUAL.



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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
ELECTRICAL - LAYOUT
BOILER BUILDING ELECTRICAL PLAN

FILE:	JUB PROJ. # : 93-25-005
DRAWN BY:	DCL
DESIGN BY:	JCG
CHECKED BY:	MPJ
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY	
LAST UPDATED:	1/31/2026
DRAWING:	E303
SHEET:	OF



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NO.	REVISION	DESCRIPTION	BY	DATE

**WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE**

**ELECTRICAL - POWER DISTRIBUTION
DP-BB ONELINE DIAGRAM**

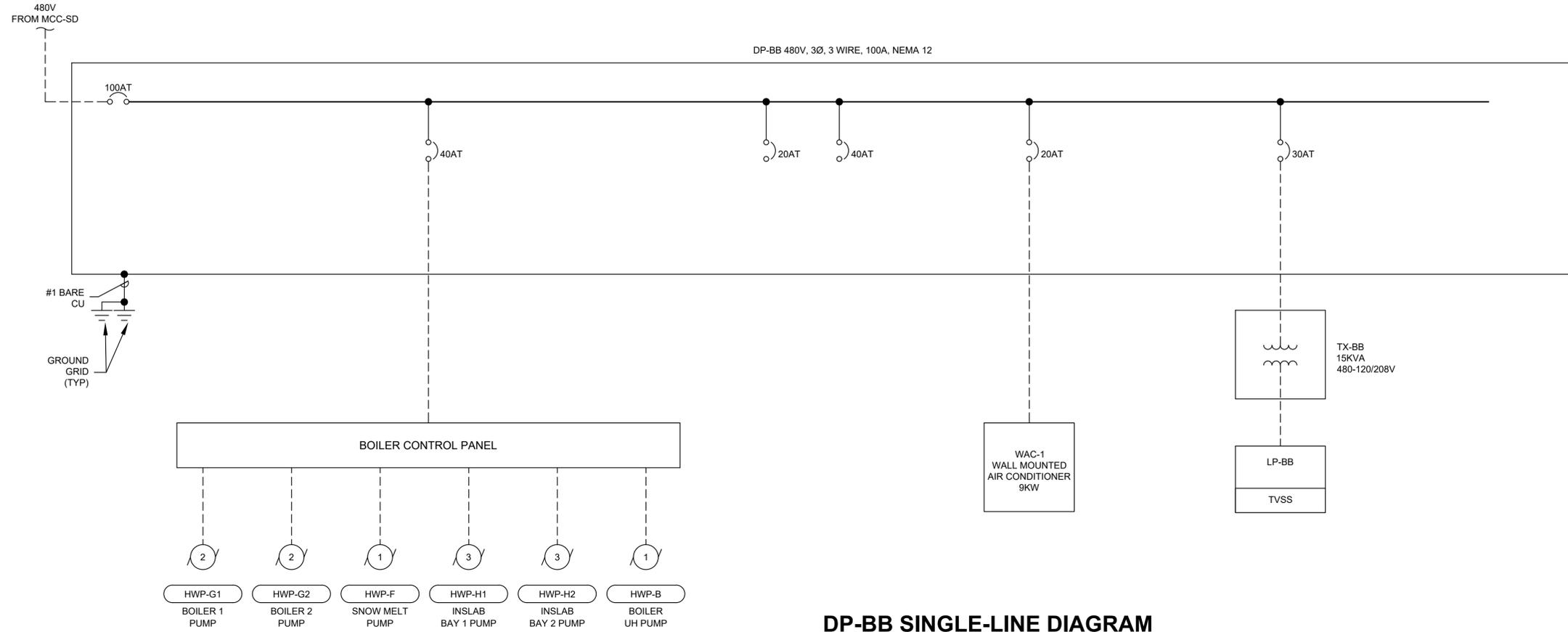
FILE:
JUB PROJ. #: 93-25-005
DRAWN BY: DCL
DESIGN BY: JCG
CHECKED BY: MPJ

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INCH, SCALE ACCORDINGLY

LAST UPDATED: 1/30/2026

DRAWING:
E502

SHEET: OF



DP-BB SINGLE-LINE DIAGRAM

CIRCUIT/DESCRIPTION	KVA	HP	FLA
DP-BB MOTOR LOADS			
BOILER PUMP 1 (HWP-G1)		2.0	3.4
BOILER PUMP 2 (HWP-G2)		2.0	3.4
SNOW MELT PUMP (HWP-F)		1.0	2.1
INSLAB BAY 1 PUMP (HWP-H1)		3.0	4.8
INSLAB BAY 2 PUMP (HWP-H2)		3.0	4.8
BOILER UH PUMP (HWP-B)		1.0	2.1
		0.0	0.0
		0.0	0.0
NON-MOTOR LOADS			
WALL MOUNTED AIR CONDITIONER (WAC-1)	9.0		10.8
LP-BB	15.0		18.1
			0.0
			0.0
SUBTOTAL			49.5
+ 25% OF LARGEST MOTOR			1.2
TOTAL AMPS @ 480V/3PHASE			50.7
SERVICE SIZE (AMPS)			100.0

NO.	REVISION	DESCRIPTION	BY	DATE

CIRCUIT/DESCRIPTION	KVA	HP	FLA
MCC-SD MOTOR LOADS			
BLOWER 1 (SD-M-7)		100.0	124.0
BLOWER 2 (SD-M-8)		100.0	0.0
SLUDGE HOLDING TANK FEED PUMP 1 (SD-P-1)		7.5	11.0
SLUDGE HOLDING TANK FEED PUMP 2 (SD-P-2)		7.5	11.0
GRINDER (SD-M-4)		2.0	3.4
FLOC MIXER (SD-M-12)		0.5	1.1
SCREW PRESS 1 DRIVE (SD-M-1A)		2.0	3.4
SPRAY WASH 1 DRIVE (SD-M-1B)		0.1	0.1
SCREW PRESS 2 DRIVE (SD-M-2A)		2.0	3.4
SPRAY WASH 2 DRIVE (SD-M-2B)		0.1	0.1
CONVEYOR 1 (SD-M-5)		3.0	4.8
CONVEYOR 2 (SD-M-9)		5.0	7.6
CONVEYOR 3A (SD1-M-2A)		3.0	4.8
CONVEYOR 3B (SD1-M-2B)		3.0	4.8
CONVEYOR 4A (SD3-M-2A)		3.0	4.8
CONVEYOR 4B (SD3-M-2B)		3.0	4.8
NON-MOTOR LOADS			
LCP-SD1			60.0
LCP-SD2			60.0
LCP-SD3			60.0
LCP-SD4			60.0
MCP-SD			15.0
AC UNIT (SD-H-17)			8.0
LIGHTING TRANSFORMER	45.0		24.9
SUBTOTAL			477.0
+ 25% OF LARGEST MOTOR			31.0
TOTAL AMPS @ 480V/3PHASE			508.0
SERVICE SIZE (AMPS)			600.0

MCC-SD LOAD CALCULATIONS

PANEL: LP-SD		VOLTAGE: 120/208		MAIN CB: 125 AMP		BUS AMPS: 200 AMP		BUS A.I.C: 10KA		BKR AIC: 10KA		MOUNTING: SURFACE	
CIRCUIT DESCRIPTION	BKR	CIRCUIT	LOAD	PHASE	LOAD	CIRCUIT	BKR	CIRCUIT DESCRIPTION					
PROCESS AREA LIGHTS (6, A)	20/1	1	1032	A	1032	2	20/1	PROCESS AREA LIGHTS (6, B)					
BLOWER LIGHTS (2, C)	20/1	3	344	B	344	4	20/1	ELECTRICAL ROOM LIGHTS (2, D)					
PROCESS ROOM RECEPTACLES (3, E)	20/1	5	540	C	720	6	20/1	PROCESS ROOM RECEPTACLES (4, F)					
BLOWER ROOM RECEPTACLES (3, G)	20/1	7	540	A	540	8	20/1	PROCESS ROOM RECEPTACLES (3, H)					
ELECTRICAL ROOM RECEPTACLES (3, I)	20/1	9	540	B	14	10	20/1	EXIT SIGNS (2, J)					
OUTDOOR LIGHTS (3, K)	20/1	11	450	C	768	12	20/1	CEILING FAN (SD-H-20)					
SD-H-2, 4, 9, T-STAT	20/1	13	1716	A	312	14	20/1	RADIANT HEATER (SD-H-11)					
RADIANT HEATER (SD-H-12)	20/1	15	312	B	312	16	20/1	RADIANT HEATER (SD-H-13)					
EXHAUST VENTILATOR (SD-H-5)	20/1	17	348	C	360	18	20/1	SPEED CONTROLLER (SD-H-21)					
SOLAR BED RECEPTACLES (3, L)	20/1	19	540	A	120	20	20/1	HOT WATER HEATER					
SOLAR BED LIGHTS (8, M)	20/1	21	1376	B	100	22	20/1	FCP-BL					
LCP-SC (TRAIN 1 SLIDE GATES)	20/1	23	1500	C	1500	24	20/1	LCP-SC (TRAIN 2 SLIDE GATES)					
LCP-SC (CONVEYOR CONTROLS)	20/1	25	100	A		26	20/1	SPARE					
LCP-SC (TRAIN 3 SLIDE GATES)	20/1	27	1500	B	1500	28	20/1	LCP-SC (TRAIN 4 SLIDE GATES)					
GARAGE DOOR	20/1	29	180	C		30	20/1	SPARE					
RADIANT HEATERS 1, 3 & 5	20/1	31	800	A		32	20/1	SPARE					
RADIANT HEATERS 2, 4 & 6	20/1	33	800	B		34	20/1	SPARE					
RADIANT HEATERS 7, 9 & 11	20/1	35	800	C		36	20/1	SPARE					
RADIANT HEATERS 8, 10 & 12	20/1	37	800	A		38	20/1	SPARE					
RADIANT HEATERS 13, 15 & 17	20/1	39	800	B		40	20/1	SPARE					
RADIANT HEATERS 14, 16 & 18	20/1	41	800	C		42	20/1	SPARE					
CONNECTED VA PER PHASE			7532.0	7942.0	7966.0	NOTES:							
CONNECTED AMPS PER PHASE			62.8	66.2	66.4								
25% OF CONTINUOUS & LIGHTING LOAD (VA)			1883.0	1985.5	1991.5								
CODE VA PER PHASE			9415.0	9927.5	9957.5								
CODE AMPS PER PHASE			78.5	82.7	83.0								

LP-SD PANEL SCHEDULE

PANEL: LP-BB		VOLTAGE: 120/208		MAIN CB: 50 AMP		BUS AMPS: 100 AMP		BUS A.I.C: 10KA		BKR AIC: 10KA		MOUNTING: SURFACE	
CIRCUIT DESCRIPTION	BKR	CIRCUIT	LOAD	PHASE	LOAD	CIRCUIT	BKR	CIRCUIT DESCRIPTION					
LIGHTING	20/1	1	1000	A	342	2	20/2	BOILER 1					
LIGHTING	20/1	3	1000	B	342	4	20/2	BOILER 2					
RECEPTICLES	20/1	5	1000	C	342	6	20/2	BOILER 3					
RECEPTICLES	20/1	7	1000	A	342	8	20/2	BOILER 3					
EXIT SIGNS	20/1	9	200	B	342	10	20/2	BOILER 3					
DOOR WALL PACKS	20/1	11	200	C	342	12	20/2	BOILER 3					
SPARE	20/1	13	0	A	0	14	20/1	SPARE					
SPARE	20/1	15	0	B	0	16	20/1	SPARE					
SPARE	20/1	17	0	C	0	18	20/1	SPARE					
SPARE	20/1	19	0	A	0	20	20/1	SPARE					
SPARE	20/1	21	0	B	0	22	20/1	SPARE					
SPARE	20/1	23	0	C	0	24	20/1	UNIT HEATER					
CONNECTED VA PER PHASE			2684.0	1884.0	1884.0	NOTES:							
CONNECTED AMPS PER PHASE			22.4	15.7	15.7								
25% OF CONTINUOUS & LIGHTING LOAD (VA)			671.0	471.0	471.0								
CODE VA PER PHASE			3355.0	2355.0	2355.0								
CODE AMPS PER PHASE			28.0	19.6	19.6								

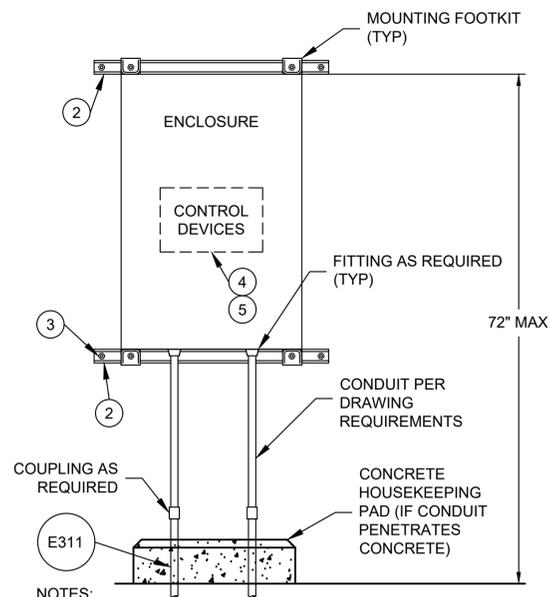
LP-BB PANEL SCHEDULE

CIRCUIT/DESCRIPTION	KVA	HP	FLA
DP-UV MOTOR LOADS			
NON-MOTOR LOADS			
UV PROCESS TRANSFORMER	93.0		112.0
LIGHTING TRANSFORMER	30.0		12.3
MCC-ED			241.3
SUBTOTAL			365.6
+ 25% OF LARGEST MOTOR			0.0
TOTAL AMPS @ 480V/3PHASE			365.6
SERVICE SIZE (AMPS)			600.0

DP-UV LOAD CALCULATIONS

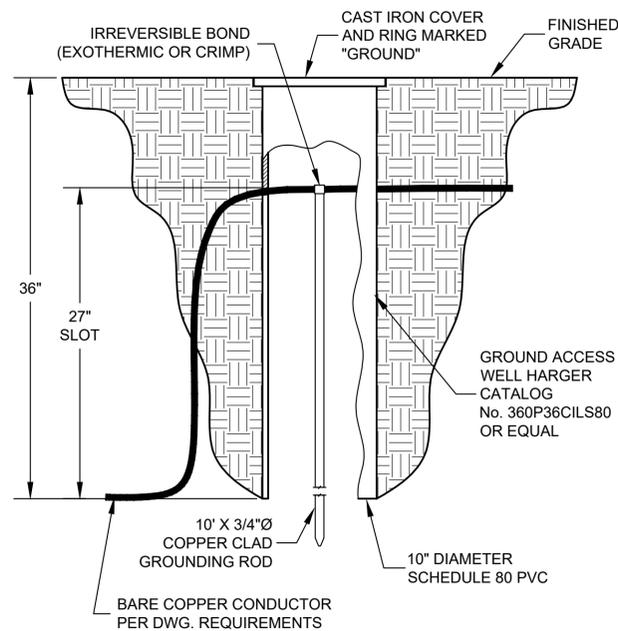
PANEL: LP-UV		VOLTAGE: 120/208		MAIN CB: 100 AMP		BUS AMPS: 100 AMP		BUS A.I.C: 10KA		BKR AIC: 10KA		MOUNTING: SURFACE	
CIRCUIT DESCRIPTION	BKR	CIRCUIT	LOAD	PHASE A	PHASE B	PHASE C	CIRCUIT	BKR	CIRCUIT DESCRIPTION				
INDOOR LIGHTS (6, A)	20/1	1	1032				2	20/1	RECEPTACLES (3, C)				
			540										
INDOOR LIGHTS (6, B)	20/1	3	540				4	20/1	RECEPTACLES (4, D)				
RECEPTACLES (3, E)	20/1	5	540				6	20/1	RECEPTACLES (4, F)				
OUTDOOR LIGHTS (2, G)	20/1	7	300				8	20/1	GARAGE DOOR (H)				
			360										
EXIT SIGNS (2, I)	20/1	9	14				10	20/1	SPARE				
SPARE	20/1	11					12	20/1	UV-H-7 (EXHAUST FAN)				
FCP-UV	20/1	13	1176				14	20/1	UV-H-11 (RADIANT HEATER)				
UV-H-9 (EXHAUST FAN)	20/1	15	1176				16	20/1	SPARE				
UV-H-13 (CEILING FAN)	20/1	17	120				18	20/1	UV-H-14 (CEILING FAN)				
SPARE	20/1	19	120				20	20/1	UV-H-16 (SPEED CONTROLLER)				
SPARE	20/1	21	100				22	20/1	SPARE				
UV-H-12 (RADIANT HEATER)	20/1	23	312				24	20/1	UV-H-18 (RADIANT HEATER)				
SPARE	20/1	25	312				26	20/1	SCC-UV				
SPARE	20/1	27	100				28	20/1	SPARE				
SPARE	20/1	29					30	20/1	SPARE				
SPARE	20/1	31					32	20/1	SPARE				
SPARE	20/1	33					34	20/1	SPARE				
SPARE	20/1	35					36	20/1	SPARE				
SPARE	20/1	37					38	20/1	SPARE				
SPARE	20/1	39					40	20/1	SPARE				
SPARE	20/1	41					42	20/1	SPARE				
CONNECTED KVA PER PHASE			2844.0	2942.0	3120.0	NOTES:							
CONNECTED AMPS PER PHASE			23.7	24.5	26.0								
25% OF CONTINUOUS & LIGHTING LOAD (KVA)			383.0	261.5	0.0								
LARGEST MOTOR (25%)			90.0	294.0	294.0								
CODE KVA PER PHASE			3317.0	3497.5	3414.0								
CODE AMPS PER PHASE AT 120V			27.6	29.1	28.5								

LP-UV PANEL SCHEDULE

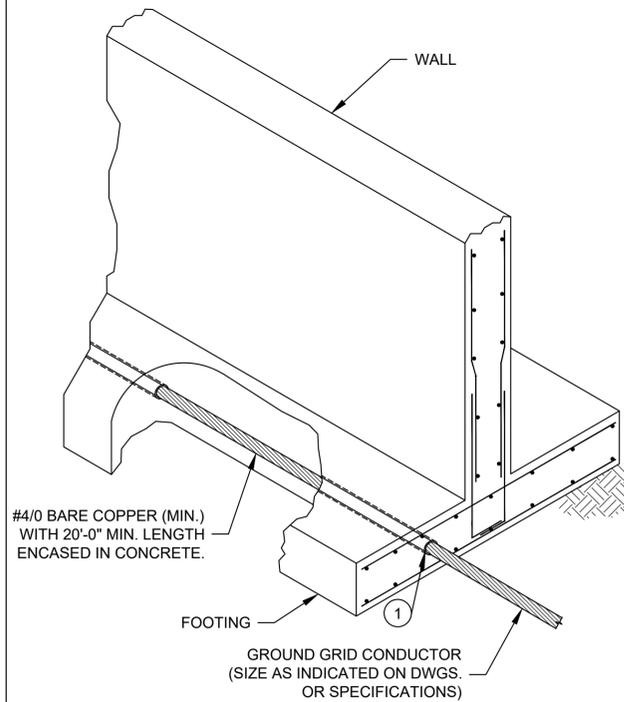


- NOTES:
- 1 ALL MATERIAL SHALL BE HOT DIPPED GALVANIZED, 316 STAINLESS STEEL, OR PVC COATED GALVANIZED STEEL; AS NOTED IN THE DRAWINGS AND SPECIFICATIONS. FOR CHEMICAL ROOMS SEE COMPATIBLE MATERIALS IN SPECIFICATIONS.
 - 2 1-5/8" X 1-5/8" UNISTRUT CHANNEL.
 - 3 1/2" X 3" 316 SS ANCHOR BOLT OR LAG BOLT WITH WASHER, ANCHORED TO WALL (EVERY 18", 2 MIN.).
 - 4 CENTER OF INSTRUMENT DISPLAYS SHALL BE 62".
 - 5 CENTER OF LOCAL CONTROL STATIONS SHALL BE 52".

E001 WALL MOUNTED ENCLOSURE
NTS

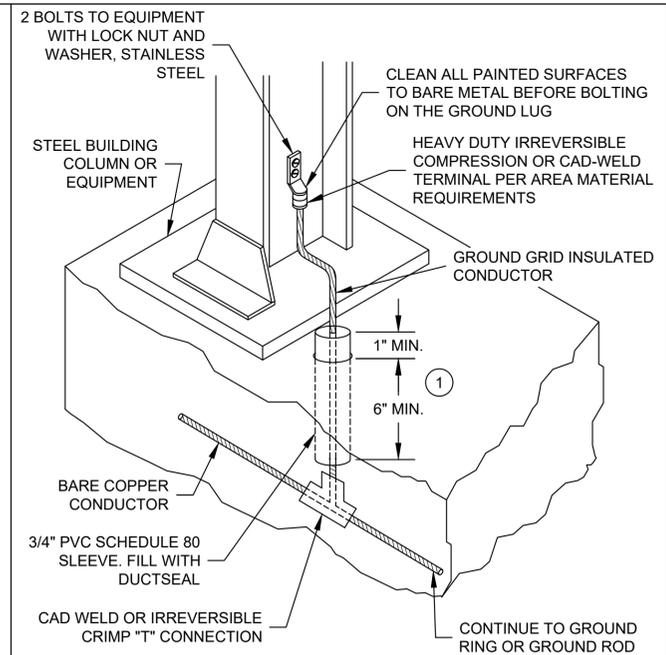


E101 GROUND ROD WITH ACCESS WELL
NTS



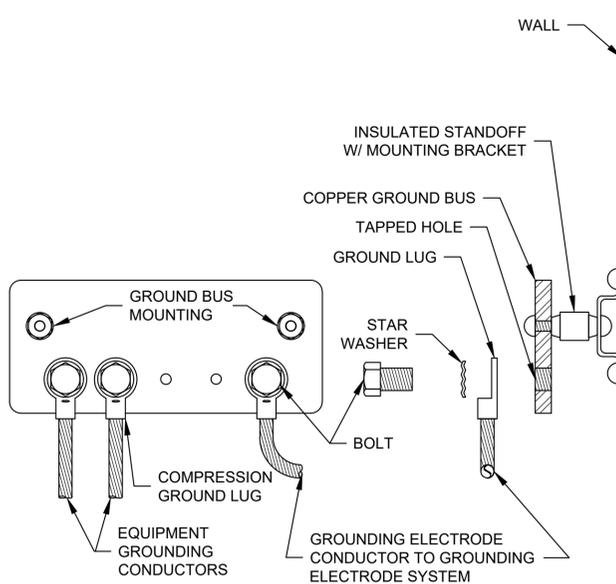
- NOTE:
- 1 GROUND GRID CONDUCTOR TO BE FULLY ENCASED IN CONCRETE. PROVIDE MINIMUM 2" CLEAR BETWEEN CONDUCTOR AND FACE OF CONCRETE.

E111 GROUNDING CONNECTION TO FOOTING (UFER)
NTS



- NOTE:
- 1 ALL EXPOSED GROUND GRID CONDUCTOR TO BE PROTECTED WITH XHHW INSULATION.
 - 2 PROVIDE A 4/0 (OR MAIN GROUNDING CONDUCTOR SIZE IF SMALLER) BARE CONTINUOUS COPPER GROUND. SEE GROUNDING SPECIFICATION SECTION 260526.

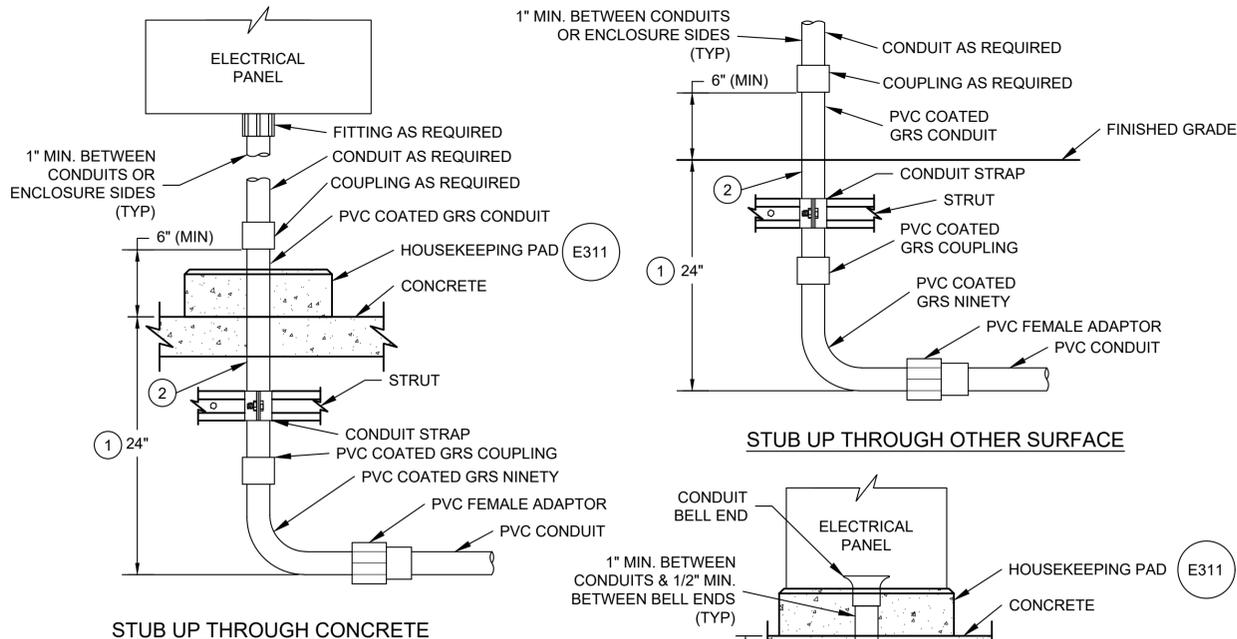
E112 STRUCTURE OR EQUIPMENT GROUNDING CONNECTION
NTS



GROUND BUS FRONT VIEW GROUND BUS SIDE VIEW

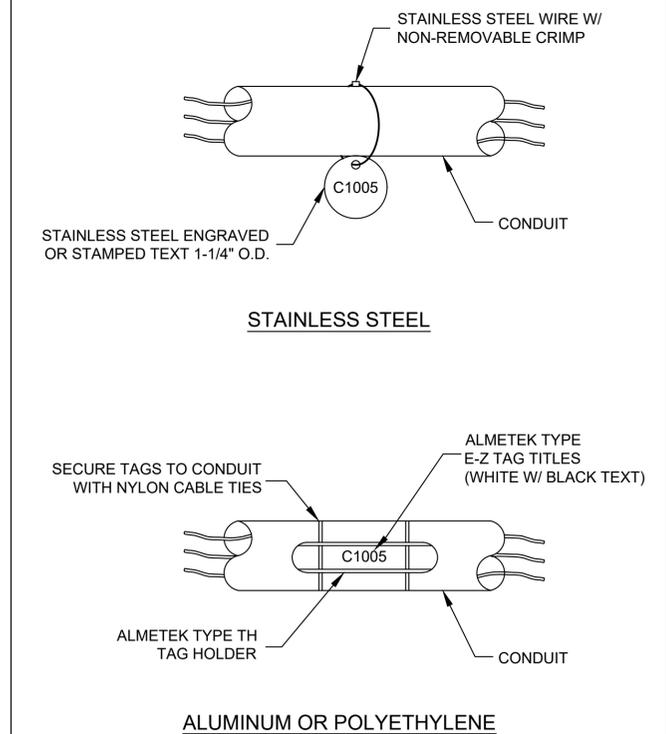
- NOTE:
- 1 ALL EXPOSED GROUND GRID CONDUCTORS TO BE PROTECTED WITH XHHW INSULATION.
 - 2 PROVIDE A 4/0 (OR MAIN GROUNDING CONDUCTOR SIZE IF SMALLER) BARE CONTINUOUS COPPER GROUND. SEE GROUNDING SPECIFICATION SECTION 260526.

E141 GROUND BUS CONNECTIONS
NTS



- NOTES:
- 1 WHERE CONDUITS ARE INSTALLED IN OR UNDER A CONCRETE SLAB, THE 24" DIMENSION DOES NOT APPLY. CONDUITS SHALL BE INSTALLED BETWEEN REBAR MATS OR UNDER A SINGLE REBAR MAT.
 - 2 BELOW CONCRETE, ANCHOR CONDUITS INTO ALIGNED ROWS AND COLUMNS.

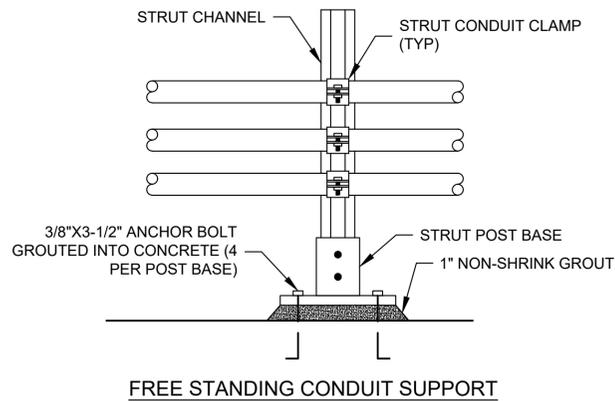
E312 CONDUIT STUB UP
NTS



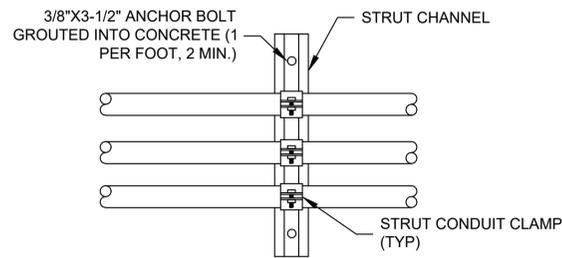
E321 CONDUIT MARKING SYSTEM
NTS

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FREE STANDING CONDUIT SUPPORT



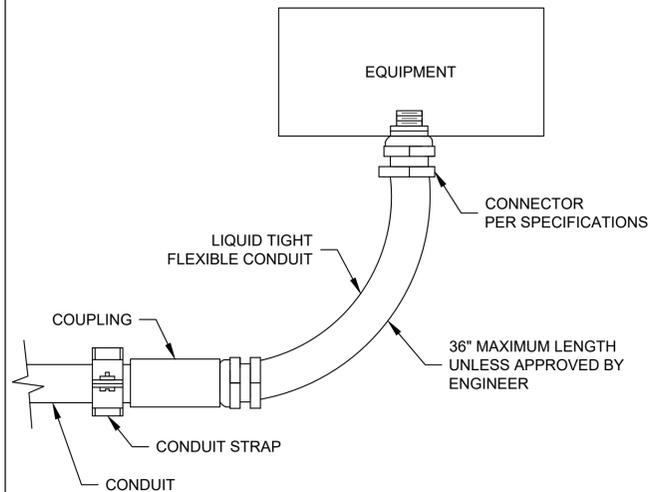
WALL/STRUCTURE MOUNTED CONDUIT SUPPORT

NOTE:

- 1 ALL CONDUIT FITTINGS AND SUPPORT TO BE STAINLESS STEEL UNLESS NOTED ON DRAWINGS.

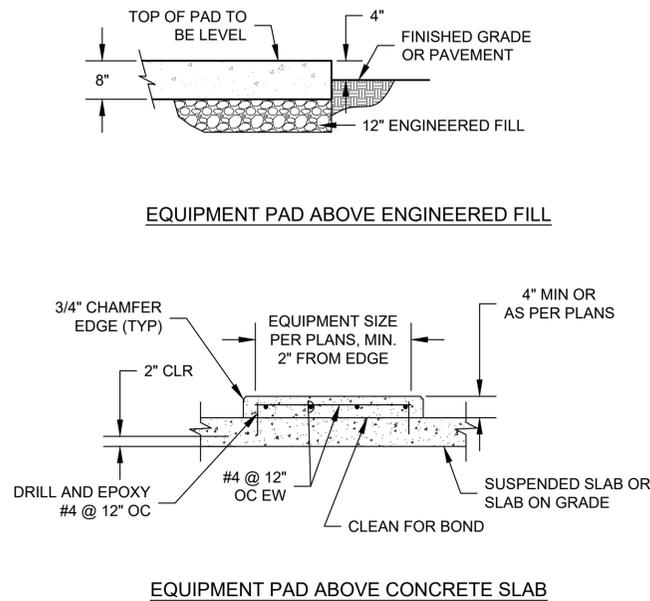
EXPOSED SURFACE CONDUIT SUPPORT

E322 NTS



FLEXIBLE CONDUIT

E323 NTS

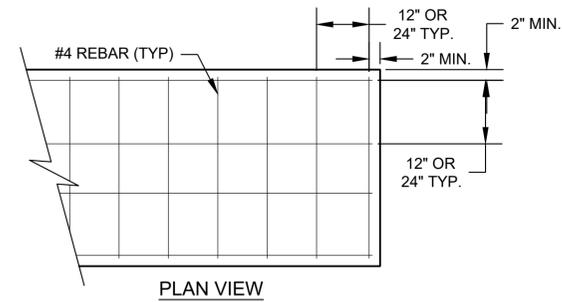


EQUIPMENT PAD ABOVE ENGINEERED FILL

EQUIPMENT PAD ABOVE CONCRETE SLAB

EQUIPMENT PAD

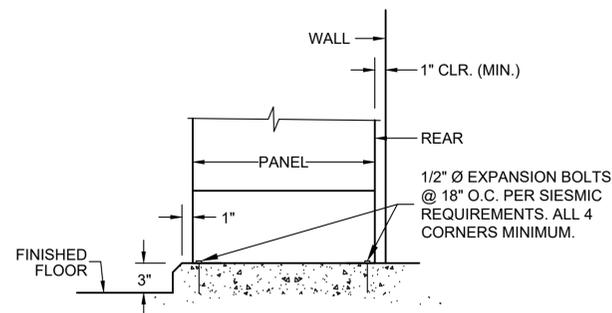
E401 NTS



PLAN VIEW

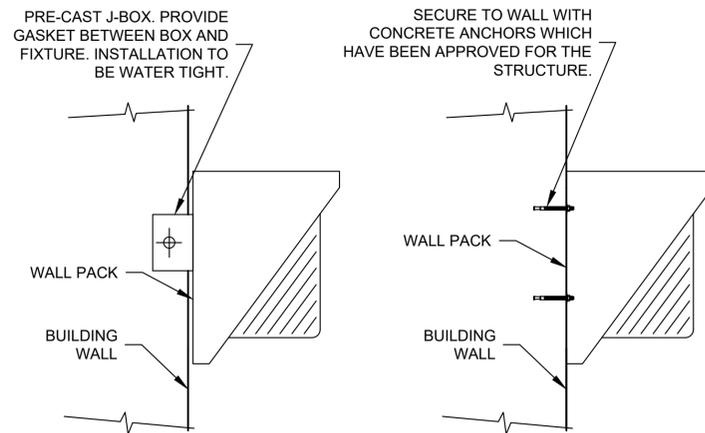
NOTES:

- 1 ALL CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS. BATCH PLANT INSPECTIONS AND TESTS OF CEMENT AND REINFORCING BARS MAY BE WAIVED PER TITLE 24 SECTION 2628 (E) & (F).
- 2 CONCRETE MIX DESIGNS SHALL COMPLY WITH TITLE 24 SECTION 2624 (C), METHOD A.
- 3 PORTLAND CEMENT SHALL CONFORM TO UBC STANDARD NO. 26-1.
- 4 CONCRETE AGGREGATES SHALL CONFORM TO UBC STANDARD NO. 26-2
- 5 CONCRETE PLACEMENT SHALL CONFORM TO TITLE 24, SECTION 2605.
- 6 ALL REINFORCING BARS SHALL CONFORM TO TITLE 24, SECTION 2603 (F) AND ASTM A-615, GRADE 40.
- 7 PAD TO EXTEND 6" MIN. PAST SIDES AND 3" IN FRONT OF CABINET LINE-UP.



FLOOR MOUNTED PANEL

E421 NTS

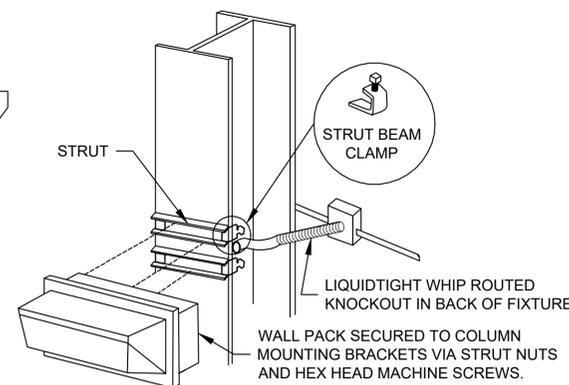


FINISHED WALL

CONCRETE WALL

STRUCTURE MOUNTED OUTDOOR LIGHT FIXTURE (WALL PACK)

E531 NTS



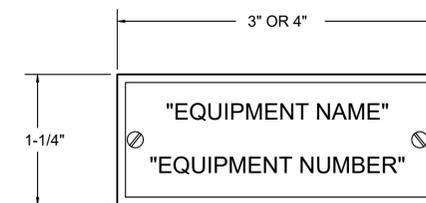
METAL STRUCTURE

NOTES:

- 1 ALL LETTERS TO BE 1/4" UNLESS NOTED OTHERWISE.
- 2 ALL NAMEPLATES TO BE MOUNTED ON THE VERTICAL CENTERLINE OF THE CUBICAL OR DEVICE.
- 3 ATTACH ALL NAMEPLATES WITH 316 STAINLESS STEEL SCREWS.
- 4 PROVIDE BLANK NAMEPLATES FOR ALL SPARE AND FUTURE DEVICES.
- 5 NAMEPLATE SHALL BE WHITE BACKGROUND WITH BLACK TEXT.

ELECTRICAL EQUIPMENT NAMEPLATE

E601 NTS



Subconsultant:



533 W 2600 S, Suite 25
Bountiful, Utah 84010
Phone: (801) 677-0011
www.skmeng.com

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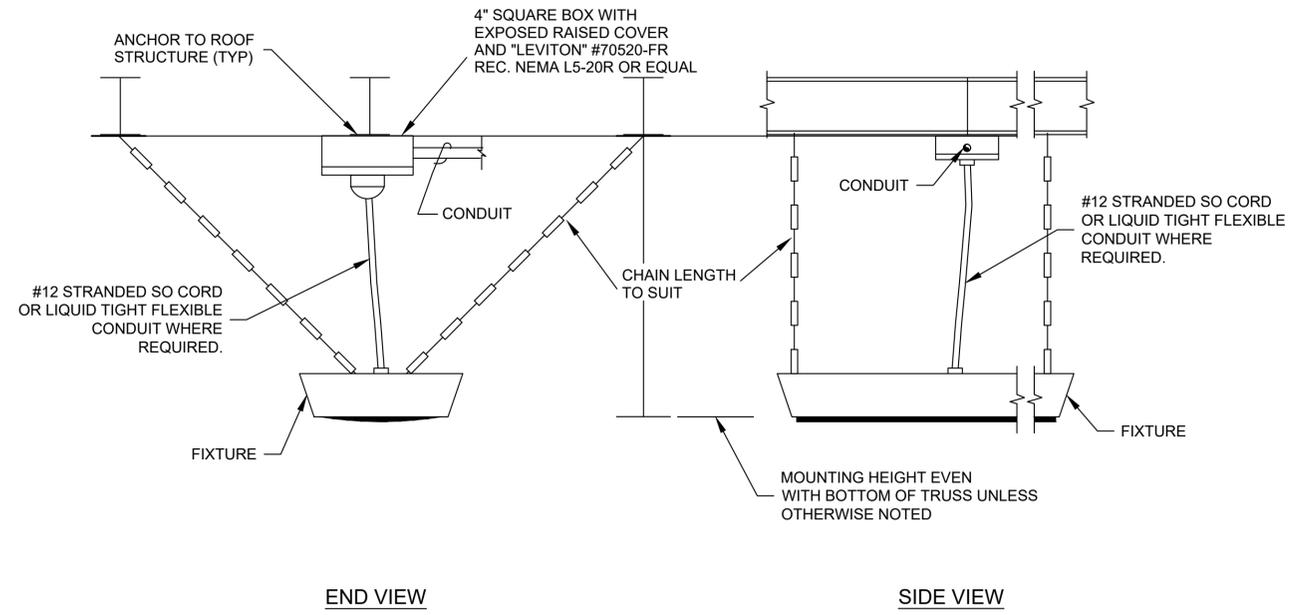
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NO.	REVISION	DESCRIPTION	BY	DATE

WATER RECLAMATION FACILITY 2026 UPGRADES CITY OF TOOELE

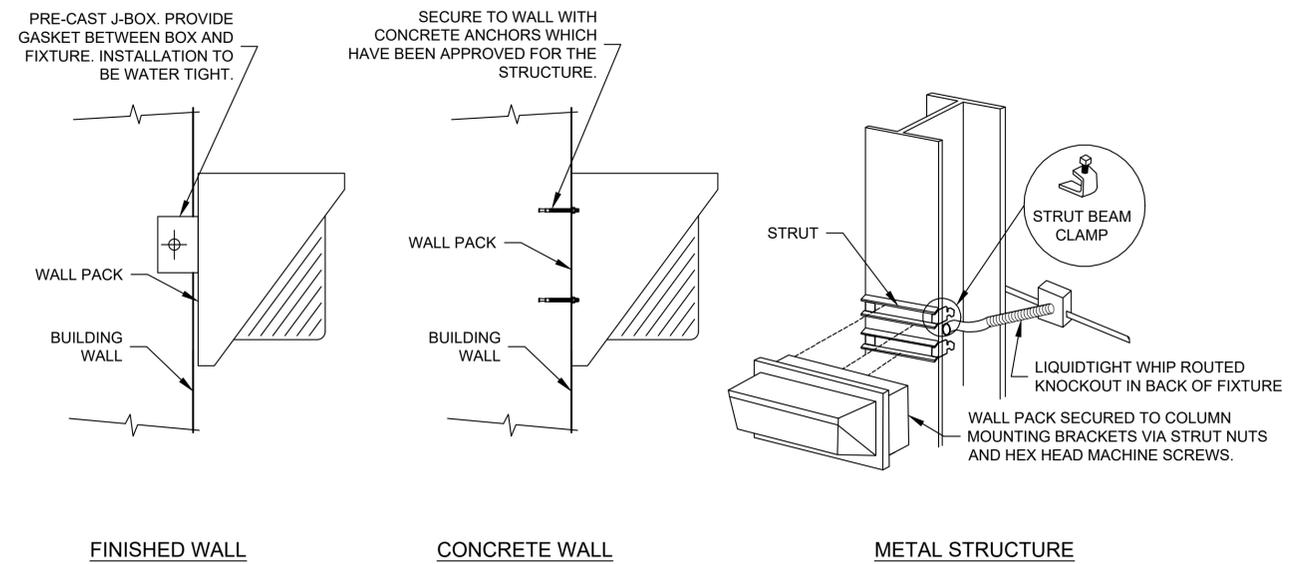
ELECTRICAL - DETAILS DETAILS 2

NO.	DESCRIPTION	BY	DATE

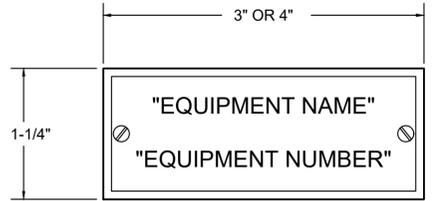


NOTE:
 ① IN CLASSIFIED AREAS, CONTRACTOR SHALL INSTALL CONDUIT AND WIRING PER NEC AND MANUFACTURERS INSTRUCTIONS TO MAINTAIN EXPLOSION PROOF / VAPOR TIGHT INSTALLATION.

E511 CEILING SUSPENDED LIGHT FIXTURE
NTS



E531 STRUCTURE MOUNTED OUTDOOR LIGHT FIXTURE (WALL PACK)
NTS



- NOTES:**
- ① ALL LETTERS TO BE 1/4" UNLESS NOTED OTHERWISE.
 - ② ALL NAMEPLATES TO BE MOUNTED ON THE VERTICAL CENTERLINE OF THE CUBICAL OR DEVICE.
 - ③ ATTACH ALL NAMEPLATES WITH 316 STAINLESS STEEL SCREWS.
 - ④ PROVIDE BLANK NAMEPLATES FOR ALL SPARE AND FUTURE DEVICES.
 - ⑤ NAMEPLATE SHALL BE WHITE BACKGROUND WITH BLACK TEXT.

E601 ELECTRICAL EQUIPMENT NAMEPLATE
NTS

Plot Date: 1/12/2026 2:38 PM Plotted By: Michael Johnson
 Date Created: 1/12/2026 C:\USERS\MICHAEL.JOHNSON\Documents\JUB ENGINEERS, INC\PROJECTS\TOOELE SOLAR DRYER IMPROVEMENTS\PROJECT FILES\DESIGN\CAD\MODEL\ELECTRICAL\E511-E531-DETAILS 3.DWG



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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE

NEW HYDRONIC HEATING SYSTEM
81 - SOLAR DRYER GREENHOUSE
HEATING SYSTEM LAYOUT

FILE:
JUB PROJ. #: 2510023
DRAWN BY: CRUJDK
DESIGN BY: CRL
CHECKED BY:

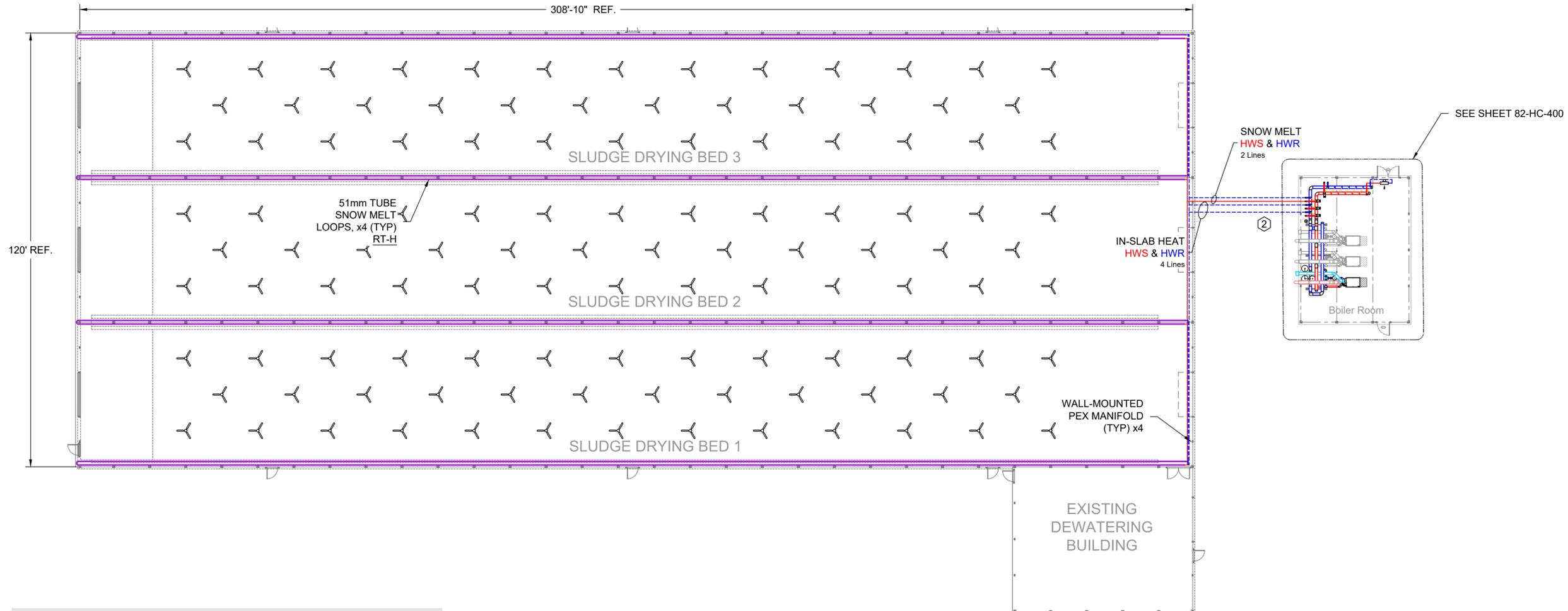
ONE INCH
AT FULL SIZE, IF NOT ONE
INCH, SCALE ACCORDINGLY

LAST UPDATED: 1/29/2026

DRAWING:
81-HC-100

SHEET: 04 OF 20

Plot Date: 1/29/2026 4:36 PM Plotted By: Kramer, Jim
 Date Created: 1/29/2026 S:\COMMERCIAL\DESIGN\2025_JOBS\2510023 - CITY OF TOOELE - UT (DE ONL V)\DRAWINGS\HVAC\2510023 CITY OF TOOELE, UT HEATING MASTER.DWG



Notes

- 1 This system is not to provide air temperature control for the glass house. This is a supplemental process heating system. Heat load to be provided by existing heating devices.
- 2 All exterior pipe to be buried below frost line or heat traced.
- 3 Route all pressure relief valves to drain, one per boiler, by contractor

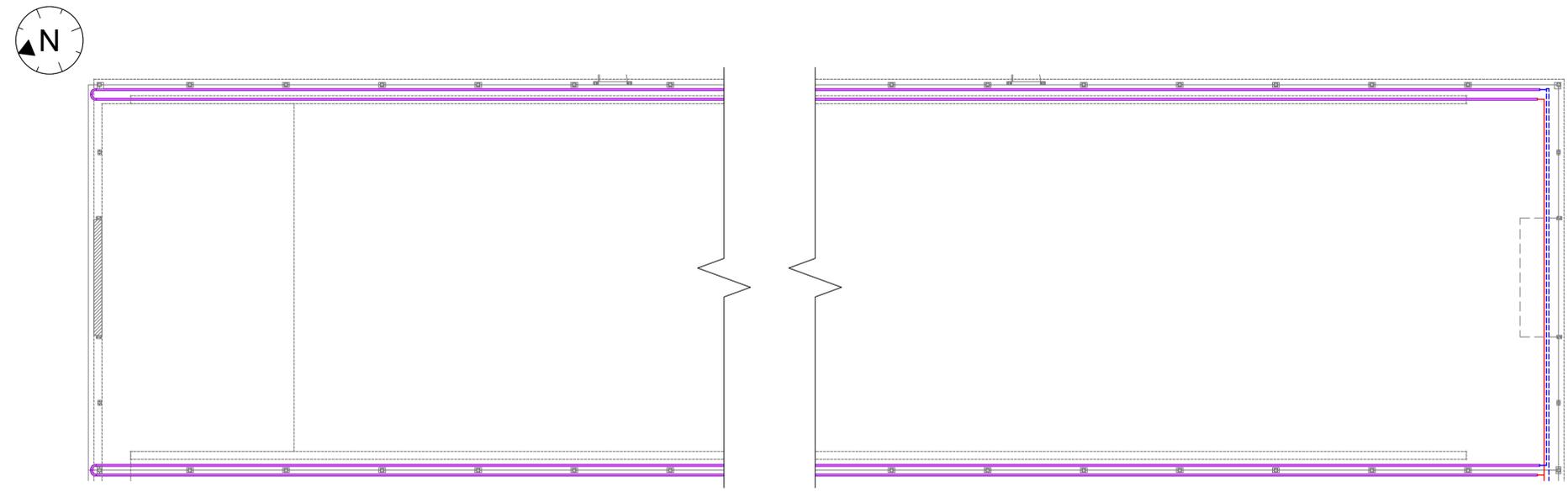
A Heating System Piping - Layout
Scale: 1/16" = 1'-0"

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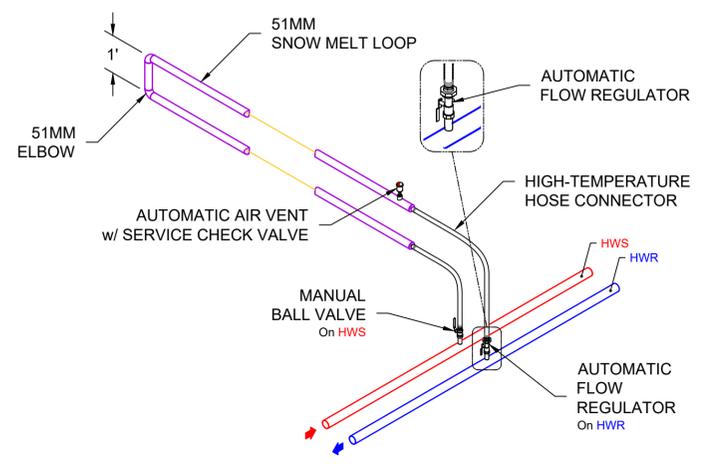
NO.	REVISION	DESCRIPTION	BY	DATE

WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
NEW HYDRONIC HEATING SYSTEM
81 - SOLAR DRYER GREENHOUSE
GUTTER MELT LAYOUT

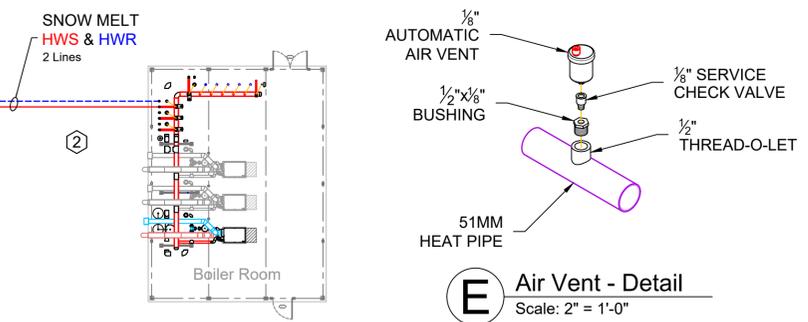


B Snow Melt System Piping - Layout
 Scale: 1/8" = 1'-0"

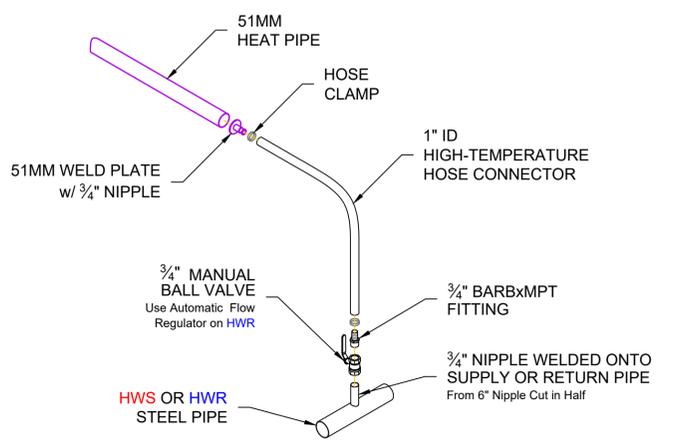
C Snow Melt Mounting - Detail
 Scale: 1" = 1'-0"



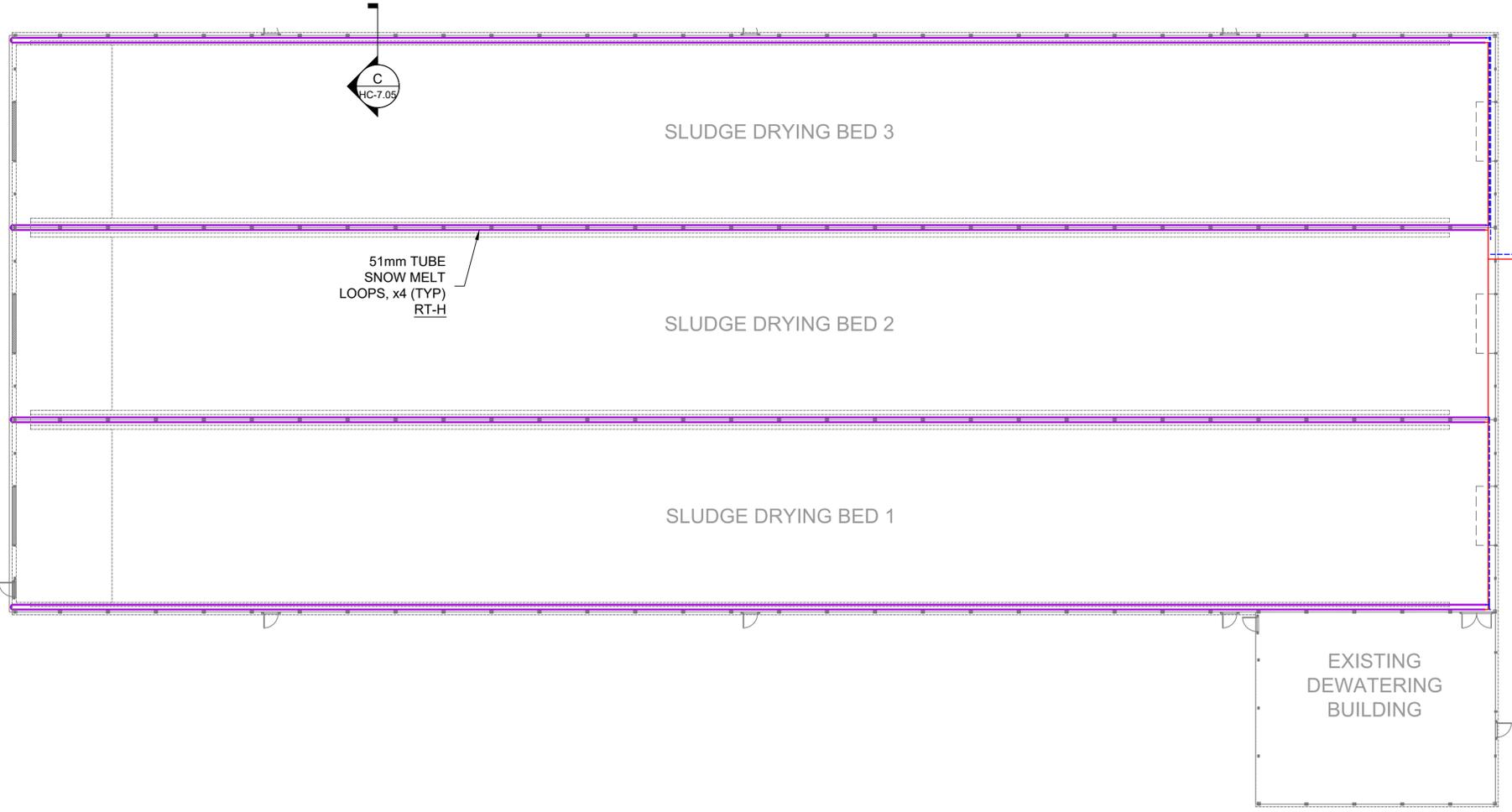
D Snow Melt Vertical Loop - Detail
 Scale: 1/2" = 1'-0"



E Air Vent - Detail
 Scale: 2" = 1'-0"



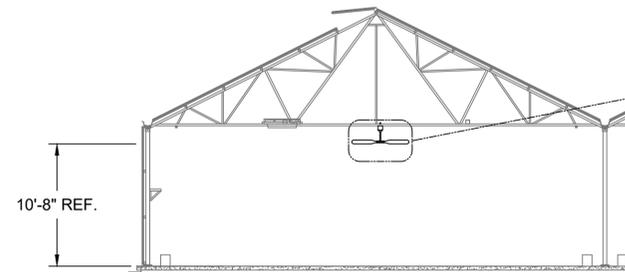
F Snow Melt Connection - Detail
 Scale: 1" = 1'-0"



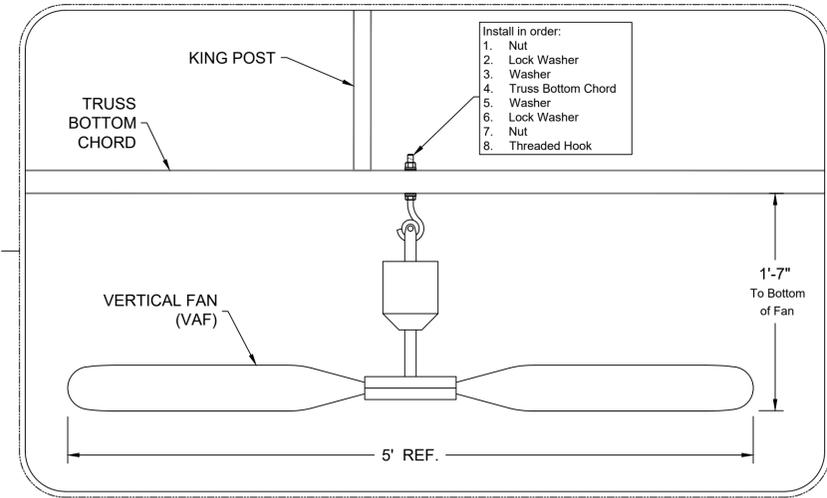
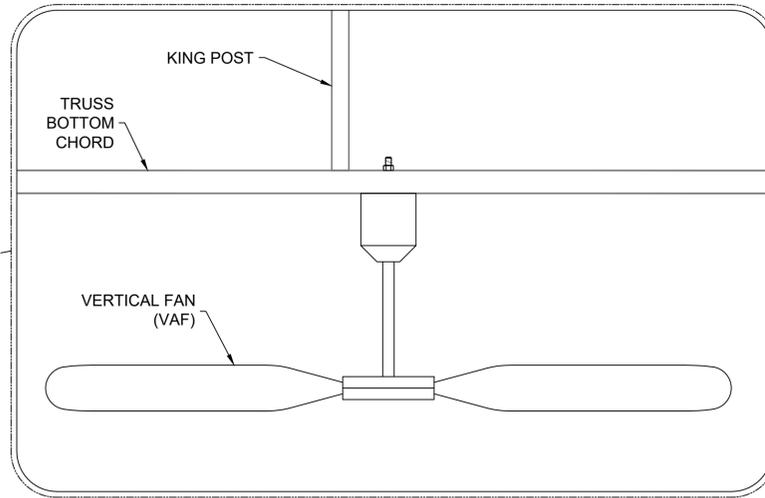
A Snowmelt System Piping - Layout
 Scale: 1/16" = 1'-0"

- Notes**
- This system is not to provide air temperature control for the glass house. This is a supplemental process heating system. Heat load to be provided by existing heating devices.
 - All exterior pipe to be buried below frost line or heat traced.

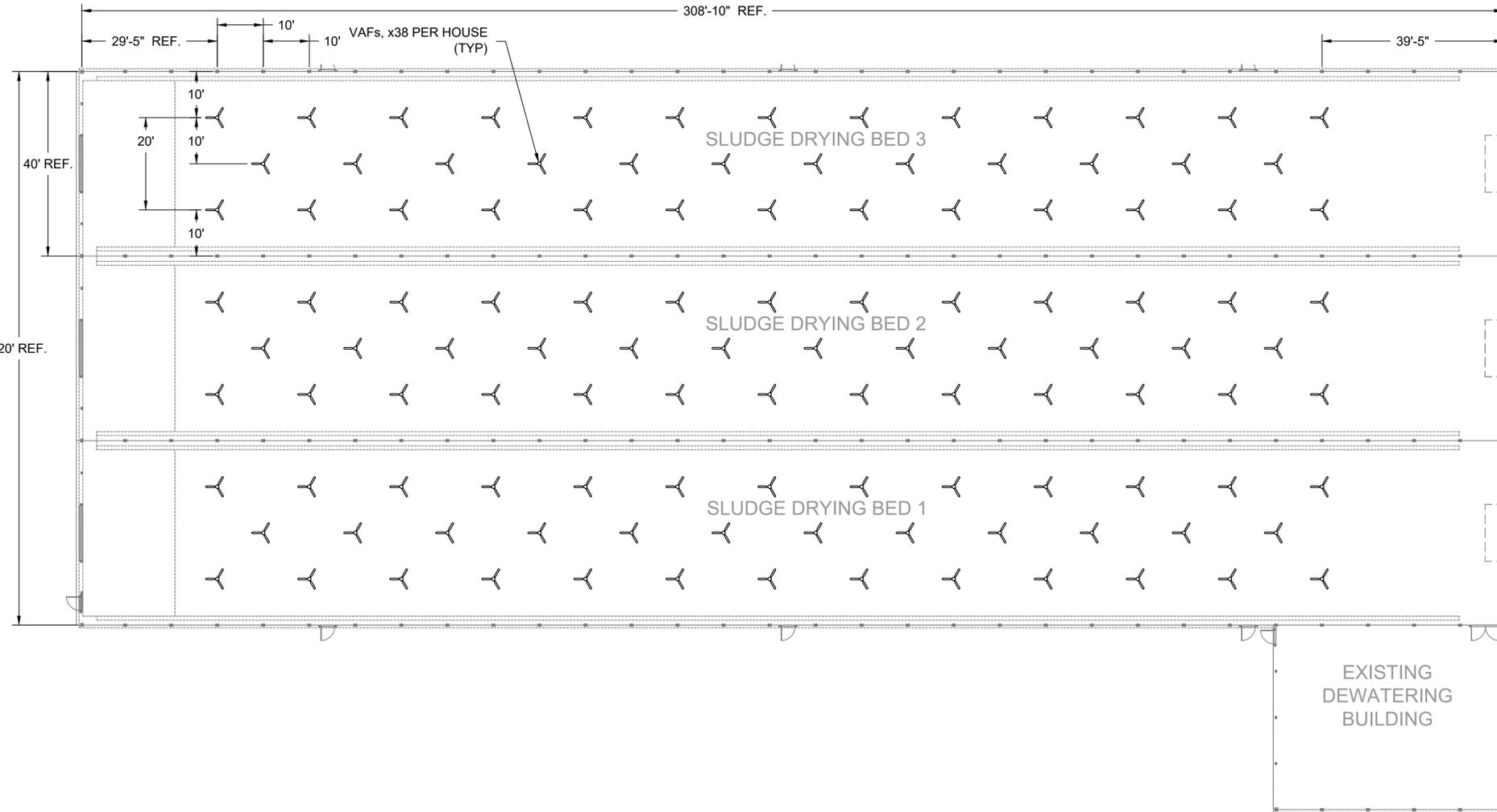
Plot Date: 1/29/2026 4:37 PM Plotted By: Kramar, Jim
 Date Created: 1/29/2026 5:10 COMMERCIAL DESIGN 2025
 JUBS2510023 - CITY OF TOOELE - UT (DE ONL) DRAWINGS HVAC2510023 CITY OF TOOELE, UT HEATING MASTER.DWG



B Vertical Fan - Elevation
Scale: 1/8" = 1'-0"



C Vertical Fan - Detail
Scale: 1 1/2" = 1'-0"



A Vertical Fan - Layout
Scale: 1/16" = 1'-0"

- Notes**
- 1 Slab details omitted for clarity.
 - 2 Fan shown is representative of actual fan to be supplied. Dimensions are actual.

File Date: 1/29/2026 4:37 PM Plotted By: Kramer, Jim Date Created: 1/29/2026 S:\COMMERCIAL\DESIGN\2025_JOBS\51\00XX - COMMERCIAL\25\1023 - CITY OF TOOELE, UT (DE ONL)\DRAWINGS\HVAC\25\1023 CITY OF TOOELE, UT HEATING MASTER.DWG

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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
NEW HYDRONIC HEATING SYSTEM
81 - SOLAR DRYER GREENHOUSE
VERTICAL FAN (VAF) LAYOUT



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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE

NEW HYDRONIC HEATING SYSTEM
81 - SOLAR DRYER GREENHOUSE
HYDRONIC HW SYSTEM PID

FILE:
JUB PROJ.# : 2510023
DRAWN BY: CRL
DESIGN BY: CRL
CHECKED BY:

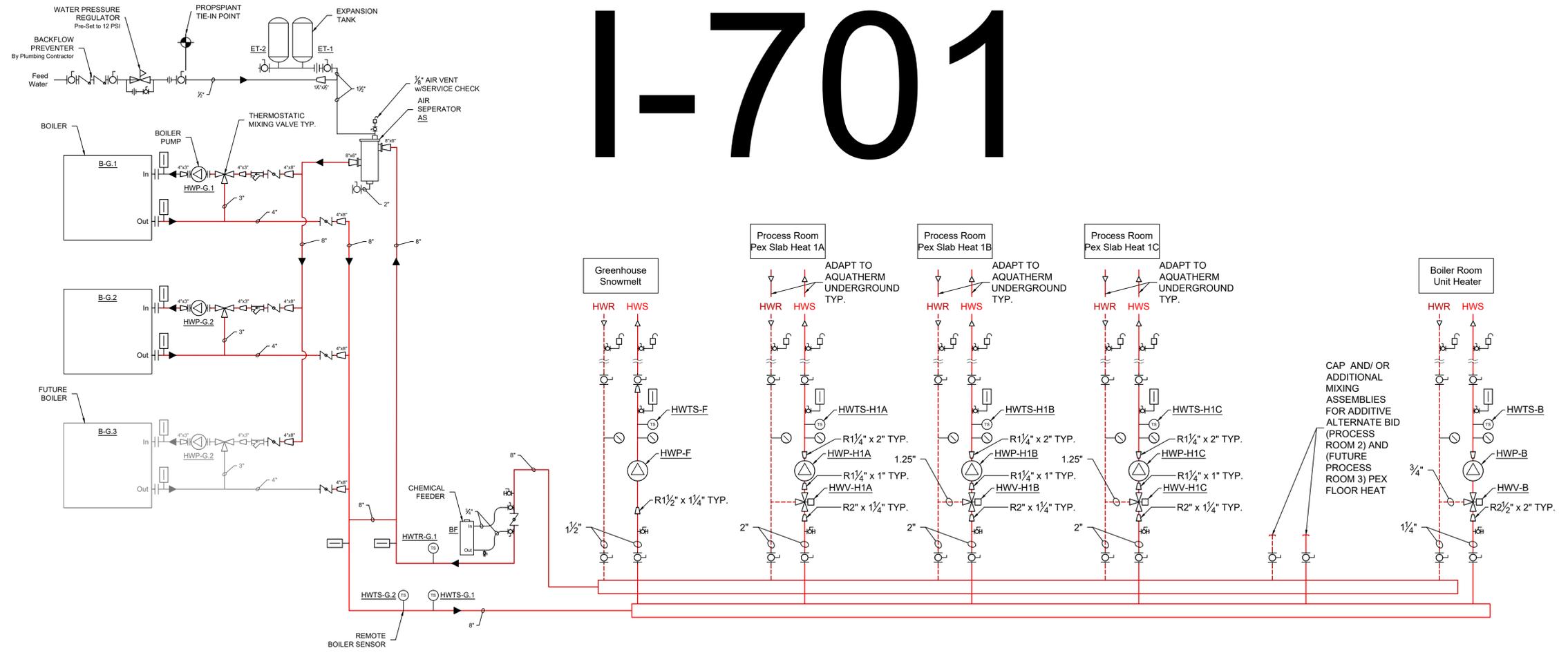
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LAST UPDATED: 1/29/2026

DRAWING:
81-HC-200

SHEET: 8 OF 20

Mechanical Symbols			
Flange / Union		Thermometer	
Flex Connector		Pressure Gauge	
Butterfly Valve		Pressure Sensor	
Check Valve		Differential Pressure Sensor	
Ball Valve		Temperature Sensor	
Drain Valve		Relief Valve	
Strainer		Pressure Regulator	
Thermostatic Mixing Valve		Solenoid Valve	
Drain		Air Vent	
Manual Screen Filter		Flow Meter	
Rubber Expansion Joint			
Bellows Expansion Joint			
		2-Way Control Valve	
		3-Way Control Valve	
		4-Way Control Valve	
		Flow Regulator	
		In-Line Pump	
		In-Line Pump Variable Speed	
		End Suction Pump	
		End Suction Pump Variable Speed	
		Suction Diffuser	
		Pipe Reducer	
		Pressure Reducer	
		Venturi	

I-701



A System Piping - P&ID
Scale: None

Plot Date: 1/29/2026 4:37 PM Plotted By: Kramer, Jim
Date Created: 1/29/2026 5:10 COMMERCIAL DESIGN 2025 JOBS 05 10XX - COMMERCIAL 2510023 - CITY OF TOOELE, UT HEATING MASTER.DWG

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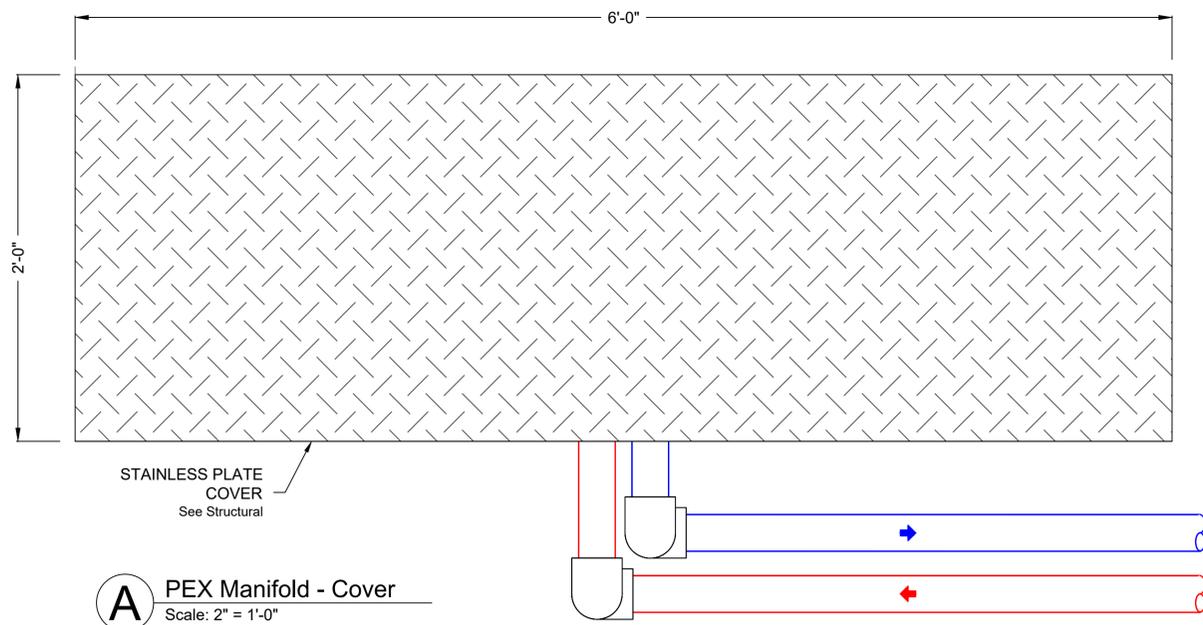
WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE

NEW HYDRONIC HEATING SYSTEM
PEX DETAILS

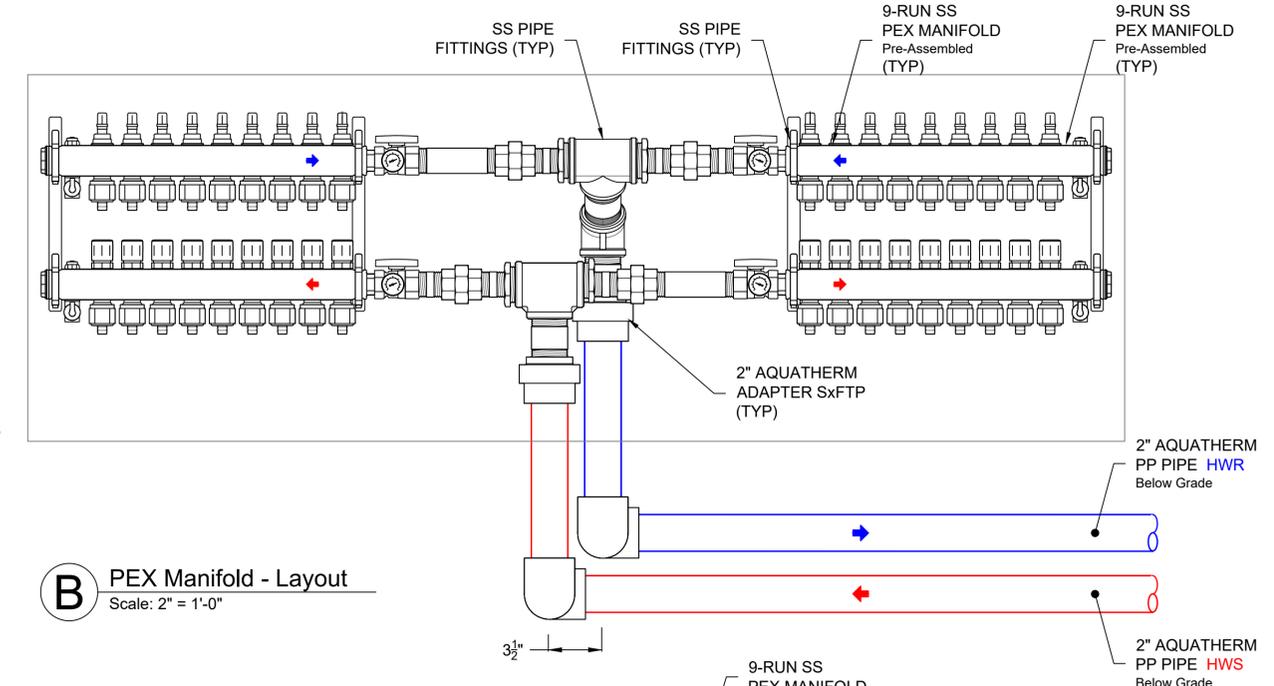
FILE:
JUB PROJ. #: 2510023
DRAWN BY: JDK
DESIGN BY: CRL
CHECKED BY:

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INCH, SCALE ACCORDINGLY
LAST UPDATED: 1/29/2026

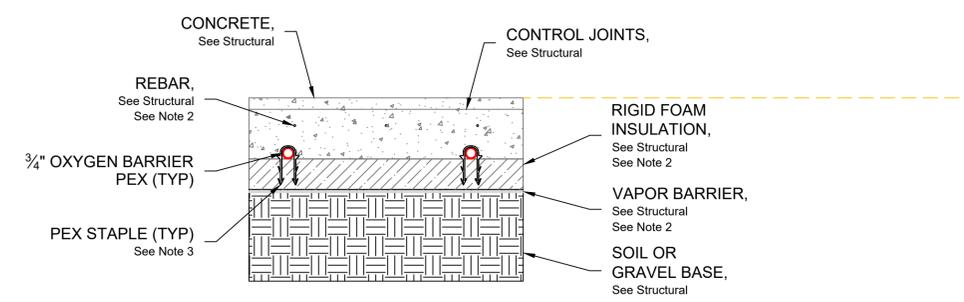
DRAWING:
81-HC-701



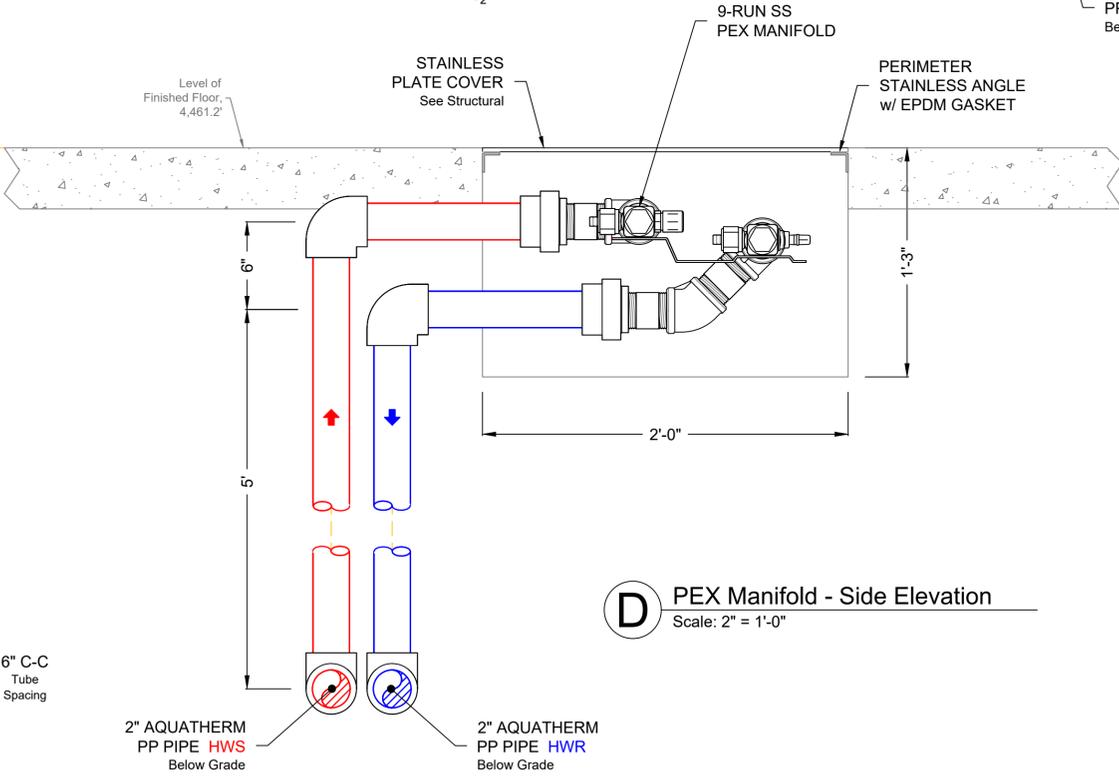
A PEX Manifold - Cover
Scale: 2" = 1'-0"



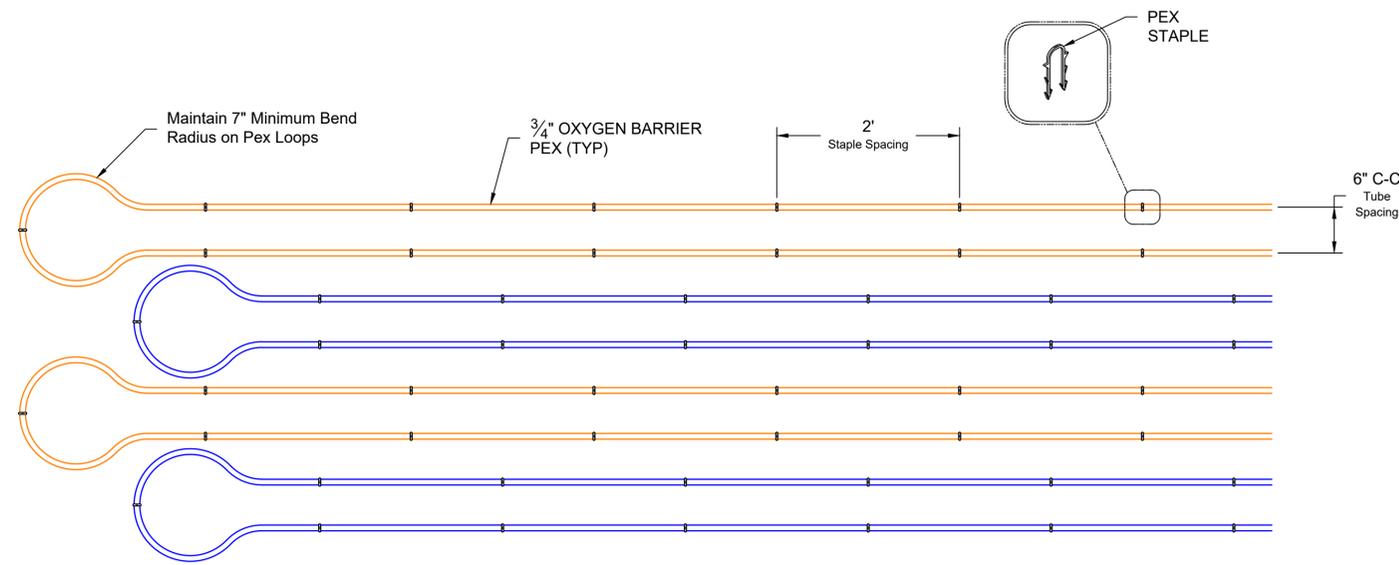
B PEX Manifold - Layout
Scale: 2" = 1'-0"



C Concrete Slab - Section
Scale: 2" = 1'-0"



D PEX Manifold - Side Elevation
Scale: 2" = 1'-0"



E In-Slab PEX - Layout
Scale: 1" = 1'-0"

Notes

- 1 Typical In-slab hot water heating systems are designed for 135°F water max. Only exceed this temperature after confirming with concrete design details.
- 2 Concrete, Vapor Barrier, Rigid Insulation, and Concrete Reinforcement, See Structural
- 3 PEX Staples
- 4 All tubing loops to be one piece - **DO NOT SPLICE TUBING IN CONCRETE FLOOR.**
- 5 Install tubing on 6" centers with a minimum radius of 7" on all loops.
- 6 Install all tubing 3" to 6" from all outside walls and floor drains.
- 7 Staple tubing to rigid foam insulation every 2 ft.
- 8 **PRESSURE TEST TUBING WITH 40 PSI AIR PRIOR AND DURING CONCRETE POUR.**
- 9 Installation to follow all state and local codes where applicable.
- 10 Protect PEX extending up to manifold from sunlight/UV light at all times.

Plot Date: 1/29/2026 4:38 PM Plotted By: Kramer, Jim
Date Created: 1/29/2026 5:10 COMMERCIAL DESIGN 2025
JOB#S2510023 - COMMERCIAL 2510023 - CITY OF TOOELE, UT (DE ONL) DRAWINGS HVAC 2510023 CITY OF TOOELE, UT HEATING MASTER.DWG



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Salt Lake City, UT 84107
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Subconsultant:



Prospiant, Inc.
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Cincinnati, OH 45237
513-242-0310
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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE

NEW HYDRONIC HEATING SYSTEM
81 - SOLAR DRYER GREENHOUSE
FINTUBE ASSEMBLY DETAIL

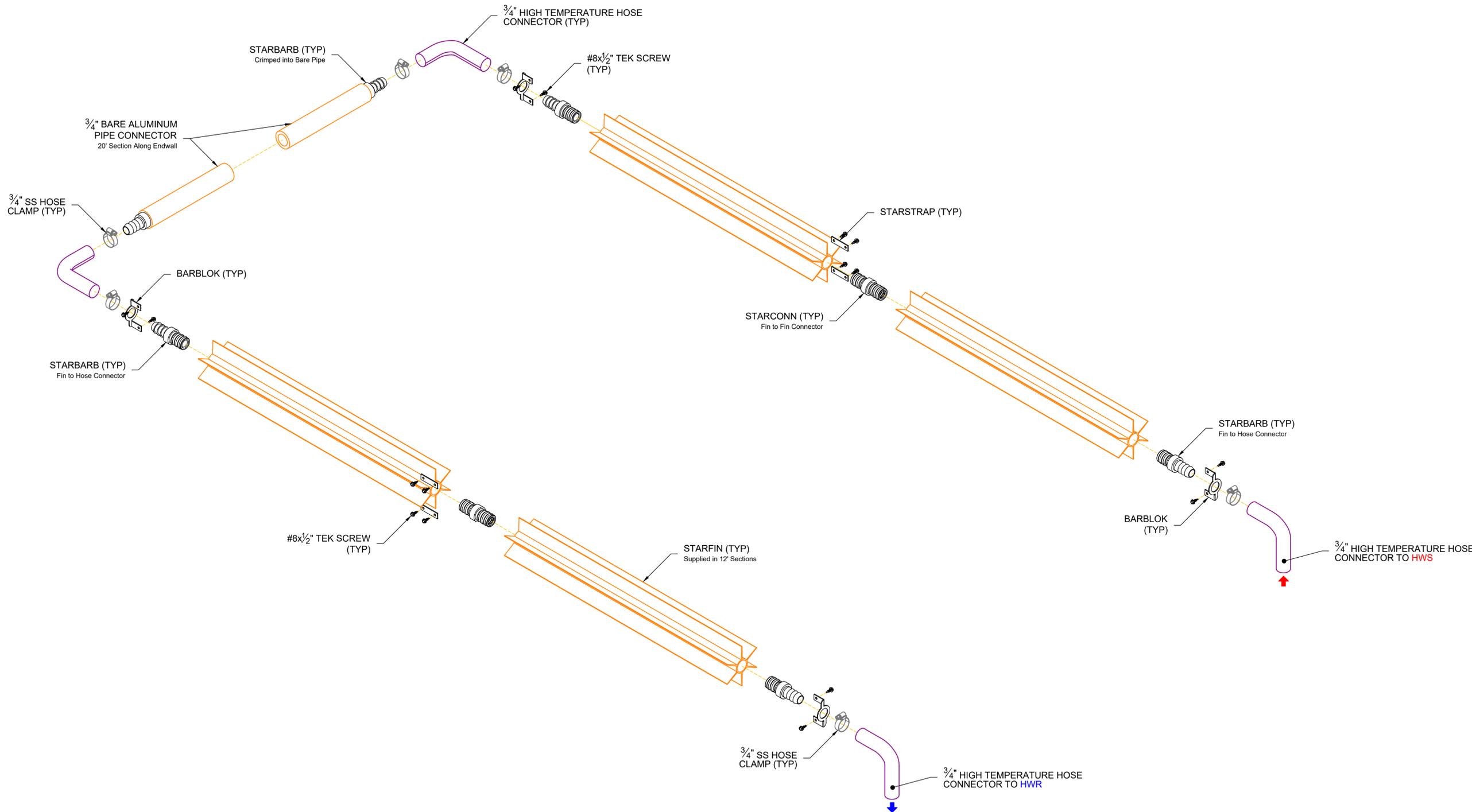
FILE:
JUB PROJ.# : 2510023
DRAWN BY: JDK
DESIGN BY: CRL
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INCH, SCALE ACCORDINGLY
LAST UPDATED: 1/29/2026

DRAWING:
81-HC-703

SHEET: 19 OF 20

Plot Date: 1/29/2026 4:39 PM Plotted By: Kramer, Jim
Date Created: 1/29/2026 S:\COMMERCIAL\DESIGN\2025_JOBS\2510023 - CITY OF TOOELE - UT (DE ONL)\DRAWINGS\HVAC\2510023 - CITY OF TOOELE, UT HEATING MASTER.DWG



A StarFin SnowMelt Pipe - Connection Detail
Scale: 3" = 1'-0"



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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE

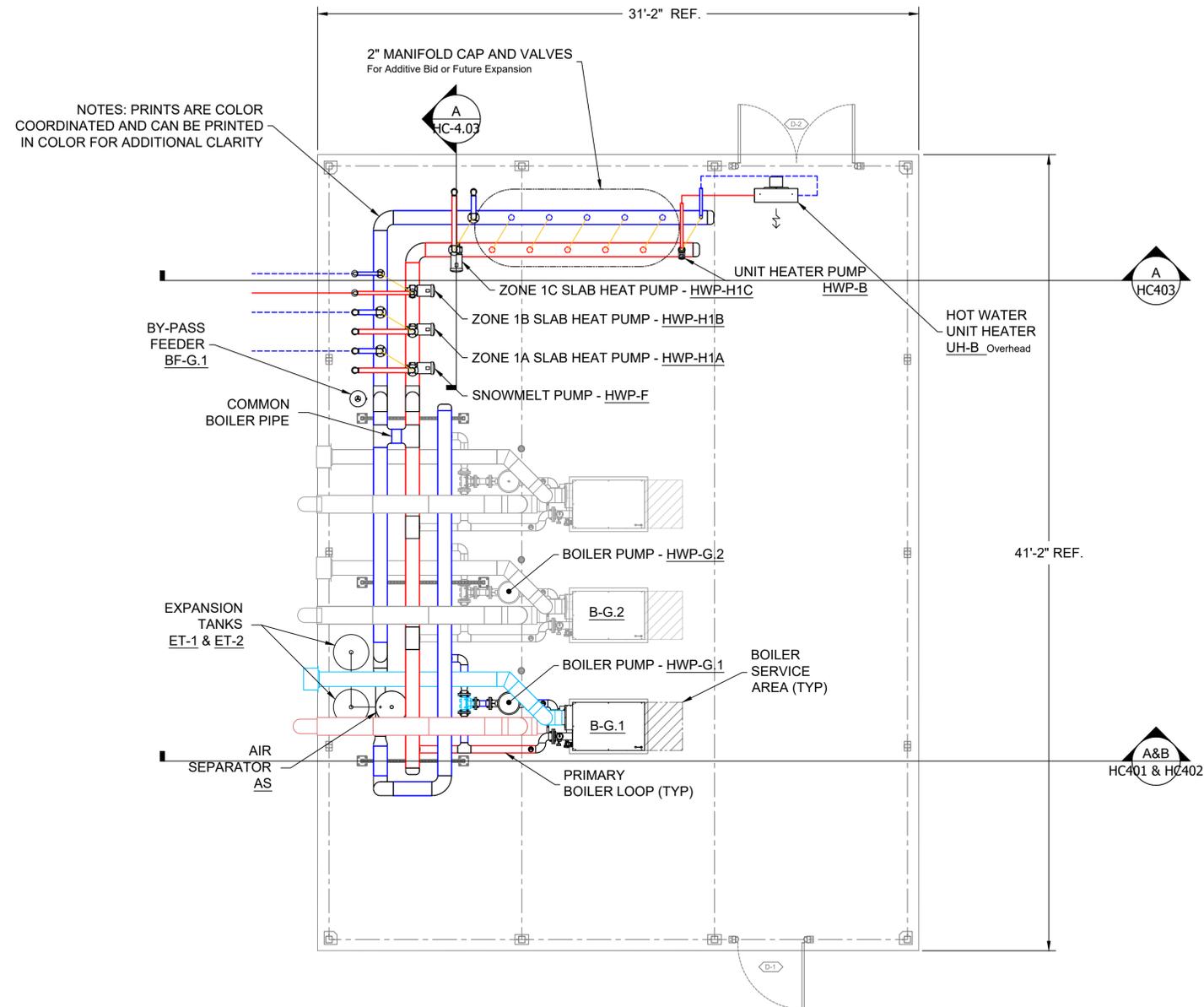
NEW HYDRONIC HEATING SYSTEM
82 - BOILER ROOM BUILDING
BOILER ROOM LAYOUT

FILE:
JUB PROJ. #: 2510023
DRAWN BY: CRU/JDK
DESIGN BY: CRL
CHECKED BY:

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INCH, SCALE ACCORDINGLY
LAST UPDATED: 1/29/2026

DRAWING:
82-HC-400

SHEET: 04 OF 20



NOTES: PRINTS ARE COLOR COORDINATED AND CAN BE PRINTED IN COLOR FOR ADDITIONAL CLARITY

A Boiler Room - Layout
Scale: 1/4" = 1'-0"

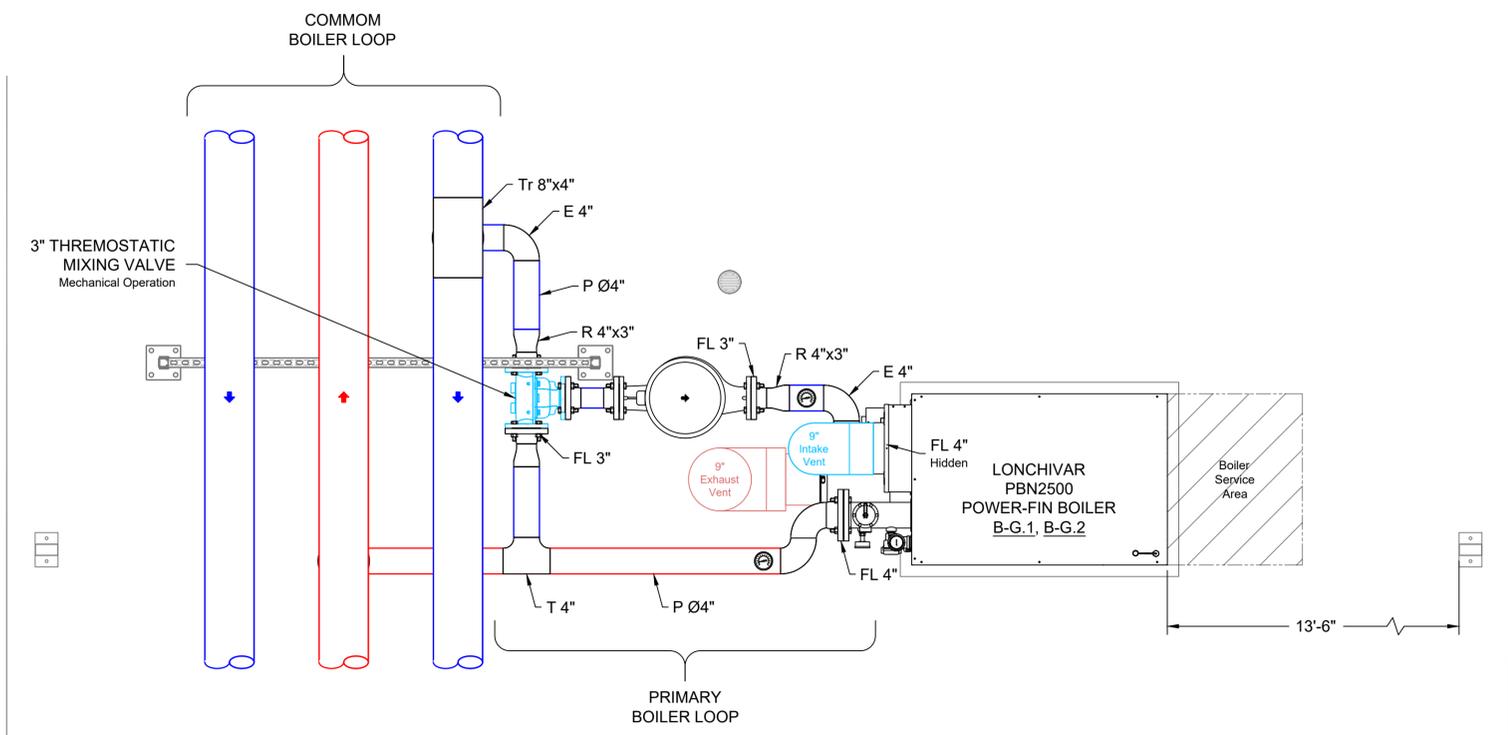
Notes

- 1 This system is not to provide air temperature control for the glass house. This is a supplemental process heating system. Heat load to be provided by existing heating devices.
- 2 All exterior pipe to be buried below frost line or heat traced.
- 3 Route all pressure relief valves to drain, one per boiler, by contractor

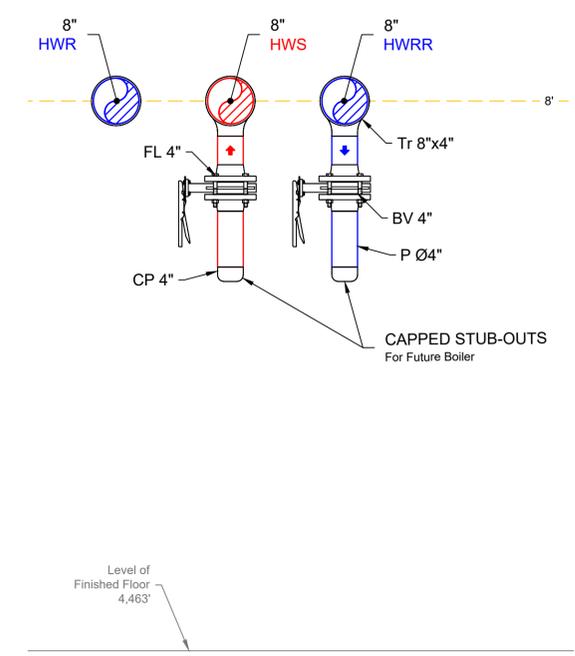
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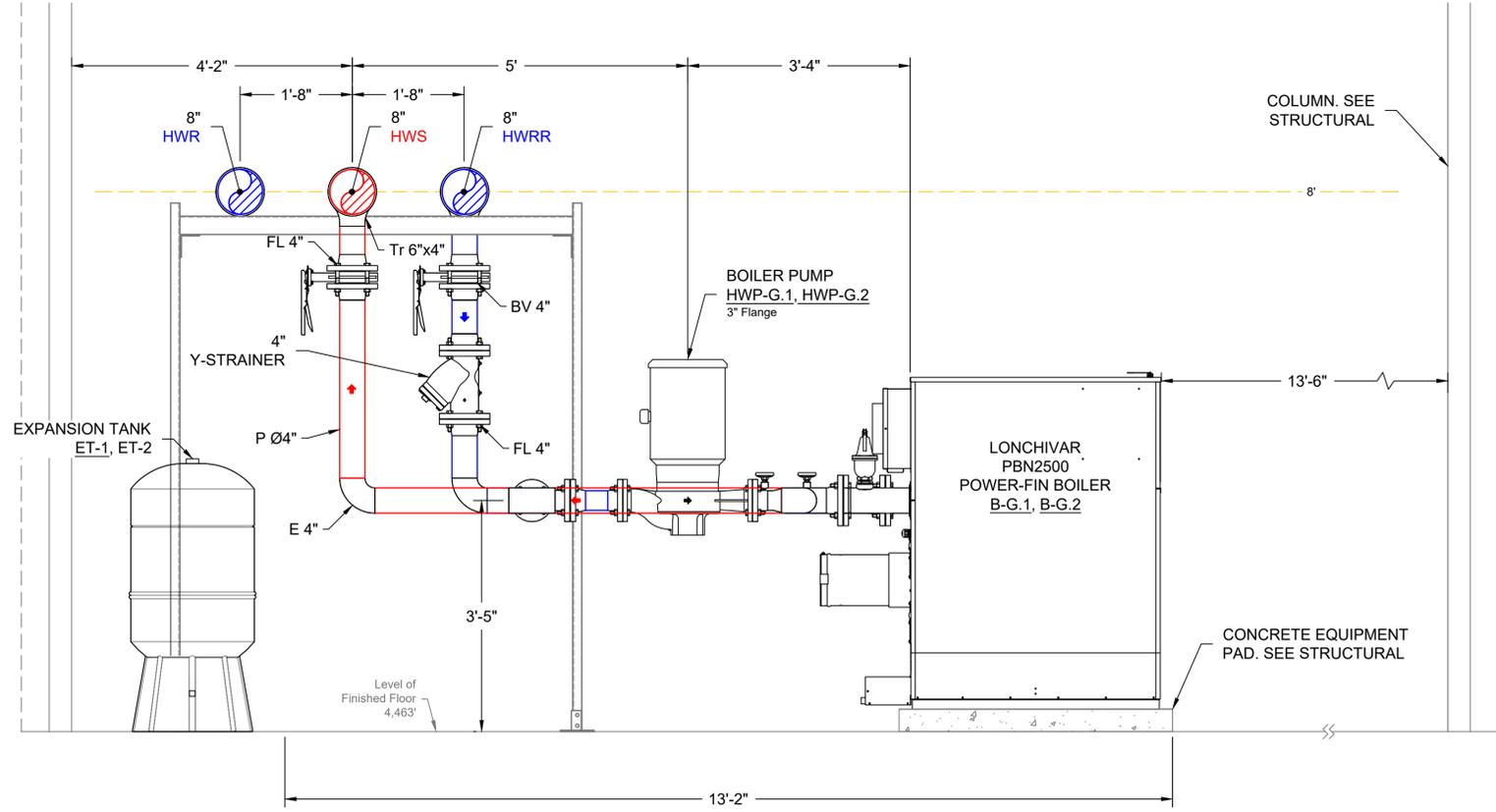
NO.	REVISION	DESCRIPTION	BY	DATE



A Boiler Piping - Plan View Detail
 Scale: 3/4" = 1'-0"



B Future Boiler Stub-Outs - Detail
 Scale: 3/4" = 1'-0"



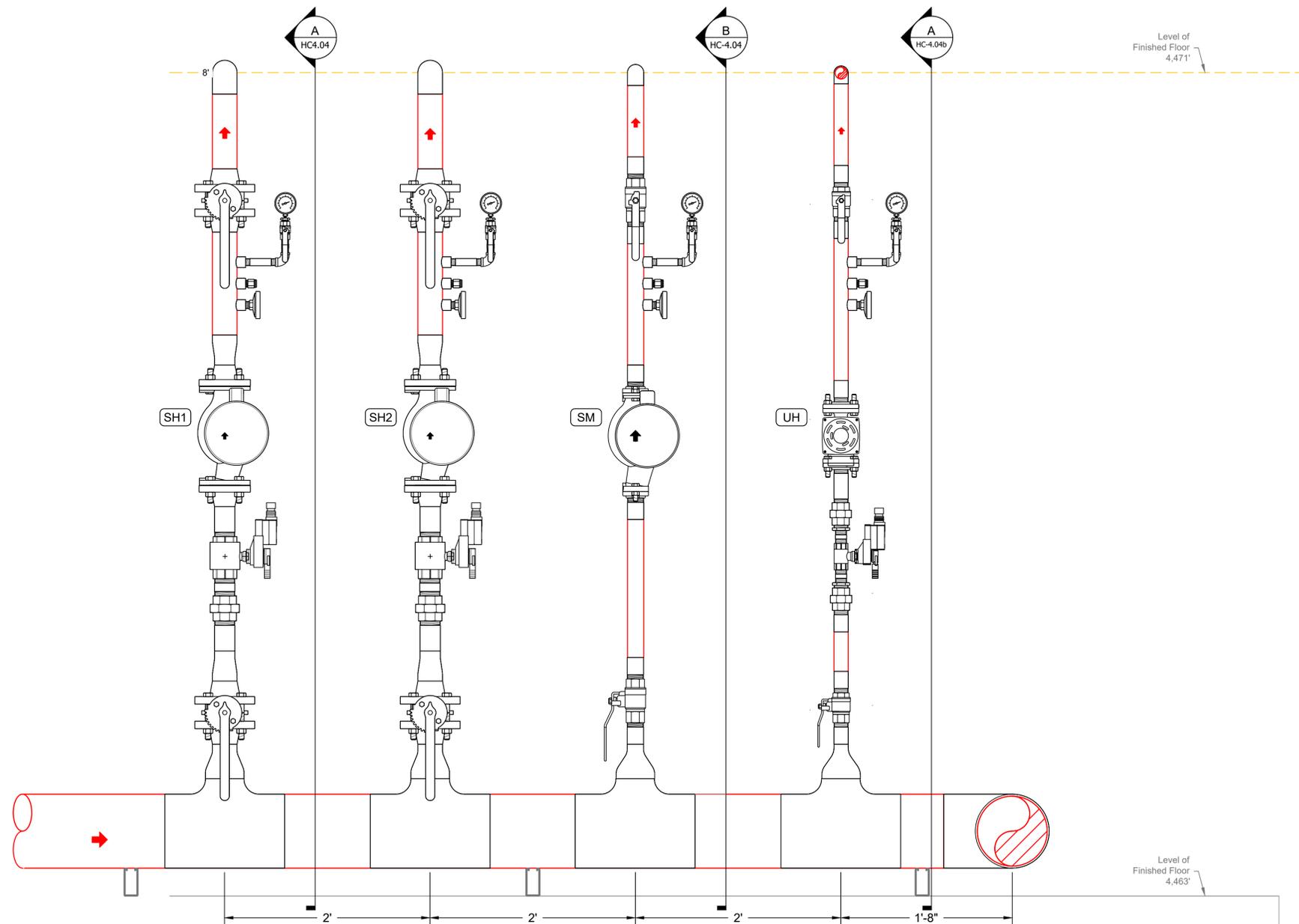
B Boiler Piping - Section View
 Scale: 3/4" = 1'-0"

Tag	Description
A	ADAPTER
AV	AIR VENT
Br	REDUCING BUSHING
BV	BALL/BUTTERFLY VALVE
CP	CAP
CVB	CONTROL VALVE BODY
DEU	DI-ELECTRIC UNION
DV	DRAIN VALVE
E	ELBOW
E45	45° ELBOW
ES	STREET ELBOW
FC	FLEX CONNECTOR
FL	FLANGE
H	HOSE
HC	HOSE CLAMP
HF	HOSE FITTING
P	PIPE
PI	PRESSURE GAUGE
PL	PLUG
R	REDUCER
T	TEE
Tr	TEE REDUCING
TI	TEMPERATURE GAUGE
ThR	THREADED ROD
TOL	THREAD-O-LET
TT	TEMPERATURE TRANSMITTER
U	UNION
WCV	WAFER CHECK VALVE

WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
 NEW HYDRONIC HEATING SYSTEM
 82 - BOILER ROOM BUILDING
 BOILER PIPING DETAIL

Plot Date: 1/29/2026 4:37 PM Plotted By: Kramar, Jim
 Date Created: 1/29/2026 S:\COMMERCIAL\DESIGN\2025\JOBS\2510023 - CITY OF TOOELE - UT (DE ONL)\DRAWINGS\HVAC\2510023 CITY OF TOOELE, UT HEATING MASTER.DWG

Plot Date: 1/29/2026 4:38 PM Plotted By: Kramer, Jim
 Date Created: 1/29/2026 5:10 AM Commercial Design 2025 Jobs 0510XX - Commercial 2510023 - City of Tooele, UT (DE ONL) Drawings HVAC 2510023 City of Tooele, UT Heating Master.DWG



A Pump Manifold - Elevation
 Scale: 1-1/2" = 1'-0"

Equipment - Phase 1		Tags		
Key	Description	Pump	Control Valve	Supply Temp Sensor
SH1	Slab Heat 1	HWP-H1	HWV-H1	HWTS-H1
SH2	Slab Heat 2	HWP-H2	HWV-H2	HWTS-H2
SM	Snow Melt	HWP-F		HWTS-F
UH	Unit Heater	HWP-B	HWV-B	HWTS-B

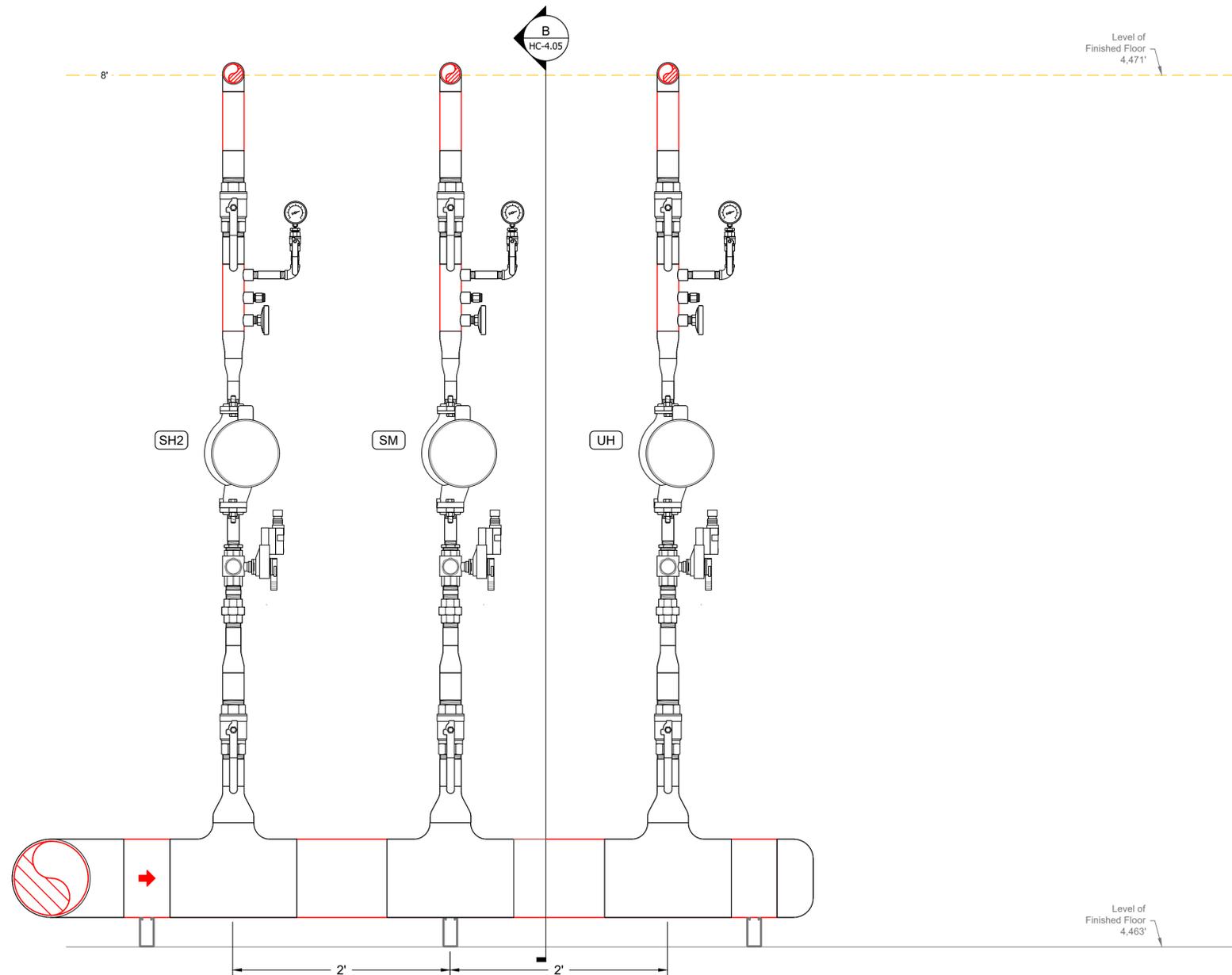
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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
 NEW HYDRONIC HEATING SYSTEM
 82 - BOILER ROOM BUILDING
 PUMP MANIFOLD ELEVATION

Plot Date: 1/29/2026 4:38 PM Plotted By: Kramer, Jim
 Date Created: 1/29/2026 5:10:00 AM Commercial Design 2025 Jobs 0510XX - Commercial 251023 - City of Tooele UT (DE ONL) Drawings HVAC 251023 City of Tooele, UT Heating Master.DWG



A Pump Manifold - Elevation
 Scale: 1-1/2" = 1'-0"

Equipment - Phase 1		Tags		
Key	Description	Pump	Control Valve	Supply Temp Sensor
SH1	Slab Heat 1	HWP-H1	HWV-H1	HWTS-H1
SH2	Slab Heat 2	HWP-H2	HWV-H2	HWTS-H2
SH3	Slab Heat 2	HWP-F		HWTS-F

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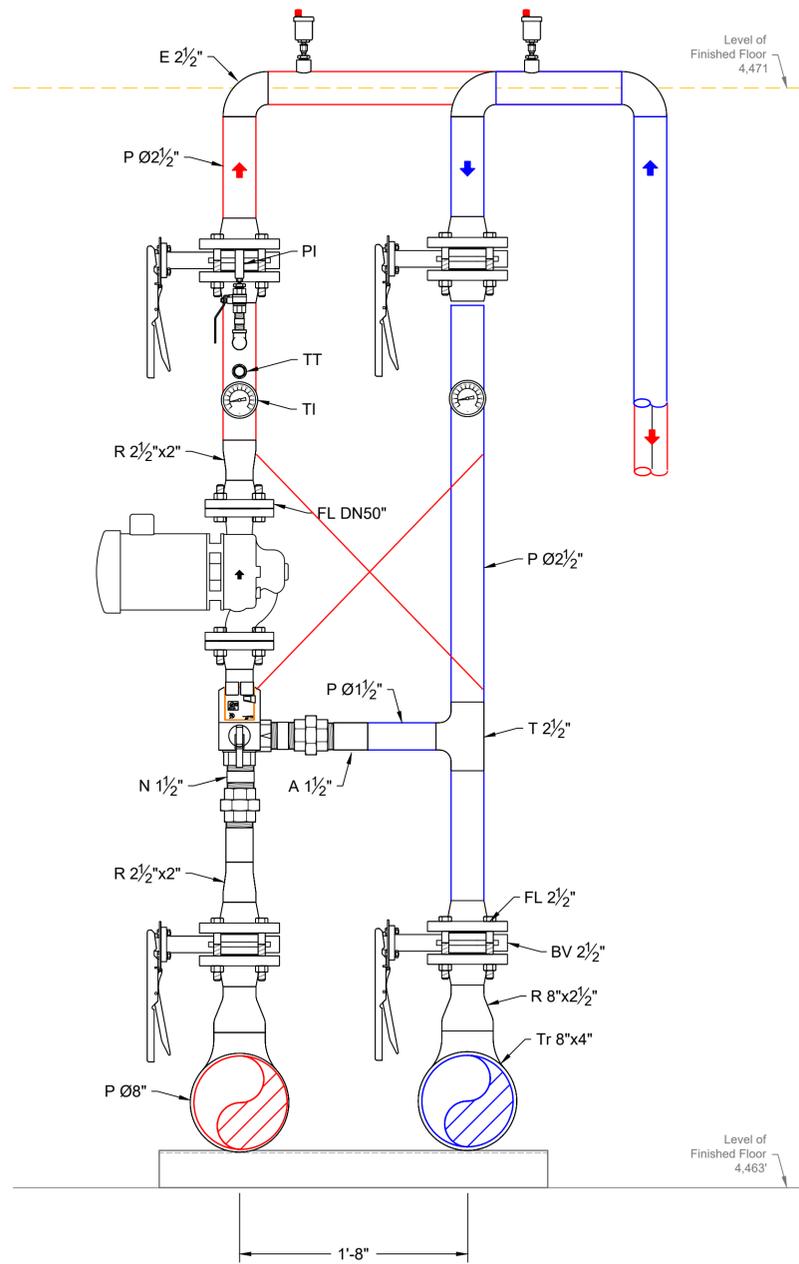
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WATER RECLAMATION FACILITY 2026 UPGRADES
 CITY OF TOOELE
 NEW HYDRONIC HEATING SYSTEM
 82 - BOILER ROOM BUILDING
 PUMP MANIFOLD ELEVATION

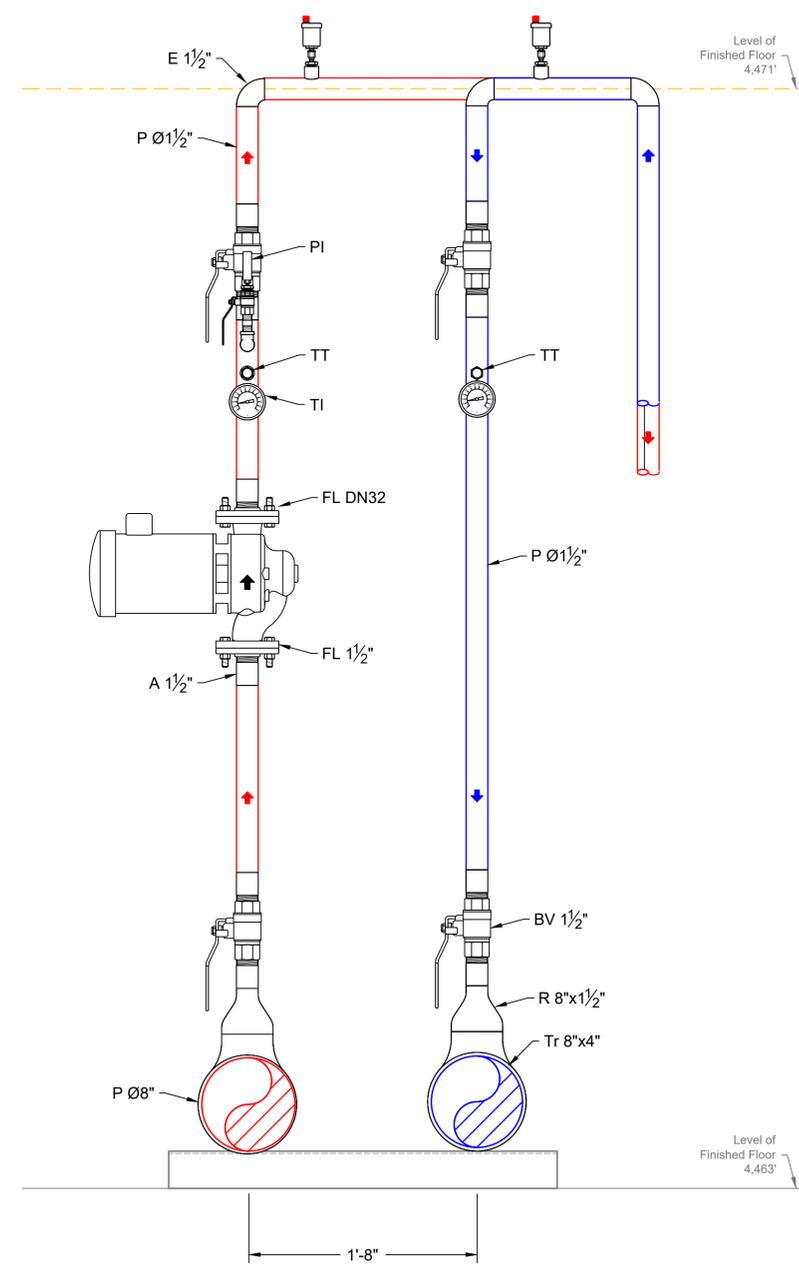
NO.	DESCRIPTION	BY	DATE

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A PEX Slab Heat Section Pump - Detail
Scale: 1-1/2" = 1'-0"

x1



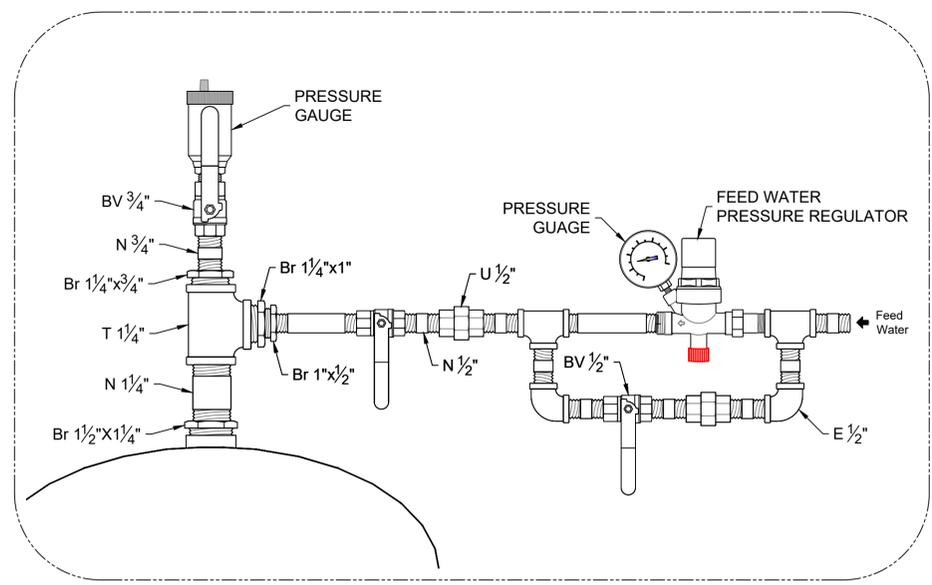
B Snow Melt Section Pump - Detail
Scale: 1-1/2" = 1'-0"

Tag	Description
A	ADAPTER
AV	AIR VENT
Br	REDUCING BUSHING
BV	BALL/BUTTERFLY VALVE
CP	CAP
CVB	CONTROL VALVE BODY
DEU	DI-ELECTRIC UNION
DV	DRAIN VALVE
E	ELBOW
E4	45° ELBOW
ES	STREET ELBOW
FC	FLEX CONNECTOR
FL	FLANGE
H	HOSE
HC	HOSE CLAMP
HF	HOSE FITTING
P	PIPE
PI	PRESSURE GAUGE
PL	PLUG
R	REDUCER
T	TEE
Tr	TEE REDUCING
TI	TEMPERATURE GAUGE
ThR	THREADED ROD
TOL	THREAD-O-LET
TT	TEMPERATURE TRANSMITTER
U	UNION
WCV	WAFER CHECK VALVE

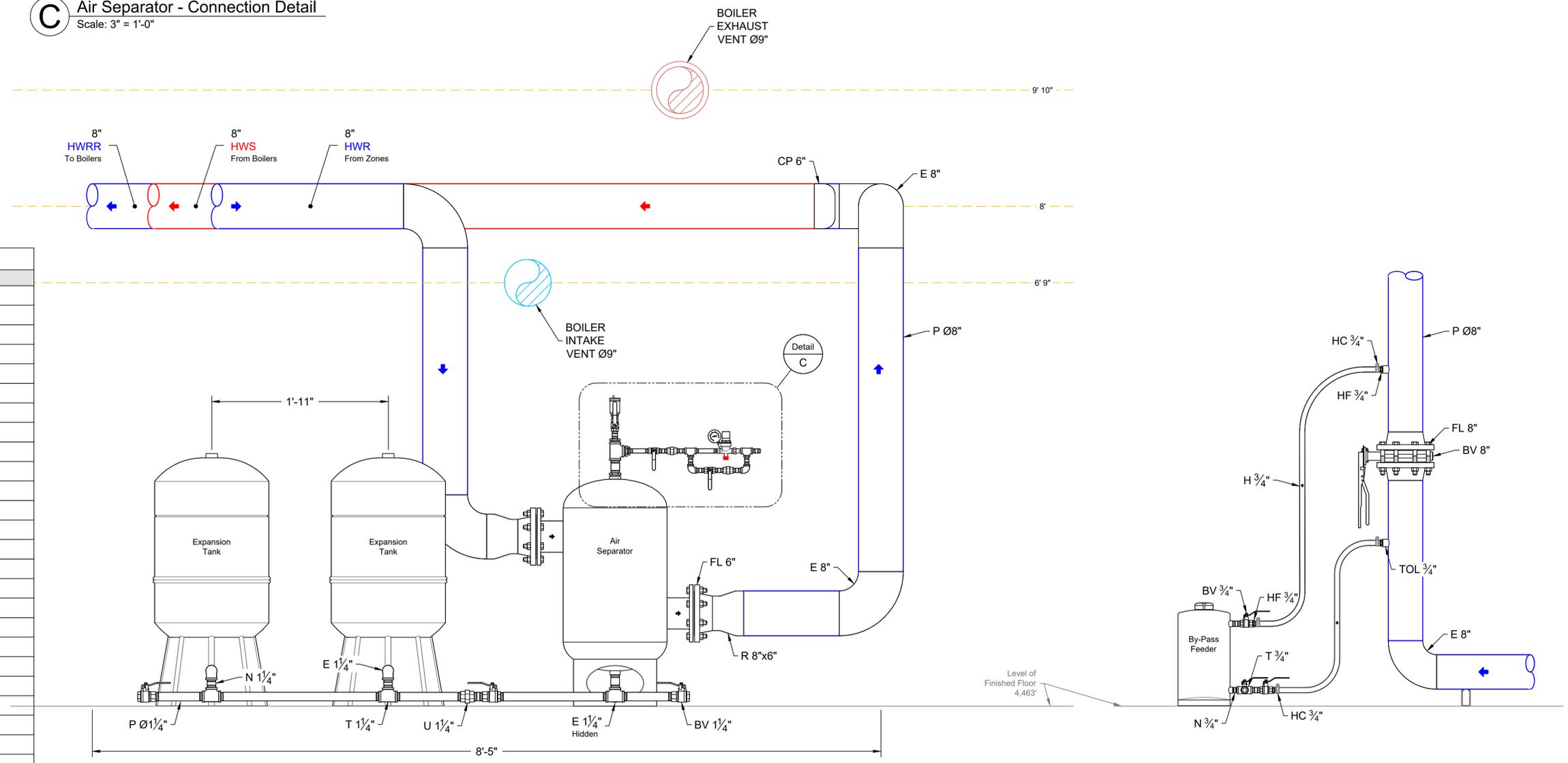
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FILE:
JUB PROJ.# : 2510023
DRAWN BY: JDK
DESIGN BY: CRL
CHECKED BY:

- By-Pass Feeder Notes**
- Installation Instructions**
- The By-Pass Feeder should be installed in a convenient location where it may be easily filled. The inlet may be either on the pressure side of a main-line valve or on the pressure side of a circulating pump.
 - As shown in the following diagrams, the 3/4" hose should be used to connect the By-Pass Feeder to a by-pass on the water line of the system being treated. The direction of flow should be up through the By-Pass Feeder.
 - A 3/4" ball valve should be placed on each side of the By-Pass Feeder.
 - A drain is desirable and should be installed near the bottom inlet to the feeder with a valve in the outlet.
- Add Chemical Instructions**
- To begin, the main-line valve should be open, By-Pass Feeder valves closed, and the cap on. Open the drain valve and make certain it is operating properly and the pressure in the By-Pass Feeder is relieved. Remove the cap of the By-Pass Feeder and allow water to flow out of the By-Pass Feeder's drain.
 - Close the drain valve, add the proper amount of chemical to the By-Pass Feeder, and crack the inlet valve of the By-Pass Feeder to fill the By-Pass Feeder with water, replace the By-Pass Feeder cap.
 - Open the By-Pass Feeder valves and partially close the main line valve to force the water through the By-Pass Feeder. Wait 3 to 4 minutes.
 - Repeat Step 5 - 7 as required.
- Storage Instructions**
- Open the main-line valve and close the By-Pass Feeder valves. Drain the By-Pass Feeder.



C Air Separator - Connection Detail
Scale: 3" = 1'-0"



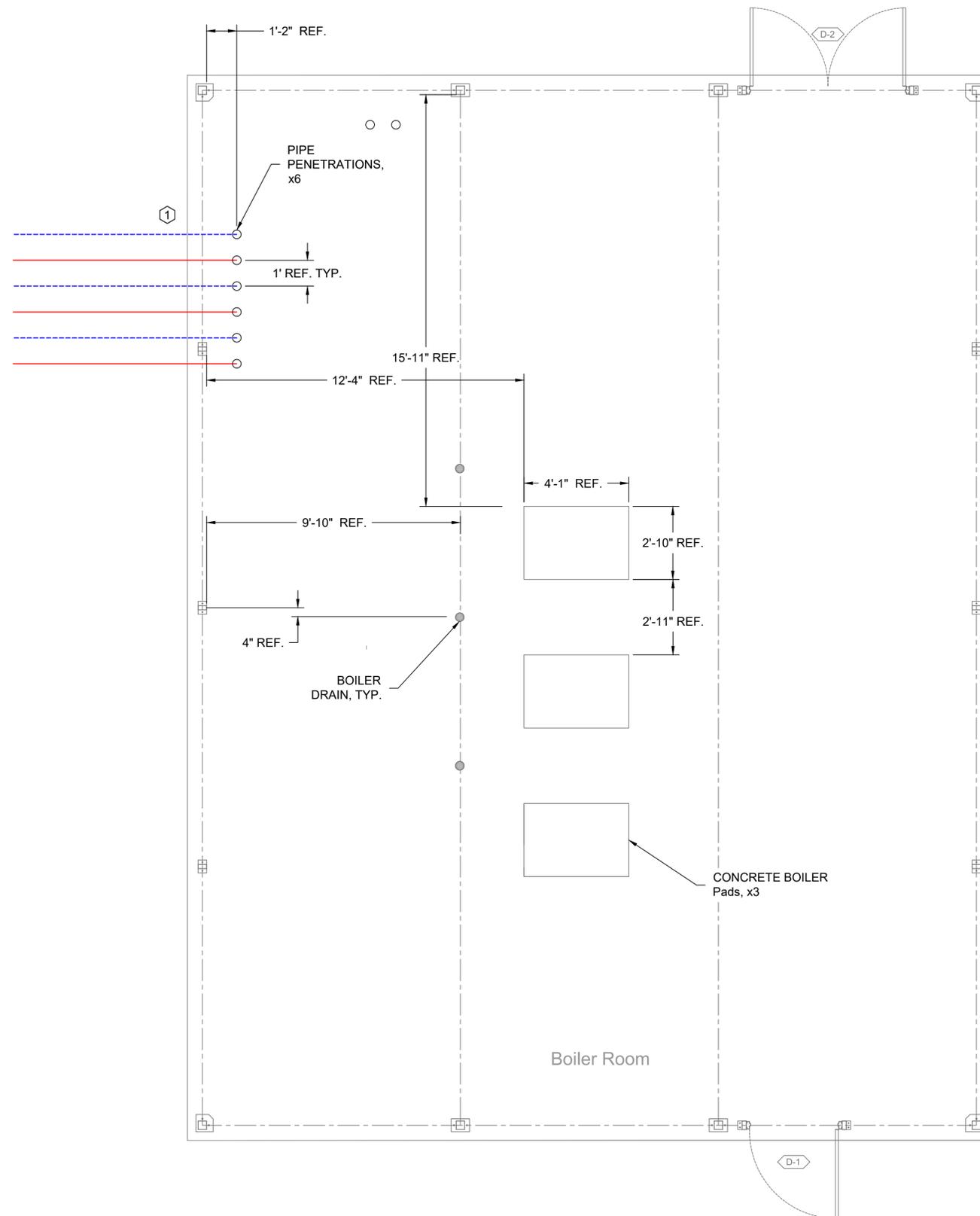
A Expansion Tank & Air Separator - Detail
Scale: 1" = 1'-0"

B By-Pass Feeder - Detail
Scale: 1" = 1'-0"

Piping Key

Tag	Description
A	ADAPTER
AV	AIR VENT
Br	REDUCING BUSHING
BV	BALL/BUTTERFLY VALVE
CP	CAP
CVB	CONTROL VALVE BODY
DEU	DI-ELECTRIC UNION
DV	DRAIN VALVE
E	ELBOW
E4	45° ELBOW
ES	STREET ELBOW
FC	FLEX CONNECTOR
FL	FLANGE
H	HOSE
HC	HOSE CLAMP
HF	HOSE FITTING
P	PIPE
PI	PRESSURE GAUGE
PL	PLUG
R	REDUCER
T	TEE
Tr	TEE REDUCING
TI	TEMPERATURE GAUGE
ThR	THREADED ROD
TOL	THREAD-O-LET
TT	TEMPERATURE TRANSMITTER
U	UNION
WCV	WAFER CHECK VALVE

Plot Date: 1/29/2026 4:38 PM Plotted By: Kramer, Jim
 Date Created: 1/29/2026 5:00 AM Designer: S:\COMMERCIAL\DESIGN\2025 JOBS\2510023 - CITY OF TOOELE - UT (DE ONL)\DRAWINGS\HVAC\2510023 CITY OF TOOELE, UT HEATING MASTER.DWG



Notes

- 1 All exterior pipe to be buried below frost line or heat traced.

A Concrete Penetration - Layout
 Scale: 3/8" = 1'-0"

Plot Date: 1/29/2026 4:38 PM, Plotted By: Kramer, Jim
 Date Created: 1/29/2026 5:10 AM, S:\COMMERCIAL\DESIGN\2025\JOBS\2510023 - CITY OF TOOELE - UT (DE ONL V)\DRAWINGS\HVAC\2510023 CITY OF TOOELE, UT HEATING MASTER.DWG

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WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE
 NEW HYDRONIC HEATING SYSTEM
 82 - BOILER ROOM BUILDING
 BOILER ROOM PIPE PENETRATIONS

FILE:
 JUB PROJ. #: 2510023
 DRAWN BY: JDK
 DESIGN BY: CRL
 CHECKED BY:

ONE INCH
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DRAWING:
82-HC-410
 SHEET: 17 OF 20



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Subconsultant:



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NO.	REVISION	DESCRIPTION	BY	DATE

WATER RECLAMATION FACILITY 2026 UPGRADES
CITY OF TOOELE

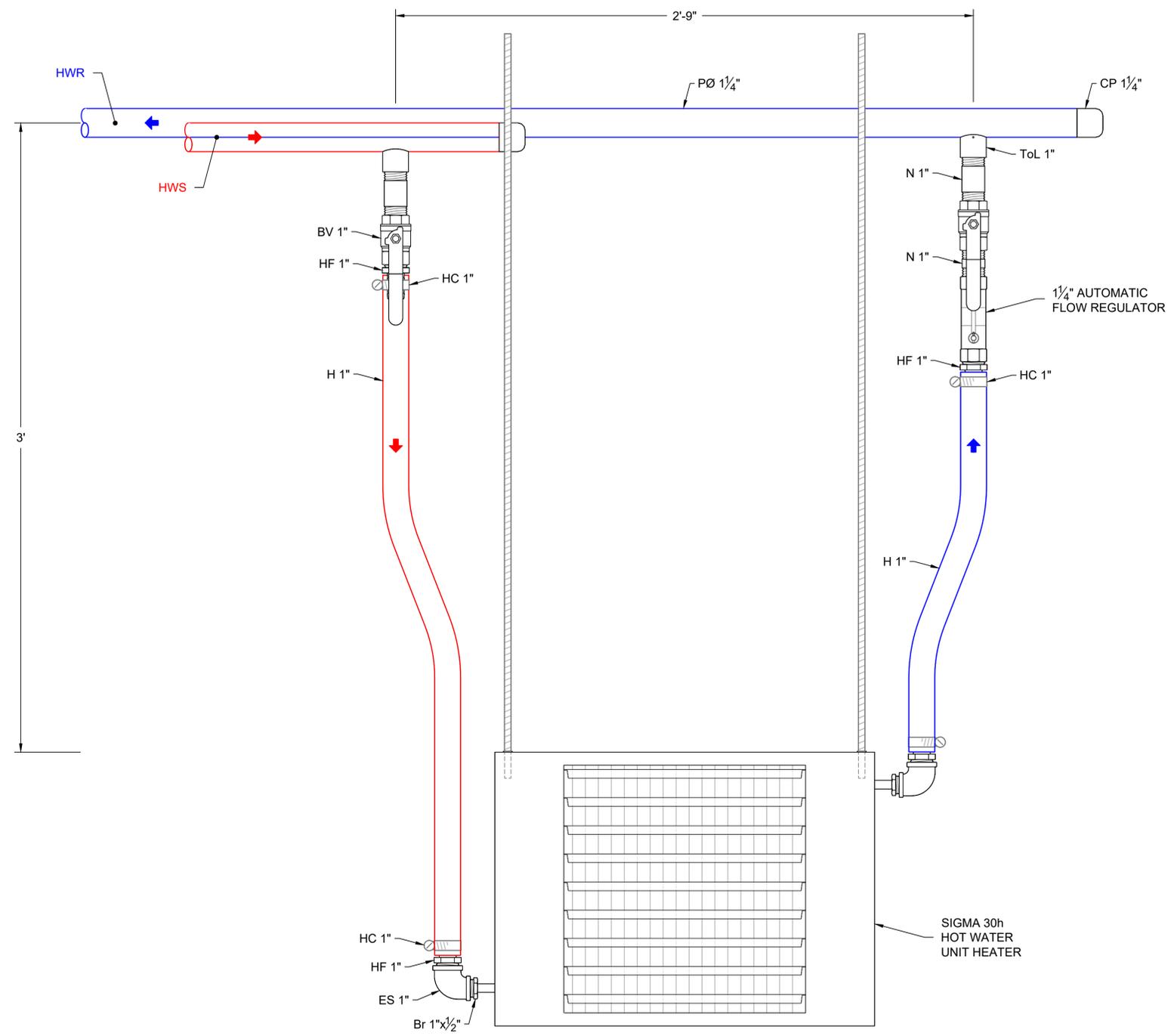
NEW HYDRONIC HEATING SYSTEM
82 - BOILER ROOM BUILDING
UNIT HEATER

FILE:
JUB PROJ.# : 2510023
DRAWN BY: JDK
DESIGN BY: CRL
CHECKED BY:

ONE INCH
AT FULL SIZE, IF NOT ONE
INCH, SCALE ACCORDINGLY
LAST UPDATED: 1/29/2025

DRAWING:
82-HC-704

SHEET: 19 OF 20



Tag	Description
A	ADAPTER
AV	AIR VENT
Br	REDUCING BUSHING
BV	BALL/BUTTERFLY VALVE
CP	CAP
CVB	CONTROL VALVE BODY
DEU	DI-ELECTRIC UNION
DV	DRAIN VALVE
E	ELBOW
E4	45° ELBOW
ES	STREET ELBOW
FC	FLEX CONNECTOR
FL	FLANGE
H	HOSE
HC	HOSE CLAMP
HF	HOSE FITTING
P	PIPE
PI	PRESSURE GAUGE
PL	PLUG
R	REDUCER
T	TEE
Tr	TEE REDUCING
TI	TEMPERATURE GAUGE
ThR	THREADED ROD
TOL	THREAD-O-LET
TT	TEMPERATURE TRANSMITTER
U	UNION
WCV	WAFER CHECK VALVE

A Hot Water Unit Heater - Elevation
Scale: 3" = 1'-0"

Plot Date: 1/29/2025 4:39 PM Plotted By: Kramer, Jim
Date Created: 1/29/2025 S:\COMMERCIAL\DESIGN\2025_JOBS\2510023 - CITY OF TOOELE - UT (DE ONL)\DRAWINGS\HVAC\2510023 - CITY OF TOOELE, UT HEATING MASTER.DWG