

INVITATION TO BIDDERS #2023-06
NEW GEOTHERMAL STORAGE TANK
ADDENDUM NUMBER ONE
October 3, 2023

On September 14, 2023, the Oregon Institute of Technology (“Oregon Tech”) published Invitation to Bidders #2023-06 for New Geothermal Storage Tank (“BID”).

Oregon Tech has found that it is in its interest to amend the BID through the issuance of this Addendum Number One. Except as expressly amended below, all other terms and conditions of the original BID and any previous addenda shall remain unchanged.

1. The originally published Bid Form is removed in its entirety and replaced with the revised Bid Form, attached hereto and incorporated herein as **Exhibit A**.
2. The originally published Drawings and Plans are removed in their entirety and replaced with the revised Drawings and Plans for Geothermal Improvements, attached hereto and incorporated herein as **Exhibit B**. Revisions to the Drawings and Plans include the following:
 - a. Addition of chain link fencing.
 - b. All valves, fittings, piping, gaskets, etc. must be compatible with two hundred and ten (210) degrees Fahrenheit water.
 - c. Add flat cap block to block screen wall.
 - d. Vent/overflow combined.
3. The originally published Specifications are removed in their entirety and replaced with the revised “Geothermal Water Storage Tank Specifications Welded Steel Construction – Addendum #1,” attached hereto and incorporated herein as **Exhibit C**. Revisions to the Specifications include the following:
 - a. Tank will store Geothermal water at two hundred and ten (210) degrees Fahrenheit.
 - b. Vent and overflow are combined.
 - c. Two manways are required.
 - d. Plug valves required in all locations.

End of Addendum

EXHIBIT A

REVISED BID FORM

[Please see attached.]



OREGON INSTITUTE OF TECHNOLOGY
PUBLIC IMPROVEMENT CONTRACT

BID FORM

CAMPUS: Oregon Institute of Technology – Klamath Falls Campus
PROJECT: BID #2023-06 New Geothermal Storage Tank
BID CLOSING: October 10, 2023, 1:00 PM, Pacific Time
BID OPENING: October 10, 2023, 1:15 PM, Pacific Time

FROM: _____
Name of Contractor

TO: Oregon Institute of Technology
Procurement & Contract Services
Owens Hall, Office 145
3201 Campus Drive
Klamath Falls, OR 97601

1. The Undersigned (*Check one of the following and insert information requested.*):

- a. ☐ An individual doing business under an assumed name registered under the laws of the State of _____; or
- b. ☐ A partnership registered under the laws of the State of _____;
or
- c. ☐ A corporation organized under the laws of the State of _____;
or
- d. ☐ A limited liability corporation organized under the laws of the State of _____;

hereby proposes to furnish all machinery, material, tools, and labor, and perform all work hereinafter indicated for the above Project in strict accordance with the Contract Documents for the Base Bid as follows:

_____ Dollars (\$_____)

and the Undersigned agrees to be bound by the following documents:

- Notice of Contract Opportunity
- Supplemental Instructions to Bidders
- Performance Bond
- Payment Bond
- Prevailing Wage Rates
- Oregon Tech General Conditions (02/01/2017)
- Instructions to Bidders
- Public Improvement Contract Form
- Plans and Specifications
- Supplemental General Conditions
- Payroll and Certified Statement Form

- ADDENDA numbered _____ through _____, inclusive. *(Fill in blanks.)*

2. The Undersigned proposes the Base Bid with the unit price amounts as follows:

Bid Item	Item Description	Unit	Unit Qty	Unit Price	Total Price
1	Mobilization/Demobilization (201)	L.S.	1		
2	Earthwork (204)	L.S.	1		
3	6" D-50 Rip Rap	C.Y.	40		
4	Aggregate Base (207)	C.Y.	175		
5	Tank Foundation	L.S.	1		
6	Block Wall Screen /with cap	L.S.	1		
7	Clean Up (223)	L.S.	1		
8	Pipe Bedding (301) ¾" minus	C.Y.	30		
9	8" Steel Line Schedule 40	L.F.	300		
10	Flanged Braided Flex Hose 8"D x18"L	EA	2		
11	Chain Link Fence	LS	1		
12	Plug Valve	EA	5		
13	Pipe Supports	EA	11		
14	Pipe Insulation	L.S.	1		
15	8" Class 50 Ductile Iron Pipe	L.F.	50		
16	8" Steel to Ductile Transition	EA	1		
17	Horizontal Tank	L.S.	1		
BASE BID					

3. The work shall be completed within the time stipulated and specified in Division 1, Section 01 01 00 of the Specifications.

4. The Undersigned agrees, if awarded the Contract, to execute and deliver to the Oregon Institute of Technology ("Owner"), within twenty (20) calendar days after receiving the Contract forms, an Agreement Form, and a satisfactory Performance Bond and Payment Bond each in an amount equal to one hundred percent (100%) of the Contract sum, using forms provided by the Owner. The surety requested to issue the Performance Bond and Payment Bond will be:

(Name of surety company - not insurance agency)

The Undersigned hereby authorizes said surety company to disclose any information to the Owner concerning the Undersigned's ability to supply a Performance Bond and Payment Bond each in the amount of the Contract.

5. The Undersigned certifies that: a.) This Bid has been arrived at independently and is being submitted without collusion with and without any agreement, understanding, or planned common course of action with any other vendor of materials, supplies, equipment or services described in the invitation to bid designed to limit independent bidding or competition; and b.) The contents of the Bid have not been communicated by the Undersigned or its employees or agents to any person not an employee or agent of the Undersigned or its surety on any Bond furnished with the Bid and will not be communicated to such person prior to the official opening of the Bid.

6. The undersigned **HAS, HAS NOT** (*circle applicable status*) paid unemployment or income taxes in Oregon within the past 12 months and **HAS, HAS NOT** (*circle applicable status*) a business address in Oregon.

7. The Undersigned agrees, if awarded a contract, to comply with the provisions of ORS 279C.800 through 279C.870 pertaining to the payment of the prevailing rates of wage.

8. Contractor's CCB registration number is _____. As a condition to submitting a bid, a Contractor must be registered with the Oregon Construction Contractors Board in accordance with ORS 701.035 to 701.055, and disclose the registration number. Failure to register and disclose the number will make the bid unresponsive and it will be rejected, unless contrary to federal law.

9. The successful Bidder hereby certifies that all subcontractors who will perform construction work as described in ORS 701.005(2) were registered with the Construction Contractors Board in accordance with ORS 701.035 to 701.055 at the time the subcontractor(s) made a bid to work under the contract.

10. The successful Bidder hereby certifies that, in compliance with the Worker's Compensation Law of the State of Oregon, its Worker's Compensation Insurance provider is _____, Policy No. _____, and that Contractor shall submit Certificates of Insurance as required.

11. Contractor's Key Individuals for this Project (*Supply information as applicable.*):

- a. Project Executive: _____ Phone: _____
Email: _____
- b. Project Manager: _____ Phone: _____
Email: _____
- c. Job Superintendent: _____ Phone: _____
Email: _____
- d. Project Engineer: _____ Phone: _____
Email: _____

12. The Undersigned certifies that it has not discriminated against minority, women, or emerging small businesses in obtaining any subcontracts for this Project.

[Optional]

13. The Undersigned hereby identifies the following sources for specific tasks (indicate the subcontractor's name or "self-performed") and suppliers and products for the following specified materials (*use a separate page if necessary*).

- a. _____
- b. _____
- c. _____

d. _____

By signature below, Contractor agrees to be bound by this Bid.

NAME _____

ADDRESS _____

PHONE _____

EMAIL _____

CCB# _____ EXP. DATE: _____

SIGNATURE 1) _____
Sole Individual

or 2) _____
Partner

or 3) _____
Authorized Officer of Corporation

*Payment information will be reported to the IRS under the name and taxpayer ID # provided.
Information not matching IRS records could subject Contractor to backup withholding.*

*** * * * * E N D O F B I D * * * * ***

EXHIBIT B

REVISED DRAWINGS AND PLANS FOR GEOTHERMAL IMPROVEMENTS

[Please see attached.]

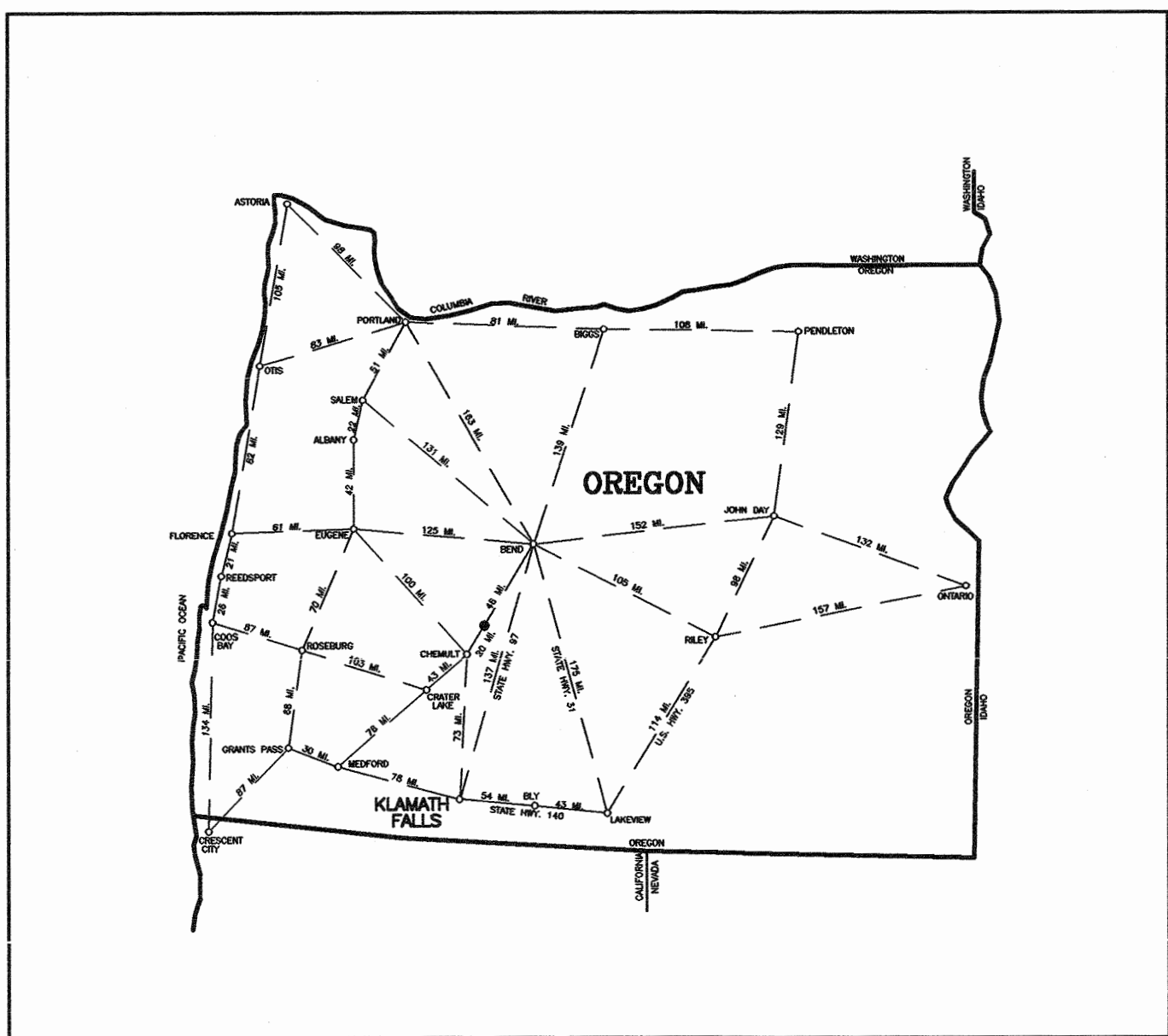
OREGON INSTITUTE OF TECHNOLOGY GEOTHERMAL IMPROVEMENTS

LOCATED IN: KLAMATH COUNTY, STATE OF OREGON

GENERAL NOTES

1. ALL STEEL PIPE, ELBOWS, AND FITTINGS TO BE FLANGED AND SCHEDULE 40
2. FLANGE GASKETS TO BE 200° TEMP RATED AND OIL RESISTANT
3. VERIFY EXISTING PIPE LOCATIONS PRIOR TO ANY UNDERGROUND WORK OR EXCAVATION
4. ALL EXISTING PIPING THAT IS TO BE REPLACED IS TO BE REMOVED - VERIFY WITH OWNER AND ENGINEER PRIOR TO REMOVAL
5. COVER DISTURBED PROJECT GROUND SURFACE AREA WITH 6" OF 3/4" MINUS
6. ENGINEER WILL PROVIDE CONCRETE AND COMPACTION TESTING - CONTRACTOR TO SUPPLY EARTH & AGGREGATE SAMPLES.
7. ALL PIPING SHALL BE PRESSURE TESTED TO 100 PSI FOR ONE HOUR DURATION IN PRESENCE OF ENGINEER. CONTRACTOR TO SUPPLY ALL TESTING EQUIPMENT, PLUGS, BLIND FLANGES ETC. TO CONDUCT TESTS.
8. SUBMIT ALL PRODUCT DATA TO ENGINEER FOR APPROVAL - PIPES COUPLINGS, VALVES, FITTINGS INSULATION, ETC. ELECTRONIC SUBMITTALS ARE ACCEPTABLE.

TITLE	SHEET
TITLE SHEET	TS
20,000 GALLON HORIZONTAL TANK - SITE PLAN	C1
NEW DRAINAGE PROFILE AND CROSS SECTIONS	C2
20,000 GALLON HORIZONTAL TANK - FOUNDATION DESIGN	S1



AREA MAP

CONCRETE NOTES:

- CONCRETE
- 1) MIX DESIGN:
MINIMUM 6 SACK MIX
STRENGTH: 4000 PSI @ 28 DAYS
SLUMP 4" ± 1"
AIR ENT.: 5% ± 1%
SUBMIT MIX DESIGN TO ENGINEER FOR APPROVAL
 - 2) CONCRETE SHALL NOT BE POURED ON FROZEN GROUND. CONCRETE PLACED DURING COLD WEATHER SHALL BE BLANKETED FOR A MINIMUM OF 24 HOURS. COLD WEATHER IS DESCRIBED AS, FOR 3 CONSECUTIVE DAYS, THE AVERAGE DAILY TEMPERATURE IS LESS THAN 40 DEGREES AND THE AIR TEMPERATURE IS LESS THAN 50 DEGREES.
 - 3) CONSOLIDATE CONCRETE BY MEANS OF A HIGH-FREQUENCY, INTERNAL, MECHANICAL VIBRATOR SUPPLEMENTED BY HAND SPADING.

- CONCRETE FORM WORK
- 1) CONSTRUCT FORM WORK IN ACCORDANCE WITH ACI 301 AND 347.
 - 2) VERTICAL FACE, EXPOSED CONCRETE:
MINIMUM 3/4" PLYWOOD WITH "B" GRADE FACE TO CONCRETE. EARTH FORMS SHALL NOT BE PERMITTED.
 - 3) VERIFY LINES AND GRADES PRIOR TO PLACING CONCRETE.
 - 4) ARRANGE AND ASSEMBLE FORM WORK TO PERMIT STRIPPING OF FORMS WITHOUT DAMAGING CONCRETE.
 - 5) APPLY FORM RELEASE AGENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. KEEP SURFACES WET JUST PRIOR TO CONCRETE PLACEMENT.

- REINFORCING STEEL
- 1) REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60.
 - 2) TIE WIRE SHALL BE CLEAN AND FREE OF SCALE OR RUST.
 - 3) PLACE REINFORCEMENT AS SHOWN ON THE DRAWINGS. PROVIDE SUPPORTING DEVICES NECESSARY TO MAINTAIN THE REINFORCEMENT IN-PLACE DURING CONCRETE PLACEMENT AND CONSOLIDATION.
 - 4) COVER REQUIREMENTS:
AGAINST EARTH: 3 INCHES CLEAR
FORMED CONCRETE AGAINST EARTH: 2 INCHES CLEAR
 - 5) ALL STEEL SHALL BE TIED IN-PLACE. NO STABBING OF REINFORCING SHALL BE ALLOWED.

OWNER

OREGON INSTITUTE OF TECHNOLOGY
3201 CAMPUS DRIVE
KLAMATH FALLS, OREGON 97630

PROJECT ENGINEERS

ANDERSON ENGINEERING & SURVEYING, INC.



DARRYL ANDERSON, PE, PLS, PRINCIPAL ENGINEER/PROJECT MANAGER
KARAH WITZEL, EIT, PROJECT ENGINEER
P.O. BOX 28 ~ 17681 HWY 395 ~ LAKEVIEW, OR 97630
BUS (541) 947-4407 ~ FAX (541) 947-2321
www.andersonengineering.com

BRIAN BROWN ENGINEERING

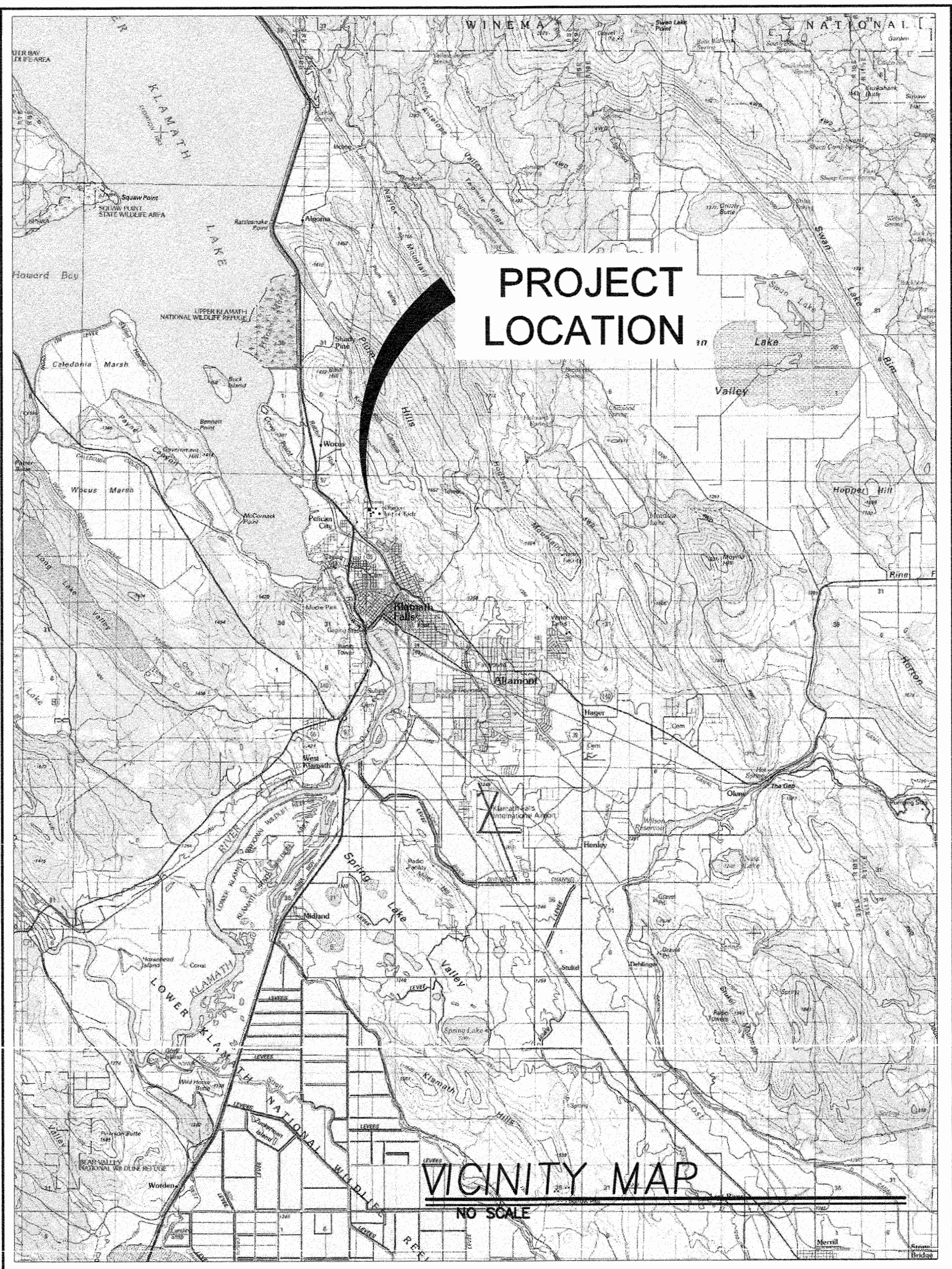
BRIAN BROWN, PE, MECHANICAL ENGINEERING/GEOTHERMAL
PO BOX 563 ~ FORT KLAMATH, OR 97626
(541) 783-3347

FLUENT ENGINEERING, INC.

DAVID EBSEN, ELECTRICAL ENGINEERING
MATHEW CASH, PE, P.ENG, ELECTRICAL ENGINEERING
932 KLAMATH AVE, KLAMATH FALLS, OR 97601
(503) 447-5030

PINNACLE ARCHITECTURE, INC.

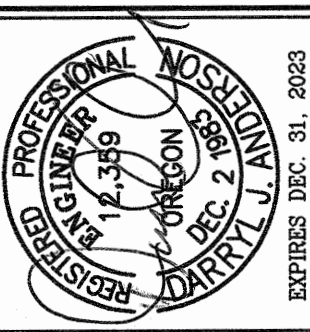
BRIANA MANFRASS, EDAC, ARCHITECTURAL DESIGN
1001 SW DISK DR., SUITE 105, BEND, OR 97702
(541) 388-9897



REVISIONS	BY
10/2/2023	KW

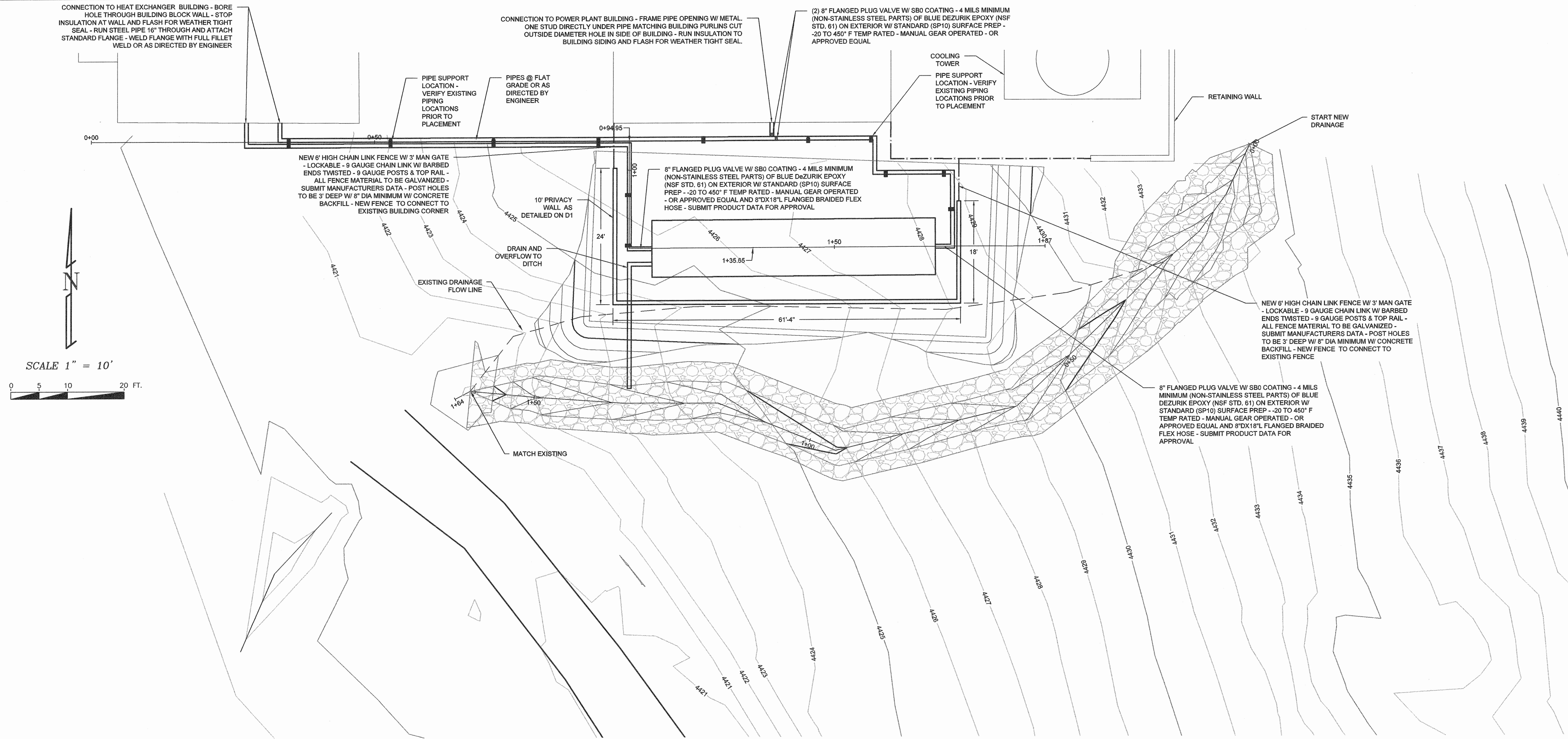
ANDERSON ENGINEERING
AND SURVEYING, INC.
P.O. BOX 28
LAKEVIEW, OREGON 97630
(541) 947-4407/FAX 947-2321
WWW.ANDERSONENGINEERING.COM

PREPARED FOR:
OREGON TECH
3201 CAMPUS DRIVE
KLAMATH FALLS, OR 97601

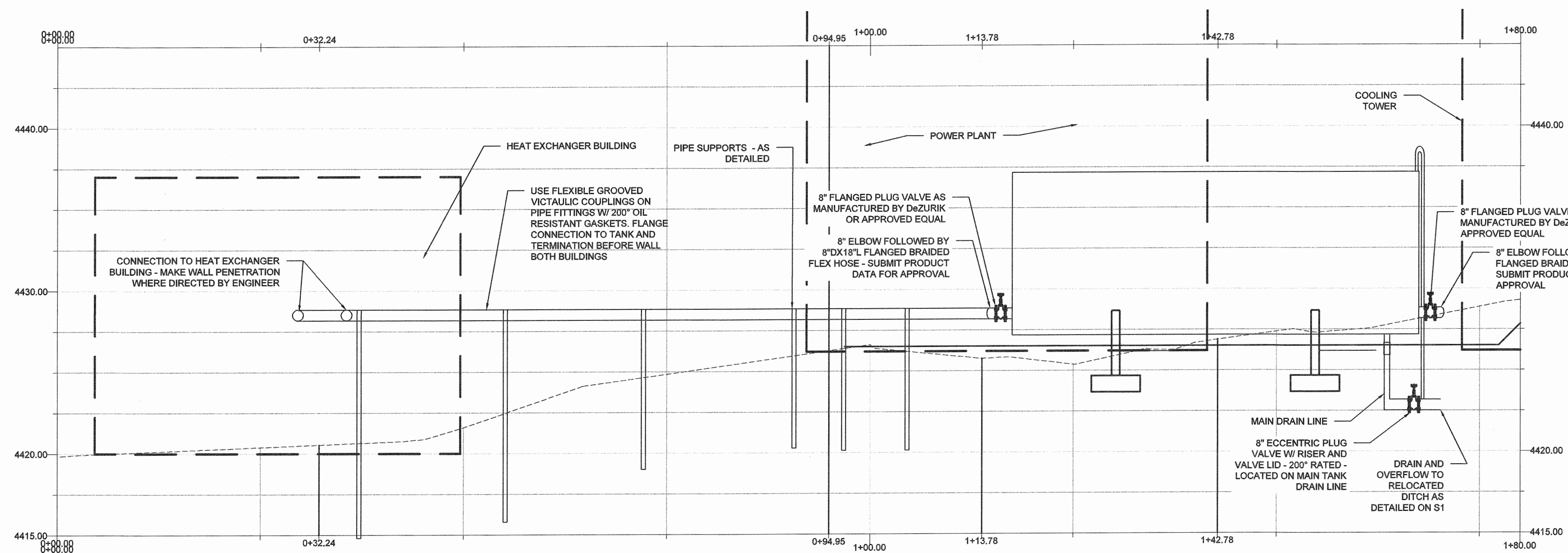


TITLE
OIT HEAT GEOTHERMAL IMPROVEMENTS
OREGON INSTITUTE OF TECHNOLOGY
KLAMATH FALLS, OR

DATE:	09/5/2023
SCALE:	AS SHOWN
DWG. BY:	K.W.
FILE:	2023-009
JOB NO.:	2023-009
SHEET	TS



1 SITE PLAN - HORIZONTAL TANK
C2 SCALE 1"=10'



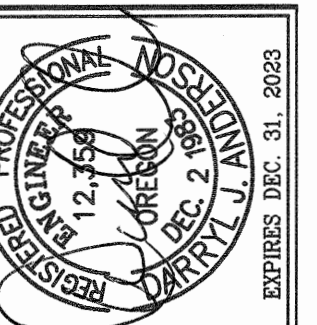
2 PIPE PROFILE - HORIZONTAL TANK
C2 SCALE H:1"=10'
V:1"=5'

REVISIONS	BY
10/2/2023	KW

ANDERSON ENGINEERING
AND SURVEYING, INC.

P.O. BOX 28
LAKEVIEW, OREGON 97630
(541) 947-4407/FAX 947-2321
WWW.ANDERSONENGINEERING.COM

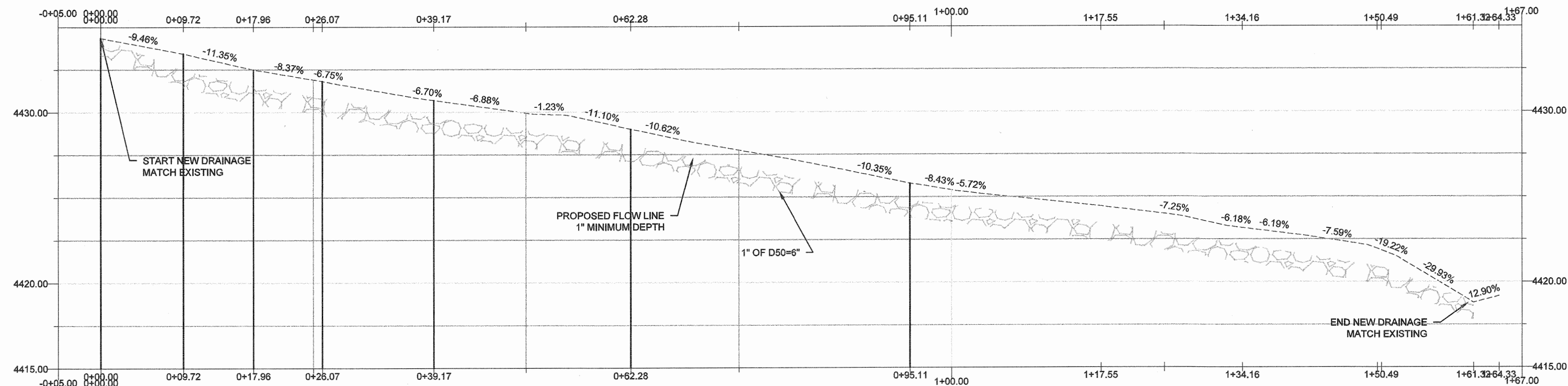
PREPARED FOR:
OREGON TECH
3201 CAMPUS DR
KLAMATH FALLS, OR 97601



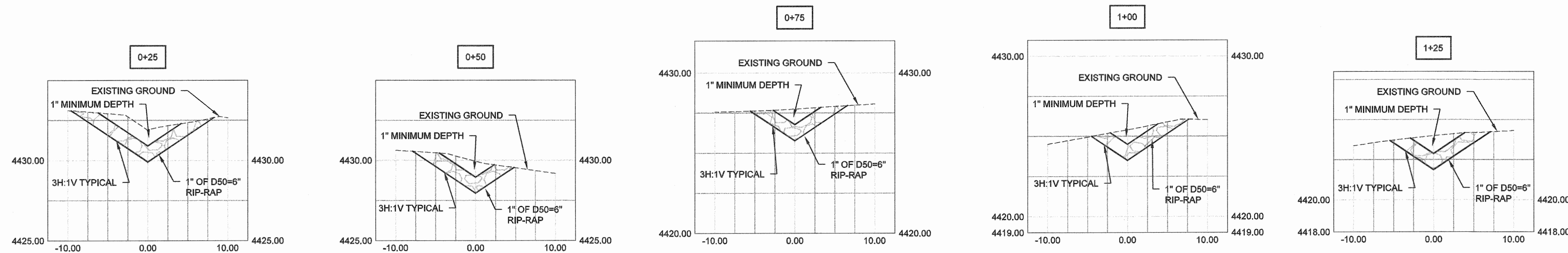
20,000 GALLON HORIZONTAL TANK
SITE PLAN
OREGON INSTITUTE OF TECHNOLOGY
KLAMATH FALLS, OR

DATE: 09/5/2023
SCALE: 1"=10'
DWG. BY: K.W.
FILE: 2023-009
JOB NO.: 2023-009
SHEET

C1



1 PROFILE - NEW DRAINAGE
SCALE H:1"=10'
V:1"=5'

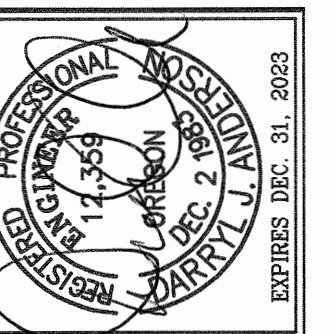


2 CROSS SECTIONS - NEW DRAINAGE
SCALE H:1"=10'
V:1"=5'

REVISIONS	BY
10/2/2023	KW

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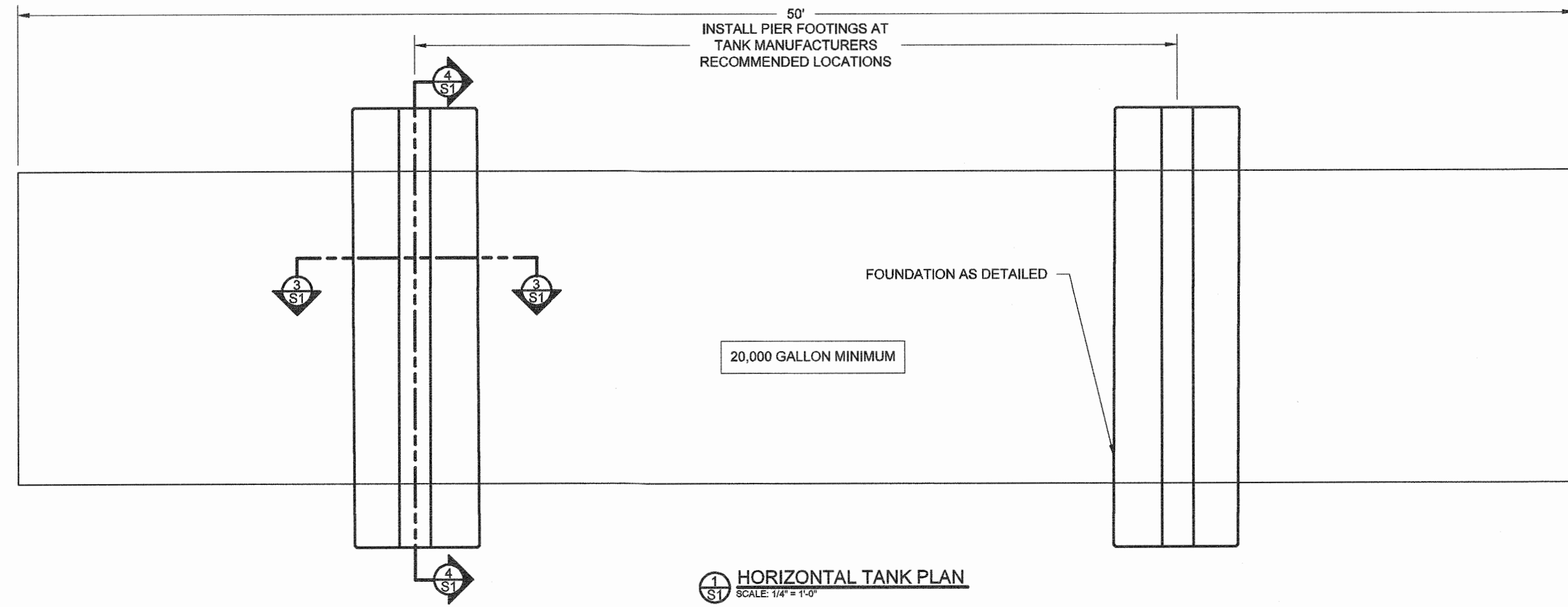
PREPARED FOR:
OREGON TECH
3201 CAMPUS DR
KLAMATH FALLS, OR 97601



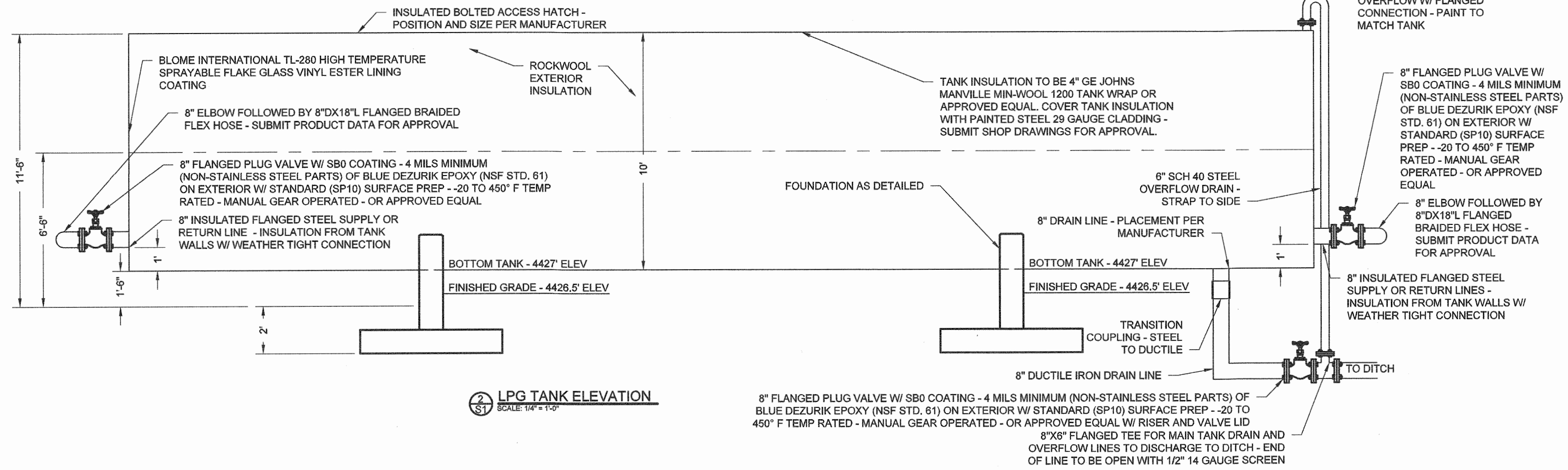
20,000 GALLON TANK
NEW DRAINAGE PROFILE AND CROSS SECTIONS
OREGON INSTITUTE OF TECHNOLOGY
KLAMATH FALLS, OR

DATE:	09/5/2023
SCALE:	AS SHOWN
DWG. BY:	K.W.
FILE:	2023-009
JOB NO.:	2023-009

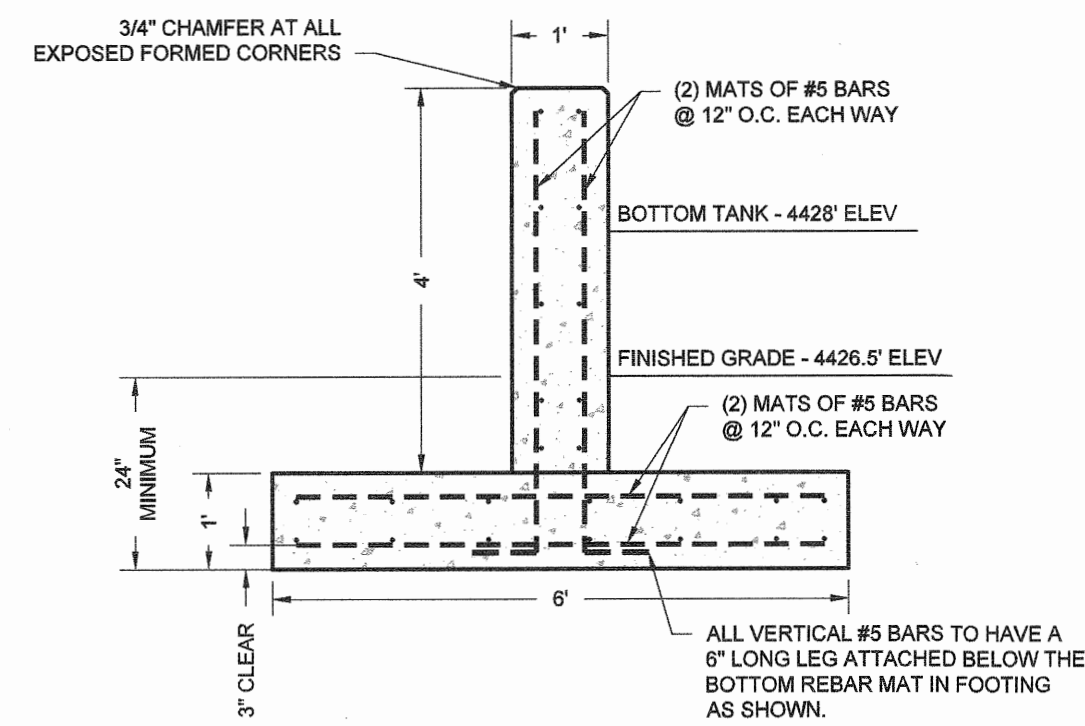
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C2



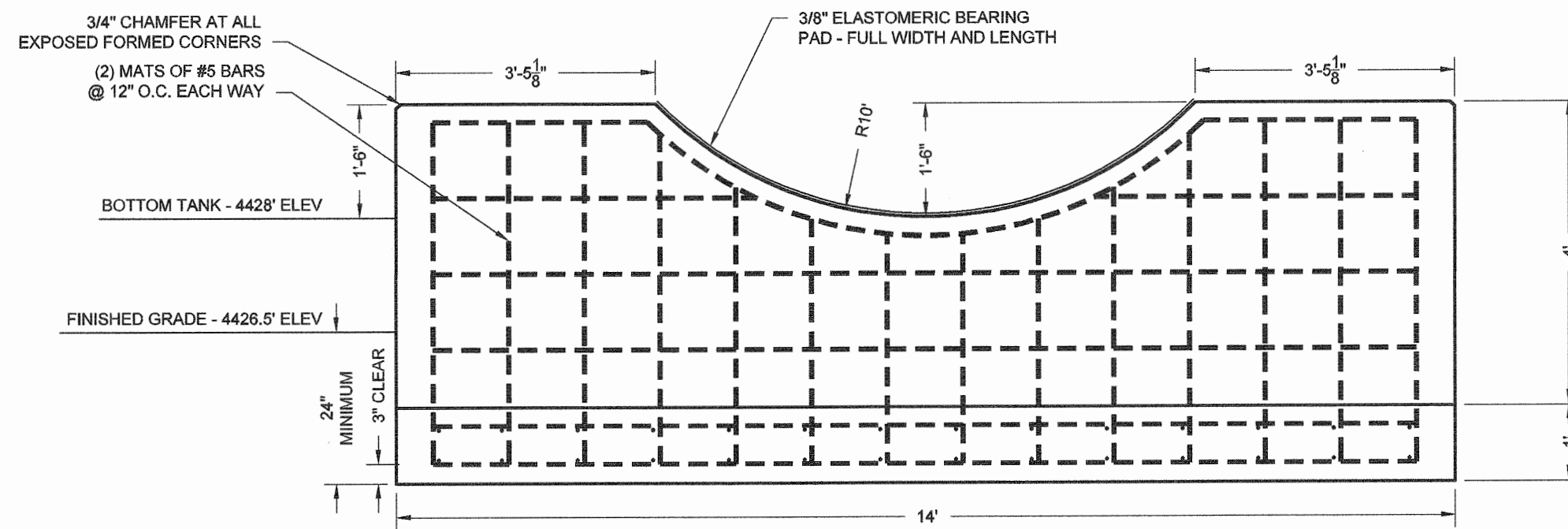
1 HORIZONTAL TANK PLAN
SCALE: 1/4" = 1'-0"



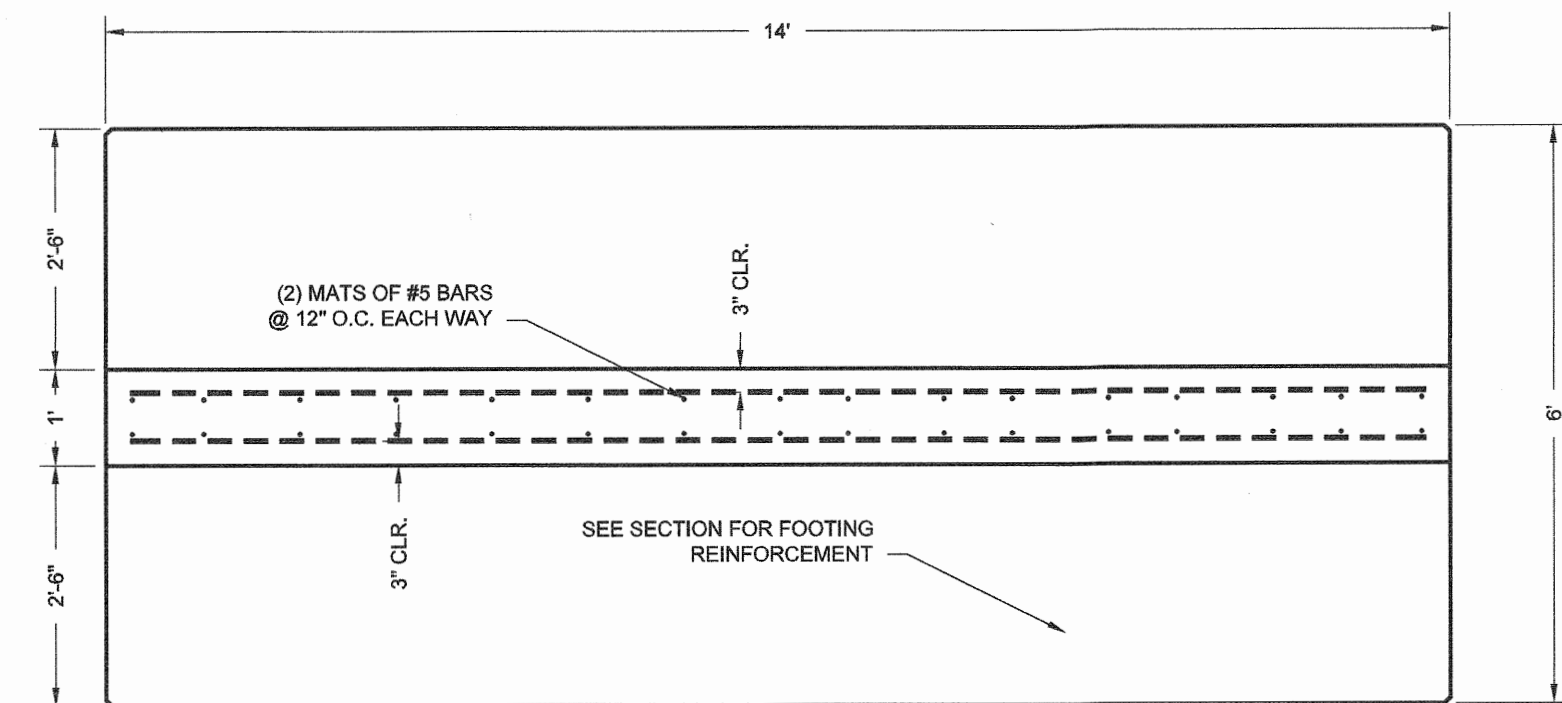
2 LPG TANK ELEVATION
SCALE: 1/8" = 1'-0"



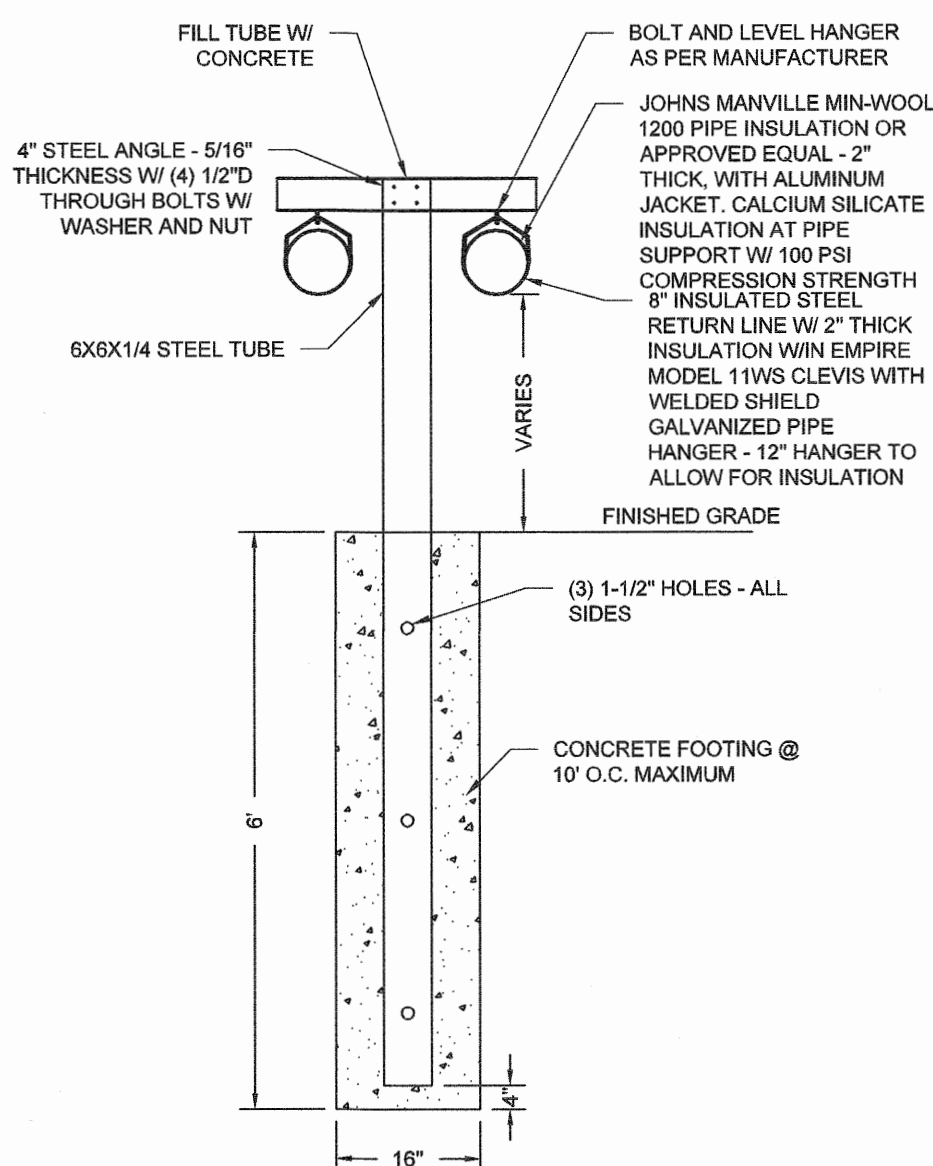
3 PIER FOOTING SECTION
SCALE: 1/2" = 1'-0"



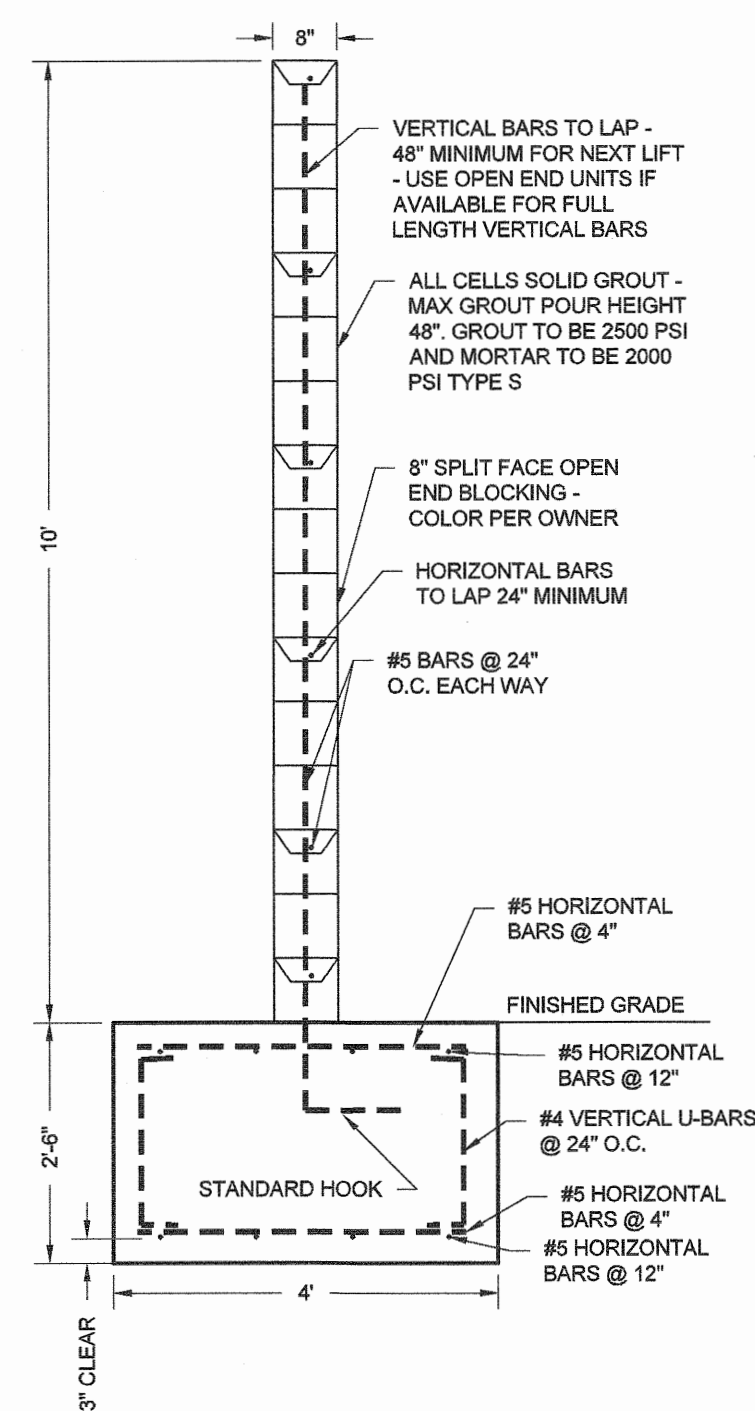
4 PIER FOOTING ELEVATION
SCALE: 1/2" = 1'-0"



5 PIER FOOTING PLAN
SCALE: 1/2" = 1'-0"



6 PIPE HANGER DETAIL
SCALE: 1/2" = 1'-0"

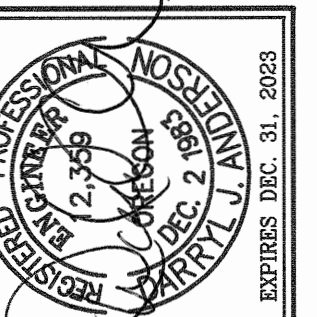


7 BLOCK WALL SECTION
SCALE: NTS

REVISIONS	BY

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PREPARED FOR:
OREGON TECH
3201 CAMPUS DR
KLAMATH FALLS, OR 97601



20,000 GALLON HORIZONTAL TANK
FOUNDATION DESIGN
OREGON INSTITUTE OF TECHNOLOGY
KLAMATH FALLS, OR

DATE: 09/5/2023
SCALE: AS LABELED
DWG. BY: K.W.
FILE: 2023-009
JOB NO.: 2023-009
SHEET

S1

EXHIBIT C

**REVISED “GEOTHERMAL WATER STORAGE TANK SPECIFICATIONS WELDED
STEEL CONSTRUCTION – ADDENDUM #1”**

[Please see attached.]

REVISED GEOTHERMAL WATER STORAGE TANK SPECIFICATION WELDED STEEL CONSTRUCTION – ADDENDUM #1

PART 1. GENERAL

1.01 SECTION INCLUDES:

This section includes furnishing and erecting a 20,000-gallon welded steel tank and necessary piping and appurtenances, per AWWA D100 specifications, latest revision. This tank will store Geothermal water at 210 degrees Fahrenheit.

1.02 QUALIFICATIONS OF TANK SUPPLIER:

- A. The Engineer's selection of a welded steel tank is predicated on a thorough examination of design criteria, construction methods, and optimum coating for resistance to internal and external tank corrosion. Deviations from the specified design, construction or coating details will not be permitted.
- B. The bidder shall offer a new tank reservoir as supplied from a manufacturer specializing in the design, fabrication and erection of welded water storage tanks.
- C. The tank shown on the contract drawings and specified herein shall be fabricated by Tank Manufacturer.
- D. Erection and /or fabrication of the tank is to be by the tank manufacturer or approved contractor. The installer shall be fully responsible for the entire installation including tank erection, and the ultimate water tightness of the complete installation.
- E. Strict adherence to the standards of design, fabrication, erection, product, quality, and long-term performance, established in this Specification will be required by the Owner and Engineer.
- F. Tank suppliers wishing to pre-qualify shall submit the following to the Engineer/Owner for consideration:
 - 1. List of tank materials, appurtenances and tank coating technical specifications.
 - 2. Resume of job installation superintendent.
 - 3. The contractor shall have the experience and knowledge necessary to furnish and erect/fabricate the highest quality tank possible. The contractor shall be fully responsible for the entire installation including appurtenances and the final product.

1.03 SUBMITTAL DRAWINGS AND SPECIFICATIONS:

- A. Construction shall be governed by the Owner's drawings and specifications showing general dimensions and construction details. There shall be no deviation from the drawings and specifications, except upon written order from the Engineer.
- B. The bidder is required to furnish, for the approval of the Engineer and at no increase in contract price, 5 sets of complete specifications and construction drawings, stamped by an Oregon Licensed Engineer, for all work for construction of the tank. A complete set of structural calculations shall be provided for the tank structure and foundation.
- C. When approved, and permitted, two sets of such prints and submittal information will be returned to the bidder marked "APPROVED FOR CONSTRUCTION" and these drawings will then govern the work detailed thereon. The approval by the Engineer of the tank supplier's drawings shall be an approval relating only to their general conformity with the bidding drawings and specifications and shall not guarantee detail dimensions and quantities, which remains the bidder's responsibility.

PART 2. DESIGN CRITERIA

2.01 TANK SIZE:

- A. The horizontal tank shall be as shown on the drawings. Dimensions may vary if proposed by the supplier/contractor.
- B. Soil bearing capacity is 1,500 pounds per square foot.
- C. Seismic coefficients – $S_s = 1.054$, $S_1 = 0.415$, Site Class D, Response Coefficient $C = 0.3513$

2.02 TANK CAPACITY AND ELEVATION:

- A. Tank working capacity shall be 20,000 gallons (nominal).
- B. Freeboard space in top of tank shall be a minimum of 0.5 ft.
- C. Tank base (bottom) elevation shall be at 4,428.0 ft.

2.03 TANK DESIGN REQUIREMENTS:

- A. The materials, design, fabrication and erection of the welded tank shall conform to AWWA Standard D100, latest edition.
- B. The welded steel tank will rest on footings designed similar to, as shown on the drawings.

C. The reservoir shall be furnished with piping and appurtenances as shown on the plans and as follows:

1. Inlet pipe
2. Overflow pipe/ vent
3. Outlet pipe
4. Drain pipe
5. Insulation as shown on the drawings
6. Outside weather tight steel cladding over insulation
7. Vent with Overflow
8. Identification name plate
9. Access hatches/covers insulated

PART 3. MATERIALS

3.01 MANUFACTURERS:

A. Five years' experience in welded steel tank construction.

3.02 TANK MATERIALS:

A. Furnish steel plate and structural shapes per AWWA D100, Section 2.

B. Steel pipe and pipe fittings shall conform to ASTM A-120.

C. Structural bolts shall conform to ASTM A-307.

D. Welding electrodes shall conform to ASTM 233 E60 or E70.

F. Asphalt board or asphalt expansion joint material shall be furnished which complies with ASTM D-994.

G. Caulking mastic shall be 100% solids epoxy or approved equal.

PART 4. COATINGS

4.01 COATING SYSTEM:

A. Interior coating system, Blome International, TL-280 High Temperature Sprayable Flake Glass Vinyl Ester Lining, or approved equal.

B. Exterior coating system, coat exterior of tank before applying insulation. Coat with Sherwin Williams, HEAT-FLEX® HI-TEMP 1200 COATING under insulation, or approved equal.

- C. Install Johns Mansville, Min-wool 1200 insulation over coated tank exterior. Submit shop drawings with tank design for attaching insulation and metal weather tight jacket over insulation.
- D. Metal Jacket ,29 Gauge, factory painted sheets, with trim as required. Submit Product data and anchoring system for approval.

PART 5. FABRICATION

5.01 TANK FABRICATION:

- A. All reservoir sub-assemblies and accessories, including shell manholes, ladders, and overflow pipes, shall be fabricated in accordance with AWWA D-100, Section 7.

5.02 APPURTENANCES:

A. Pipe Connections

1. Overflow piping shall be 6 inches nominal diameter schedule 40 carbon steel coated externally.
2. Inlet and outlet connections shall conform to the sizes and locations specified on the plan sheets. Standard flange connections to piping outside of tank.

B. Access Doors

1. Two manways shall be provided as shown on the contract drawings in accordance with AWWA D100.
2. The Manway opening shall be a minimum of 24 inches in diameter. The access door (shell manhole) and the tank shell reinforcing shall comply with AWWA D100.

C. Roof Vent

1. A properly sized vent assembly in accordance with AWWA D100 shall be furnished and installed above the maximum water level of sufficient capacity so that at maximum design rate of water fill or withdrawal, the resulting interior design pressure / vacuum will not exceed +2.0 / -0.5 ounces per square inch.
2. The overflow pipe shall not be considered to be a tank vent.
3. The vent shall be so designed in construction as to prevent the entrance of birds and/or animals by including a 4 mesh (1/4" opening size) galvanized screen.

D. Identification Plate

1. Manufacturer's nameplate shall list the tank serial number, tank diameter and height, and maximum design capacity. The nameplate shall be affixed to the tank exterior sidewall location approximately five (5) feet from the grade elevation.

PART 6. EXECUTION

6.01 EARTHWORK:

- A. All excavation, structural fill, and structural backfill in connection with foundation preparation and construction shall be done according to the requirements of the drawings and of contract documents. All trench excavation, pipe laying, and pipe bedding and backfill shall be done according to the requirements of the drawings and specifications.

6.02 CONCRETE:

- A. All concrete work for reservoir foundations and floor slabs shall be done according to contract documents.

6.03 FIELD EXAMINATION:

- A. The tank fabricator shall field verify the foundation elevation and the tolerances of the in-place foundation. Any deviations shall be reported to the Engineer for correction before proceeding with any work. All tank piping must be in place prior to the commencement of tank erection.

6.04 TANK ERECTION:

- A. The CONTRACTOR shall furnish all labor, tools, scaffolding, and other equipment necessary to properly erect the tank complete and ready for use.
- B. Erection shall be completed in compliance with Section 10 of AWWA D100 for welded steel tanks.

6.05 FIELD QUALITY CONTROL TESTING:

- A. After the erection of the reservoir is completed and before it is painted, it shall be tested for leaks. Any leaks that are disclosed in the shell bottom, roof, manhole, or piping shall be repaired prior to painting.
- B. Inspection and testing shall be in accordance with Section 11 of AWWA D100, latest revision.
- C. All defective welds shall be removed and repaired in accordance with Section 11 of AWWA D100, latest revision.

- D. Make available all radiographs and other testing information to the Owner's representative during construction.
- E. After completion of the work, the Contractor shall submit a written report and certification that all work has been inspected and tested and is in accordance with all applicable provisions of AWWA D100, latest revision.
- F. All costs associated with testing shall be paid by the Contractor.

PART 7. CLEANING

7.01 STANDARDS:

- A. The tank structure shall be thoroughly cleaned after construction and prepared for coatings as per the coating manufacturer's recommendations.

PART 8. TANK MANUFACTURER'S WARRANTY

- A. The tank manufacturer shall include a warranty on tank materials and workmanship for a specified period. As a minimum, the warranty shall provide assurance against defects in material, coatings and workmanship for a period of one (1) year.

**** END OF SECTION ****