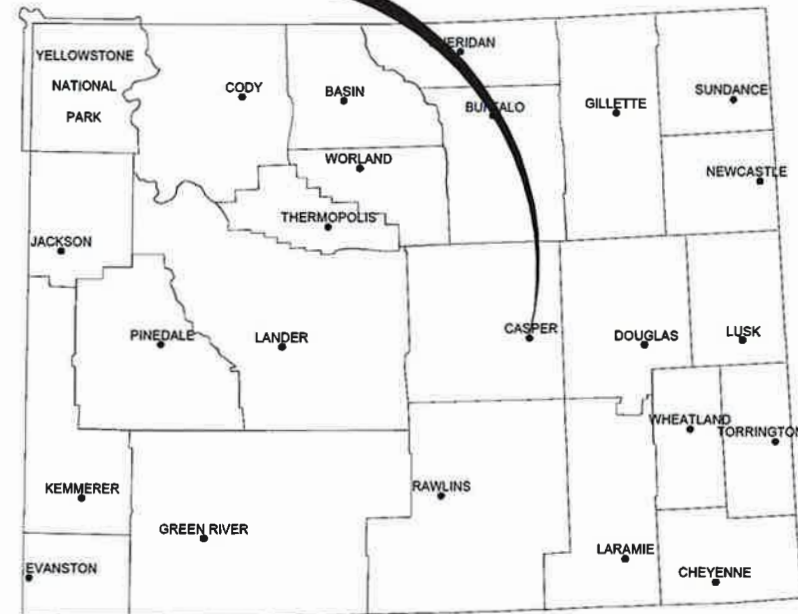


CONSTRUCTION DRAWINGS FOR CASPER COLLEGE BARN 4 SEPTIC UPGRADES

CASPER, WYOMING
AUGUST 2022

PROJECT LOCATION



LOCATION MAP

NOT TO SCALE

PREPARED BY:



engineers • surveyors • planners • scientists

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SHEET INDEX		
SHT. NO.	DWG. NO.	TITLE
1	CS-1	COVER SHEET
2	G-1	GENERAL NOTES AND PROJECT NOTES
3	C-1	SITE PLAN
4	C-2	SEWER LAYOUT PLAN AND PROFILE
5	D-1	DETAILS
6	D-2	DETAILS
7	E-1	ELECTRICAL SITE PLAN AND PARTIAL ONE-LINE DIAGRAM

CONSTRUCTION DRAWINGS
AUGUST 2022

PROJECT LOCATION



VICINITY MAP

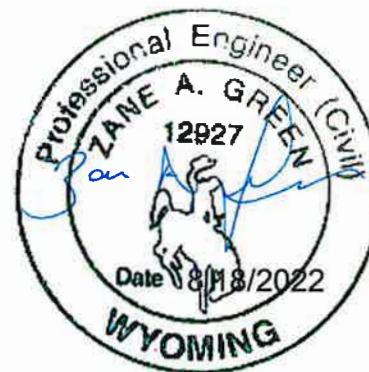
SCALE: 1" = 500'



Know what's below.
Call before you dig.

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VERIFY COLOR!
THIS SHEET IS INTENDED TO BE IN COLOR. RED, GREEN AND BLUE WILL BE VISIBLE IF REPRODUCED CORRECTLY.



APPROVED BY:

Zane A. Green
ZANE GREEN, P.E.
PROJECT MANAGER

AUTHORIZED BY AUTHORITY OF
Water Quality Rules and
Regulations, Chapter III
Director
Department of Environmental Quality

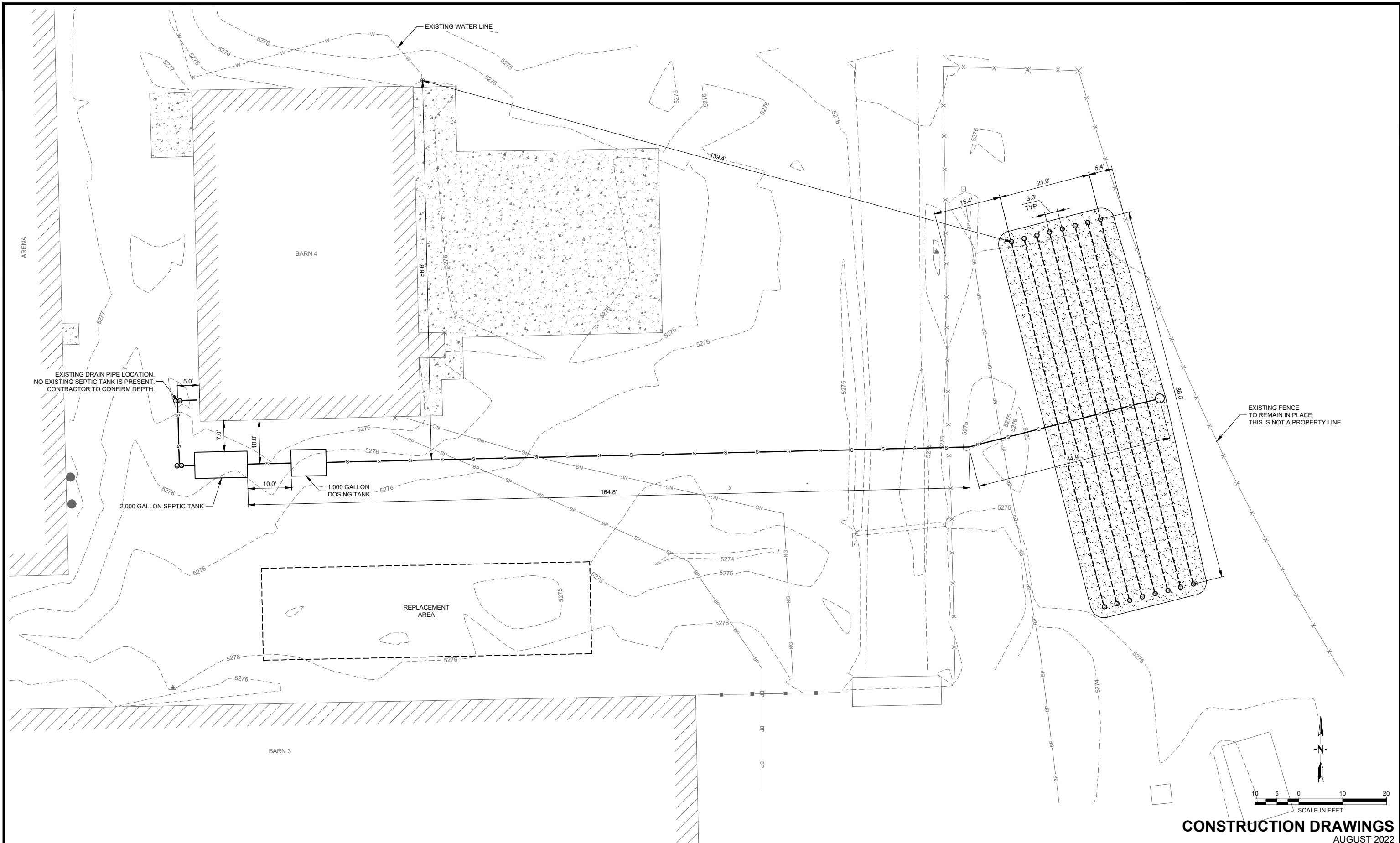
PERMIT NO. 2022-227

DATE 8/23/2022

BY *Bray E. Elt*

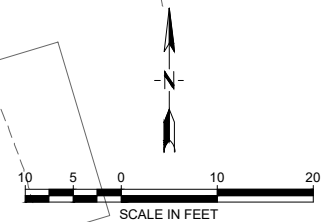
SET NO. _____

MORRISON-MAIERLE PROJECT NO. 6002.012



EXISTING DRAIN PIPE LOCATION.
NO EXISTING SEPTIC TANK IS PRESENT.
CONTRACTOR TO CONFIRM DEPTH.

EXISTING FENCE
TO REMAIN IN PLACE.
THIS IS NOT A PROPERTY LINE



CONSTRUCTION DRAWINGS
AUGUST 2022

VERIFY SCALE!		REVISIONS		
NO.	DESCRIPTION	BY	DATE	

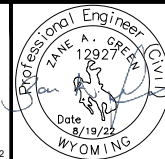
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DRAWN BY: KRL
DSGN BY: ZAG
APPR BY: ZAG
DATE: 08/2022
Q.C. REVIEW BY: _____
DATE: _____

CASPER

CASPER COLLEGE
BARN 4 SEPTIC UPGRADES

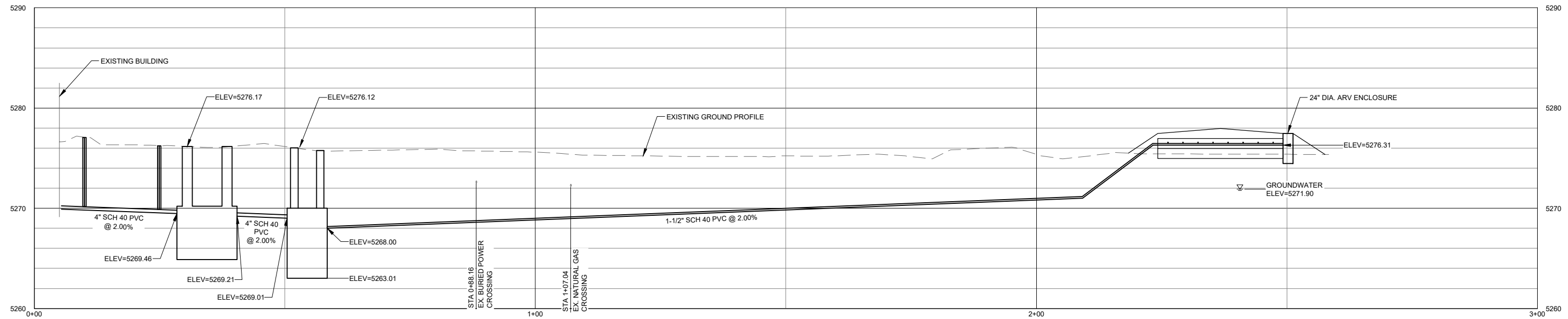
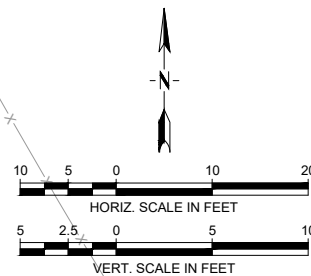
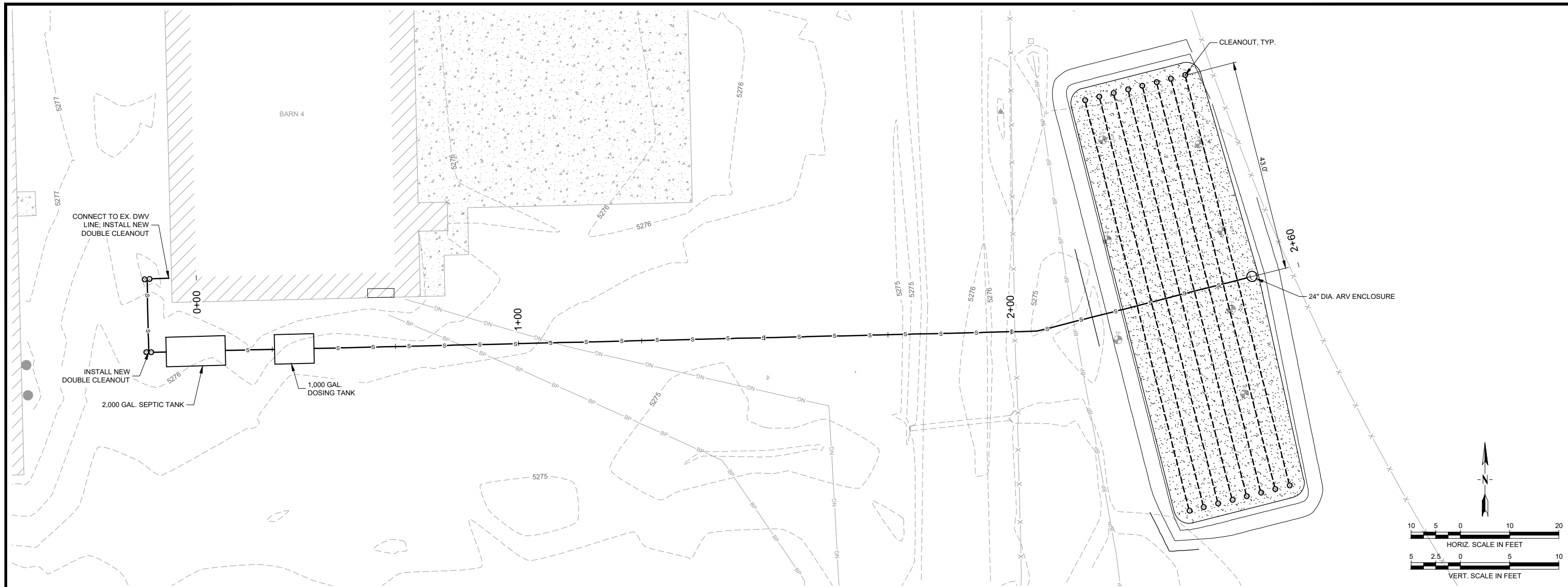
WYOMING

SITE PLAN

PROJECT NUMBER
6002.012

SHEET NUMBER
3

DRAWING NUMBER
C-1



CONSTRUCTION DRAWINGS
AUGUST 2022

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Professional Engineer
ZANE A. GREEN
No. 12927
State of Wyoming
Date 8/19/22

DRAWN BY: KRL
DSGN. BY: ZAG
APPR. BY: ZAG
DATE: 08/2022

CASPER

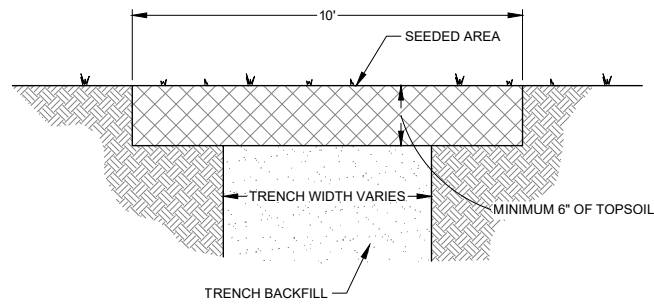
CASPER COLLEGE
BARN 4 SEPTIC UPGRADES
WYOMING

SEWER LAYOUT PLAN AND PROFILE

PROJECT NUMBER
6002.012

SHEET NUMBER
4

DRAWING NUMBER
C-2

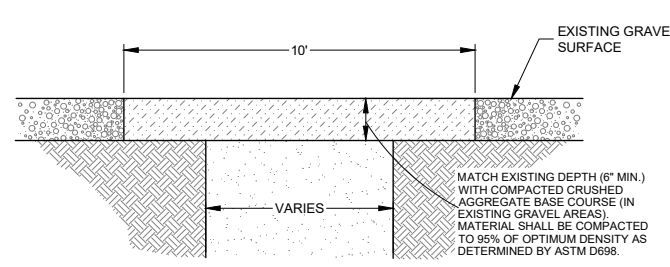


FOR REQUIREMENTS OF SEED MIXTURE AND APPLICATION SEE SPECIFICATION 02480.

NOTES:

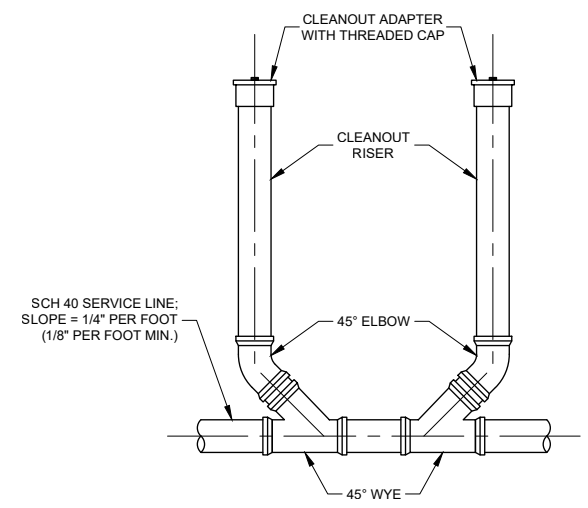
1. THIS RESTORATION WILL BE REQUIRED ON ALL DISTURBED AREAS THAT WILL NOT BE COVERED WITH SOD OR OTHER SURFACING.
2. ROCKS LARGER THAN 2" CANNOT BE PLACED WITHIN TOPSOIL.

1 TRENCH RESTORATION - GRASS AREAS
SCALE: N.T.S.



NOTE:
THIS RESTORATION WILL BE REQUIRED WITHIN ANY R.O.W. OR OTHER AREA WITH GRAVEL SURFACING.

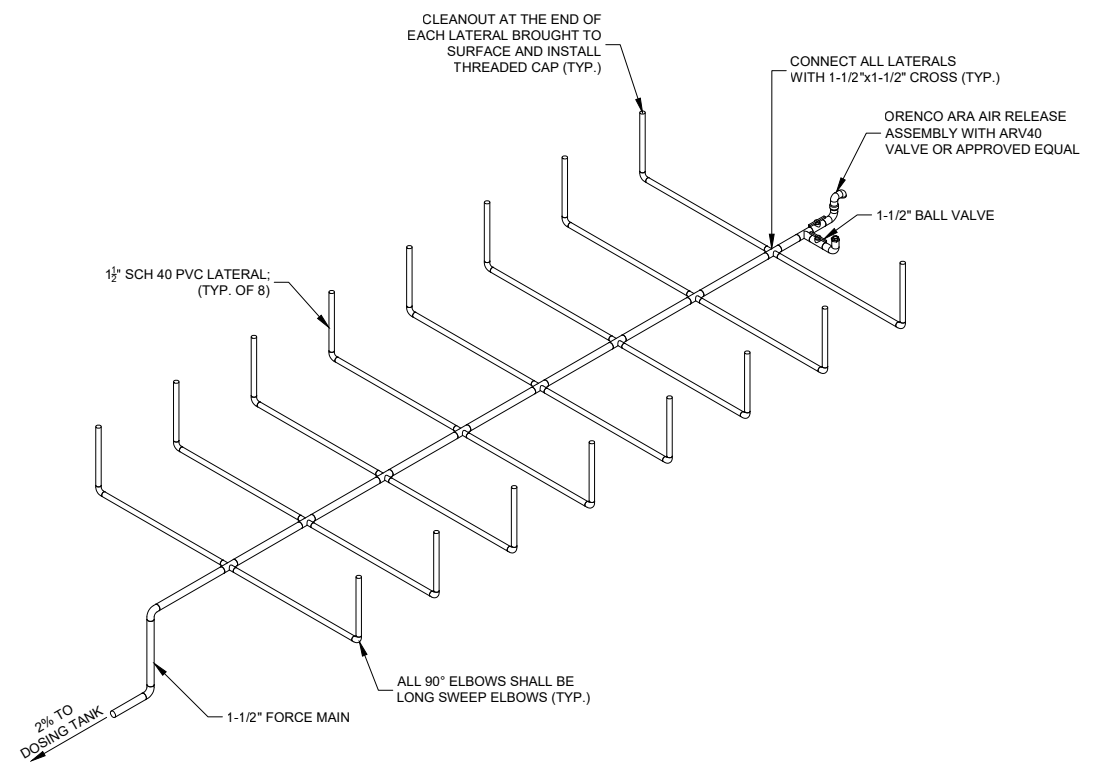
2 TRENCH RESTORATION - GRAVEL SURFACE
SCALE: N.T.S.



NOTES:

1. CLEANOUTS TO BE SAME DIAMETER AS SERVICE LINE.

3 SANITARY SEWER CLEANOUT
SCALE: N.T.S.



4 LATERAL DETAIL
SCALE: N.T.S.

CONSTRUCTION DRAWINGS
AUGUST 2022

W:\6002 CASPER COLLEGE\BARN 4 SEPTIC\CAD\BHSHEETS\CIVIL\012-05_DETAILS.DWG

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PLOTTED BY: KATELYN LOLLAR ON Aug/18/2022

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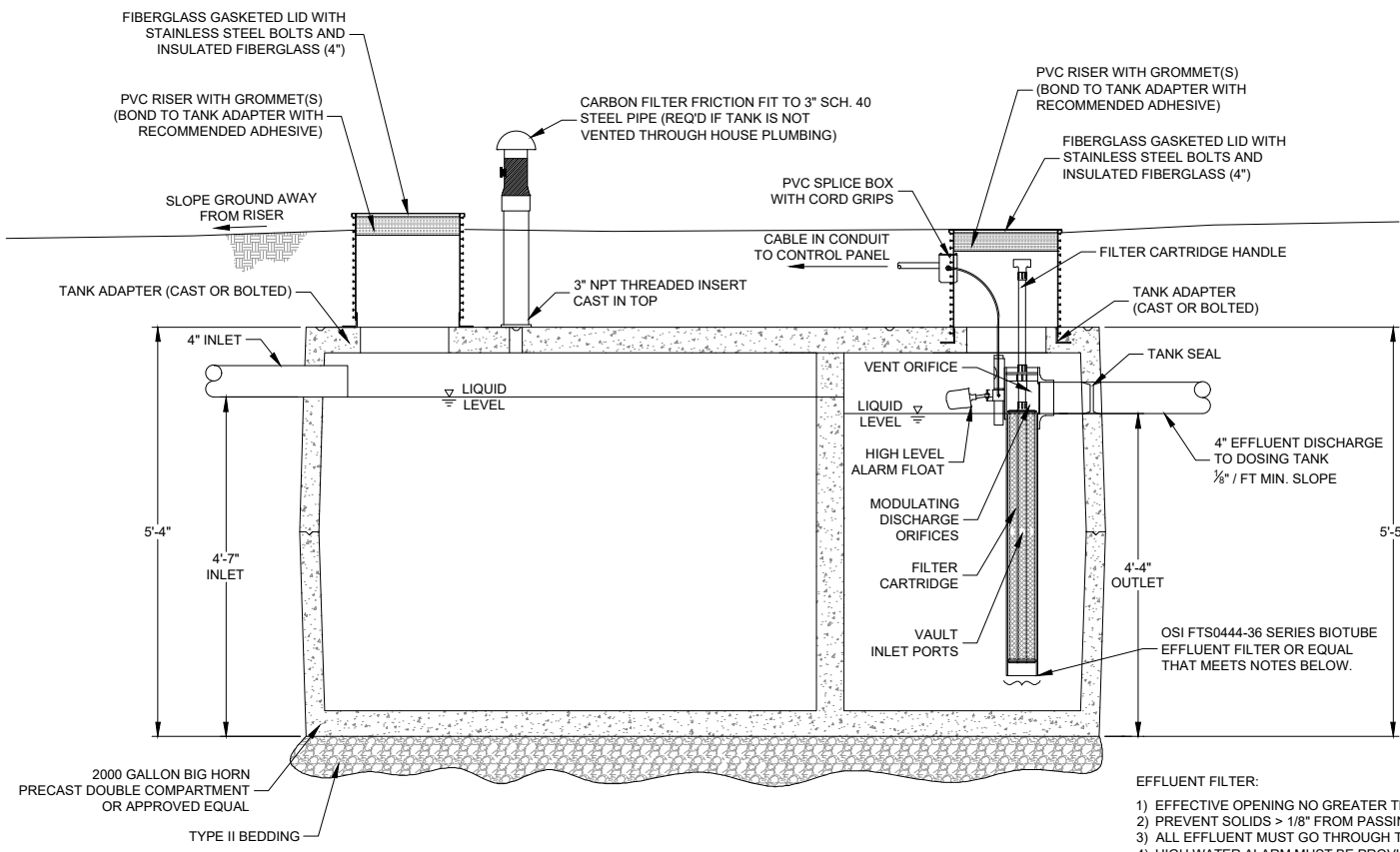
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DSGN BY: ZAG
APPR BY: ZAG
DATE: 08/2022
Q.C. REVIEW BY: _____
DATE: _____

CASPER COLLEGE
BARN 4 SEPTIC UPGRADES
CASPER WYOMING

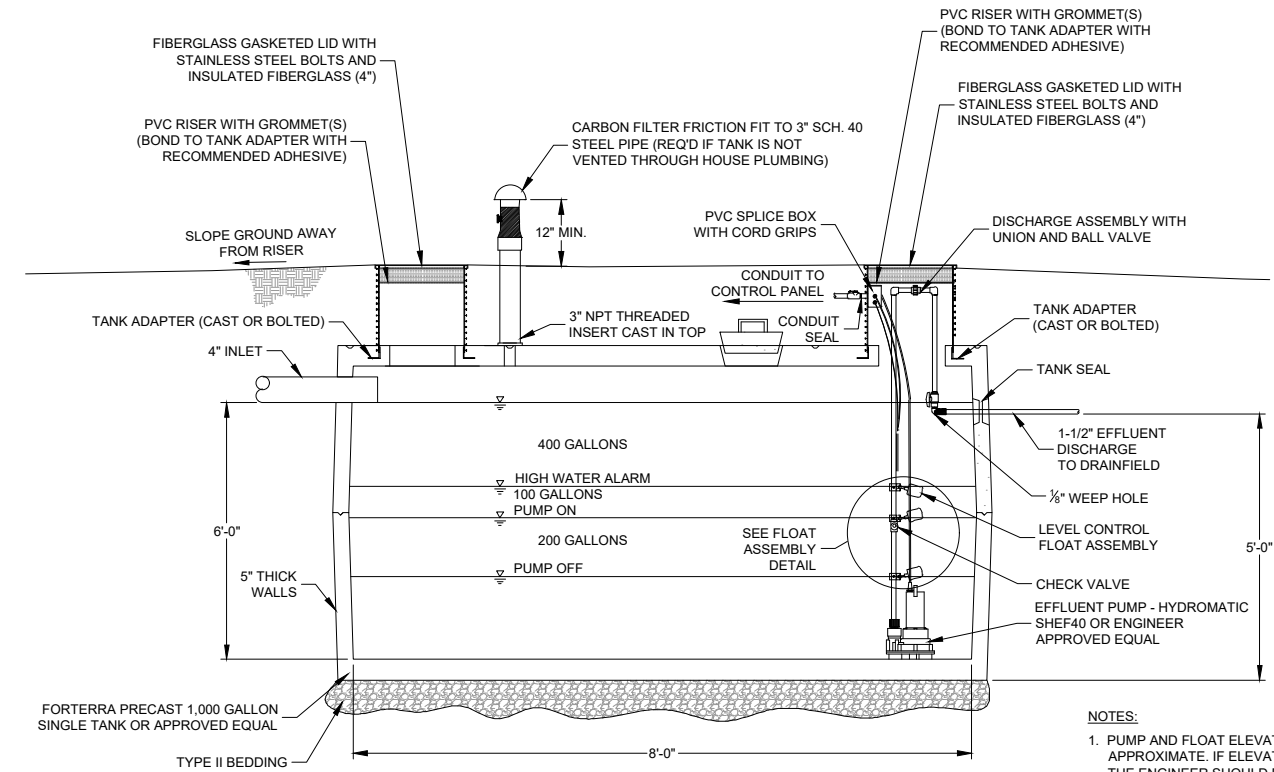
DETAILS

PROJECT NUMBER 6002.012
SHEET NUMBER 5
DRAWING NUMBER D-1



1 2,000 GALLON DOUBLE COMPARTMENT SEPTIC TANK
SCALE: N.T.S.

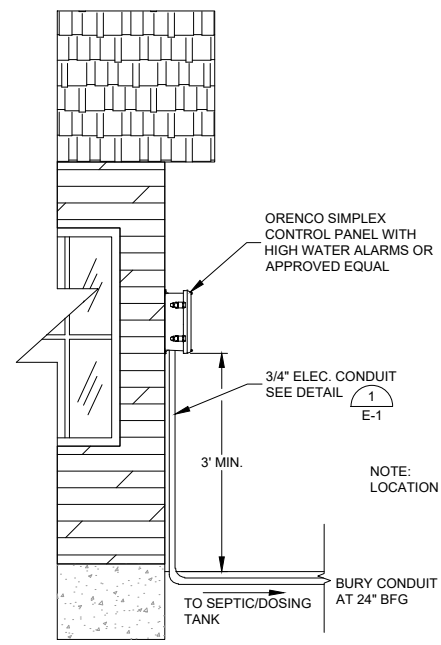
- EFFLUENT FILTER:**
- 1) EFFECTIVE OPENING NO GREATER THAN 1/8"
 - 2) PREVENT SOLIDS > 1/8" FROM PASSING THROUGH
 - 3) ALL EFFLUENT MUST GO THROUGH THE FILTER
 - 4) HIGH WATER ALARM MUST BE PROVIDED
 - 5) FILTER HANDLE TO EXTEND TO GROUND SURFACE
 - 6) MUST HAVE PROCESS CONTROLLED FILTER OPENINGS
 - 7) FILTER MATERIAL MUST BE CORROSION RESISTANT
 - 8) FILTER MUST MEET ANS/NSF STANDARD 46
 - 9) O&M MANUAL MUST BE PROVIDED



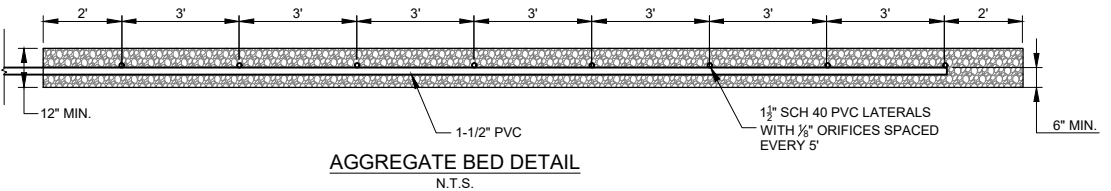
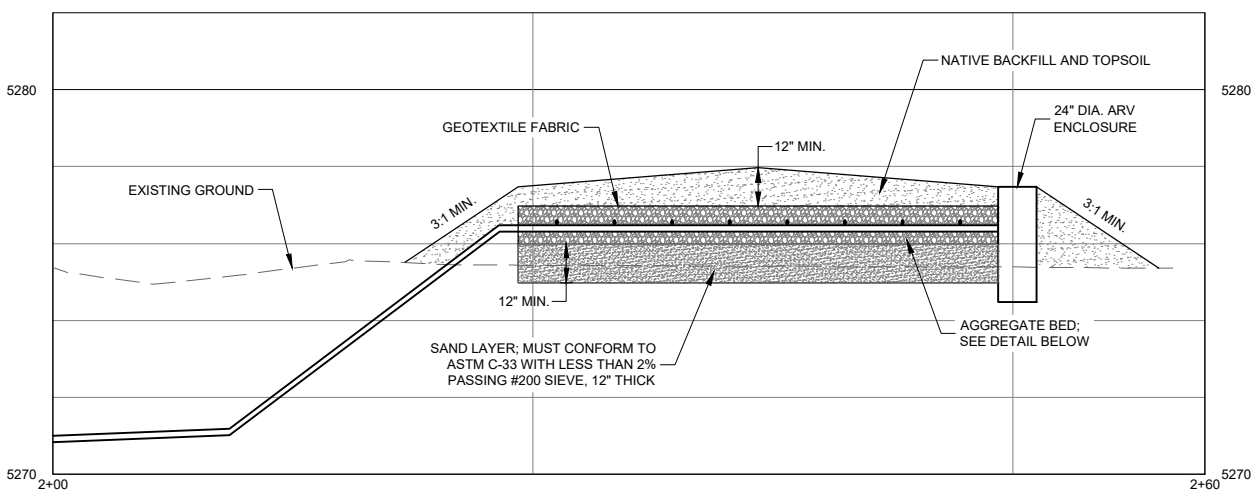
2 5' MANHOLE DOSING TANK
SCALE: N.T.S.

NOTES:
1. PUMP AND FLOAT ELEVATIONS ARE AN APPROXIMATE. IF ELEVATIONS DIFFER IN THE FIELD, THE ENGINEER SHOULD BE CONTACTED TO CONFIRM PUMP AND VOLUMES.

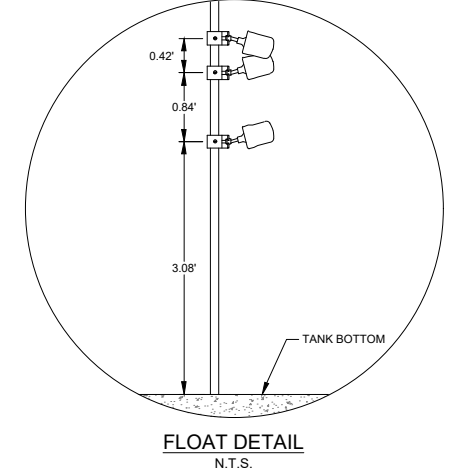
DOSING TANK ELEVATIONS		
	ELEV (FT)	VOL (GAL)
DOSING TANK INV.	5269.01	400
ALARM	5267.34	100
PUMP ON	5266.92	200
PUMP OFF	5266.08	



3 CONTROL PANEL
SCALE: N.T.S.



4 DRAINFIELD LAYOUT
SCALE: N.T.S.



FLOAT DETAIL
N.T.S.

- NOTE TO CONTRACTOR:**
1. CONTRACTOR SHALL LOCATE ALL UTILITY LINES WITHIN PROPERTY PRIOR TO CONSTRUCTION
 2. PRIOR TO CLOSE OF CONTRACT, CONTRACTOR SHALL SEED DISTURBED AREAS WITH GRASS SEED ACCEPTABLE TO THE OWNER.
 3. ELECTRICAL SOURCE PROVIDED BY OWNER
 4. NO WATER SOFTENERS OR HOT TUB EFFLUENT SHALL BE ALLOWED TO ENTER SEPTIC SYSTEM. NOTIFY ENGINEER IMMEDIATELY IF EFFLUENT IS OTHER THAN "RESIDENTIAL STRENGTH".

CONSTRUCTION DRAWINGS
AUGUST 2022

W:\6002 CASPER COLLEGE\B4 SEPTIC\CAD\B4SEPTIC\B4SEPTIC\DWG_02-05_DETAILS.DWG

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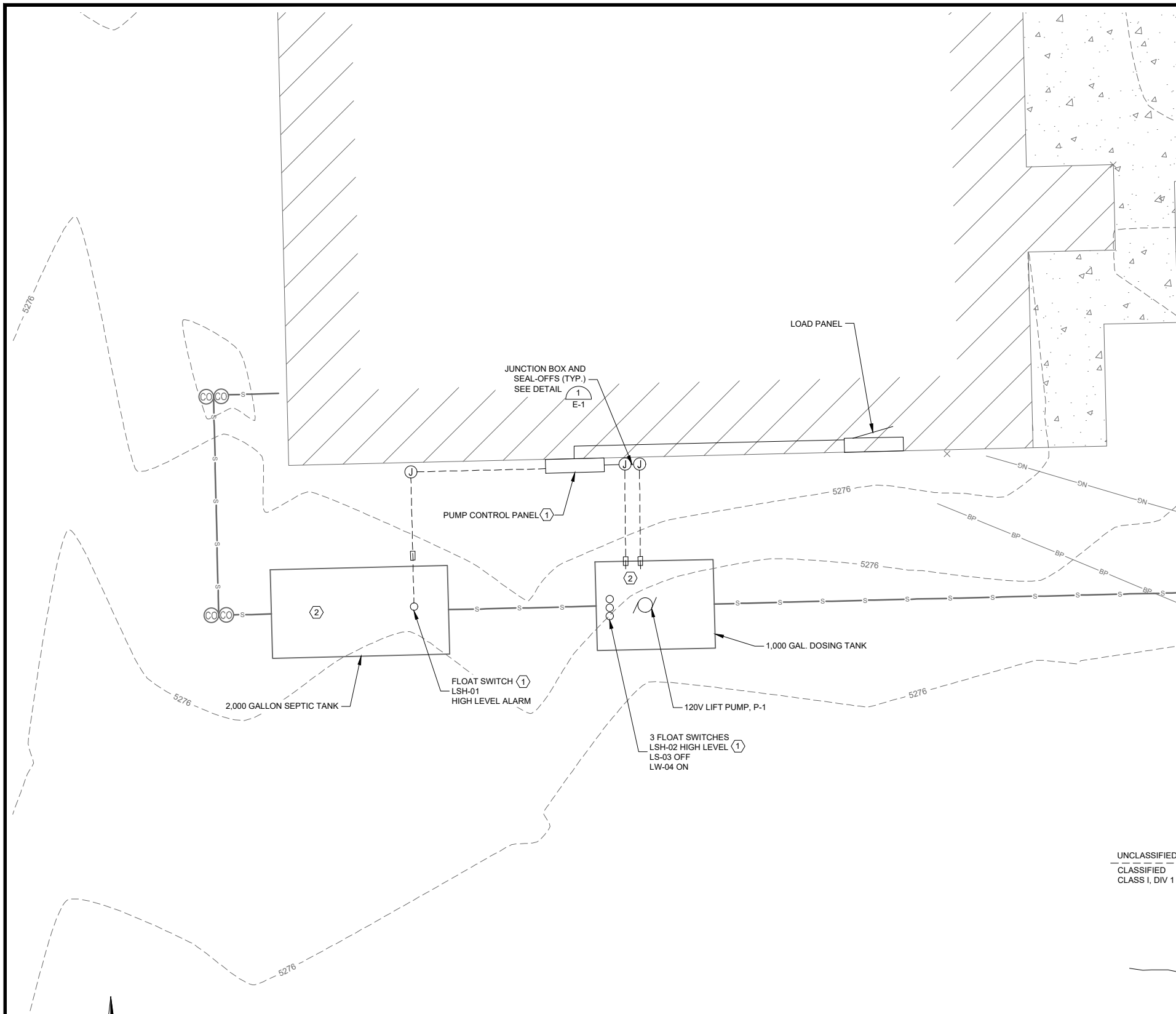
PROFESSIONAL ENGINEER
ZANE A. GREEN
12927
Date 8/19/22
WYOMING

DRAWN BY: KRL
DSGN BY: ZAG
APPR BY: ZAG
DATE: 08/2022
Q.C. REVIEW BY: _____
DATE: _____

CASPER COLLEGE
BARN 4 SEPTIC UPGRADES
CASPER WYOMING

PROJECT NUMBER 6002.012
SHEET NUMBER 6
DRAWING NUMBER D-2

DETAILS

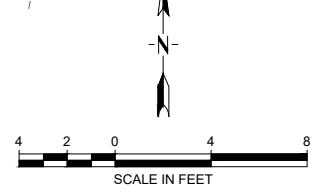


ELECTRICAL KEY NOTES

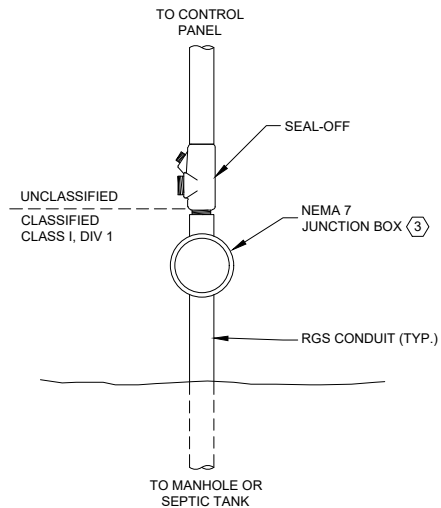
- ① PARALLEL HIGH LEVEL FLOAT SWITCH IN EITHER TANK TO OPERATE THE HIGH LEVEL ALARM AT THE PUMP CONTROL PANEL.
- ② AREAS INSIDE SEPTIC AND DOSING TANKS ARE CONSIDERED CLASS 1, DIVISION 1 EXPLOSION HAZARD AREAS.
- ③ SPLICE POINT FOR POWER AND CONTROLS CONDUCTORS. SIZE JUNCTION BOX TO ACCOMMODATE CONDUCTORS AND ASSOCIATED SPLICES.

GENERAL NOTES:

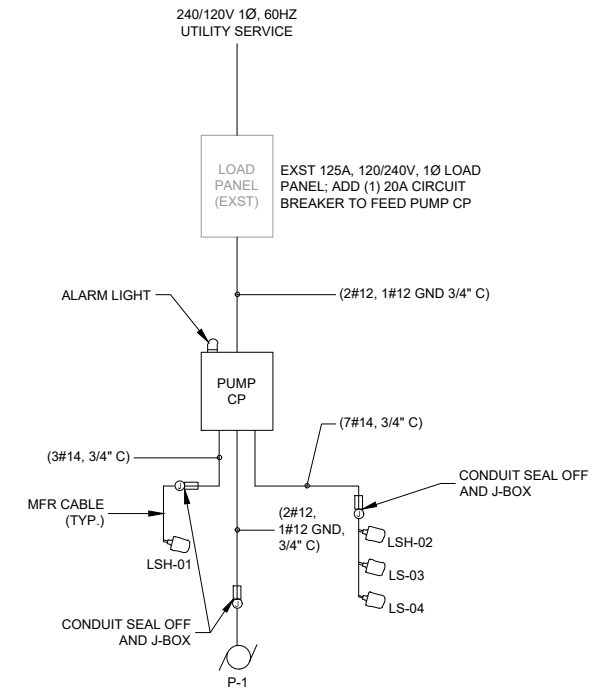
- A. THE COMPLETED INSTALLATION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE, AND LOCAL ORDINANCES AND REGULATIONS. CONTRACTOR SHALL OBTAIN NECESSARY PERMITS AND INSPECTIONS REQUIRED BY THE GOVERNING AUTHORITIES. ALL WORK SHALL BE DONE IN A NEAT, WORKMANLIKE, FINISHED, AND SAFE MANNER, ACCORDING TO THE LATEST PUBLISHED N.E.C.A. STANDARDS OF INSTALLATION, UNDER COMPETENT SUPERVISION.
- B. THIS PROJECT CONSISTS OF NEW AND RE-WORKED AREAS OF THE CASPER COLLEGE BARN 4 NEAR CASPER, WY. VISIT THE SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND ALL FACTORS/INCIDENTAL WORK WHICH MAY AFFECT THE EXECUTION OF THIS WORK.
- C. ALL MATERIALS SHALL BE NEW AND OF THE BEST QUALITY, MANUFACTURED IN ACCORDANCE WITH NEMA, ANSI, U.L., OR OTHER APPLICABLE STANDARDS. THE USE OF MANUFACTURERS NAMES, MODELS AND NUMBERS IS INTENDED TO ESTABLISH STYLE, QUALITY, APPEARANCE, USEFULNESS AND BID PRICE. PROPOSED SUBSTITUTIONS SHALL BE SUBMITTED DURING THE SUBMITTAL PROCESS IN WRITING AND REVIEWED BY THE ENGINEER PRIOR TO ORDERING THE EQUIPMENT.
- D. PROTECT ALL ELECTRICAL MATERIAL AND EQUIPMENT INSTALLED UNDER THIS DIVISION AGAINST DAMAGE BY OTHER TRADES, WEATHER CONDITIONS OR ANY OTHER CAUSES. EQUIPMENT FOUND DAMAGED OR IN OTHER THAN NEW CONDITION WILL BE REJECTED AS DEFECTIVE.
- E. LEAVE THE SITE CLEAN, REMOVE ALL DEBRIS, EMPTY CARTONS, TOOLS, CONDUIT, WIRE SCRAPS AND ALL MISCELLANEOUS SPARE EQUIPMENT AND MATERIALS USED IN THE WORK DURING CONSTRUCTION. ALL COMPONENTS SHALL BE FREE OF DUST, GRIT, AND FOREIGN MATERIALS, LEFT AS NEW BEFORE FINAL ACCEPTANCE OF WORK. PRIME AND REPAIR ALL STRUCTURAL SURFACES THAT HAVE BEEN DRILLED OR WELDED.
- F. ALL CABLE ROUTING IS DIAGRAMMATIC. CONTRACTOR TO ROUTE CABLE AS REQUIRED TO AVOID OBSTACLES AND TO FOLLOW EXISTING STRUCTURAL SUPPORTS OR CABLE TRAYS.
- G. ALL EXTERIOR CONDUIT TO BE RGS. ALL INTERIOR CONDUIT TO BE EMT. ALL CONDUCTORS SHALL BE 600V RATED THHN/THWN COPPER.
- H. CONDUIT SEALS FOR RGS RATED FOR CLASS I, DIV. 1 AREAS.
- I. CONTRACTOR TO CONFIRM WITH OWNER LOCATION OF LOAD PANEL AND ALARM PANEL LOCATION.



ELECTRICAL PLAN
SCALE: 1" = 4'



1 DETAIL
SCALE: N.T.S.



PARTIAL ONE-LINE
SCALE: N.T.S.

CONSTRUCTION DRAWINGS
AUGUST 2022

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Professional Engineer
BRIAN C. LITVINSKY
16108
Date 08/19/22
WYOMING

DRAWN BY: KRL
DSGN BY: BCL
APPR BY: BCL
DATE: 08/2022
Q.C. REVIEW BY: MWB
DATE: 07/2022

CASPER COLLEGE
BARN 4 SEPTIC UPGRADES
CASPER WYOMING

ELECTRICAL SITE PLAN AND PARTIAL ONE-LINE DIAGRAM

PROJECT NUMBER 6002.012
SHEET NUMBER 7
DRAWING NUMBER E-1

W:\6002 CASPER COLLEGE\012 BARN 4 SEPTIC\CAD\SHETS\ELECTRICAL\012-E1-SITE PLAN.DWG PLOTTED BY:KATELYN LOLLAR ON Aug/18/2022

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