

VICINITY MAP

Prepared for:
**NORTH VILLAGE
SPECIAL SERVICE DISTRICT**
 P.O. BOX 519
 HEBER CITY, UT 84032

Prepared by:
BT ENGINEERING
 ENGINEER
 Contact: Jason Bradford, P.E.
 801-633-1048



LOCATION MAP

BIDDING DRAWINGS FOR
UVU SEWER LIFT STATION
 PREPARED FOR
NORTH VILLAGE SPECIAL SERVICE DISTRICT
 WASATCH COUNTY, UTAH

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CIVIL DESIGN BY BT ENGINEERING
 STRUCTURAL DESIGN BY EPIC ENGINEERING
 ELECTRICAL DESIGN BY SKM ENGINEERING

This project shall comply with all provisions of
 the Heber City Municipal Code



NO.	DATE	REVISION	BY
09.01.003	FEBRUARY 2026		
DRAWN BY:	CHECKED BY:		
JB	TT		
PROJECT MANAGER:			
T. TIMOTHY			
COVER SHEET			

GENERAL NOTES:

THE CONTRACTOR SHALL CAREFULLY READ ALL OF THE NOTES AND SPECIFICATIONS, THE CONTRACTOR SHALL BE SATISFIED AS TO THEIR TRUE MEANING AND INTENT AND SHALL BE RESPONSIBLE FOR COMPLYING WITH EACH.

- ALL IMPROVEMENTS SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE FOLLOWING: PROJECT PLANS AND SPECIFICATIONS, JORDANELLE SPECIAL SERVICE DISTRICT STANDARD SPECIFICATIONS AND CONSTRUCTION DETAILS, AND THE HEBER CITY STANDARD SPECIFICATIONS AND CONSTRUCTION DETAILS, WHERE APPLICABLE.
- PRIOR TO PERFORMING ANY WORK, THE CONTRACTOR SHALL CONTACT CONSTRUCTION MANAGER FOR A PRE-CONSTRUCTION CONFERENCE.

A. OWNER:	B. ENGINEER:
NORTH VILLAGE SPECIAL SERVICE DISTRICT 5780 N. OLD HWY 40 HEBER CITY, UT 84032 (435) 654-9233 CONTACT: DAVE FULLER, ASSISTANT GENERAL MANAGER	BT ENGINEERING CONTACT: JASON BRADFORD PHONE: (801) 633-1048
- IT IS INTENDED THAT THESE PLANS AND SPECIFICATIONS REQUIRE ALL LABOR AND CONTRACTOR PROVIDED MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IMMEDIATELY REGARDING ANY DISCREPANCIES OR AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. THE CONSTRUCTION MANAGER'S INTERPRETATION THEREOF SHALL BE CONCLUSIVE.
- WHERE THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.
- THE CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PROJECT PLANS AND SPECIFICATIONS. THEREFORE, THE OWNER IS RELYING UPON THE EXPERIENCE AND EXPERTISE OF THE CONTRACTOR, IT SHALL BE EXPECTED THAT PRICES PROVIDED WITHIN THE CONTRACT DOCUMENTS SHALL INCLUDE ALL LABOR AND CONTRACTOR PROVIDED MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL BE COMPETENT, KNOWLEDGEABLE AND HAVE SPECIAL SKILLS IN THE NATURE, EXTENT AND INHERENT CONDITIONS OF THE WORK TO BE PERFORMED. CONTRACTOR SHALL ALSO ACKNOWLEDGE THAT THERE ARE CERTAIN PECULIAR AND INHERENT CONDITIONS EXISTENT IN THE CONSTRUCTION OF THE PARTICULAR FACILITIES, WHICH MAY CREATE, DURING THE CONSTRUCTION PROGRAM, UNUSUAL OR PECULIAR UNSAFE CONDITIONS HAZARDOUS TO PERSONS, PROPERTY AND THE ENVIRONMENT. CONTRACTOR SHALL BE AWARE OF SUCH PECULIAR RISKS AND HAVE THE SKILL AND EXPERIENCE TO FORESEE AND TO ADOPT PROTECTIVE MEASURES TO ADEQUATELY AND SAFELY PERFORM THE CONSTRUCTION WORK WITH RESPECT TO SUCH HAZARDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LICENSES REQUIRED FOR THE CONSTRUCTION AND COMPLETION OF THE PROJECT, AND SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS AND CONDITIONS OF ALL PERMITS AND APPROVALS APPLICABLE TO THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT THE NECESSARY RIGHTS-OF-WAY, EASEMENTS, AND/OR PERMITS ARE SECURED PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT WHERE APPLICABLE FOR ANY WORK DONE WITHIN RIGHTS-OF-WAY OR EASEMENTS FROM HEBER CITY, WASATCH COUNTY, AND/OR UDOT. CONTRACTOR SHALL NOTIFY CITY, COUNTY, AND/OR STATE, 24 HOURS IN ADVANCE OF COMMENCING THE WORK, OR AS REQUIRED BY SAID PERMITS.
- THE CONTRACTOR SHALL, AT THE TIME OF BIDDING, AND THROUGHOUT THE PERIOD OF THE CONTRACT, BE LICENSED IN THE STATE OF UTAH AND SHALL BE BONDABLE FOR AN AMOUNT EQUAL TO OR GREATER THAN THE AMOUNT BID AND TO DO THE TYPE OF WORK CONTEMPLATED IN THE PLANS AND SPECIFICATIONS. CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PLANS AND SPECIFICATIONS.
- CONTRACTOR SHALL INSPECT THE SITE OF THE WORK PRIOR TO BIDDING TO SATISFY THEMSELVES BY PERSONAL EXAMINATION OR BY SUCH OTHER MEANS AS THEY MAY PREFER, OF THE LOCATION OF THE PROPOSED WORK, AND OF THE ACTUAL CONDITIONS OF AND AT THE SITE OF WORK. IF, DURING THE COURSE OF THEIR EXAMINATION, A BIDDER FINDS FACTS OR CONDITIONS WHICH APPEAR TO THEM TO BE IN CONFLICT WITH THE LETTER OR SPIRIT OF THE PROJECT PLANS AND SPECIFICATIONS, THEY SHALL CONTACT THE CONSTRUCTION MANAGER FOR ADDITIONAL INFORMATION AND EXPLANATION BEFORE SUBMITTING THEIR BID.
- SUBMISSION OF A BID BY THE CONTRACTOR SHALL CONSTITUTE ACKNOWLEDGMENT THAT, IF AWARDED THE CONTRACT, THEY HAVE RELIED AND ARE RELYING ON THEIR OWN EXAMINATION OF: (1) THE SITE OF THE WORK, (2) ACCESS TO THE SITE, AND (3) ALL OTHER DATA AND MATTERS REQUISITE TO THE FULFILLMENT OF THE WORK AND ON THEIR OWN KNOWLEDGE OF EXISTING FACILITIES ON AND IN THE VICINITY OF THE SITE OF THE WORK TO BE CONSTRUCTED UNDER THIS CONTRACT.
- THE INFORMATION PROVIDED BY THE OWNER OR THE ENGINEER IS NOT INTENDED TO BE A SUBSTITUTE FOR, OR A SUPPLEMENT TO THE INDEPENDENT VERIFICATION BY THE CONTRACTOR TO THE EXTENT SUCH INDEPENDENT INVESTIGATION OF SITE CONDITIONS IS DEEMED NECESSARY OR DESIRABLE BY THE CONTRACTOR. CONTRACTOR SHALL ACKNOWLEDGE THAT THEY HAVE NOT RELIED SOLELY UPON OWNER OR ENGINEER FURNISHED INFORMATION REGARDING SITE CONDITIONS IN PREPARING AND SUBMITTING THEIR BID.
- THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, BARRICADES, SIGNS, FLAGMEN OR OTHER DEVICES NECESSARY FOR PUBLIC SAFETY.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, SANITARY FACILITIES AND TELEPHONE SERVICES AS REQUIRED FOR THE CONTRACTORS USE DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE CONSTRUCTION MANAGER.
- THE CONTRACTOR SHALL EXERCISE DUE CAUTION AND SHALL CAREFULLY PRESERVE BENCH MARKS, CONTROL POINTS, REFERENCE POINTS AND ALL SURVEY STAKES, AND SHALL BEAR ALL EXPENSES FOR REPLACEMENT AND/OR ERRORS CAUSED BY THEIR UNNECESSARY LOSS OR DISTURBANCE.
- THE CONTRACTOR AGREES THAT:
 - THEY SHALL BE RESPONSIBLE TO CLEAN THE JOB SITE AT THE END OF EACH PHASE OF WORK.
 - THEY SHALL BE RESPONSIBLE TO REMOVE AND DISPOSE OF ALL TRASH, SCRAP AND UNUSED MATERIAL AT THEIR OWN EXPENSE IN A TIMELY MANNER.
 - THEY SHALL BE RESPONSIBLE TO MAINTAIN THE SITE IN A NEAT, SAFE AND ORDERLY MANNER AT ALL TIMES.
 - THEY SHALL BE RESPONSIBLE TO KEEP MATERIALS, EQUIPMENT, AND TRASH OUT OF THE WAY OF OTHER CONTRACTORS SO AS NOT TO DELAY THE JOB. FAILURE TO DO SO WILL RESULT IN A DEDUCTION FOR THE COST OF CLEAN UP FROM THE FINAL PAYMENT.
 - THEY SHALL BE RESPONSIBLE FOR THEIR OWN SAFETY, TRAFFIC CONTROL, PERMITS, RETESTING AND RE-INSPECTIONS AT THEIR OWN EXPENSE.
 - UNLESS OTHERWISE NOTED ALL EXCESS SOILS AND MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE LAWFULLY DISPOSED OF OFF SITE AT THE CONTRACTOR'S EXPENSE.
 - MAINTAIN EROSION CONTROL MEASURES ASSOCIATED WITH THE JOBS SITE AS DESIGNATED IN SWPPP.
 - COMPLY WITH APPLICABLE OSHA AND RSHS STANDARDS.
- THE CONTRACTOR SHALL PROVIDE PROOF OF INSURANCE WITH NVSSD AND BT ENGINEERING IDENTIFIED "ADDITIONAL INSURED".
- DUST TO BE CONTROLLED 24 HOURS PER DAY, 7 DAYS PER WEEK, AS CONDITIONS DICTATE.
- CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION STAKING.
- FOR ALL WORK WITHIN PUBLIC RIGHTS-OF-WAY OR EASEMENTS, THE CONTRACTOR SHALL PRESERVE THE INTEGRITY AND LOCATION OF ANY AND ALL PUBLIC UTILITIES AND PROVIDE THE NECESSARY CONSTRUCTION PROTECTIVE CONTROL. CONTRACTOR SHALL, THROUGH THE ENCROACHMENT PERMIT PROCESS, VERIFY WITH THE NECESSARY REGULATORY AGENCIES, THE NEED FOR ANY TRAFFIC ROUTING PLAN. IF A PLAN IS REQUIRED, CONTRACTOR SHALL PROVIDE A PLAN AND RECEIVE PROPER APPROVALS PRIOR TO BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES CONSTRUCTED UNDER THIS CONTRACT. ALL TESTING SHALL CONFORM TO THE REGULATORY AGENCY'S STANDARD SPECIFICATIONS. ALL TESTING AND INSPECTION SHALL BE PAID FOR BY THE CONTRACTOR; ALL RE-TESTING AND/OR RE-INSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.
- IF EXISTING IMPROVEMENTS NEED TO BE DISTURBED AND/OR REMOVED FOR THE PROPER PLACEMENT OF IMPROVEMENTS TO BE CONSTRUCTED BY THESE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING OR REPAIRING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND/OR REPLACEMENT OF EXISTING IMPROVEMENTS. THERE WILL BE NO EXTRA COST DUE TO THE CONTRACTOR FOR REPLACING OR REPAIRING EXISTING IMPROVEMENTS.

GENERAL NOTES (CONT):

- WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE PLANS OR SPECIFICATIONS, SAID FACILITIES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, AFTER PROPER BACKFILLING AND/OR CONSTRUCTION, WITH MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL EXISTING FACILITIES. THE FINISHED PRODUCT SHALL BE SUBJECT TO THE APPROVAL OF THE CONSTRUCTION MANAGER, AND THE RESPECTIVE REGULATORY AGENCY.
- THE CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF AS-BUILT RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF PIPING, STRUCTURES AND OTHER FACILITIES. AS-BUILT RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO THE CONSTRUCTION MANAGER, ONE SET OF NEATLY MARKED AS-BUILT RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. AS-BUILT RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE AS-BUILT RECORD DRAWING SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATIONS REDLINED AS A PRECONDITION TO FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.
- WORK IN EASEMENTS AND/OR RIGHTS-OF-WAY IS SUBJECT TO THE APPROVAL AND ACCEPTANCE OF THE REGULATORY AGENCY RESPONSIBLE FOR OPERATION AND/OR MAINTENANCE OF SAID EASEMENTS AND/OR RIGHTS-OF-WAY.

CLEARING AND GRADING NOTES

- THE EXISTING TOPOGRAPHY SHOWN ON THESE PLANS IS BASED ON TOPOGRAPHIC SURVEY PREPARED BY BT ENGINEERING.
- CONTRACTOR SHALL PROVIDE A TEMPORARY EROSION CONTROL PLAN AND SUBMIT REQUEST FOR SWPPP PERMIT. OWNER REQUIRED TO OBTAIN OTHER PERMITS FROM WASATCH COUNTY AND THE STATE OF UTAH FOR TEMPORARY EROSION CONTROL. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ALL TEMPORARY EROSION CONTROL AND MAINTENANCE, AND SHALL PROVIDE EROSION AND SEDIMENT CONTROL FORMS TO THE COUNTY.

PIPING INSTALLATION NOTES:

- CONTRACTOR SHALL SLOPE ALL EXCAVATION TO AN ANGLE OF REPOSE OF MATERIAL BEING EXCAVATED OR USE BRACING OR SHORING, CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH OSHA REGULATIONS AND GUIDELINES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FLAGGING, CAUTION SIGNS AND PUBLIC SAFETY ON ALL ADJACENT STREETS AND CONSTRUCTION SITE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PUBLIC SAFETY AND OSHA SAFETY STANDARDS.
- NATIVE BACK FILL SHALL BE COMPAKTED TO JSSD SPECIFICATIONS.
- CONTRACTOR TO SPACE UTILITIES TO PROVIDE MINIMUM DISTANCES AS REQUIRED BY LOCAL, COUNTY, STATE AND INDIVIDUAL UTILITY CODES.
- ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE JSSD STANDARD SPECIFICATIONS
- CONTRACTOR SHALL BE RESPONSIBLE FOR BACKFILL OF UTILITY TRENCHES TO LEVEL OF FINISHED GRADE.
- ADJUST PIPE LINE ALIGNMENT IN FIELD (PER ENGINEER) TO ACCOMMODATE EXISTING UTILITIES AND TERRAIN.
- RESTORE ROAD SURFACE TO EXISTING CONDITIONS AT ALL ROAD CROSSINGS.

UDOT NOTES

- EXCEPT FOR EMERGENCIES, NO EXCAVATION SHALL BE MADE WITHIN UDOT ROW WITHOUT AGREEMENT OR AUTHORIZATION FROM UDOT.
- TURN LANES AT ALL SIGNALIZED INTERSECTIONS MUST BE MAINTAINED.
- ALL EXCAVATIONS IN THE ASPHALT WITHIN UDOT RIGHT-OF-WAY SHALL BE BACKFILLED WITH FLOWABLE FILL (UDOT SPEC) AND 7-INCHES MINIMUM OF ASPHALT OR MATCH EXISTING DEPTH, WHICHEVER IS GREATER. ASPHALT SHALL COMPLY WITH UDOT SPECIFICATIONS.
- ALL EXCAVATIONS WITHIN UDOT RIGHT-OF-WAY GREATER THAN 10' AWAY FROM THE EDGE OF ASPHALT MAY BE BACKFILLED WITH NATIVE BACKFILL (90% COMPACTION)
- ALL EXCAVATIONS WITHIN UDOT RIGHT-OF-WAY CLOSER THAN 10' TO THE EDGE OF ASPHALT MAY BE BACKFILLED WITH NATIVE BACKFILL (97% COMPACTION)
- ALL STEEL PLATES IN TRAVEL LANES SHALL BE MILLED IN.
- ANY POTHOLES IN ASPHALT SHALL REQUIRE CORING WITH CORES BEING REINSTALLED WITH UTILIBOND.
- ANY NEW PAVEMENT MARKINGS OR PAVEMENT MARKINGS THAT ARE REMOVED FROM THE HIGHWAY ARE TO BE REPLACED WITH IN KIND MATERIALS SUCH AS 3M TAPE, THERMOPLASTIC, ETC. ALL PAINT LINES ARE TO BE INSTALLED WITH PERMANENT PAINT APPLICATION BEFORE COMPLETION OF THE PERMIT AND MUST HAVE AT LEAST 6 MONTHS LIFE AS DETERMINED BY UDOT PERMITS OFFICER. LANE STRIPPING MUST BE KEPT CURRENT AT ALL TIMES.
- ALL SIGNS INSTALLED ON THE UDOT RIGHT-OF-WAY SHALL BE HIGH INTENSITY GRADE PER UDOT STANDARD DRAWING SN 11. BASE IS SLB1 AND POSTS MUST MEET THE SN 10 AND FOR INTERSTATE SIGNING, REFER TO THE SN SERIES.
- BEFORE COMMENCING WORK ON THE STATE HIGHWAY, THE CONTRACTOR SHALL HAVE A PERFORMANCE BOND ON FILE WITH UDOT, OBTAIN AN ENCROACHMENT PERMIT FROM THE REGION THREE PERMITS OFFICE, AND PROVIDE PROOF OF LIABILITY INSURANCE IN THE UTAH DEPARTMENT OF TRANSPORTATION'S NAME. THE MINIMUM AMOUNT IS \$1,000,000 PER OCCURRENCE AND \$2,000,000 IN AGGREGATE.

CONSTRUCTION NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SURVEY BENCHMARK, STAKING AND CONTROL PER SPECIFICATIONS. OWNER SHALL PROVIDE AVAILABLE SURVEY CONTROL USED FOR DESIGN..
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS TESTING WITHIN THE TRENCH ZONE. TESTING SHALL FOLLOW SPECIFICATION AT A MINIMUM OF 100 FOOT INTERVALS.
- CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ALL MATERIAL TESTING OF CONCRETE STRUCTURES.

SPECIAL INSPECTION NOTES:

- SPECIAL INSPECTION REQUIRED OF WATER STOP AT WALL TO FOOTING CONNECTION PRIOR TO CONCRETE PLACEMENT.

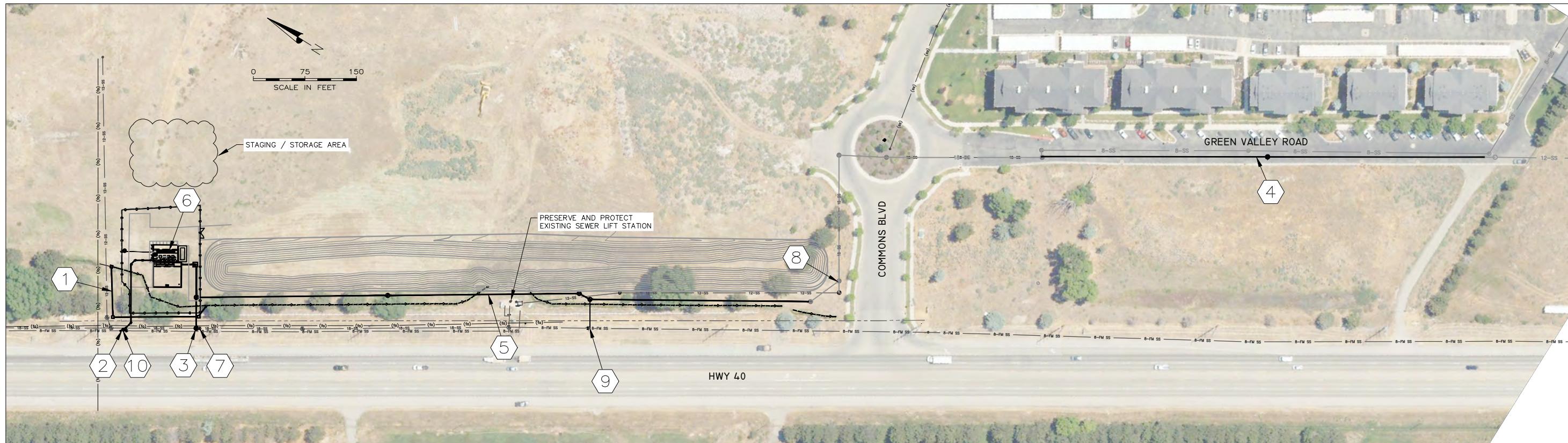
BT ENGINEERING

NORTH VILLAGE SPECIAL SERVICE DISTRICT
UVU SEWER LIFT STATION REPLACEMENT
GENERAL NOTES



NO.	DATE	REVISION	BY

PROJECT NO.:	DATE:
09-01-003	FEBRUARY 2026
DRAWN BY:	CHECKED BY:
JB	TT
PROJECT MANAGER:	
T. TIMOTHY	
GENERAL NOTES	



**NORTH VILLAGE SPECIAL SERVICE DISTRICT
UVU SEWER LIFT STATION REPLACEMENT
OVERALL LOCATION AND SEQUENCE PHASING**

BT ENGINEERING



NO.	DATE	REVISION	BY

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09.01.003	FEBRUARY 2026

DRAWN BY:	CHECKED BY:
JB	TT

PROJECT MANAGER:
T. TIMOTHY

OVERALL LOCATION AND
SEQUENCE PHASING

FINISHED GRADE ELEVATIONS		
#	ELEV	DESCRIPTION
A	5656.0	TOP OF SIDEWALK
B	5656.0	TOP OF SIDEWALK / TOP OF ROAD BASE
C	5655.19	TOP OF SIDEWALK
D	5655.09	TOP OF ROAD BASE
E	5655.90	TOP OF ROAD BASE
F	5655.34	TOP OF ROAD BASE
G	5656.68	TOP OF ROAD BASE
H	5658.75	TOP OF ROAD BASE
I	5657.85	TOP OF ROAD BASE
J	5656.90	TOP OF ROAD BASE
K	5654.76	TOP OF ROAD BASE
L	5654.46	TOP OF ROAD BASE
M	5655.49	TOP OF ROAD BASE
N	5654.24	TOP OF ROAD BASE
O	5654.54	TOP OF ROAD BASE
P	5655.79	TOP OF ROAD BASE
Q	5654.75	FINISHED GRADE
R	5654.63	TOP OF ROAD BASE

HWY 40

(CONTRACTOR TO OBTAIN UDOT
ENCROACHMENT PERMIT FOR ALL
WORK WITHIN UDOT ROW)

This detailed architectural site plan illustrates the layout and construction details for a wastewater treatment facility. The plan includes the following key components and annotations:

- Manholes:** MH #1 (existing 18" sewer, 18" in INV EL NW = 5641.54, 18" out INV EL NE = 5641.34), MH #2 (new 5' dia. manhole, 18" in INV EL SE = 5639.04, 18" in INV EL SW = 5639.04, 24" out INV EL NE = 5638.84), and MH #3 (new 5' dia. manhole, 15.13' of 15" ADS at 1.94% slope, 15" INV EL = 5652.31).
- Sewer Lines:** The plan shows various sewer lines including 18" PVC sewer (40.32' at 5.73% slope), 24" PVC sewer (42.27' at 0.10% slope), and 15" gravity sewer (17.84' at 0.56% slope).
- Structures:** A lift station building with dimensions 42' x 20', an irrigation ditch, a below-grade concrete wet well, and a proposed NVSSD property boundary.
- Utilities:** A 16" PVC force main, 2" CTS poly service, and a 2" drinking water meter vault.
- Landscaping and Infrastructure:** Existing trees, irrigation ditches, a UDOT ROW, and a 50' setback from the UDOT ROW.
- Access and Roads:** 15' wide access roads, 20' access roads, and a 14' wide double swing gate.
- Other:** A graphic scale showing 1 inch = 8 ft. Horiz. (22' x 34') and 1 inch = 16 ft. Horiz. (11' x 17').

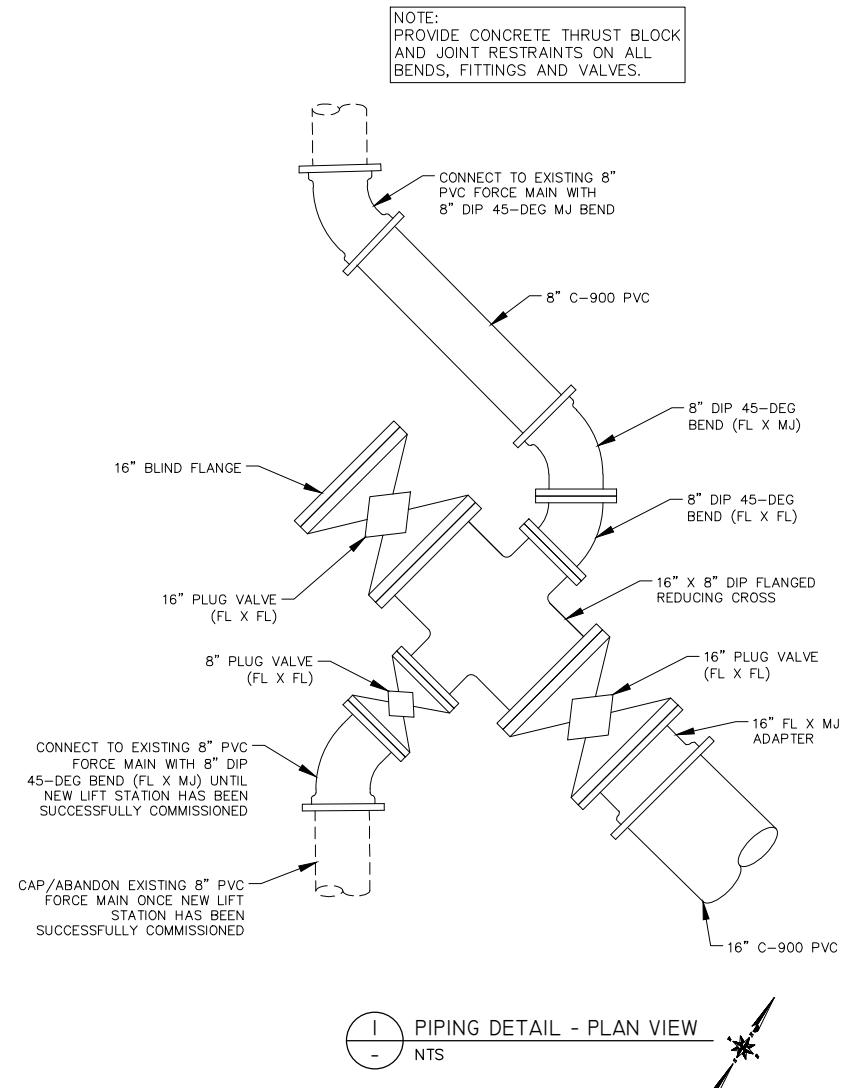
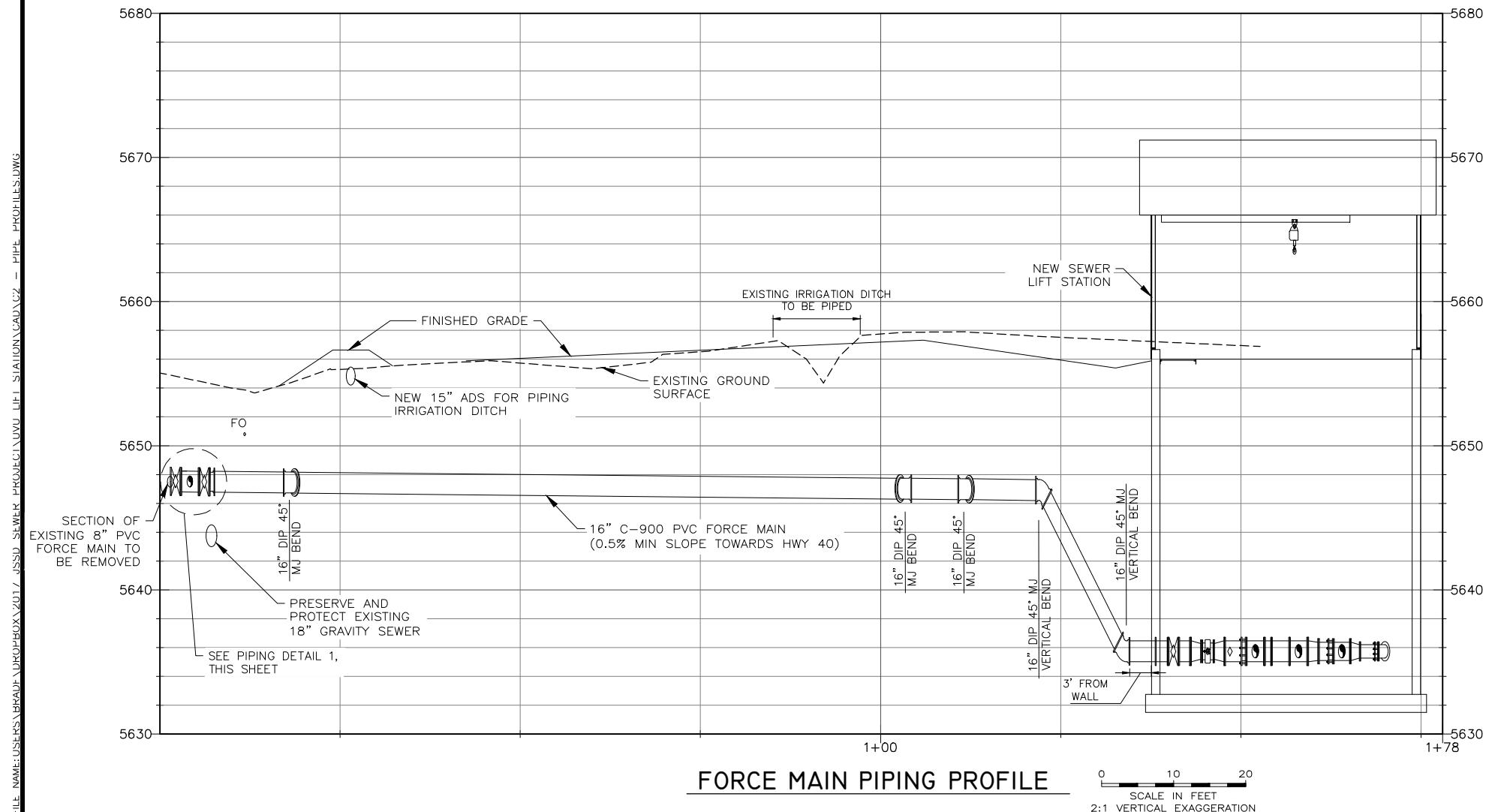
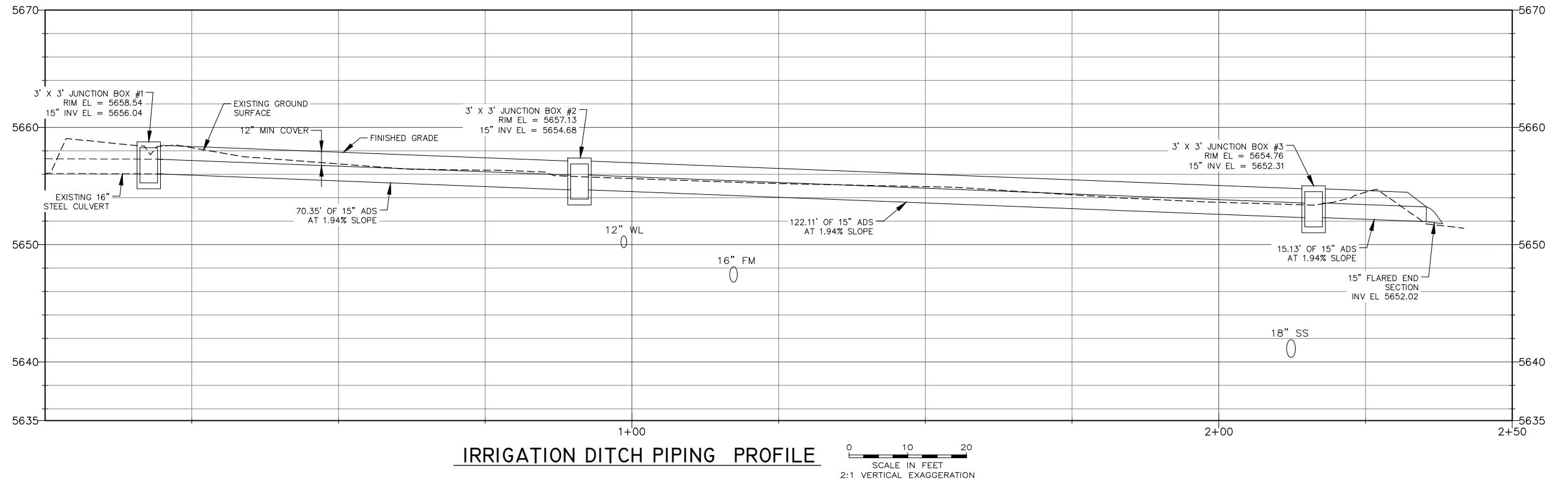
**NORTH VILLAGE SPECIAL SERVICE DISTRICT
UVU SEWER LIFT STATION REPLACEMENT
SITE PLAN**

BT ENGINEERING

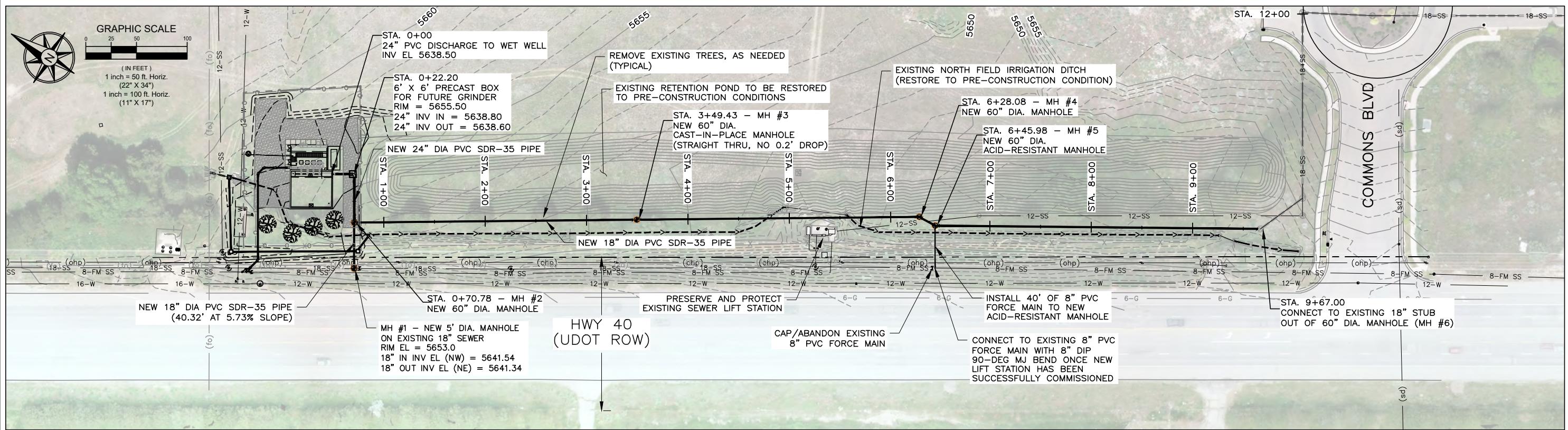
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ICIAL SERVICE DISTRICT
BOX 519
ER CITY, UT 84032
ACT:
E FULLER
(30) 654-9233

SITE PLAN

C-1



O.	DATE	REVISION	B
PROJECT NO.:		DATE:	
9.01.003		FEBRUARY 2002	
DRAWN BY:		CHECKED BY:	
B		TT	
PROJECT MANAGER:			
. TIMOTHY			



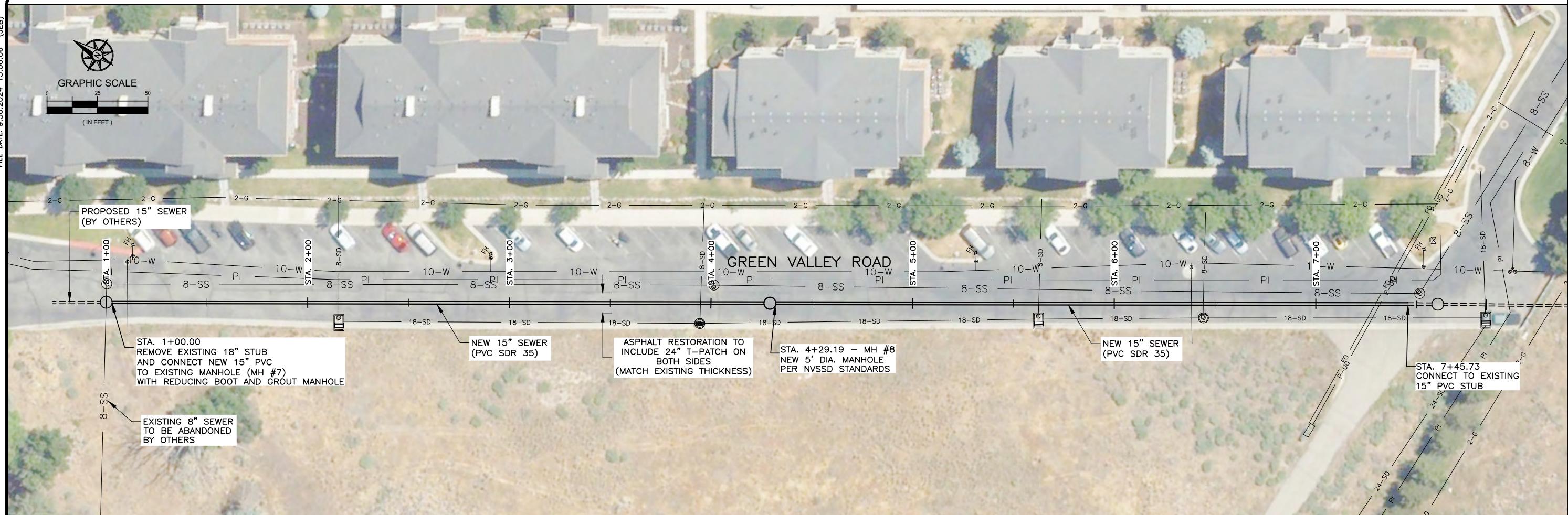
**NORTH VILLAGE SPECIAL SERVICE DISTRICT
UVU SEWER LIFT STATION REPLACEMENT**

BT ENGINEERING



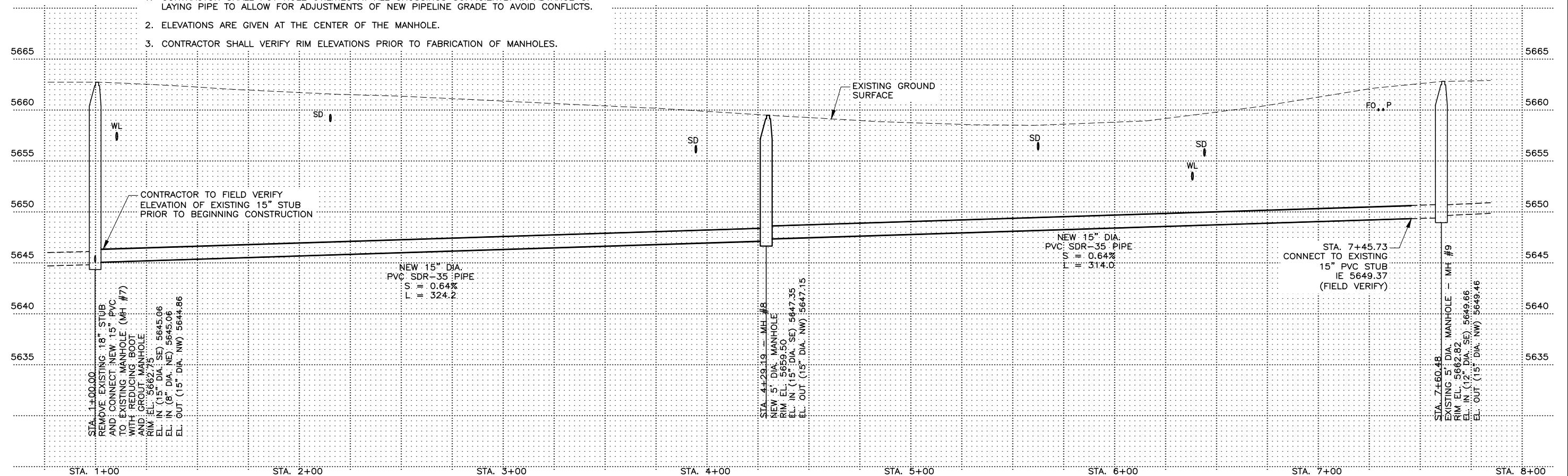
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JB	TT		
PROJECT MANAGER:			
T. TIMOTHY			

18" GRAVITY SEWER



NOTES

1. CONTRACTOR SHALL PIG HOLE UTILITIES AT ALL CROSSINGS SUFFICIENTLY IN ADVANCE OF LAYING PIPE TO ALLOW FOR ADJUSTMENTS OF NEW PIPELINE GRADE TO AVOID CONFLICTS.
2. ELEVATIONS ARE GIVEN AT THE CENTER OF THE MANHOLE.
3. CONTRACTOR SHALL VERIFY RIM ELEVATIONS PRIOR TO FABRICATION OF MANHOLES.



**NORTH VILLAGE SPECIAL SERVICE DISTRICT
UVU SEWER LIFT STATION REPLACEMENT
GREEN VALLEY ROAD GRAVITY SEWER
PLAN AND PROFILE - STA. 4+00 TO STA. 9+00**

BT ENGINEERING

A circular professional engineer stamp. The outer ring contains the words "PROFESSIONAL ENGINEER" at the top and "STATE OF UTAH" at the bottom. The center of the stamp contains the text "NO. 5148332" on the top line, "Jason Bradford" in a stylized font on the middle line, "JASON BRADFORD" in a smaller font directly below it, and "2-4-26" on the bottom line.

C-4

RE:
NORTH VILLAGE
SPECIAL SERVICE DISTRICT
P. BOX 519
BENEFIT CITY, UT 84032
CONTACT:
JOE FULLER
(5) 654-9233

MAXIMUM ALLOWABLE HIGH WATER LEVEL = 5646.0 (WET WELL STORAGE \approx 120,000 GALLONS)

2" HDPE DISCHARGE LINE FROM SUMP PUMP TO WET WELL (TRANSITION FROM 1.5" TO 2" AFTER CHECK VALVE)

24" GRAVITY SEWER (INVERT = 5638.50)

1' - 6"

6"

19'-0"

S=2.0%

S=4.0%

4' x 3' HATCH

4

S-7

28'-0" STEEL BEAM CENTERED OVER PUMPS (END 6" INSIDE DOOR) AND 2 TON HOIST/TROLLEY

3' WIDE GAP IN RAILING WITH SAFETY CHAINS

GRATED LANDING (5'-0" X 12'-2") TO SUPPORT 2 TON LOAD

UPPER F.F. ELEV = 5656.0

ANCHOR VERTICAL PIPES TO WALL (TYPICAL 2 LOCATIONS PER PIPE)

STAINLESS STEEL BALL VALVE ON PUMP DISCHARGE HEADER (SIZED TO MATCH THREADED PORT OPENING) (TYP ALL PUMPS)

LANDING ELEV = 5636.63

LOWER F.F. ELEV = 5632.75

PUMP BASE

5

S-7

2' X 2' X 2' DEEP CATCH BASIN WITH FRAME AND

32

1

23

21

23

24

25

6

5

4

3

10

9

6

18

19

3

VALVE & FITTING SCHE

NO.	DESCRIPTION
1.	SEWER PUMP (1150 GPM) KSB KRT K 150-503
2.	DIP REDUCER
3.	DIP 90° BEND
4.	DIP SPOOL OR FILLER FLANGE (4" LENGTH)
5.	CHECK VALVE (VALMATIC SURGEASTER)
6.	PLUG VALVE WITH HANDWHEEL (FLOMATIC SERIES 540)
7.	DIP REDUCING TEE
8.	DIP REDUCING TEE
9.	FLANGE ADAPTER (ROMAC FCA501)
10.	DIP SPOOL
11.	FLOW METER (SIEMENS CITRANS)

GENERAL MECHANICAL NOTES

1. ALL PIPES PASSING THROUGH CONCRETE FLOORS OR WALLS TO BE AWWA C151 CL D.I.P. W/ THRUST COLLARS. FLANGES TO BE ANSI/AWWA C115/A21.15, RATED FOR 250 PSI, DRILLED TO ASME/ANSI B15.1 CLASS 125.
2. ALL C.I. FLANGES WITHIN THE LIFT STATION SHALL BE 125 LB. ANSI B16.1 FLANGES. ALL C.S. FLANGES WITHIN THE LIFT STATION SHALL BE 150 LB ANSI B18.5 FLANGES.
3. ALL GASKETS BETWEEN FLANGES SHALL BE RED RUBBER.
4. ALL PIPING, FITTINGS AND VALVES SHALL BE ABLE TO OPERATE AT A WORKING PRESSURE OF 150 PSI. ALL PIPING SUITABLE FOR TEST PRESSURE OF 200 PSI.
5. ALL DISIMILAR METAL FLANGE TRANSITIONS SHALL HAVE FULL FACE RUBBER GASKETS AND BE COUPLED TOGETHER WITH INSULATING BOLT PACKS. ALL DISSIMILAR METAL THREAD TRANSITIONS SHALL HAVE DIALECTRIC COUPLERS.
6. CONTRACTOR TO COORDINATE PUMP PEDESTAL HEIGHT AND WALL PENETRATIONS TO MAINTAIN PUMP SUCTION INTAKE 6" ABOVE FINISHED WET WELL FLOOR.
7. CONTRACTOR TO VERIFY ALL EQUIPMENT AND LAYOUT DIMENSIONS PRIOR TO CONSTRUCTION.
8. ALL PIPE FLANGES, VALVES, FITTINGS, METERS AND APPURTENANCES TO MATCH.
9. COATING: ALL BUILDING INTERIOR PIPING, VALVES, FITTINGS AND METERS SHALL BE PAINTED WITH APPROVED EPOXY. COLORS TO BE APPROVED BY OWNER.
10. FLANGED ADAPTERS SHALL BE USED TO ENABLE THE FUTURE REMOVAL OF ANY EQUIPMENT. THE CONTRACTOR SHALL SUBMIT A PIPE FIT-UP DIAGRAM FROM THE FABRICATOR PRIOR TO FABRICATION. THE DIAGRAM SHALL IDENTIFY ADAPTER LOCATIONS.
11. PIPE STANDS SHALL BE INSTALLED TO SUPPORT ALL PIPING RUNS AND ALLOW FOR REMOVAL OF PIPING ELEMENTS SUCH AS FLOW METERS, VALVES, ETC. PIPE STAND DIAGRAM MUST BE SUBMITTED AND APPROVED BY THE OWNER AND ENGINEER PRIOR TO PIPE INSTALLATION. TOTAL OF 11 PIPE STANDS.

A PIPING SECTION VIEW
M-1 0 1 2

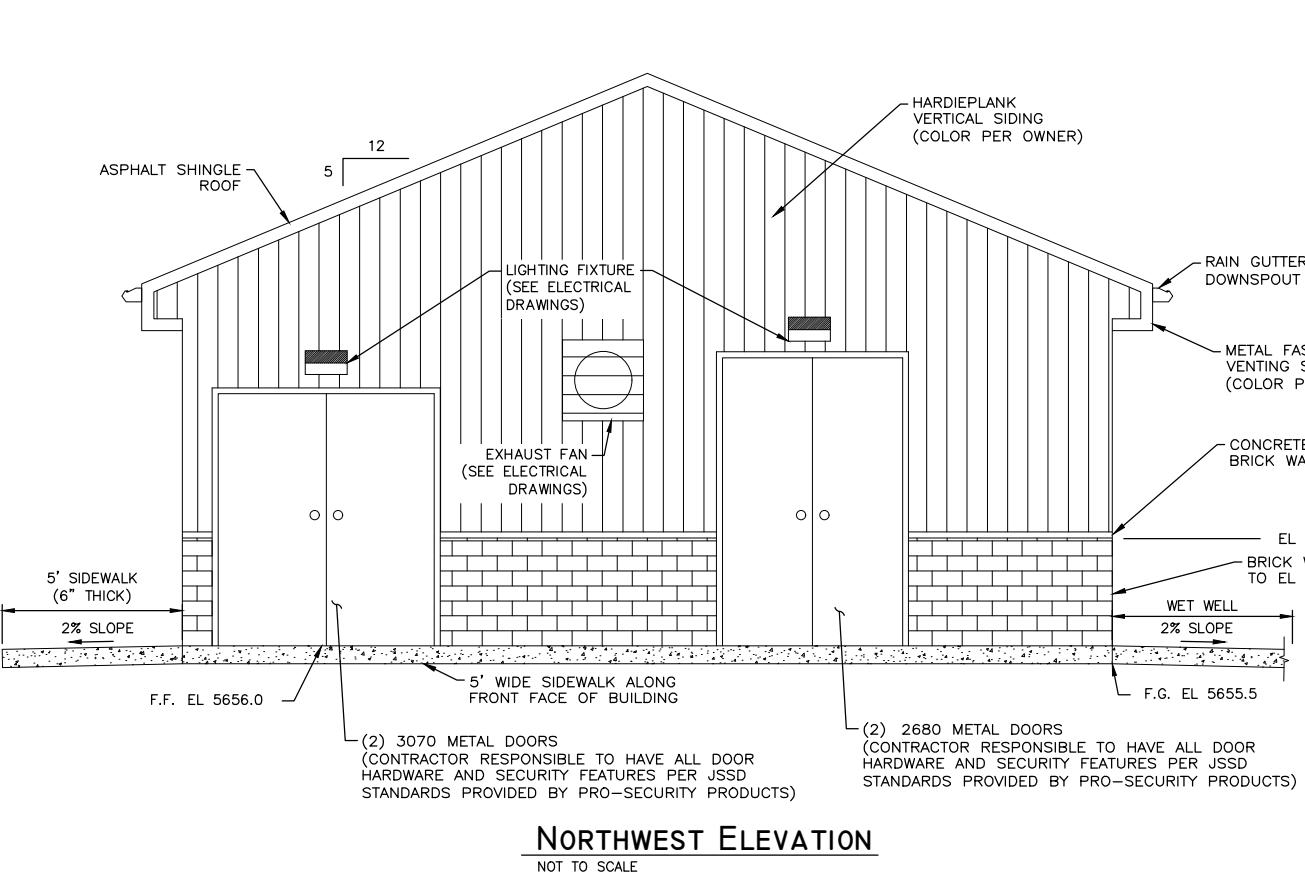
VALVE & FITTING SCHEDULE			
NO.	DESCRIPTION	SIZE	JOINT
1.	SEWER PUMP (1150 GPM) KSB KRT K 150-503	10" X 6"	FL
2.	DIP REDUCER	10" X 6"	FL
3.	DIP 90° BEND	10"	FL
4.	DIP SPOOL OR FILLER FLANGE (4" LENGTH)	10"	FL
5.	CHECK VALVE (VALMATIC SURGEBUGSTER)	10"	FL
6.	PLUG VALVE WITH HANDWHEEL (FLOMATIC SERIES 5400)	10"	FL
7.	DIP REDUCING TEE	16" X 6"	FL
8.	DIP REDUCING TEE	14" X 10"	FL
9.	FLANGE ADAPTER (ROMAC FCA501)	10"	FL
10.	DIP SPOOL	10"	FL X PE
11.	FLOW METER (SIEMENS SITRANS)	12"	FL
12.	DIP REDUCER	14" X 10"	FL
13.	DIP SPOOL WITH WALL FLANGE	16"	FL X PE
14.	FLANGE ADAPTER (ROMAC FCA501)	14"	FL
15.	DIP SPOOL	14"	FL X PE
16.	FLANGE ADAPTER (ROMAC FCA501)	16"	FL
17.	DIP REDUCER	16" X 14"	FL
18.	DIP SPOOL WITH WALL FLANGE	10"	FL
19.	DIP 90° BEND	10"	FL
20.	DIP BLIND FLANGE	10"	FL
21.	DIP 90° BEND	6"	FL
22.	DIP SPOOL WITH WALL FLANGE	6"	FL X PE
23.	DIP SPOOL	6"	FL X PE
24.	FLANGE ADAPTER (ROMAC FCA501)	6"	FL
25.	PLUG VALVE WITH HANDWHEEL (FLOMATIC SERIES 5400)	6"	FL
26.	PLUG VALVE WITH HANDWHEEL (FLOMATIC SERIES 5400)	16"	FL
27.	DIP REDUCING TEE	16" X 10"	FL
28.	DIP SPOOL	16"	FL
29.	DIP SPOOL WITH 1/2" TAP	16"	FL X PE
30.	DIP REDUCER	16" X 12"	FL
31.	DIP FILLER FLANGE (1")	10"	FL
32.	PIPE SUPPORT (ANVIL FIG 264) WITH 1" GROUT PAD	—	—



OBJECT NO.:	DATE:
01.003	FEBRUARY 202
AWN BY:	CHECKED BY:

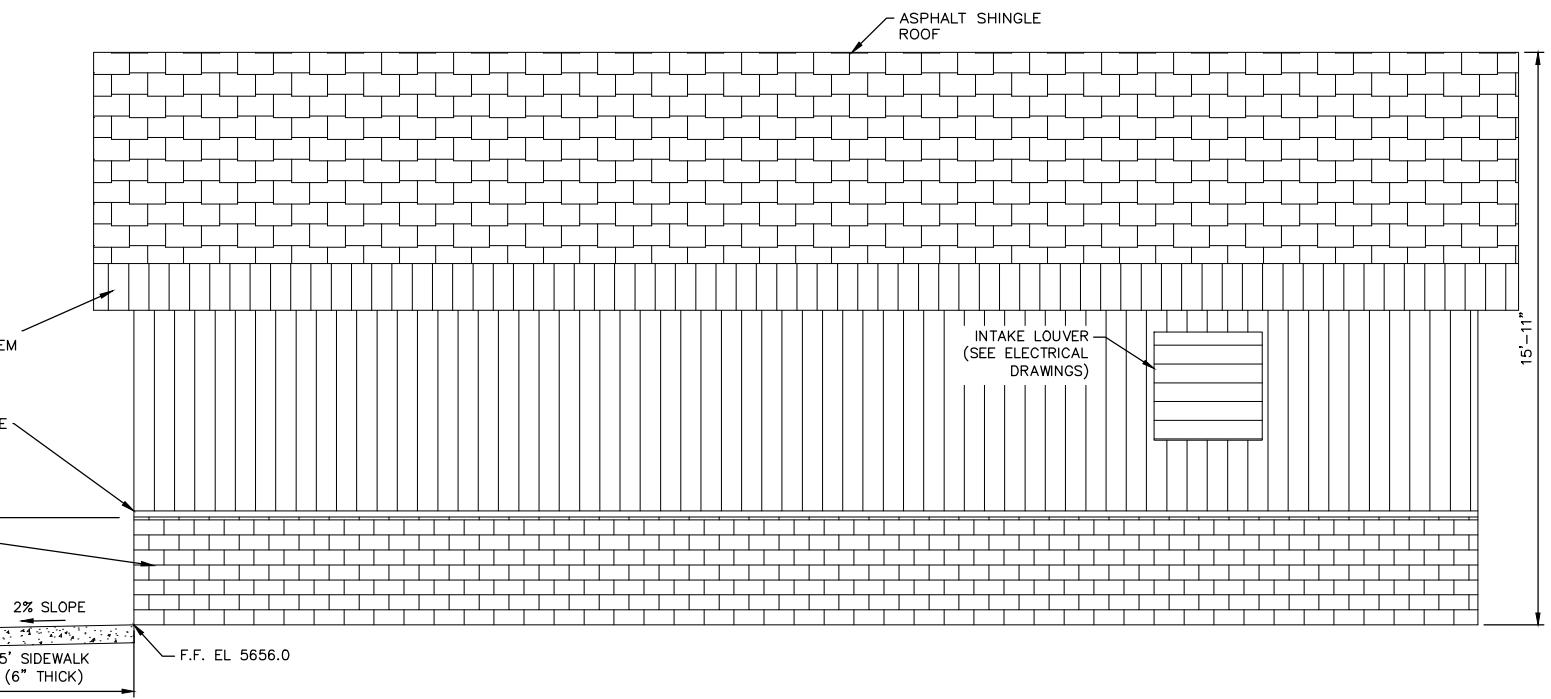
PROJECT MANAGER:
TIMOTHY

PIPING - SECTION VIEW



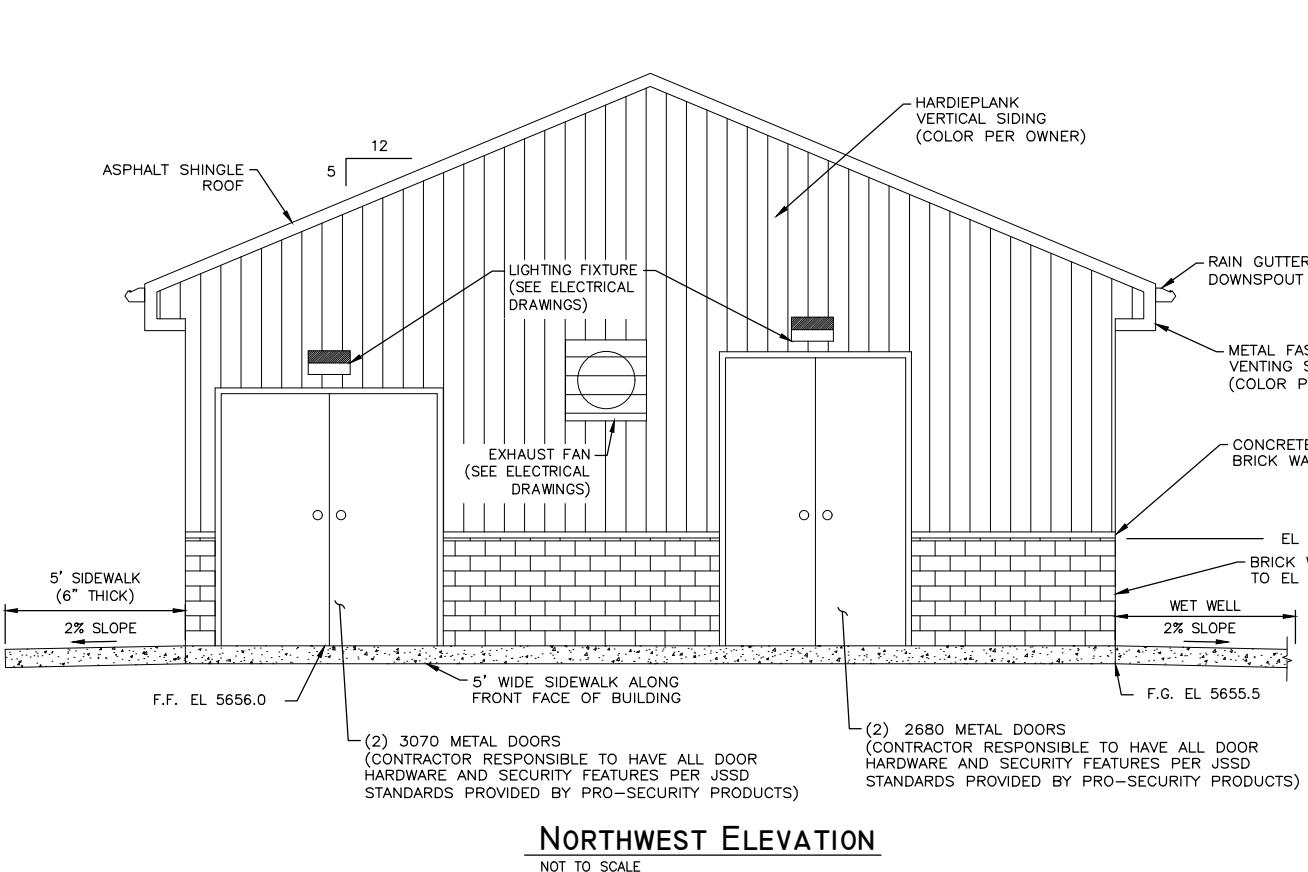
NORTHWEST ELEVATION

NOT TO SCALE



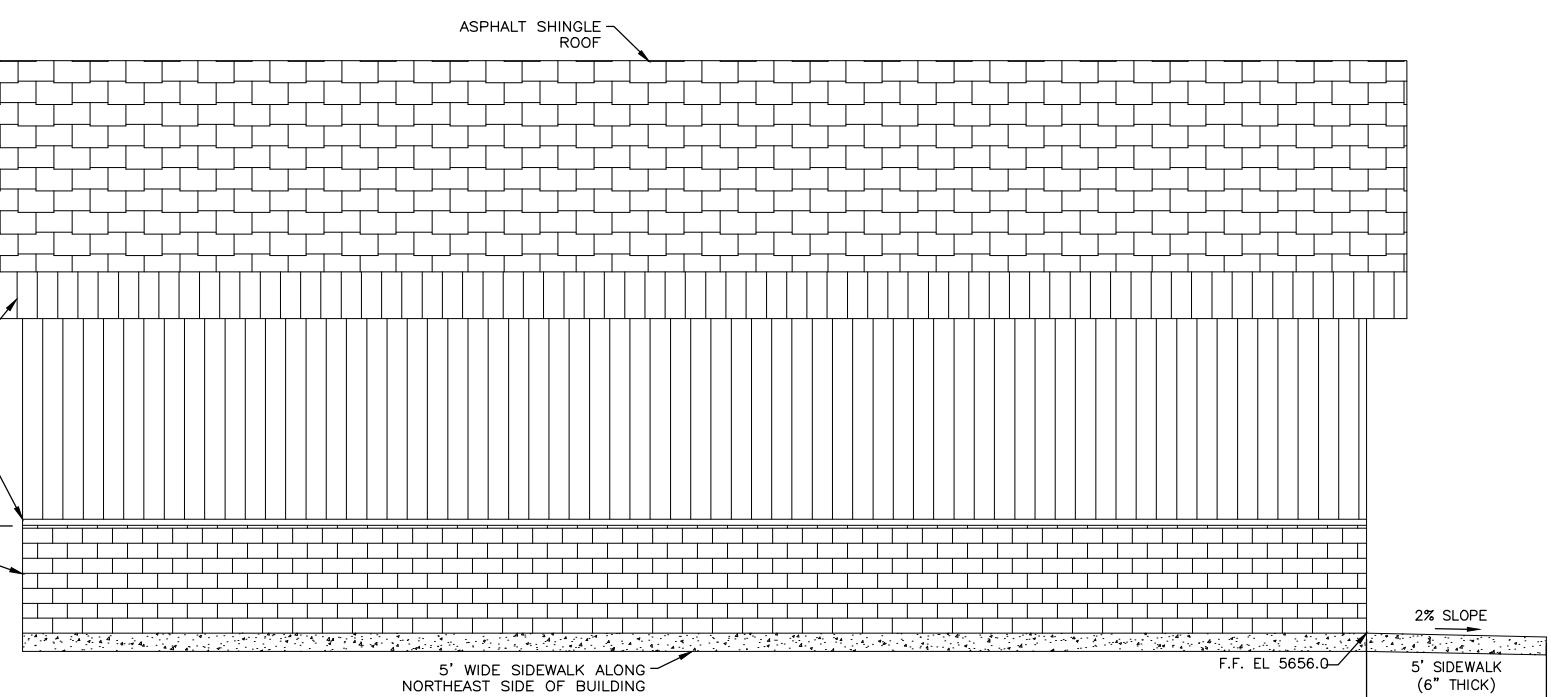
SOUTHWEST ELEVATION

NOT TO SCALE



SOUTHEAST ELEVATION

NOT TO SCALE



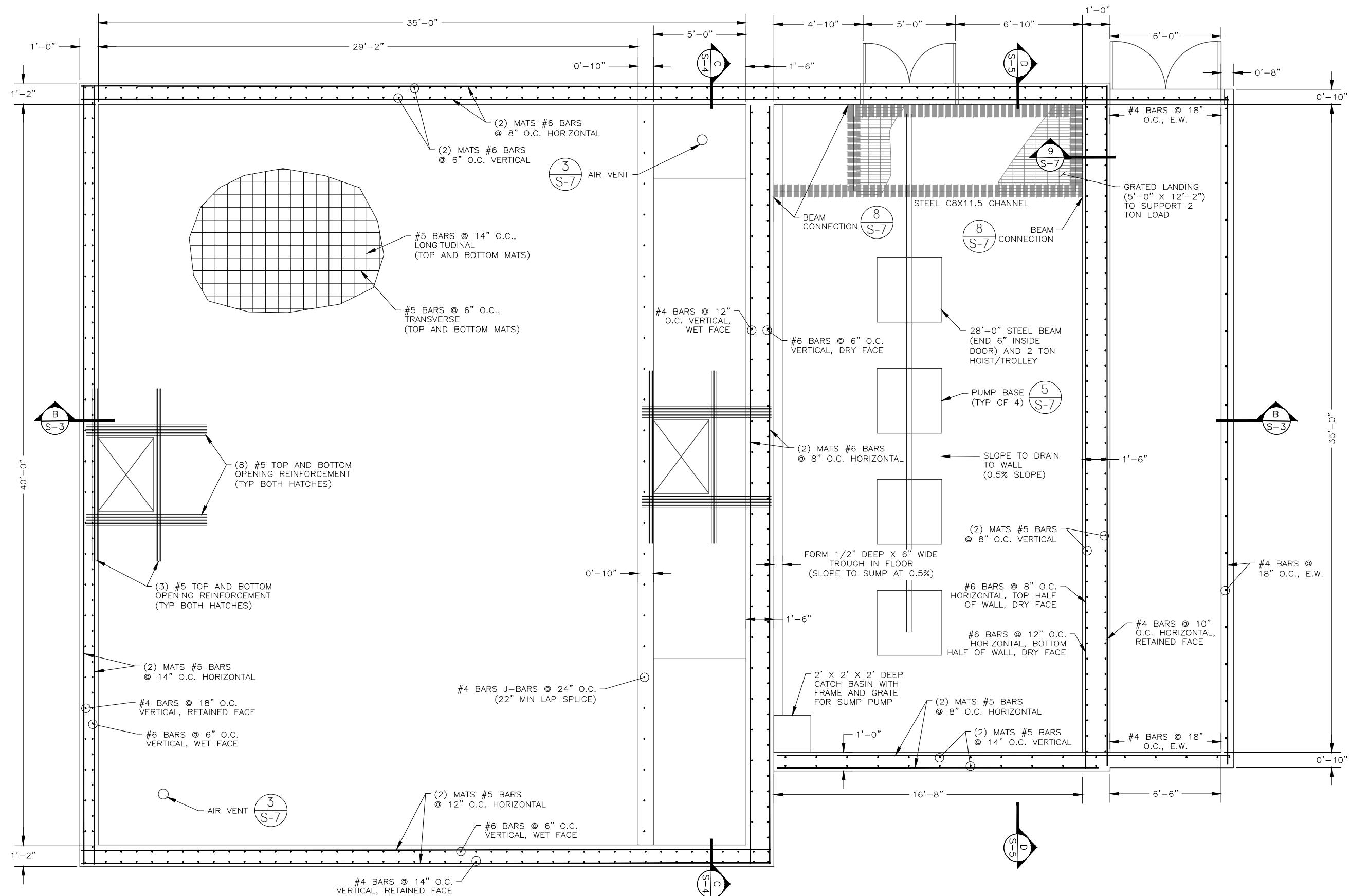
NORTHEAST ELEVATION

NOT TO SCALE

BT ENGINEERING

NORTH VILLAGE SPECIAL SERVICE DISTRICT
UVU SEWER LIFT STATION REPLACEMENT
ELEVATION VIEWS

NO.	DATE	REVISION	BY
09_01_003	FEBRUARY 2026		
DRAWN BY:	CHECKED BY:		
JB	TT		
PROJECT MANAGER:			
T. TIMOTHY			
ELEVATION VIEWS			



STRUCTURAL PLAN

0 1 2
— — —
3/8" = 1'-0"



NO.	DATE	REVISION	BY
09.0.003	02/2026		
DRAWN BY: JB	CHECKED BY: TT		
PROJECT MANAGER: T. TIMOTHY			

GOVERNING CODE: 2021 IBC
OCCUPANCY CATEGORY: IV

SOILS PROPERTIES:
SITE CLASS: D (DEFAULT)
SOIL BEARING PRESSURE:
FILL OR NATIVE - DEFAULT 2500 PSF

FROST DEPTH: 36"
SOIL WEIGHT: 130 PCF

SEISMIC DESIGN:
SS 0.548
S1 0.194
SDS 0.497
SDT 0.286
SEISMIC DESIGN CATEGORY: D
R (WOOD SHEAR WALLS): 6.5
Ie 1.50
Ip 1.50

WIND DESIGN:
BASIC WIND SPEED: 105 MPH
EXPOSURE: C
Iw 1.0

LOADING:
GROUND SNOW LOAD 64 PSF
ROOF SNOW LOAD 64 PSF
ROOF TRUSS DEAD LOAD 20 PSF
FLOOR LIVE LOAD 125 PSF
Is 1.20

GEOTECHNICAL REPORT: WILDING ENGINEERING
PROJECT: 25581
DATE: 1/19/2026

CONCRETE NOTES:

- MINIMUM CONCRETE SPECIFIED CYLINDER STRENGTH 4000 PSI AT 28 DAYS
- REINFORCEMENT TO BE DEFORMED BARS GRADE 60 ACCORDING TO ASTM A-615
- MINIMUM CONCRETE COVER TO BE 2" UNLESS OTHERWISE SHOWN
- ALL REINFORCEMENT DETAILING IS TO BE ACCORDING TO ACI 318 LATEST EDITION
- FLOOR SLAB SHALL BE GIVEN A SMOOTH TROWEL FINISH
- ALL OUTSIDE CONCRETE EDGES SHALL HAVE A 1" CHAMFERED FINISH
- ALL COLD JOINTS TO HAVE WATER STOP ACROSS JOINT
- DO NOT BACKFILL AROUND STRUCTURE UNTIL ROOF HAS BEEN POURED AND CURED FOR 5 DAYS MINIMUM
- CONCRETE FORM WORK TO BE OF ADEQUATE SIZE AND STRENGTH, PROPERLY BRACED TO PREVENT BAGGING OR BULGING, PROTECT ALL CONCRETE FROM FREEZING TEMPERATURES.
- NO FOOTING SHALL BE PLACED ON DISTURBED OR FROZEN SOIL.
- CONSTRUCTION OF CRACK CONTROL JOINTS.
- ALL SURFACES OF CONSTRUCTION JOINTS SHALL BE CLEANED TO REMOVE DUST, CHIPS AND OTHER FOREIGN MATERIAL PRIOR TO PLACING ADJACENT CONCRETE. CRACK CONTROL JOINTS IN SLABS SHALL HAVE A MAXIMUM SPACING OF 15'-0" IN BOTH DIRECTIONS. THE CONTRACTOR SHALL SUBMIT THE DETAILS AND PROPOSED LOCATIONS OF CONSTRUCTION JOINTS AND CRACK CONTROL JOINTS FOR REVIEW BEFORE STARTING CONSTRUCTION.
- ALL FOOTING STEPS SHALL BE PER DETAIL 10/S-5.

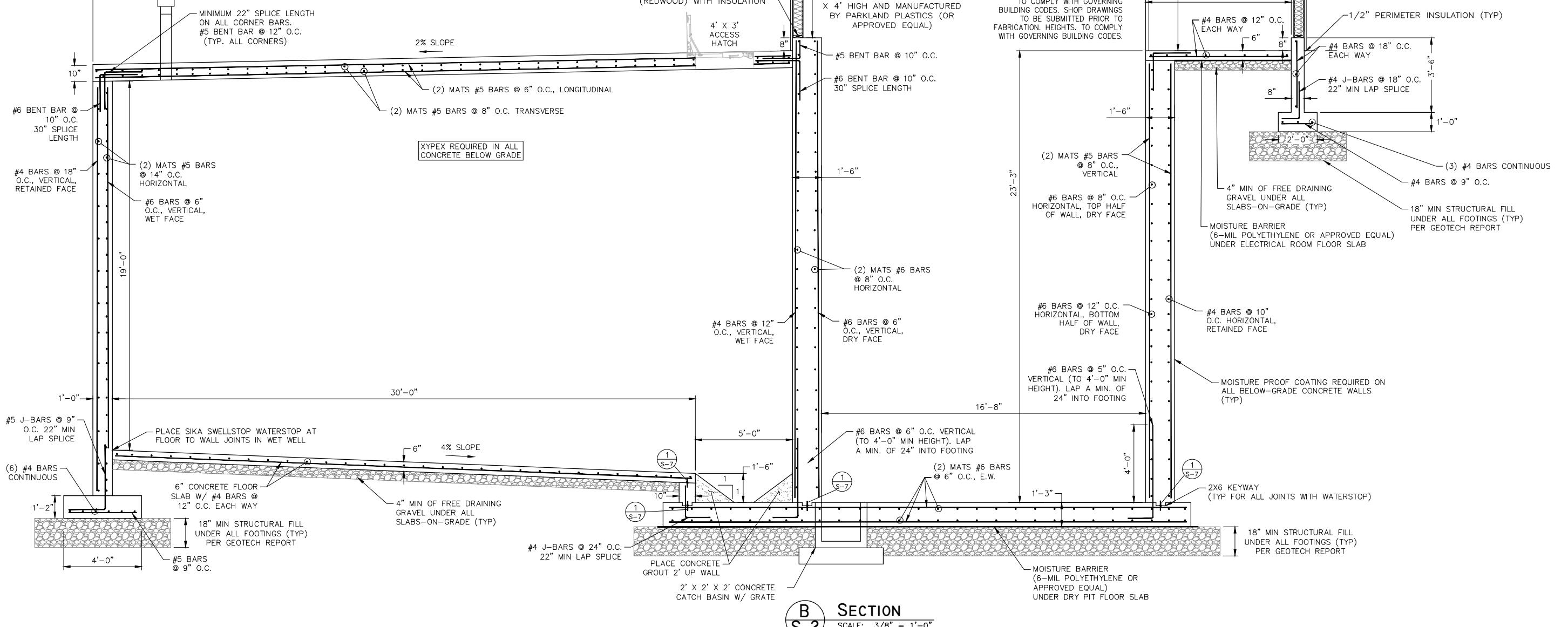
ELECTRICAL ROOM AND DRY PIT CONCRETE FLOOR TO BE PAINTED AS FOLLOWS:

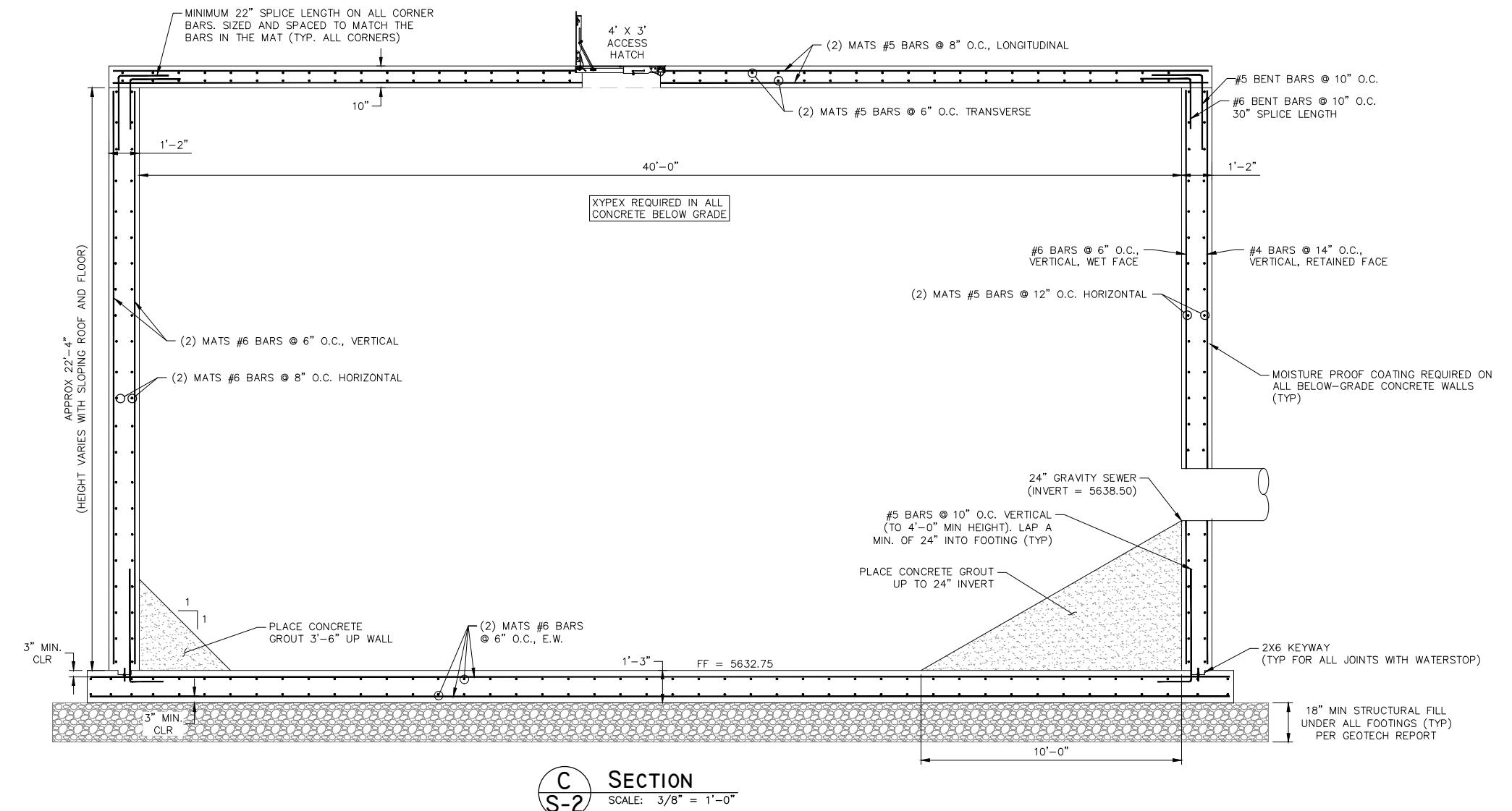
SURFACE PREP	GRIND CONCRETE JOINTS AND FILL VOIDS WITH GROUT. APPLY RUB FINISH
PAINT PRIMER	APPLY EPOXY SURFACE, (SHERWIN-WILLIAMS STEEL-SEAM FT910 OR EQUAL), TO FILL AND SMOOTH HOLES IN CONCRETE SURFACE
FINISH COAT	SHERWIN-WILLIAMS ARMORSEAL TREAD-PLEX, OR EQUAL. 2 COATS OF 4-6 MILS DFT (2ND COAT WITH HI WEAR ADDITIVE). COLOR TO BE APPROVED BY OWNER (OFF-WHITE)

DEFERRED SUBMITTALS

- STAIRS, GUARDS AND HANDRAILS
- SEISMIC ANCHORAGE FOR ELECTRICAL EQUIPMENT
- ROOF TRUSSES

THE ABOVE ITEMS LISTED AS DEFERRED SUBMITTALS TO BE DOCUMENTED WITH CALCULATIONS AND CONSTRUCTION DETAILS. DOCUMENTS TO BE STAMPED AND SIGNED BY THE DESIGN PROFESSIONAL RESPONSIBLE FOR THE DESIGN, WHO IS TO BE LICENSED BY THE STATE OF UTAH. DOCUMENTS TO BE REVIEWED BY ENGINEER OF RECORD WHO IS TO MARK THE DOCUMENTS VERIFYING THE REVIEW AND PROVIDE SIGNED AND STAMPED COVER LETTER. DOCUMENTS TO BE ACCEPTED BY THE ENGINEER OF RECORD WITHOUT REVISION. DOCUMENTS TO BE PROVIDED TO THE COUNTY BUILDING OFFICIAL AFTER REVIEW BY ENGINEER OF RECORD.



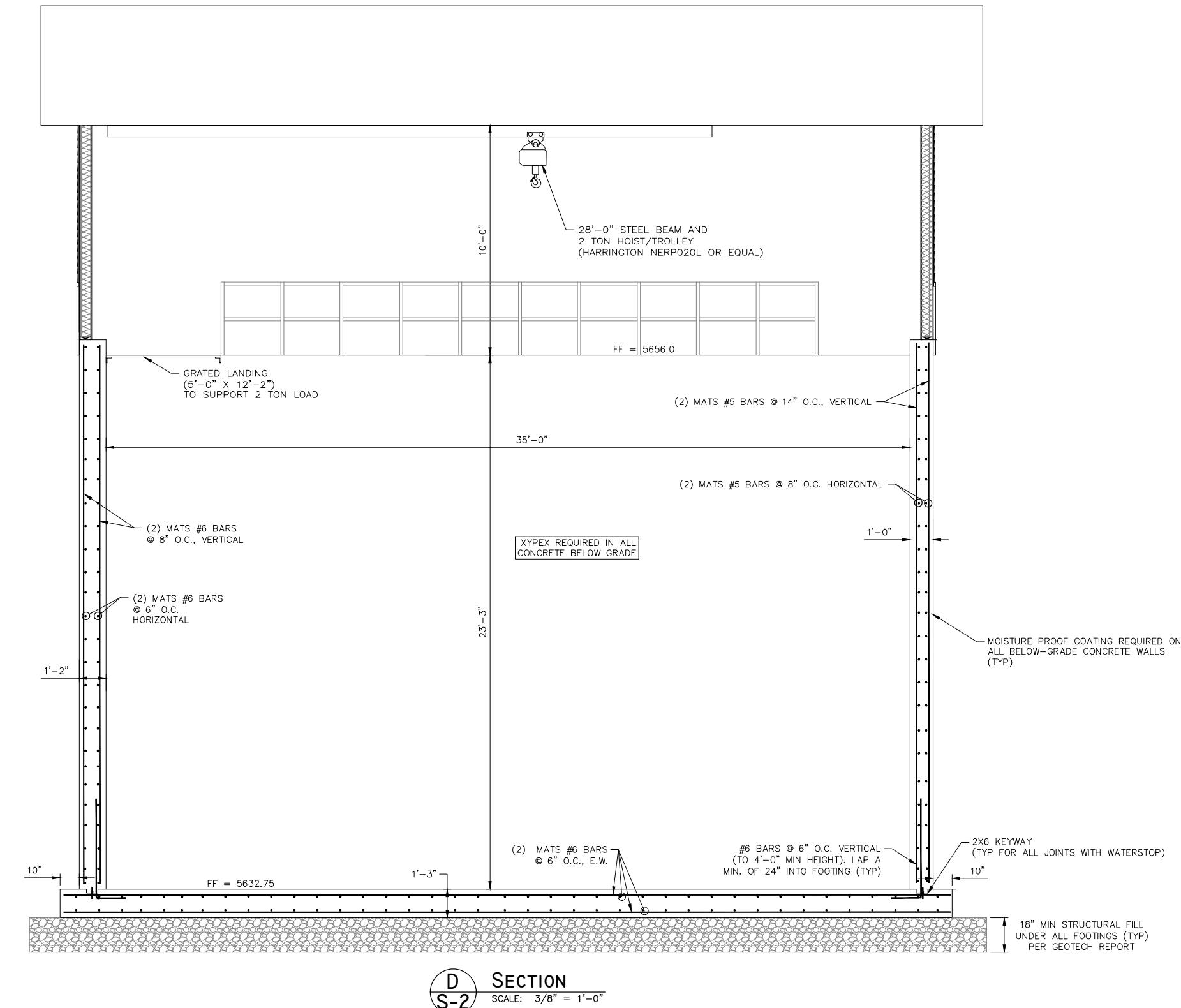


**NORTH VILLAGE SPECIAL SERVICE DISTRICT
UVU SEWER LIFT STATION REPLACEMENT**
STRUCTURAL SECTIONS - SHEET 2

BT ENGINEERING

NO.:	DATE:
	FEBRUARY 2026
Y:	CHECKED BY:
	TT
MANAGER:	
HY	

STRUCTURAL SECTIONS



D SECTION
S-2 SCALE: 3/8" = 1'-0"

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

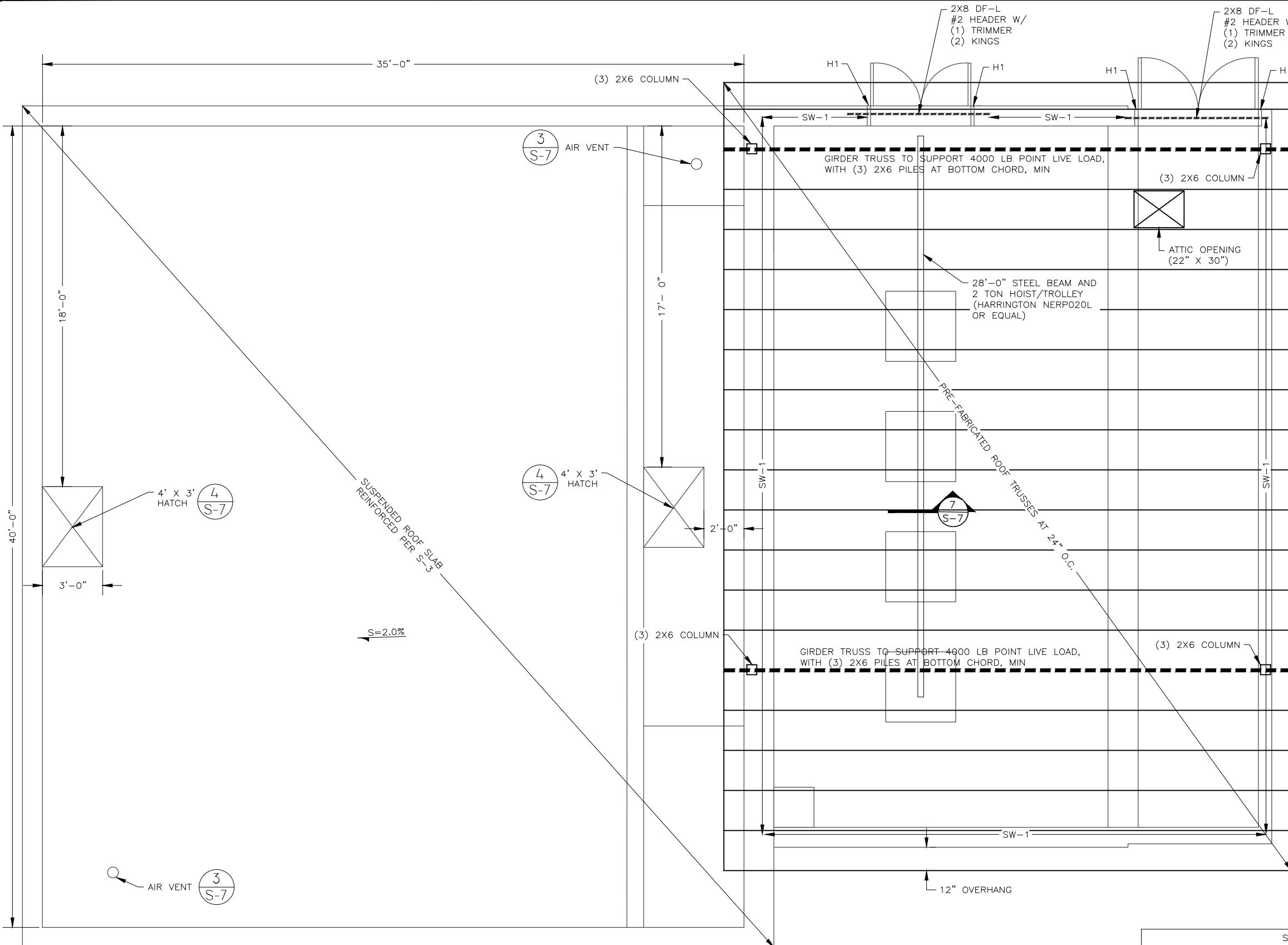
BT ENGINEERING

**NORTH VILLAGE SPECIAL SERVICE DISTRICT
UVU SEWER LIFT STATION REPLACEMENT
STRUCTURAL SECTIONS - SHEET 3**



JECT NO.:	DATE:
01.003	FEBRUARY 2026
AWN BY:	CHECKED BY:
	TT

2025 RELEASE UNDER E.O. 14176



STRUCTURAL ROOF PLAN

0 1 2
3/8" = 1'-0"

SHEAR WALL SCHEDULE						
MARK	NAILING		NOTES	SHEAR, ALLOWABLE		SOLE PLATE NAILING
	EDGE	FIELD		EDGE	FIELD	
SW-1	6" O.C.	12" O.C.	1,2,3,4,5,6	260 PLF	365 PLF	16d NAILS AT 6" O.C.

NOTES:

1. 16" O.C. MAX STUD SPACING (AWC SDPWS-2015, NOTE 2)
2. 7/16" APA RATED OSB PANEL PER GENERAL NOTES
3. 8d COMMON OR GALVANIZED BOX NAILING, SILICON BRONZE OR COPPER NAILS AT PERSERVATIVE-TREATED AND FIRE RETARDANT-TREATED WOOD LOCATIONS.
4. BLOCK ALL EDGES
5. ALL ANCHOR BOLTS TO HAVE 3" X 1/4" PLATE WASHERS, TYP, UNLESS NOTED OTHERWISE.
6. ALL EXTERIOR WALLS TO BE SHEATHED AS TYPE "SW-1", TYP, U.N.O.

NORTH VILLAGE SPECIAL SERVICE DISTRICT
UVU SEWER LIFT STATION REPLACEMENT
STRUCTURAL ROOF PLAN

BT ENGINEERING

FOR:
NORTH VILLAGE
SPECIAL SERVICE DISTRICT
P.O. BOX 519
HEBER CITY, UT 84032
CONTACT:
DAVE FULLER
(435) 654-9233



NO.	DATE	REVISION	BY

PROJECT NO.:	DATE:
09.01.003	FEBRUARY 2026
DRAWN BY: JB	CHECKED BY: TT
PROJECT MANAGER: T. TIMOTHY	

STRUCTURAL ROOF PLAN

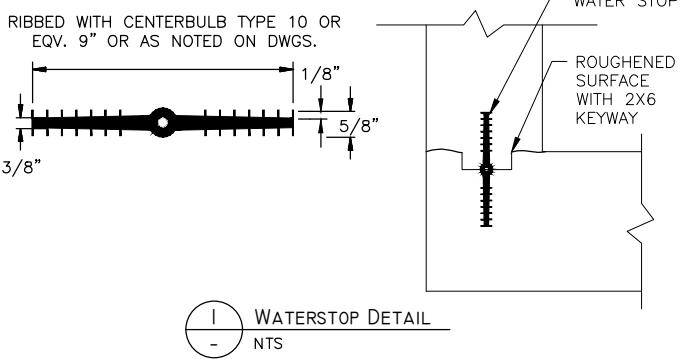
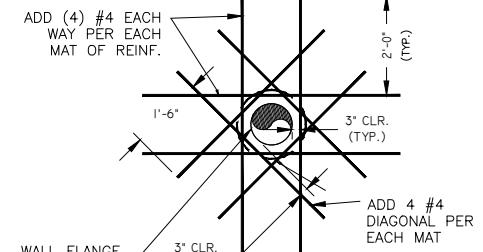
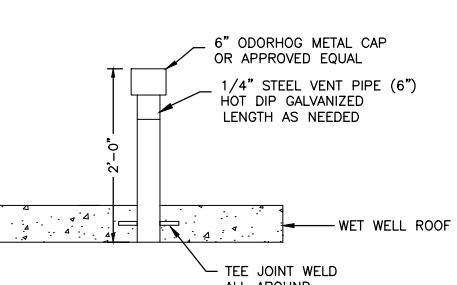
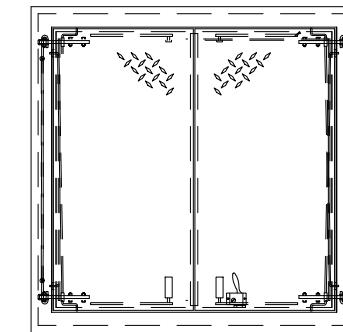
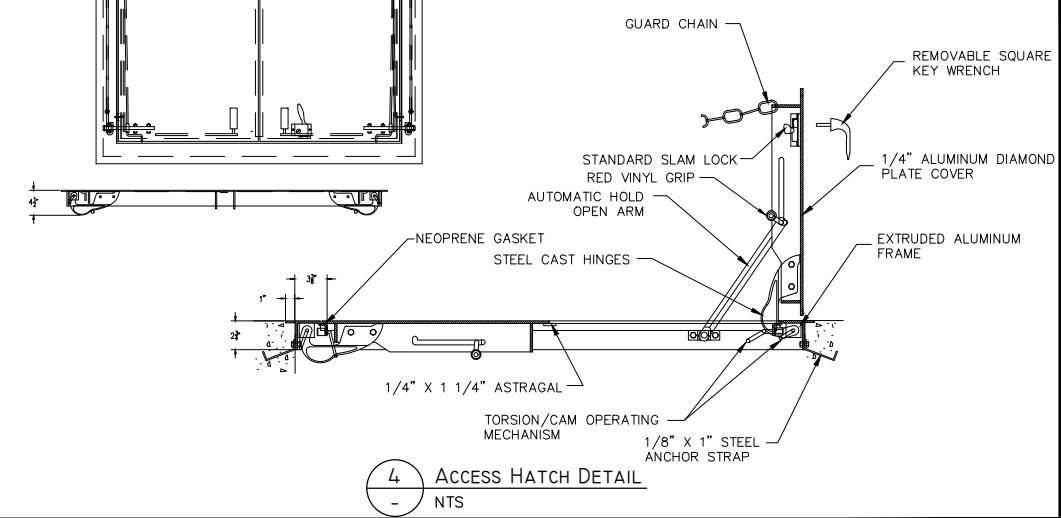
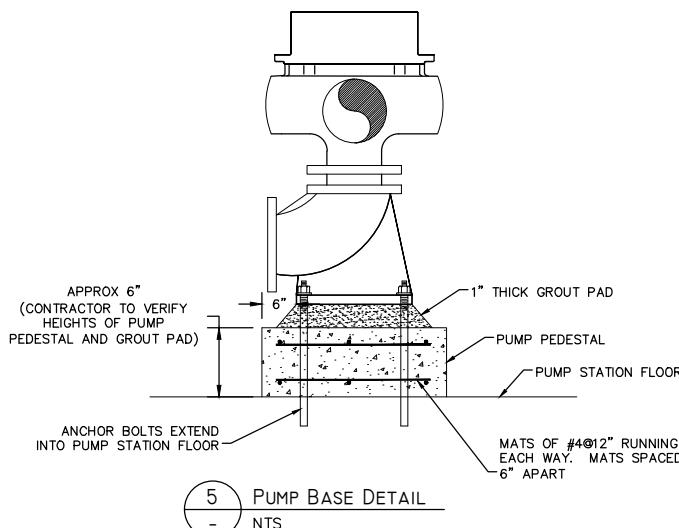
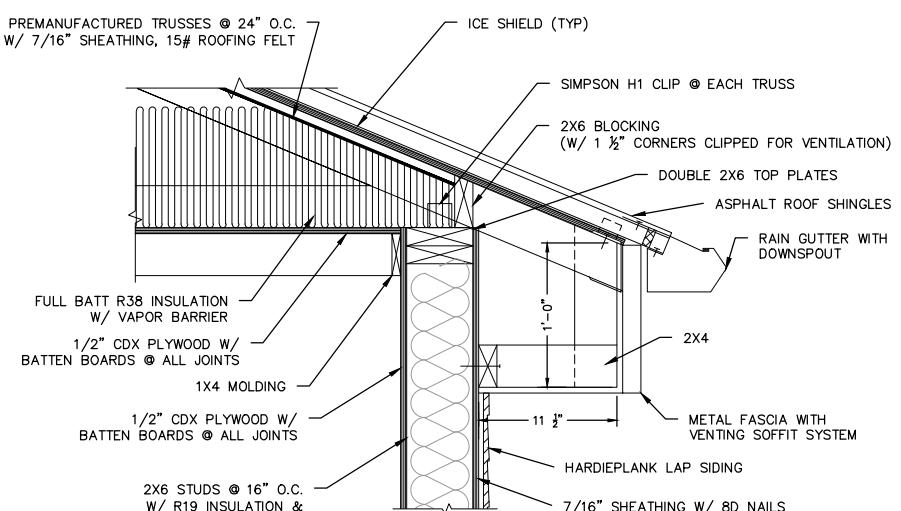
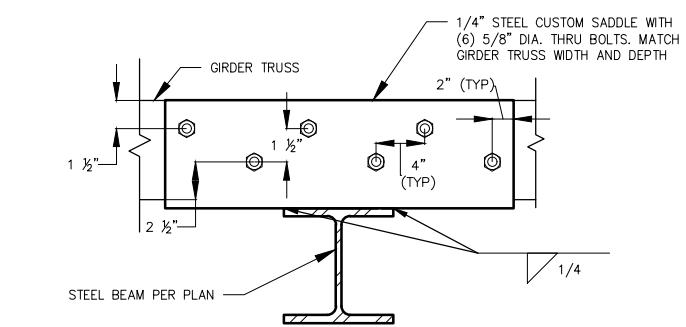
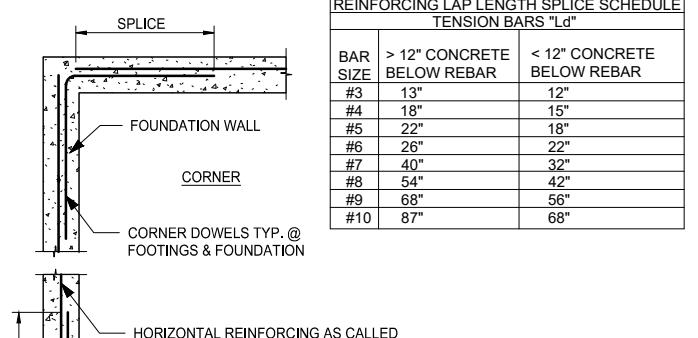


NO.	DATE	REVISION	BY
09.01.003	FEBRUARY 2026		
DRAWN BY:	TT		
PROJECT MANAGER:	T. TIMOTHY		

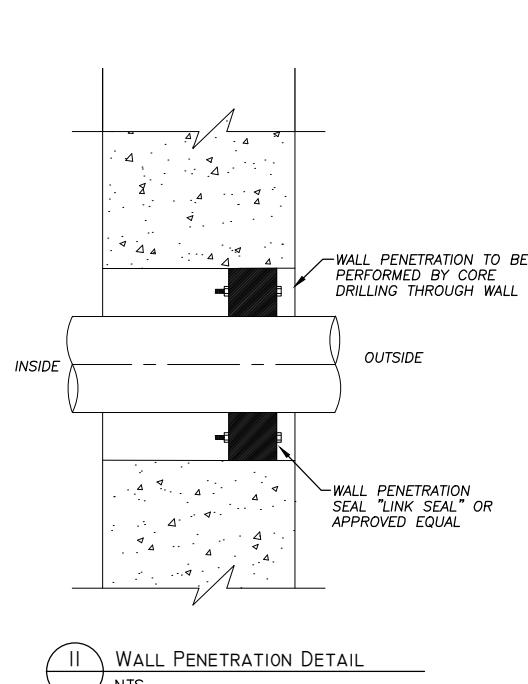
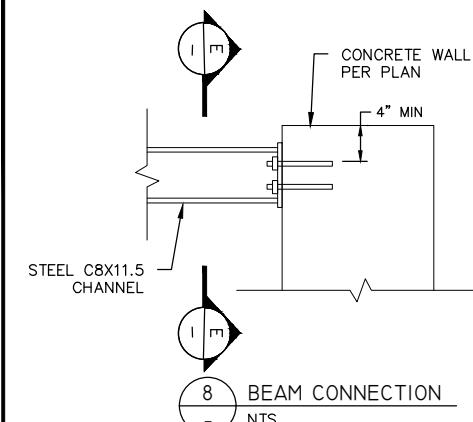
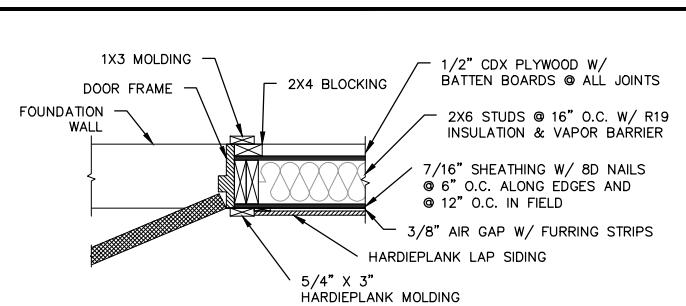
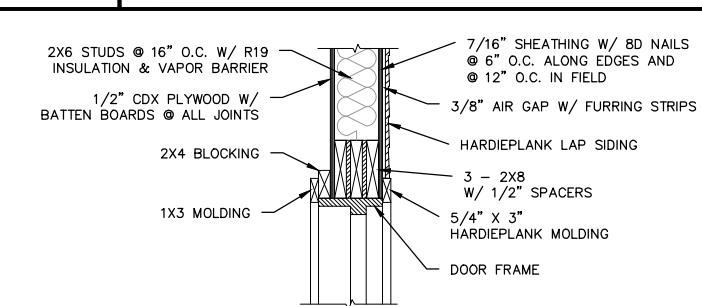
STRUCTURAL DETAILS

S-7

GREENSTREAK PVC WATERSTOP

1 WATERSTOP DETAIL
NTS2 TYP. WALL PENETRATION
NTS3 AIR VENT DETAIL
NTSU.S.F. HATCH TYPE APS
- HATCHES FOR WET WELL = 150 PSF LOADING4 ACCESS HATCH DETAIL
NTS5 PUMP BASE DETAIL
NTS6 TYPICAL SOFFIT DETAIL
NTS7 CRANE RAIL SUPPORT GIRDERR TRUSS
NTS

REQUIRED LAP LENGTH			
TYPE	CONCRETE	MASONRY	MIN.
SPlice	40 BAR DIA.	48 BAR DIA.	24"
HOOK	12 BAR DIA.	20 BAR DIA.	12"

10 REBAR REINFORCING
NTS11 WALL PENETRATION DETAIL
NTS8 BEAM CONNECTION
NTS12 TYPICAL DOOR JAMB DETAIL
NTS13 DOOR HEADER DETAIL
NTS



STRUCTURAL STEEL (IBC 1705.2.1, 1705.11.1 & 1705.12.2)

ITEM	DETAILED INSTRUCTIONS AND FREQUENCIES		
PRIOR TO WELDING (TABLE N5.4-1, AISC 360-16):			
Verify welding procedures (WPS) and consumable certificates	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Material identification	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify type and grade of material.
Welder identification	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	A system shall be maintained by which a welder who has welded a joint or member can be identified.
Fit-up groove welds	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify joint preparation, dimensions, cleanliness, tacking, and backing.
Fit-up CJP groove welds of HSS T-, Y- and K-joints without backing	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify joint preparations, dimensions, cleanliness, and tacking.
Access holes	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify configuration and finish.
Fit-up of fillet welds	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify alignment, gaps at root, cleanliness of steel surfaces, and tack weld quality and location.
DURING WELDING (TABLE N5.4-2, AISC 360-16):			
Use of qualified welders	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that welders are appropriately qualified.
Control and handling of welding consumables	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify packaging and exposure control.
Cracked tack welds	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that welding does not occur over cracked tack welds.
Environmental conditions	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify wind speed is within limits as well as precipitation and temperature.
WPS followed	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify items such as settings on welding equipment, travel speed, welding materials, shielding gas type/flow rate, preheat applied, interpass temperature maintained, and proper position.
Welding techniques	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify interpass and final cleaning, each pass is within profile limitations, and quality of each pass.
AFTER WELDING (TABLE N5.4-3, AISC 360-16):			
Welds cleaned	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that welds have been properly cleaned.
Size, length, and location of welds	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Welds meet visual acceptance criteria	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Arc strikes	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
k-area	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Backing & weld tabs removed	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Repair activities	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Document acceptance or rejection of welded joint/member	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
NONDESTRUCTIVE TESTING (SECTION N5.5, AISC 360-16):			
CJP welds (Risk Cat. II)	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Ultrasonic testing shall be performed on 10% of CJP groove welds in butt, T- and corner joints subject to transversely applied tension loading in materials 5/16-inch thick or greater. Testing rate must be increased if > 9% of welds tested have...
CJP welds (Risk Cat. III or IV)	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	A reduction in the rate of ultrasonic testing is allowed per Section N5.5e.
Access holes (flange > 2")	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Welded joints subject to fatigue	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
PRIOR TO BOLTING (TABLE N5.6-1, AISC 360-16): > Not required if only snug-tight joints are specified [per Section N5.6(1) of AISC 360-16].			
Certifications of fasteners	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Fasteners marked	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that fasteners have been marked in accordance with ASTM requirements.
Proper fasteners for joint	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify grade, type, and bolt length if threads are excluded from the shear plane.
Proper bolting procedure	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify proper procedure is used for the joint detail.
Connecting elements	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify appropriate faying surface condition and hole preparation, if specified, meet requirements.
Pre-installation verification testing	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Observe and document verification testing by installation personnel for fastener assemblies and methods used.
Proper storage	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify proper storage of bolts, nuts, washers, and other fastener components.
DURING BOLTING (TABLE N5.6-2, AISC 360-16): > Not required if only snug-tight joints are specified [per Section N5.6(1) of AISC 360-16]. > Not required for pretensioned joints using turn-of-the-nut method with match-marking, direct-tension-indicators, or twist-off type tension control method [per Section N5.6(2) of AISC 360-16].			
Fastener assemblies	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that fastener assemblies are of suitable condition, placed in all holes, and washers are positioned as required.
Snug-tight prior to pretensioning	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that joints are brought to snug-tight condition prior to pretensioning operation.
Fastener component	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that fastener component is not turned by wrench prevented from rotating.
Pretensioned fasteners	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that fasteners are pretensioned in accordance with RCSC Specification, progressing systematically from the most rigid point toward the free edges.
AFTER BOLTING (TABLE N5.6-3, AISC 360-16):			
Document acceptance or rejection of bolted connections	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	

STRUCTURAL STEEL (IBC 1705.2.1, 1705.11.1 & 1705.12.2)

ITEM	DETAILED INSTRUCTIONS AND FREQUENCIES		
OTHER STEEL INSPECTIONS (SECTION N5.7, AISC 360-16; Tables J8-1 & J10-1, AISC 341-16):			
Structural steel details	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	All fabricated steel or steel frames shall be inspected to verify compliance with the details shown in the construction documents, such as braces, stiffeners, member locations, and proper application of joint details at each connection.
Anchor rods and other embedments supporting structural steel	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Shall be on the premises during the placement of anchor rods and other embedments supporting structural steel for compliance with construction documents. Verify the diameter, grade, type, and length of the anchor rod or embedded item, and the extent or depth of embedment prior to placement ...
Reduced beam sections (RBS)	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify contour and finish as well as dimensional tolerances (see Table J8-1 of AISC 341-10).
Protected zones	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that no holes or unapproved attachments are made within the protected zone (see Table J8-1 of AISC 341-10).
H-piles	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that no holes or unapproved attachments occur within the protected zones of piling (see Table J10-1 of AISC 341-10).
STEEL ELEMENTS OF COMPOSITE CONSTRUCTION (TABLE N6.1, AISC 360-16; TABLES J9-1 thru J9-3, AISC 341-16):			
Placement and installation of steel deck	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Placement and installation of steel headed stud anchors	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Document acceptance or rejection of steel elements	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Reinforcing steel	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify appropriate reinforcement size, spacing, and orientation; that it has not been re-bent in field; that it is correctly tied and supported; and that required steel clearances have been provided.
Composite member size	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that composite member is the required size.

CONCRETE CONSTRUCTION (IBC 1705.3 & 1705.12.1)

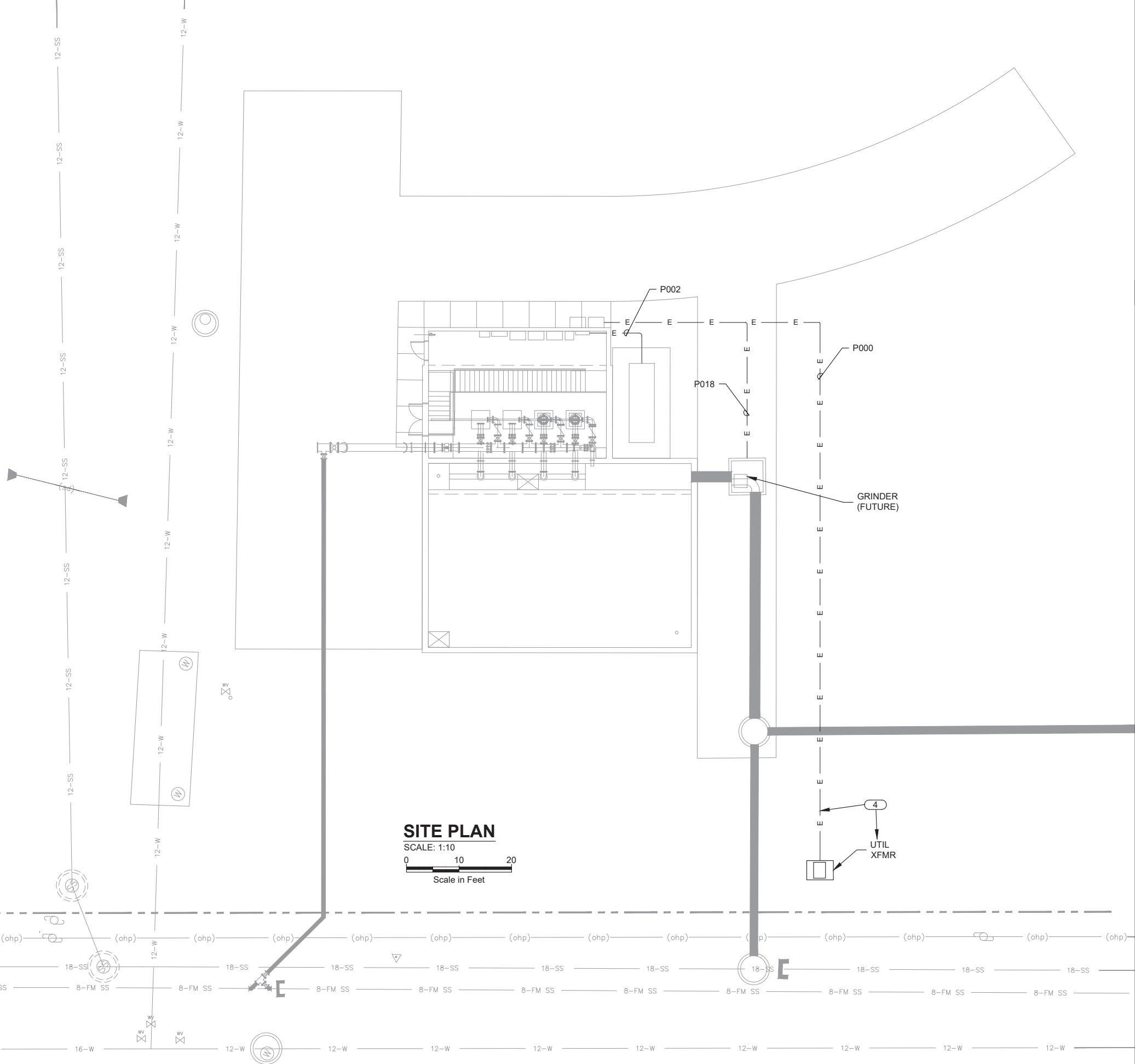
ITEM	DETAILED INSTRUCTIONS AND FREQUENCIES		
Reinforcing steel, including prestressing tendons	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify prior to placing concrete that reinforcing is of specified type, grade and size; that it is free of oil, dirt and rust; that it is located and spaced properly; that hooks, bends, ties, stirrups and supplemental reinforcement are placed correctly; that lap lengths, stagger and offsets are provided; and that all mechanical connections are installed per the manufacturer's instructions and/or evaluation report.
Cast-in bolts & embeds	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Inspection of anchors or embeds cast in concrete is required when allowable loads have been...
Post-installed anchors or dowels	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	All post-installed anchors/dowels shall be specially inspected as required by the approved ICC-ES report.
Use of required mix design	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that all mixes used comply with the approved construction documents; ACI 318: Ch. 4, 5.2-5.4; and IBC 1904.3, 1913.2, 1913.3.
Concrete sampling for strength tests, slump, air content, and temperature	<input type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Concrete & shotcrete placement	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Curing temperature and techniques	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that the ambient temperature for concrete is kept at > 50°F for at least 7 days after placement. High-early-strength concrete shall be kept at > 50°F for at least 3 days. Accelerated curing methods may be used (see ACI 318: 5.11.3). The ambient temperature for shotcrete shall be > 40°F for the same period of time as noted for concrete. Shotcrete shall be kept continuously moist for at least 24 hours after shotcreting. All concrete materials, reinforcement, forms, fillers, and ground shall be free from frost. In hot weather conditions ensure that appropriate measures are taken to avoid plastic shrinkage cracking and that the specified water/cement ratio is not exceeded.
Pre-stressed concrete	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Erection of precast concrete	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that all precast elements are lifted, assembled and braced in accordance with the...
Strength verification	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that adequate strength has been achieved prior to the removal of shoring and forms or the stressing of post-tensioned tendons.
Formwork	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that the forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents.
Reinforcement complying with ASTM A 615 in special moment frames, special structural walls and coupling beams	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that ASTM A 615 reinforcing steel used in these areas complies with ACI 318: 21.15.2 by means of certified mill test reports. If this reinforcing steel is to be welded chemical tests shall be performed in accordance with ACI 318:...

2021 IBC CODE INFORMATION

CODE ITEM REFERENCE	CODE REQUIREMENTS	ACTUAL BUILDING DESIGN
OCCUPANCY SECTION 304	U	U
OCCUPANCY SEPARATION TABLE 508.3.3	NO SEPARATION REQUIRED	N/A
CONSTRUCTION TYPE CHAPTER 6	TYPE V-B	TYPE V-B
ALLOWABLE FLOOR AREA TABLE 506.2	9,000 SQ. FT.	2,300 SQ. FT. GROSS
AREA MODIFICATIONS SECTION 506	$A = [A + [A \times 1] + [A \times 1]]$ $A = [9,000 + [9,000 \times .75] + [9,000 \times 0]] = 15,750$ SQUARE FEET	2,300 SQ. FT. GROSS
MAXIMUM HEIGHT TABLE 504.3	40'-0"	16'-0"
MAXIMUM STORIES TABLE 504.4	1 STORY	1 STORY
OCCUPANT LOAD TABLE 1004.5	300 GROSS SF / OCCUPANT (MECHANICAL EQUIPMENT ROOM)	1 OCCUPANT
ROOF COVERING TABLE-1505.1	CLASS A FIRE-RESISTANCE	CLASS B SHINGLE ROOF
DRAFT STOPS SECTION 717.4	NOT REQ'D	N/A
FIRE-PROTECTION SYSTEMS SECTION 903.2.1.1	NOT REQ'D	N/A
EXITS SECTION 1022	MIN. OF ONE	ONE PROVIDED
EXITS FROM FLOORS SECTION 1015.1/1018	ONE EXITS FROM FLOORS W/ OCCUPANT LOAD ≤ 49	ONE PROVIDED
EXIT ACCESS SECTION 1014	N/A	N/A
OPENING PROTECTIVES SECTION 716	NOT REQUIRED	NOT PROVIDED
FACILITY ACCESSIBILITY SECTION 1104	NOT REQUIRED	NOT REQUIRED
PLUMBING FIXTURES TABLE 2902.1	N/A	NOT REQUIRED - STRUCTURE IS NOT OPEN TO PUBLIC. THIS IS A UTILITY BUILDING. ALSO 2902.3 EXCEPTION 2 MAY APPLY.

STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL (IBC 1705.2)

ITEM	DETAILED INSTRUCTIONS AND FREQUENCIES		
STEEL ROOF AND FLOOR DECKS (IBC TABLE 1705.2.2):			
Material verification of cold-formed steel deck	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Confirm that identification markings are provided to conform to ASTM standards specified on construction documents.
Floor and roof deck welds	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Visual inspection is required to confirm that weld meets acceptance criteria of AWS D1.3. Welder qualifications should also be verified.
WELDING OF REINFORCING STEEL (IBC TABLE 1705.2.2):			
Verification of weldability	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify weldability of reinforcing steel based upon carbon equivalent and in accordance with AWS D1.4.
Reinforcing steel in intermediate or special moment frames, and boundary elements of...	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Shear reinforcement	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	



GENERAL NOTES

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

DRAWING TO SCALE
IF BAR MEASURES:
1" = FULL SCALE
1/2" = HALF SCALE

A scale bar diagram consisting of a horizontal line with three vertical tick marks. The first tick mark is labeled "1/2" below it. The distance between the first and second tick marks is labeled "1" below it. The distance between the second and third tick marks is labeled "1" below it.

KEY NOTES

1.

ELECTRICAL - SITE SITE PLAN

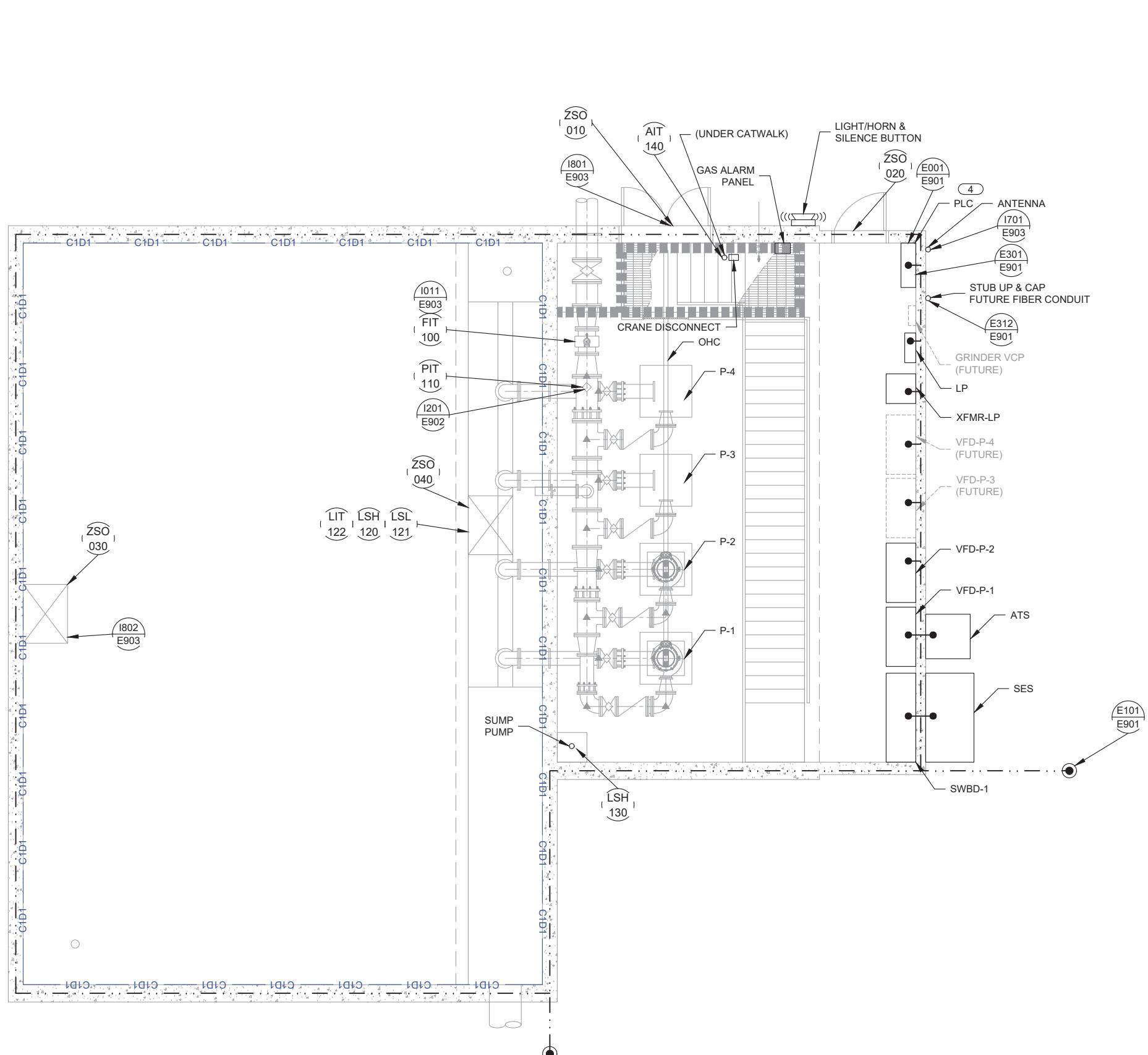
UNIVERSITY OF WISCONSIN-MADISON

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

DRAWING NO.

E201

SHEET

**GENERAL NOTES**

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

DRAWING IS TO SCALE IF BAR MEASURES: 1" = FULL SCALE 1/2" = HALF SCALE	
ORIGINAL	REVISIONS
NO. DATE	DESIGN DRAWN CHECKED
0 00/00/0000	

KEY NOTES

1. -

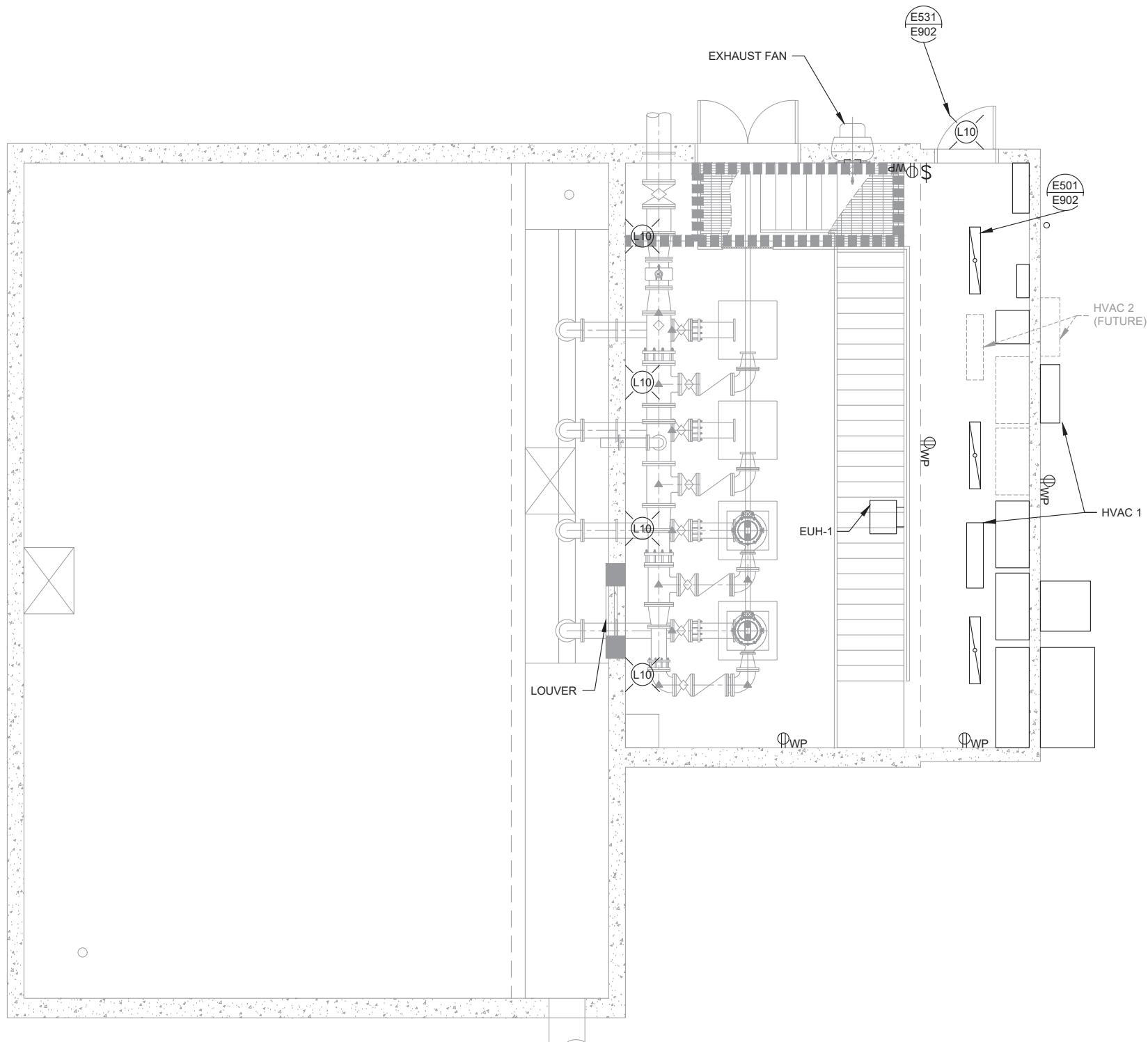
NORTH VILLAGE SPECIAL SERVICE DISTRICT
UVU LIFT STATION

ELECTRICAL - LAYOUT
ELECTRICAL PLAN

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Phone: (801) 677-0011
www.skmeng.com

DRAWING NO.
E301
SHEET

ELECTRICAL LEGEND



LIGHTING PLAN
SCALE: 1/4" = 1'-0"
0 4 8
Scale in Feet

GENERAL NOTES

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

DRAWING IS TO SCALE IF BAR MEASURES: 1" = FULL SCALE 1/2" = HALF SCALE	
ORIGINAL	REVISIONS
NO. DATE	DESIGN DRAWN CHECKED
0 00/00/0000	

KEY NOTES

1. -

ELECTRICAL LEGEND

L1 H.E. WILLIAMS 49W 1'X4" W LED FIXTURE W/ BATTERY BACKUP AND DIMMING DRIVERS. MODEL AT1-14-L50/835-D-EM/10WLP-DIM-UNV OR APPROVED EQUAL

L10 GE CURRENT EVOLVE LED 36W WALL LIGHT (WALL PACK) WITH BATTERY BACKUP AND DARK SKY COMPLIANCE. MODEL EWAS-01-1-B3-AW-7-40-D-1-FM-DKBZ-EMBR OR APPROVED EQUAL.

DUPLEX OUTLET
G: GFCI PROTECTED OUTLET
WP: WEATHER-PROOF OUTLET GFCI PROTECTED.

WP LIGHT SWITCH

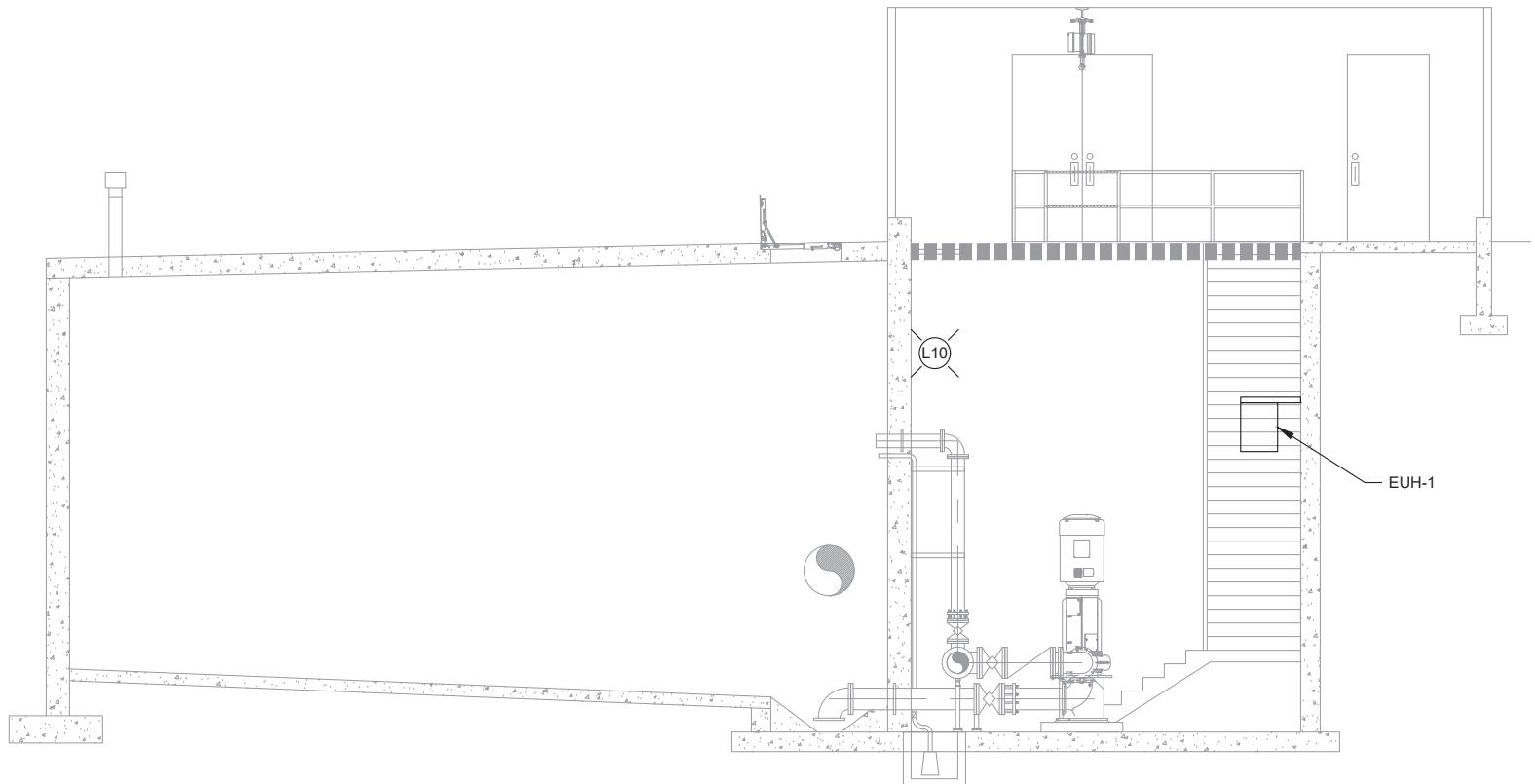
ELECTRICAL - LAYOUT LIGHTING PLAN

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Bountiful, Utah 84010
Phone: (801) 677-0011
www.skmeng.com

DRAWING NO.

E302

SHEET



BASEMENT LAYOUT

SCALE: 1/4" = 1'-0"

A scale bar for a map, labeled 'SCALE: 1/4" = 1-0'. It features a horizontal line with tick marks at 0, 4, and 8. The segments between 0 and 4, and between 4 and 8, are shaded black. Below the line, the text 'Scale in Feet' is centered.

GENERAL NOTES

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



KEY NOTES

1. -



CURRENT EVOLVE LED 36W WALL LIGHT
ALL PACK) WITH BATTERY BACKUP AND
RK SKY COMPLIANCE. MODEL EWAS-01-1-
AW-7-40-D-1-FM-DKBZ-EMBR OR
PROVED EQUIA

ELECTRICAL LEGEND

ELECTRICAL - LAYOUT BASEMENT LAYOUT

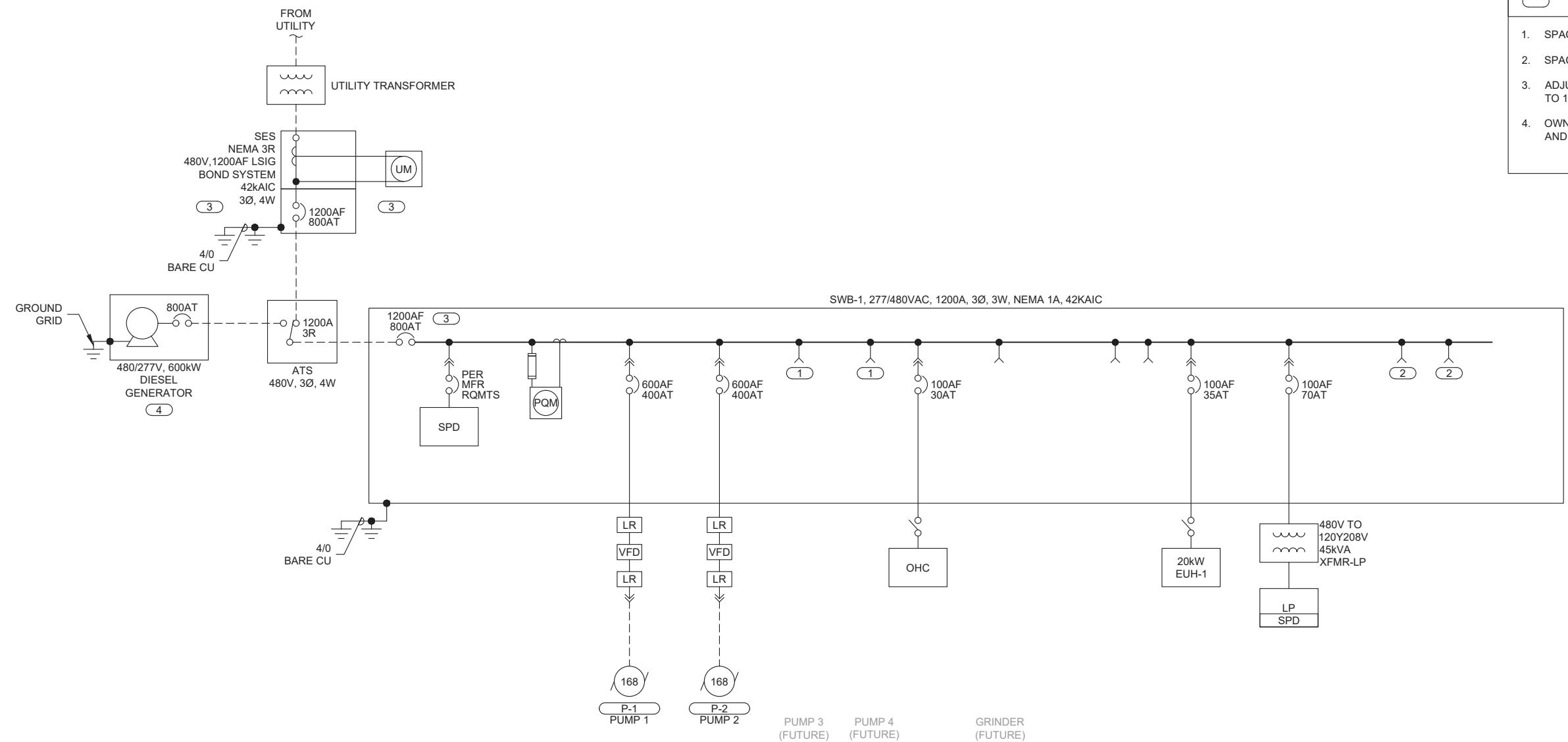
UVU LIFT STATION

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Bountiful, Utah 84010
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www.skmenq.com

DRAWING NO

E303

SHEET



ONELINE DIAGRAM

CIRCUIT/DESCRIPTION	KVA	HP	FLA
MOTOR LOADS			
PUMP 1	168.0	201.6	
PUMP 2	168.0	201.6	
GRINDER (FUTURE)	5.0	7.6	
OHC	5.0	7.6	
NON-MOTOR LOADS			
LIGHTING TRANSFORMER	45.0	54.2	
EHU-1	20.0	24.1	
	0.0		
	0.0		
SUBTOTAL	496.7		
+ 25% OF LARGEST MOTOR	50.4		
TOTAL AMPS @ 480V/3PHASE	547.1		
SERVICE SIZE (AMPS)	800.0		

CALCULATION

CIRCUIT/DESCRIPTION	KVA	HP	FLA
MOTOR LOADS			
PUMP 1	221.0	266.0	
PUMP 2	221.0	266.0	
PUMP 3	221.0	266.0	
PUMP 4	221.0	*	
GRINDER	5.0	7.6	
OHC	5.0	7.6	
NON-MOTOR LOADS			
LIGHTING TRANSFORMER	45.0	54.2	
EHU-1	20.0	24.1	
	0.0		
	0.0		
SUBTOTAL	891.6		
+ 25% OF LARGEST MOTOR	66.5		
TOTAL AMPS @ 480V/3PHASE	958.1		
SERVICE SIZE (AMPS)	1200.0		

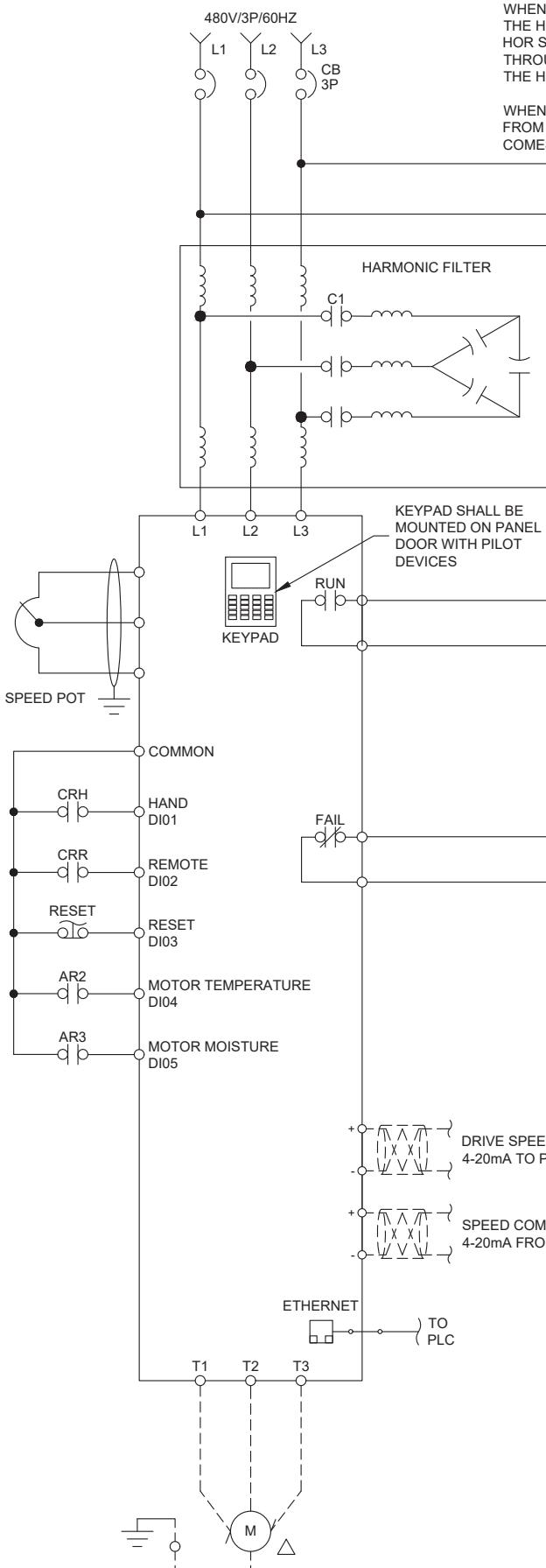
CALCULATION (FUTURE)

CIRCUIT DESCRIPTION	BKR	PANEL:		CIRCUIT	LOAD	PHASE	LOAD	CIRCUIT	BKR	CIRCUIT DESCRIPTION
		VOLTAGE: 120/208	MAIN CB: 175 AMP							BUS A.I.C: 22KA BKR A.I.C: 22KA MOUNTING: SURFACE
HVAC-1	40/2	1	3600	A	500	2	20/1	PLC		
		3	3600	B	100	4	20/1	FIT		
HVAC-2 (FUTURE)	40/2	5	3600	C	100	6	20/1	AIT		
		7	3600	A		8	20/1			
INSIDE LIGHTS	20/1	9	720	B			10	20/1		
OUTSIDE LIGHTS	20/1	11	140	C	750	12	20/1	SUMP PUMP		
INSIDE OUTLETS	20/1	13	720	A		14	20/1			
OUTSIDE OUTLETS	20/1	15	360	B	4800	16	50/2	GEN AUX		
	20/1	17		C	4800	18				
	20/1	19		A		20	20/1			
	20/1	21		B		22	20/1			
	20/1	23		C		24	20/1			
	20/1	25		A		26	20/1			
	20/1	27		B		28	20/1			
	20/1	29		C		30	20/1			
CONNECTED VA PER PHASE		8420.0	9580.0		9390.0					NOTES:
CONNECTED AMPS PER PHASE		70.2	79.8		78.3					
25% OF CONTINUOUS & LIGHTING LOAD (VA)		2105.0	2395.0		2347.5					
CODE VA PER PHASE		10525.0	11975.0		11737.5					
CODE AMPS PER PHASE		87.7	99.8		97.8					

PANEL SCHEDULE

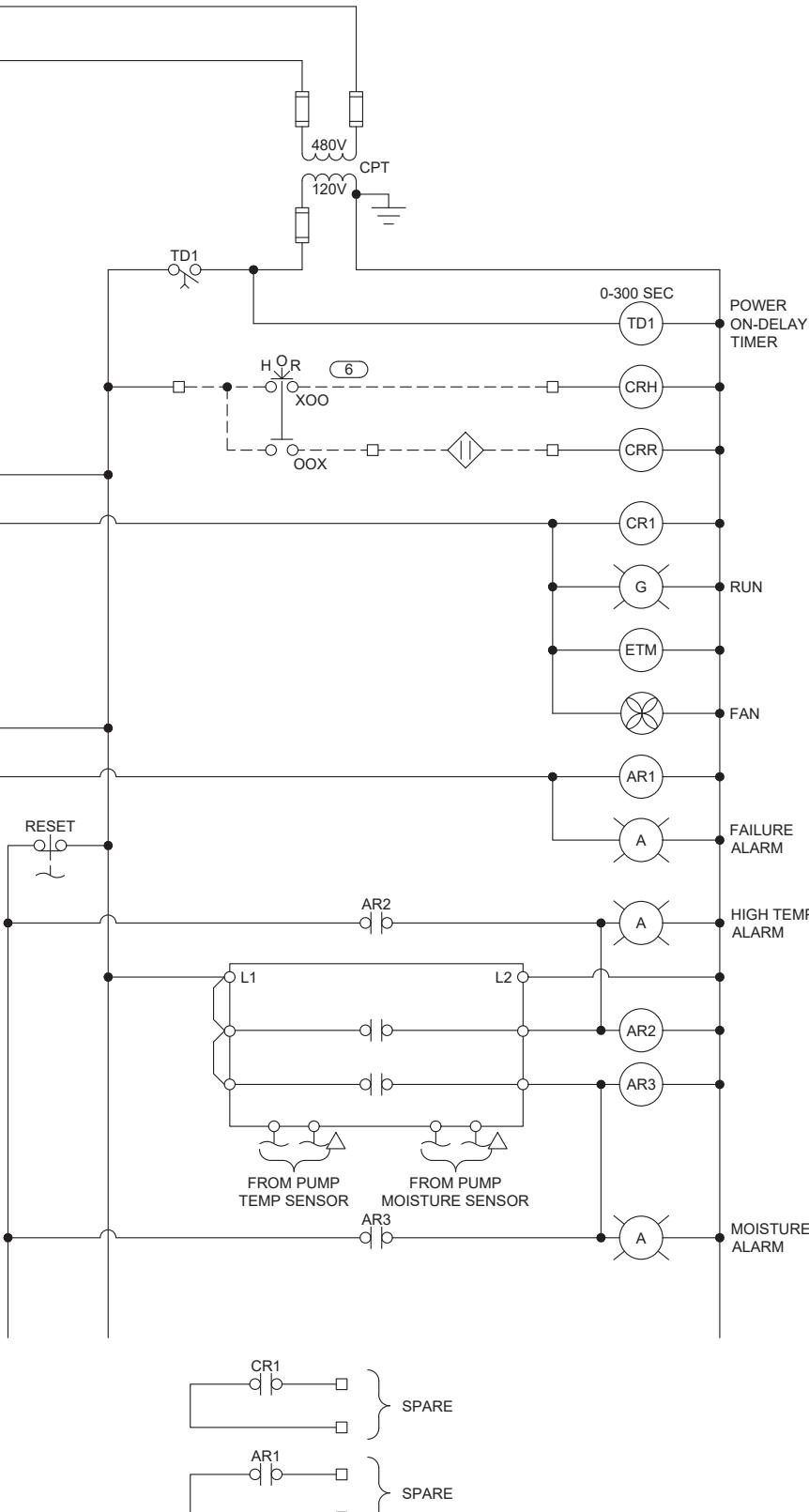
KEY NOTES																					
<ol style="list-style-type: none"> SPACE FOR FUTURE 600AF 500AT BREAKER. SPACE FOR FUTURE. ADJUSTABLE TRIP TO ALLOW FUTURE UPDATE TO 1200A. OWNER PROVIDED, CONTRACTOR INSTALLED AND WIRED. 																					
<p>DRAWING IS TO SCALE IF BAR MEASURES: 1" = FULL SCALE 1/2" = HALF SCALE</p> <table border="1"> <tr> <td>0</td> <td>1/2</td> <td>1</td> </tr> <tr> <td>NO.</td> <td>DATE</td> <td>DESIGN DRAWN CHECKED</td> </tr> <tr> <td>0</td> <td>00/00/0000</td> <td></td> </tr> <tr> <td colspan="3">REVISIONS</td> </tr> </table>										0	1/2	1	NO.	DATE	DESIGN DRAWN CHECKED	0	00/00/0000		REVISIONS		
0	1/2	1																			
NO.	DATE	DESIGN DRAWN CHECKED																			
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REVISIONS																					
<p>UVU LIFT STATION</p> <p>ELECTRICAL - POWER DISTRIBUTION ONELINE DIAGRAM</p> <p>skm</p> <p>533 W 2600 S, Suite 25 Bountiful, Utah 84010 Phone: (801) 677-0011 www.skmgeng.com</p>																					
<p>DRAWING NO.</p> <p>E501</p> <p>SHEET</p>																					

VFD CONTROL DESCRIPTION



WHEN THE HOR SWITCH IS IN THE HAND POSITION, THE MOTOR SHOULD RUN, WHEN THE HOR SWITCH IS IN THE OFF POSITION, THE MOTOR SHOULD STOP AND WHEN THE HOR SWITCH IS IN THE REMOTE POSITION, THE MOTOR IS CONTROLLED BY THE PLC THROUGH THE ETHERNET NETWORK. THE PLC WILL BE ABLE TO MONITOR WHETHER THE HOR IS IN THE HAND OR REMOTE POSITION.

WHEN THE HOR SWITCH IS IN THE HAND POSITION, THE SPEED COMMAND COMES FROM THE POTENTIOMETER. WHEN IN THE REMOTE POSITION, THE SPEED COMMAND COMES FROM THE PLC THROUGH THE ETHERNET NETWORK.



NOTES:

- 1 TYPICAL SCHEMATIC DIAGRAMS ARE INTENDED TO REFLECT THE GENERAL CONTROL STRATEGY. ACTUAL CIRCUITRY MAY VARY FOR SPECIFIC EQUIPMENT SUPPLIED. THE NUMBER AND TYPE OF DEVICES SHALL BE FURNISHED AS REQUIRED FOR PROPER OPERATION OF THE EQUIPMENT.
- 2 CONTROL POWER TRANSFORMERS (CPT) SHALL BE ADEQUATELY SIZED AND SHALL BE PROVIDED WITH PROPERLY SIZED FUSES FOR BOTH THE PRIMARY AND SECONDARY WINDINGS.
- 3 FUSES SHALL BE ADEQUATELY SIZED PER THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.
- 4 ADJUST TIME DELAY RELAYS PRIOR TO STARTUP. STAGGER TIMER SETTINGS FOR POWER ON-DELAY RELAYS.
- 5 CONTROL SWITCHES SHALL BE DOOR MOUNTED ON THEIR RESPECTIVE PANELS. DEVICES SHALL BE RATED FOR LINE VOLTAGE AND 125% OF LOAD CURRENT.
- 6 LOCAL CONTROLS SHALL BE INSTALLED ACCORDING TO P&ID'S AND NOT NECESSARILY AS SHOWN ON SCHEMATICS. SEE LCP SCHEMATICS AND CONDUIT SCHEDULE FOR EXACT WIRING.

DRAWING IS TO SCALE IF BAR MEASURES: 1/2" = FULL SCALE 1/2" = HALF SCALE	
ORIGINAL	REVISIONS
NO. 00/000000	DATE 00/00/0000
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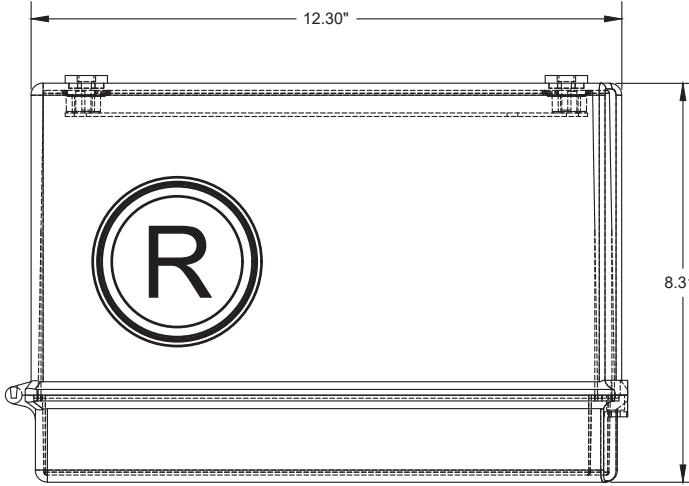
NORTH VILLAGE SPECIAL SERVICE DISTRICT
UVU LIFT STATION
ELECTRICAL - POWER DISTRIBUTION
SCHEMATIC

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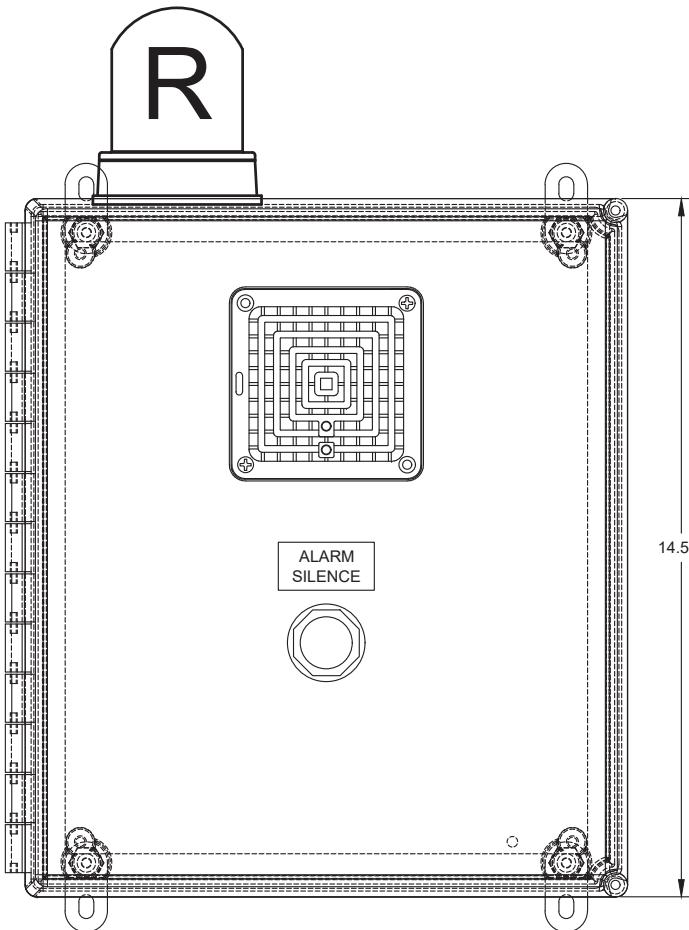
DRAWING NO.

E601

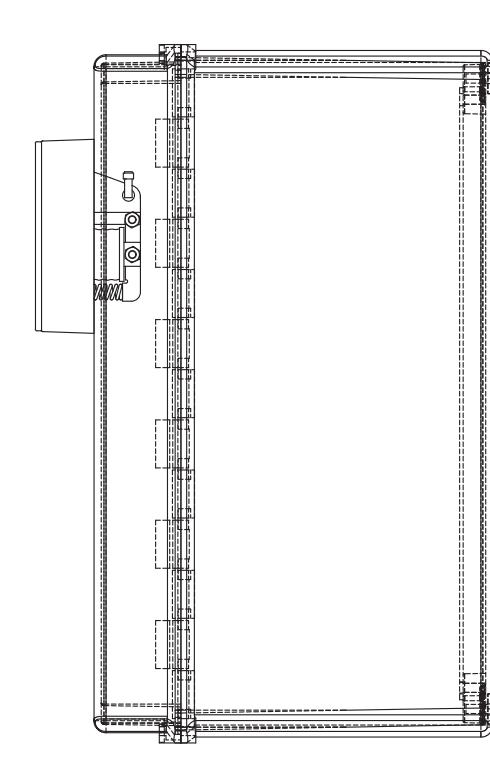
SHEET



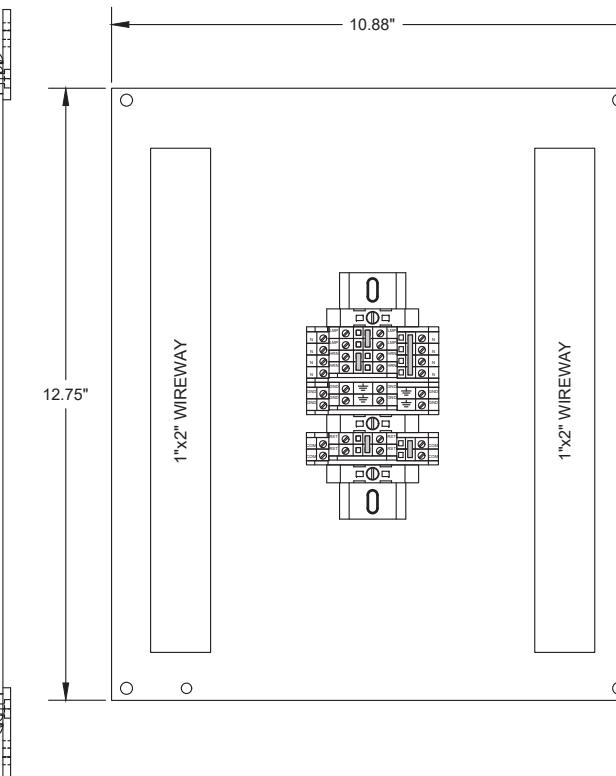
TOP VIEW



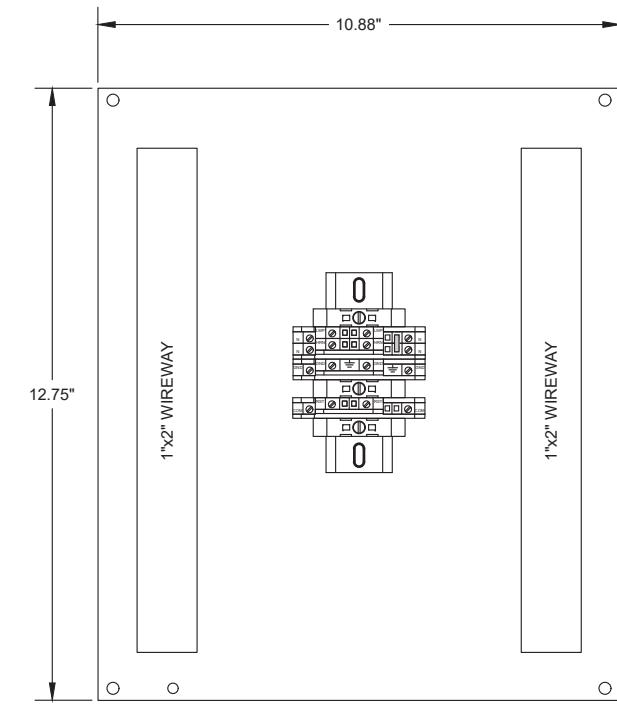
FRONT VIEW



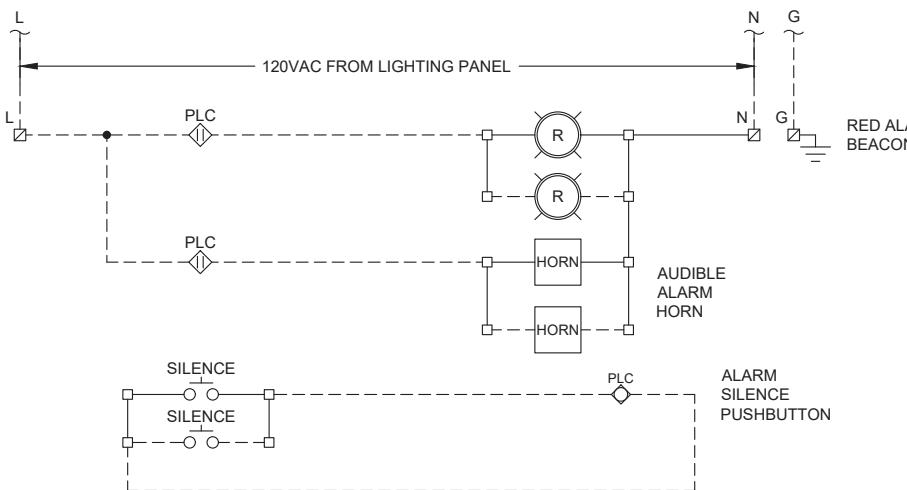
SIDE VIEW



**BACKPANEL
LAYOUT VIEW**



**REMOTE BACKPANEL
LAYOUT VIEW**



ANNUNCIATOR PANEL WIRING DIAGRAM

NOTES:

- OUTDOOR PANEL ASSEMBLY SHALL BE RATED NEMA 4X AND SHALL BE NONMETALLIC FIBERGLASS FOR NON-HAZARDOUS LOCATIONS.
- INDOOR PANEL ASSEMBLY SHALL BE RATED NEMA 4X. ALL INTERNAL COMPONENTS SHALL BE CORROSION RESISTANT AGAINST H2S. PROVIDE HOFFMAN CORROSION INHIBITORS IN EACH ASSEMBLY.

0	1/2	1	DRAWING IS TO SCALE IF BAR MEASURES: 1" = FULL SCALE 1/2" = HALF SCALE
NO.	DATE	DESIGN DRAWN CHECKED	ORIGINAL
0	00/00/0000		
			REVISIONS

NORTH VILLAGE SPECIAL SERVICE DISTRICT
UVU LIFT STATION

**ELECTRICAL - POWER DISTRIBUTION
ALARM PANEL LAYOUT & SCHEMATIC**

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DRAWING NO.

E602

SHEET

CONDUIT	SIZE	CONDUCTORS	SERVICE	FROM	TO	DUCT BANKS	NOTES
P000		3X (4 350 KCMIL W/ 3/0 GND)	480V	UTIL XFMR	SES		COORDINATE WITH UTILITY
P001	4X3"	3X (4 350 KCMIL W/ 3/0 GND)	480V	SES	ATS		ONE SPARE FOR FUTURE UPGRADE TO 1200A
P002	4X3"	3X (4 350 KCMIL W/ 3/0 GND)	480V	GENERATOR	ATS		ONE SPARE FOR FUTURE UPGRADE TO 1200A
P002A	1"	3 #8 W/ #10 GND	208V	LP	GEN-AUX		
P003	4X3"	3X (3 350 KCMIL W/ 3/0 GND)	480V	ATS	SWITCHBOARD		ONE SPARE FOR FUTURE UPGRADE TO 1200A
P004	3"	3 350 KCMIL W/ #3 GND	480V	SWITCHBOARD	VFD-P-1		
P004A	3"	3C 350 KCMIL WITH GROUND VFD CABLE	480V	VFD-P-1	P-1		
P005	3"	3 350 KCMIL W/ #3 GND	480V	SWITCHBOARD	VFD-P-2		
P005A	3"	3C 350 KCMIL WITH GROUND VFD CABLE	480V	VFD-P-2	P-2		
P006	3"	PULL STRING	480V	SWITCHBOARD	VFD-P-3 (FUTURE)		
P006A	3"	PULL STRING	480V	VFD-P-3 (FUTURE)	P-3 (FUTURE)		
P007	3"	PULL STRING	480V	SWITCHBOARD	VFD-P-4 (FUTURE)		
P007A	3"	PULL STRING	480V	VFD-P-4 (FUTURE)	P-4 (FUTURE)		
P008	1.5"	3 #4 W/ #8 GND	480V	SWITCHBOARD	XFMER-LP		
P009	2"	4 3/0 AWG W/ #6 GND	208V	XFMER-LP	LP		#2 BONDING JUMPER
P010	1"	4 #12 W/ #12 GND	120V	LP	PLC		PLC AND EXHAUST FAN
P011	1"	2 #12 W/ #12 GND	120V	PLC	EXHAUST FAN		
P012	1"	2 #12 W/ #12 GND	120V	LP	FIT		
P013	1"	2 #10 W/ #10 GND	208V	LP	HVAC-1 DISC		
P014	1"	2 #10 W/ #10 GND	208V	HVAC-1 DISC	HVAC-1		
P015	1"	2 #10 W/ #10 GND	208V	LP	HVAC-2 DISC		
P016	1"	PULL STRING	208V	HVAC-2 DISC	HVAC-2 (FUTURE)		
P017	1"	2 #12 W/ #12 GND	120V	LP	SUMP PUMP		
P018	1"	PULL STRING	480V	SWITCHBOARD	GRINDER VCP (FUTURE)		
P018A	1"	PULL STRING	480V	GRINDER VCP (FUTURE)	GRINDER (FUTURE)		
P019	1"	3 #12 W/ #12 GND	480V	SWITCHBOARD	OHC DISC		
P019A	1"	3 #12 W/ #12 GND	480V	OHC DISC	OHC		
P020	1"	3 #10 W/ #10 GND	480V	SWITCHBOARD	EUH-1 DISC		
P020A	1"	3 #10 W/ #10 GND	480V	EUH-1 DISC	EUH-1		
C004	1"	4 #14	CONTROL	VFD-P-1	P-1		MOISTURE & TEMPERATURE
C005	1"	4 #14	CONTROL	VFD-P-2	P-2		MOISTURE & TEMPERATURE
C006	1"	PULL STRING	CONTROL	VFD-P-3 (FUTURE)	P-3 (FUTURE)		MOISTURE & TEMPERATURE
C007	1"	PULL STRING	CONTROL	VFD-P-4 (FUTURE)	P-4 (FUTURE)		MOISTURE & TEMPERATURE
C008	1"	2 #12 W/ #12 GND	120V	PLC	EXHAUST FAN		
C009	1"	PULL STRING	CONTROL	PLC	GRINDER VCP (FUTURE)		
C010	1"	3 #14	24VDC	PLC	ZSO-010, 020		
C030	1"	4 #14	24VDC	PLC	ZSO-030, 040		INTRINSICALLY SAFE CIRCUIT
C140	1"	3 #14 W/ #14 GND	120VAC	PLC	ALARM PANEL		
C141	1"	2 #14	24VDC	PLC	ALARM PANEL		
C142	1"	3 #14 W/ #14 GND	120VAC	ALARM PANEL	REMOTE ANNUNCIATOR		
C143	1"	2 #14	24VDC	ALARM PANEL	REMOTE SILENCE BUTTON		
S100	1"	TSP, 2 #14	SIGNAL	PLC	FIT-100		
S110	1"	TSP	SIGNAL	PLC	PIT-110		
S122	1"	TSP	SIGNAL	PLC	LIT-122		
S140	1"	3XTSP	SIGNAL	PLC	AIT-140		
F001	2"	LMR400	SIGNAL	PLC	ANTENNA		
F002	2"	PULL STRING		NEAR UTIL XFMR	OUTSIDE BUILDING		COORDINATE WITH UTILITY, SEAL AND CAP

CONDUIT SCHEDULE

TAG	DESCRIPTION	MAKE	MODEL	SUPPLY	RANGE	COMMENTS
ZSO-10	WEST DOOR INTRUSION DETECTION SWITCH	SENETOL	2505A	24VDC		OR APPROVED EQUAL
ZSO-20	EAST DOOR INTRUSION DETECTION SWITCH	SENETOL	2505A	24VDC		OR APPROVED EQUAL
ZSO-30	WEST HATCH INTRUSION DETECTION SWITCH	BANNER	SI-LS83RC10D	24VDC		OR APPROVED EQUAL, INTRINSICALLY SAFE CIRCUIT
ZSO-40	EAST HATCH INTRUSION DETECTION SWITCH	BANNER	SI-LS83RC10D	24VDC		OR APPROVED EQUAL, INTRINSICALLY SAFE CIRCUIT
FIT-100	PUMP FLOW METER	SIEMENS	SITRANS F 5100W	120V	0-6000GPM	WITH 6000 TRANSMITTER, OR APPROVED EQUAL
PIT-110	PUMP PRESSURE TRANSMITTER	SIEMENS	SITRANS P320	LOOP	0-400FT H2O	OR APPROVED EQUAL
LSH-120	WET WELL HIGH LEVEL SWITCH	FLYGT	ENM-10	24VDC		OR APPROVED EQUAL, INTRINSICALLY SAFE CIRCUIT, WITH APPROPRIATE CABLE
LSL-121	WET WELL LOW LEVEL SWITCH	FLYGT	ENM-10	24VDC		OR APPROVED EQUAL, INTRINSICALLY SAFE CIRCUIT, WITH APPROPRIATE CABLE
LT-122	WET WELL TANK LEVEL TRANSMITTER	TE KPSI	750	LOOP	0-20 FT	OR APPROVED EQUAL
LSH-130	FLOOD DETECTION LEVEL SWITCH	GEMS	LS-1700	24VDC		OR APPROVED EQUAL
AIT-140	COMBUSTIBLE GAS DETECTOR	MSA	5000	24VDC		OR APPROVED EQUAL, LEL, O2

INSTRUMENTATION SCHEDULE

HVAC SCHEDULE						
H#	LOCATION	SERVICE	TYPE	V/HP (kW)	CAPACITY/SIZE	REMARKS
HVAC 1	ELEC ROOM	HVAC	MINI-SPLIT INDOOR UNIT	208V	42BTUH COOLING/45KBTH HEATING	MITSUBISHI PCA-A42KA7 OR APPROVED EQUAL
HVAC 1	OUTSIDE	HVAC	MINI-SPLIT OUTDOOR UNIT	208V	42BTUH COOLING/45KBTH HEATING	MITSUBISHI PUZ-A42NK7 OR APPROVED EQUAL
TSTAT-1	ELEC ROOM	HVAC	THERMOSTAT	24VAC	ROOM THERMOSTAT	MITSUBISHI
HVAC 2 (FUTURE)	ELEC ROOM	HVAC	MINI-SPLIT INDOOR UNIT	208V	42BTUH COOLING/45KBTH HEATING	MITSUBISHI PCA-A42KA7 OR APPROVED EQUAL
HVAC 2 (FUTURE)	OUTSIDE	HVAC	MINI-SPLIT OUTDOOR UNIT	208V	42BTUH COOLING/45KBTH HEATING	MITSUBISHI PUZ-A42NK7 OR APPROVED EQUAL
TSTAT-2 (FUTURE)	ELEC ROOM	HVAC	THERMOSTAT	24VAC	ROOM THERMOSTAT	MITSUBISHI
EXHAUST FAN	PUMP HOUSE	EXHAUST FAN	WALL MOUNTED	115V 1/4 HP	3128 CFM	DAYTON 484X42, OR APPROVED EQUAL
SFH-1	PUMP HOUSE	EXHAUST FAN HOUSING	WALL MOUNTED		20 INCH HOUSING	
LOUVER	PUMP HOUSE	SUPPLY LOUVER	WALL MOUNTED	115V	20H x 20W COMBINATION LOUVER DAMPER	GREENHECK EAC-401-20X20 W/ DUCT TO

HVAC SCHEDULE

		DRAWING IS TO SCALE IF BAR MEASURES: 1" = FULL SCALE 1/2" = HALF SCALE	
		ORIGINAL	REVISIONS
NO.	DATE	DESIGN	DRAWN
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NORTH VILLAGE SPECIAL SERVICE DISTRICT

UVU LIFT STATION

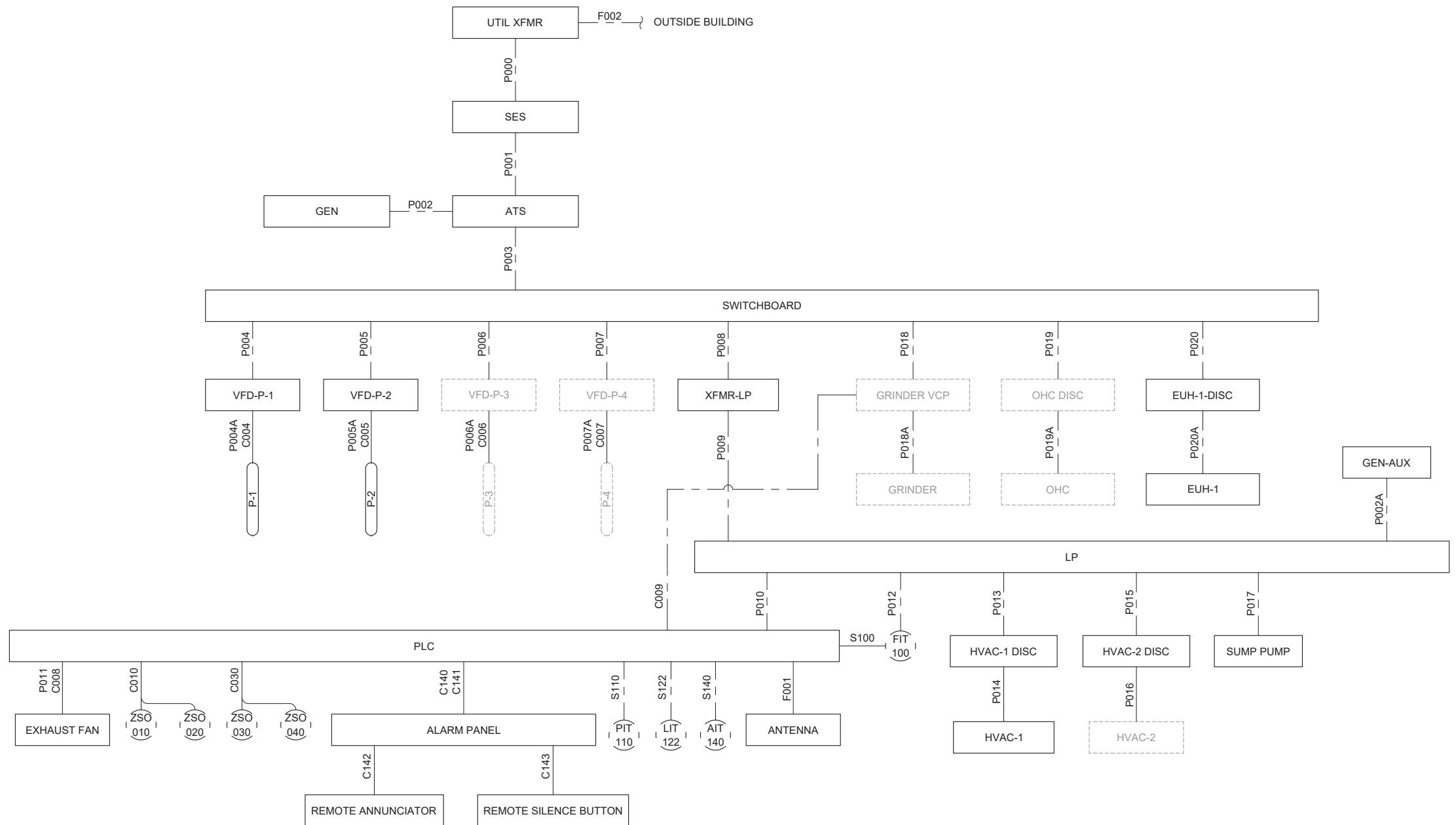
skm

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DRAWING NO. E801

SHEET

ELECTRICAL - POWER DISTRIBUTION
CONDUT SCHEDULE



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DRAWING NO.

E802

SHEET

**ELECTRICAL - POWER DISTRIBUTION
CONDUIT DEVELOPMENT**

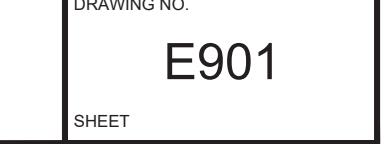
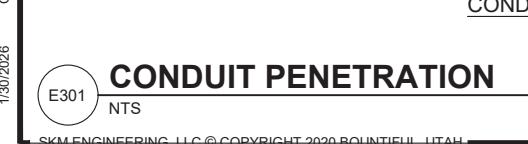
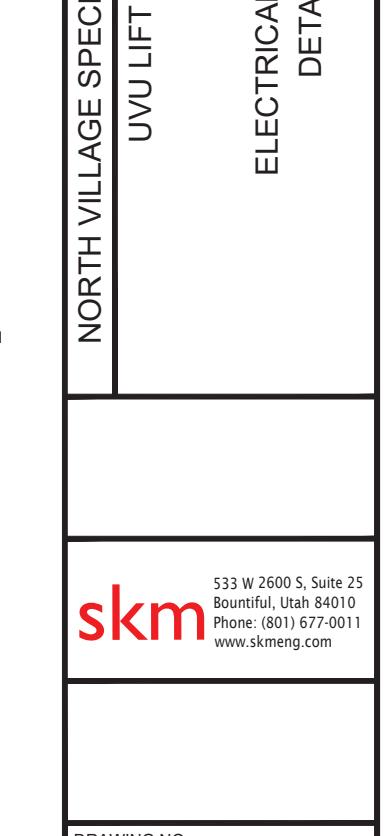
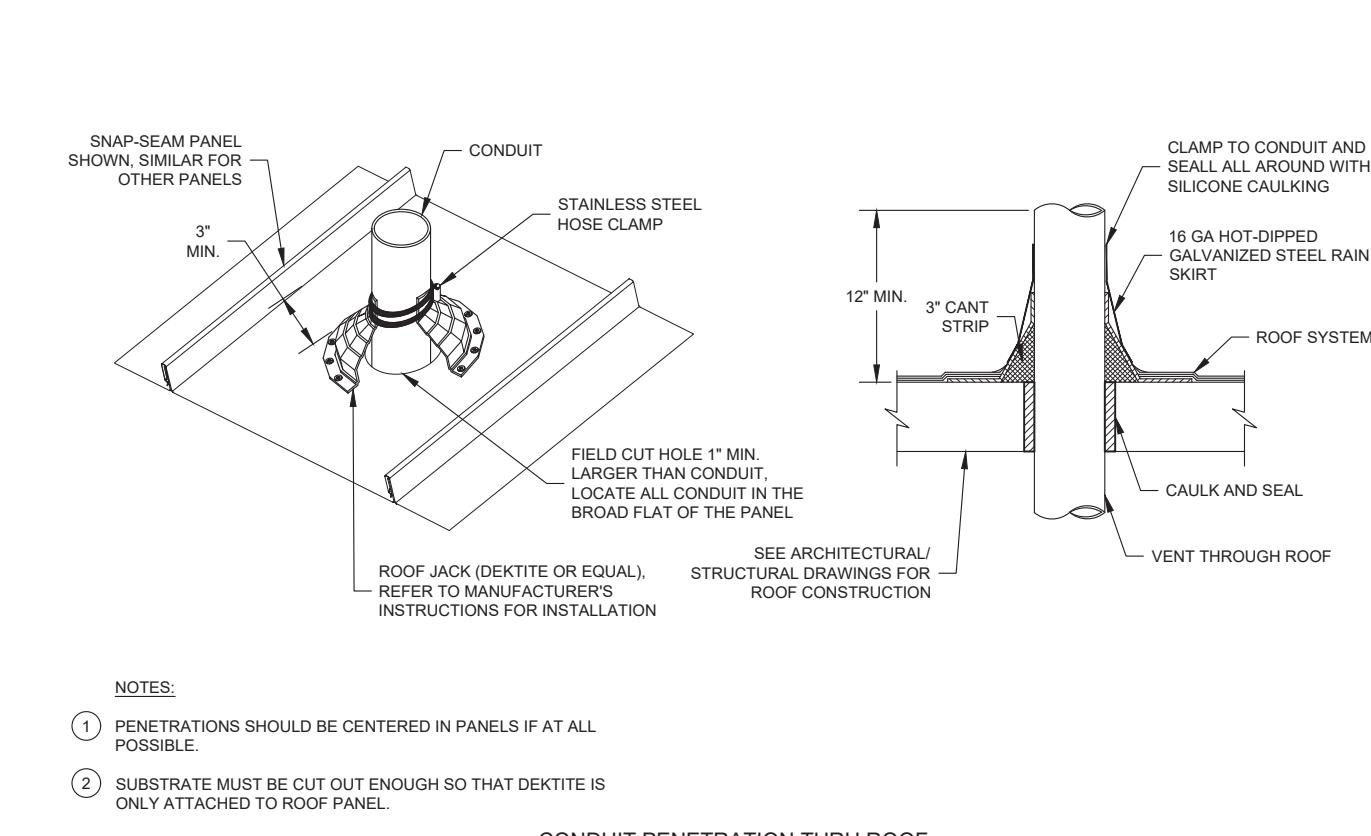
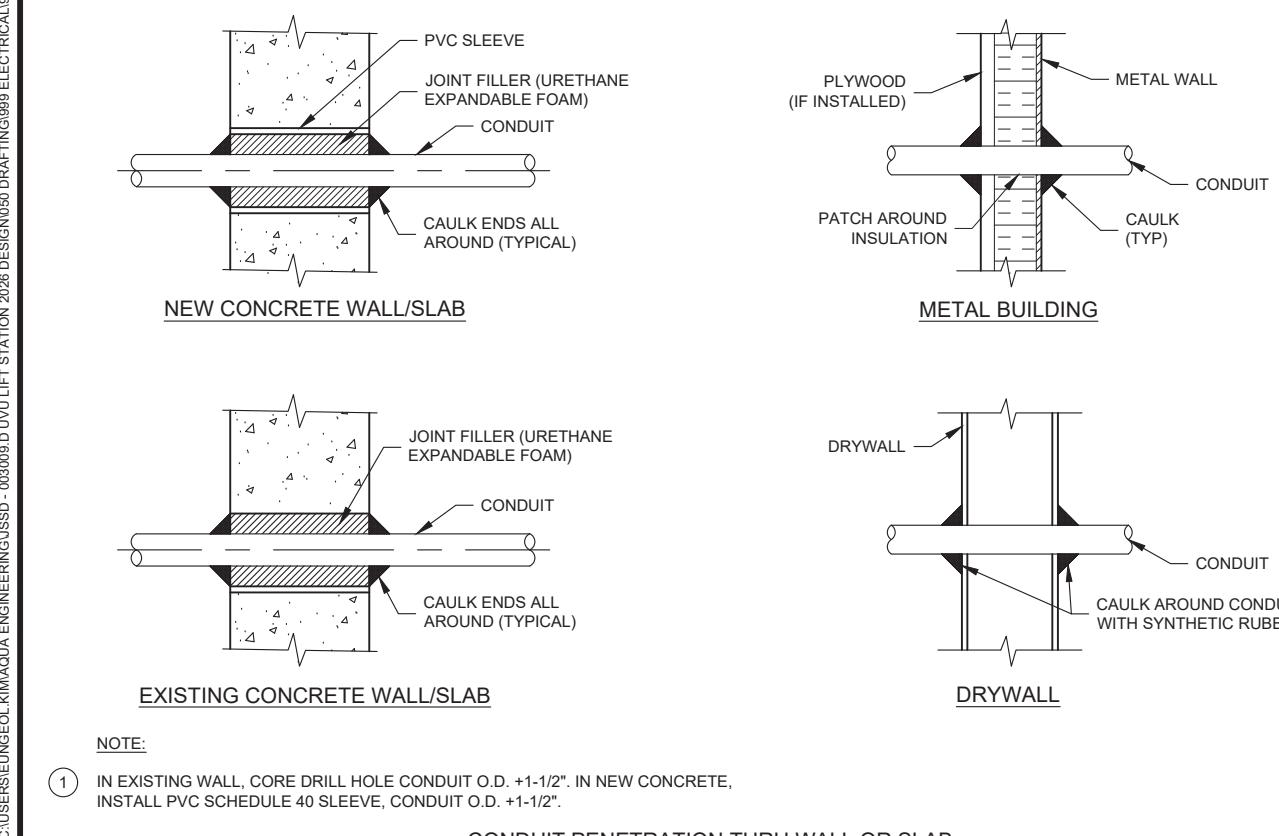
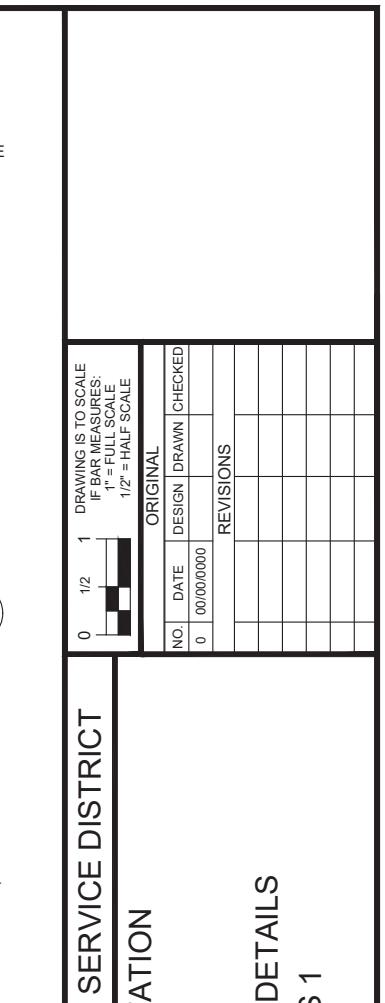
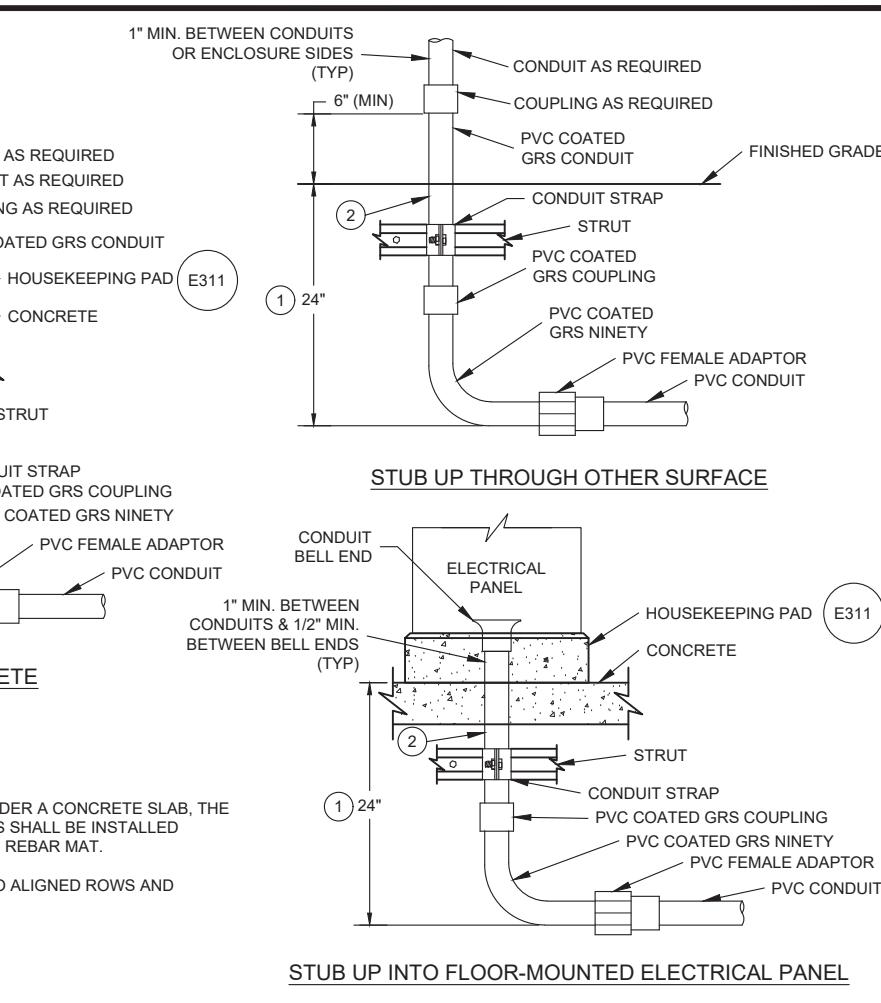
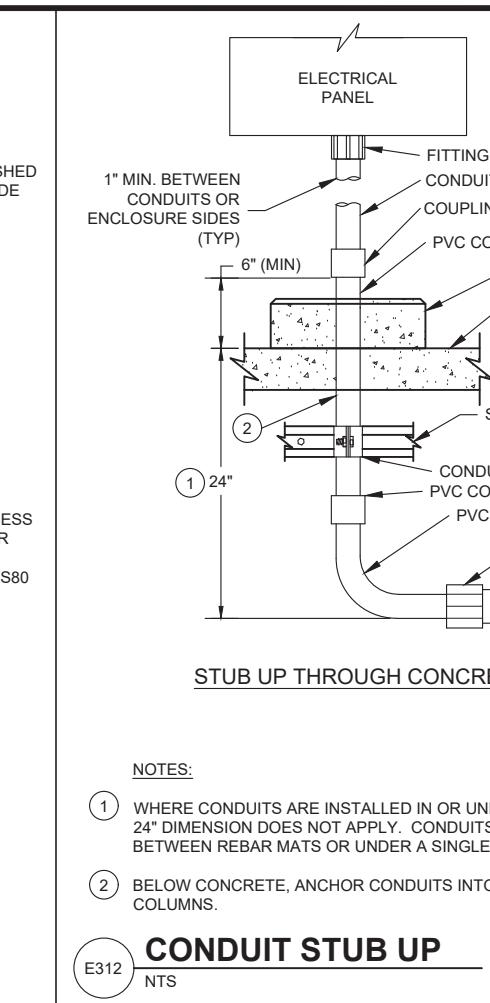
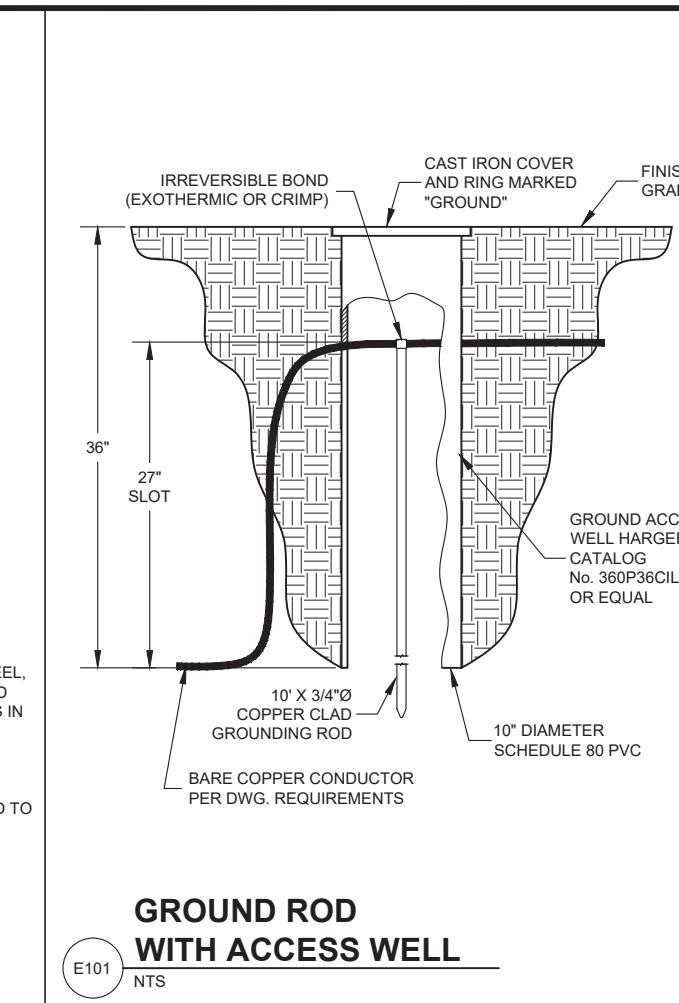
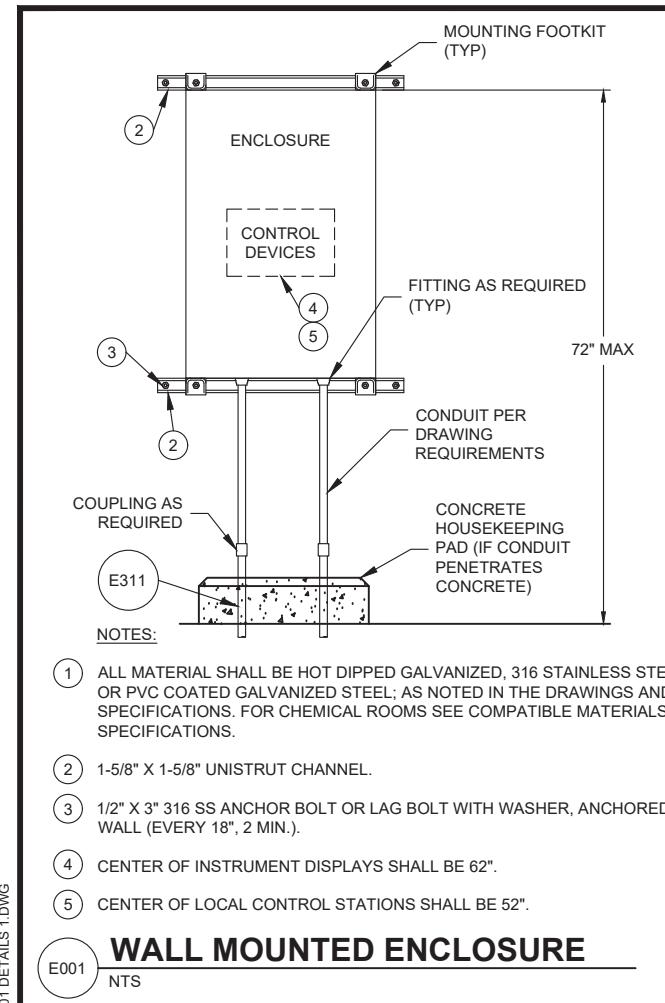
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IF BAR MEASURES
1" = FULL SCALE
1/2" = HALF SCALE

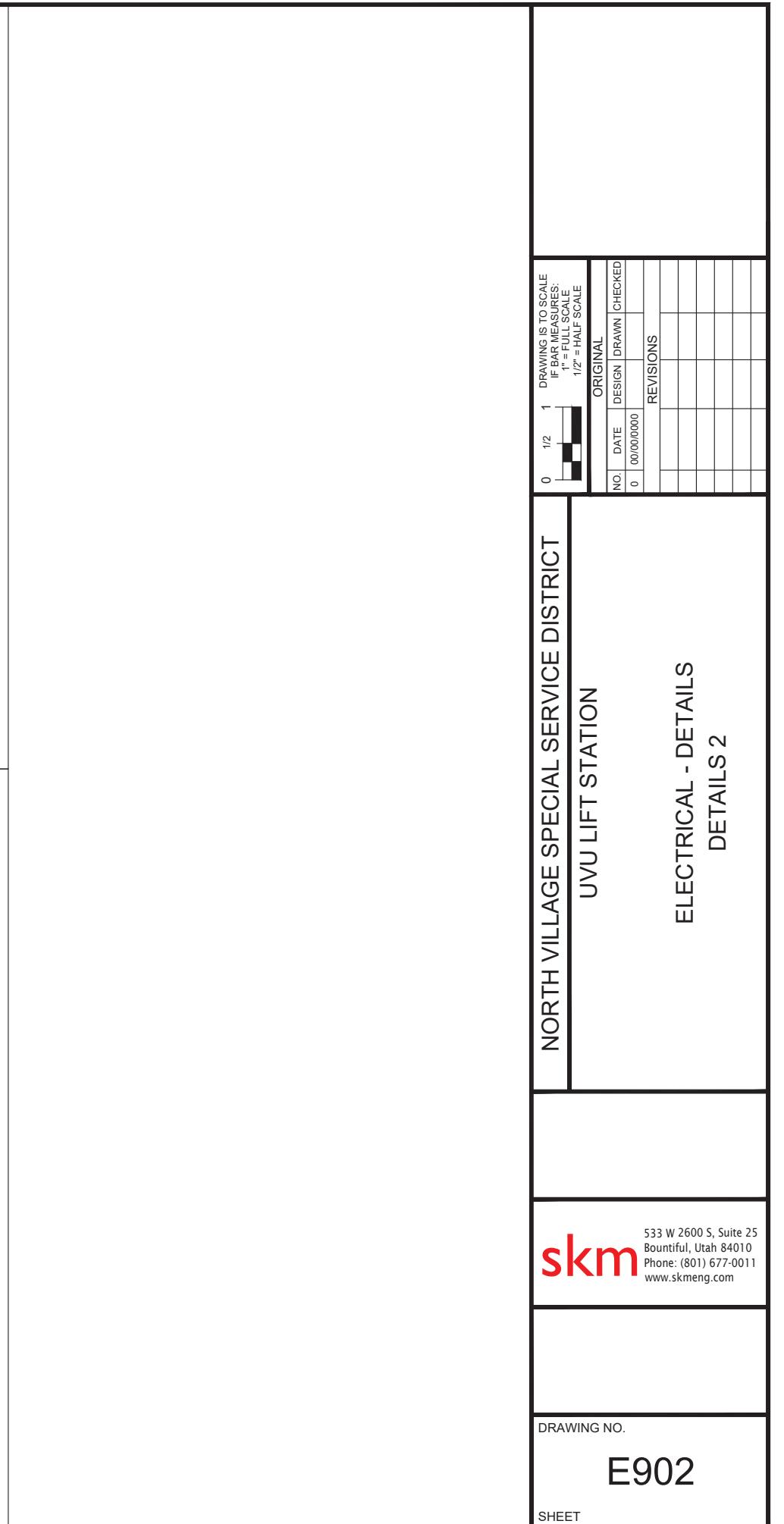
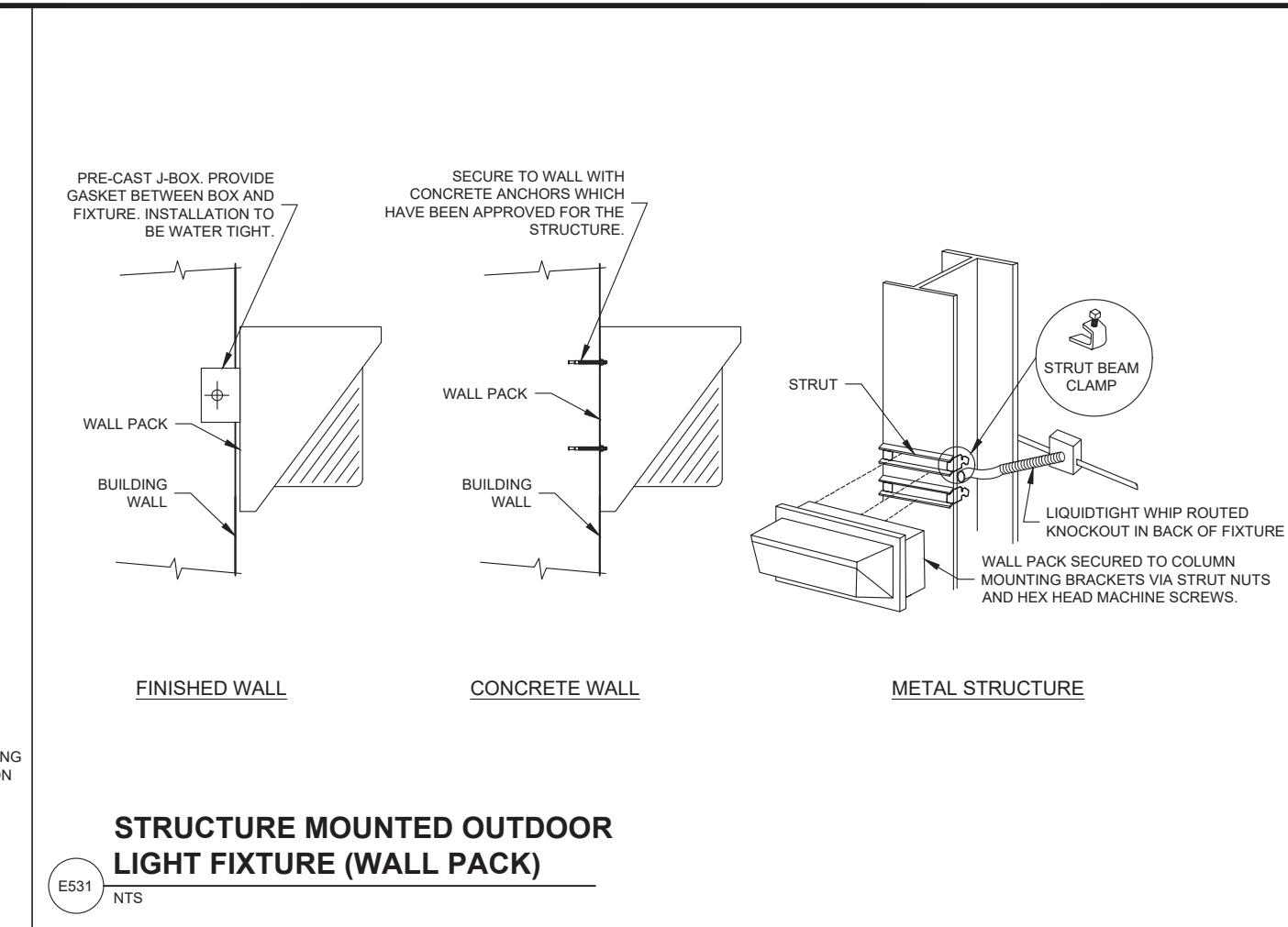
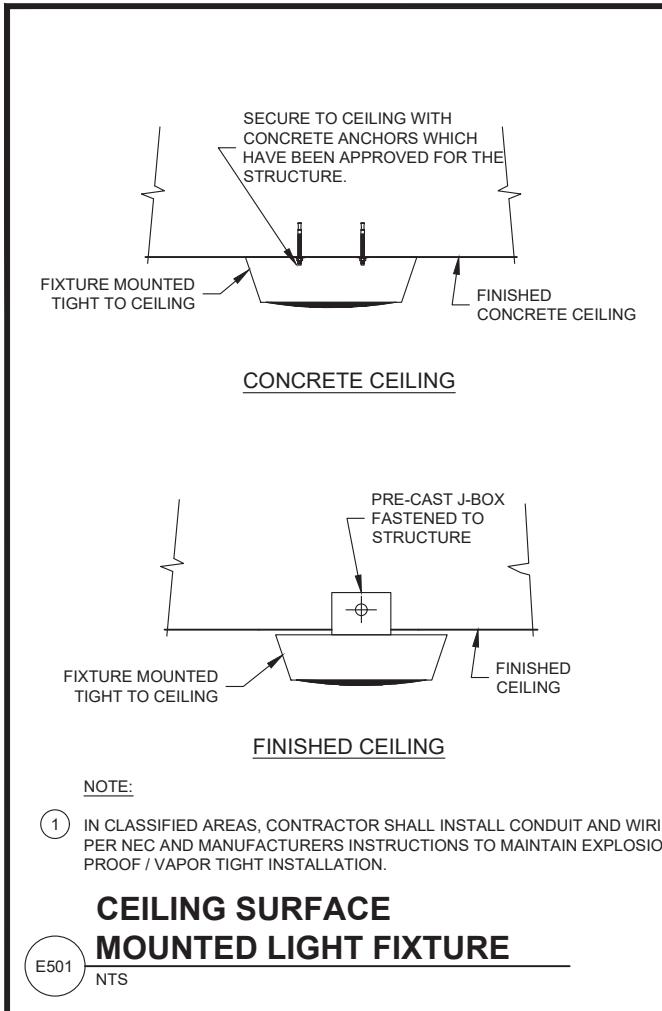
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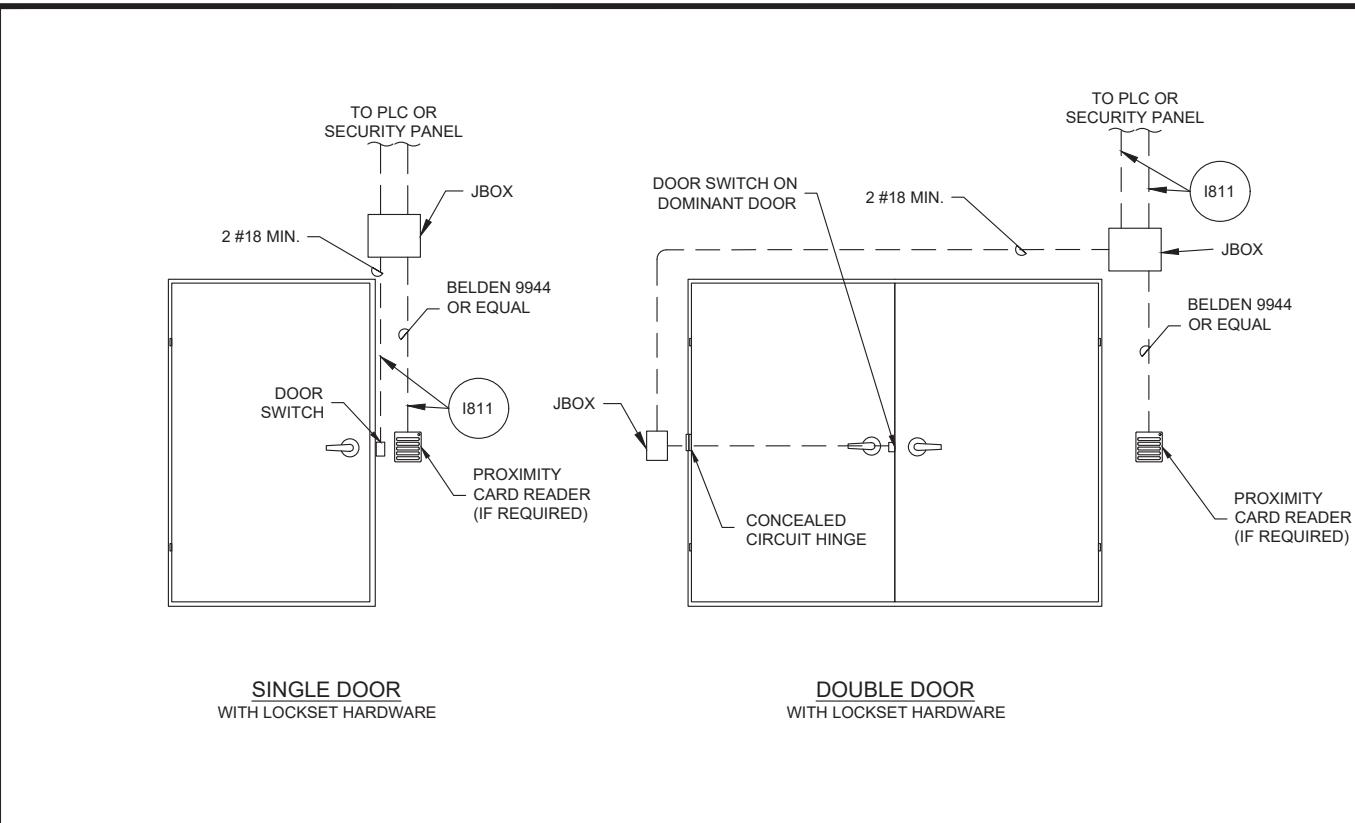
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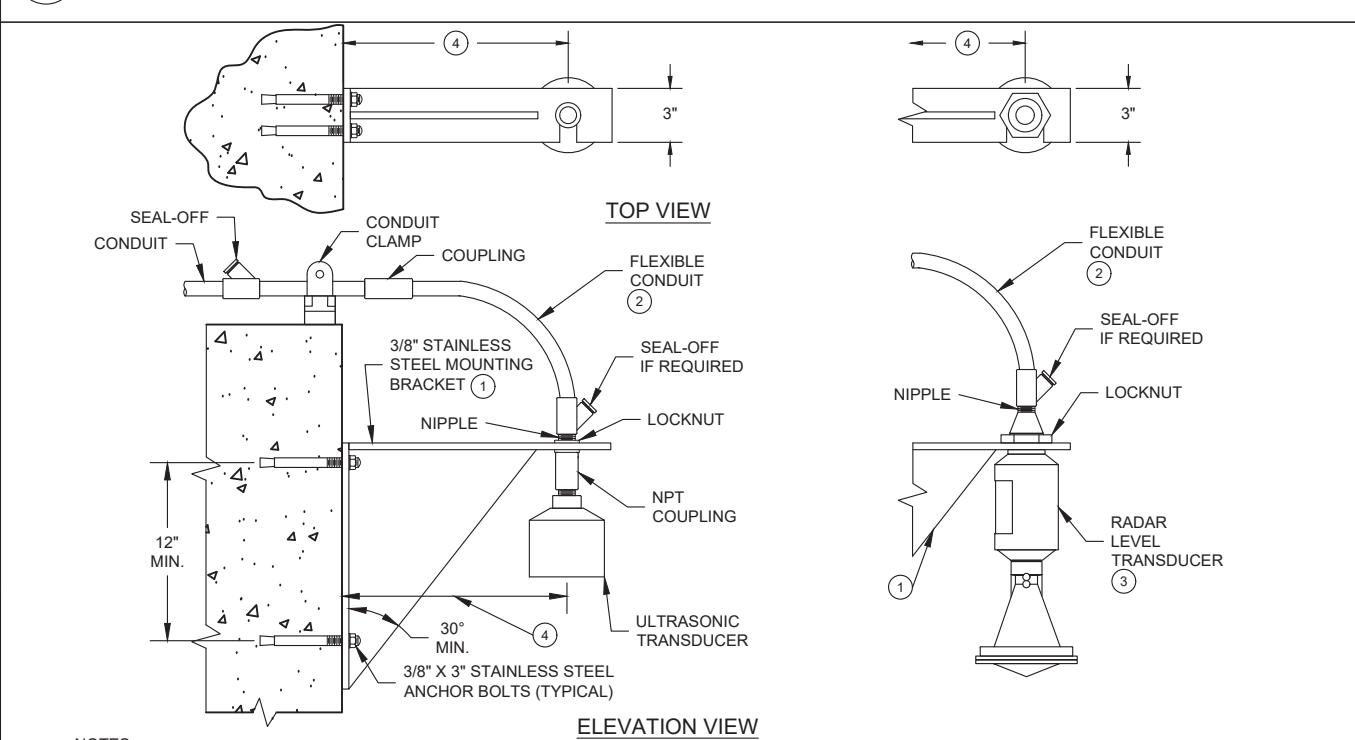
REVISIONS





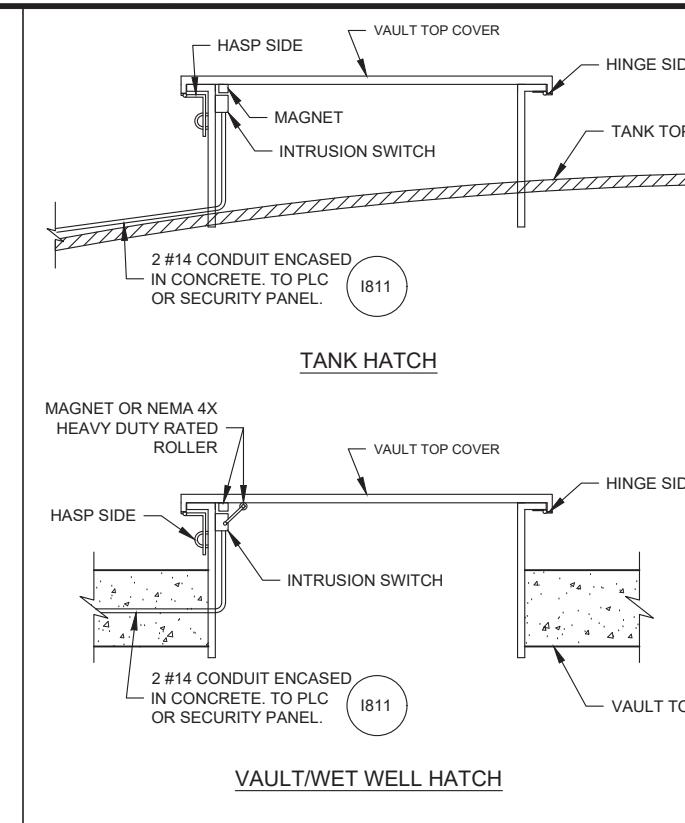


DOOR INTRUSION SWITCH
I801 NTS

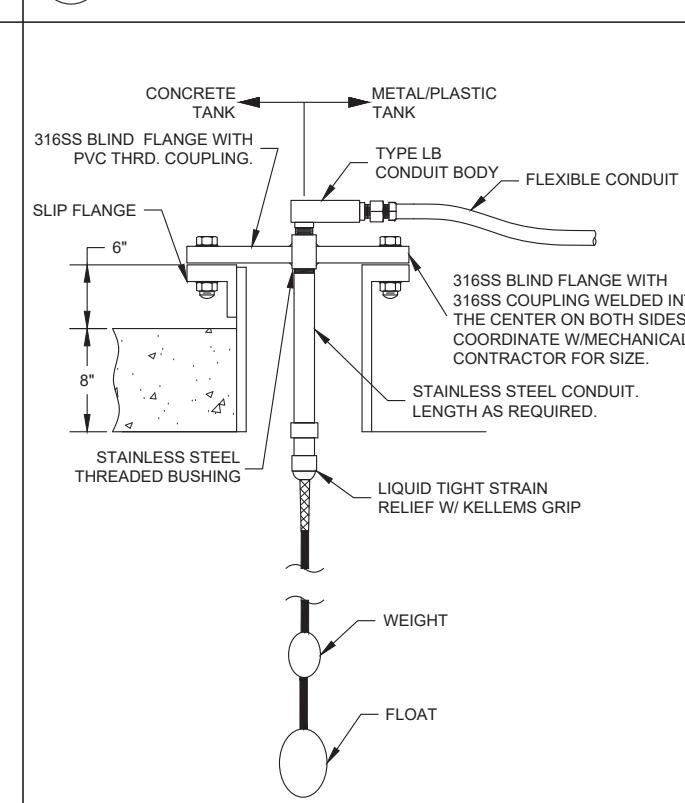


OPEN TANK ULTRASONIC/RADAR LEVEL TRANSDUCER MOUNTING
I101 NTS

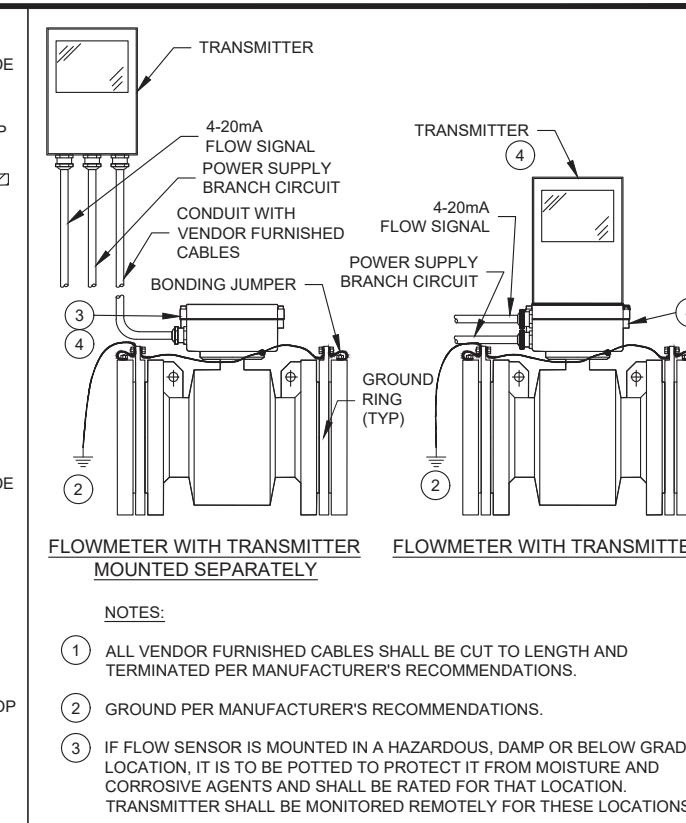
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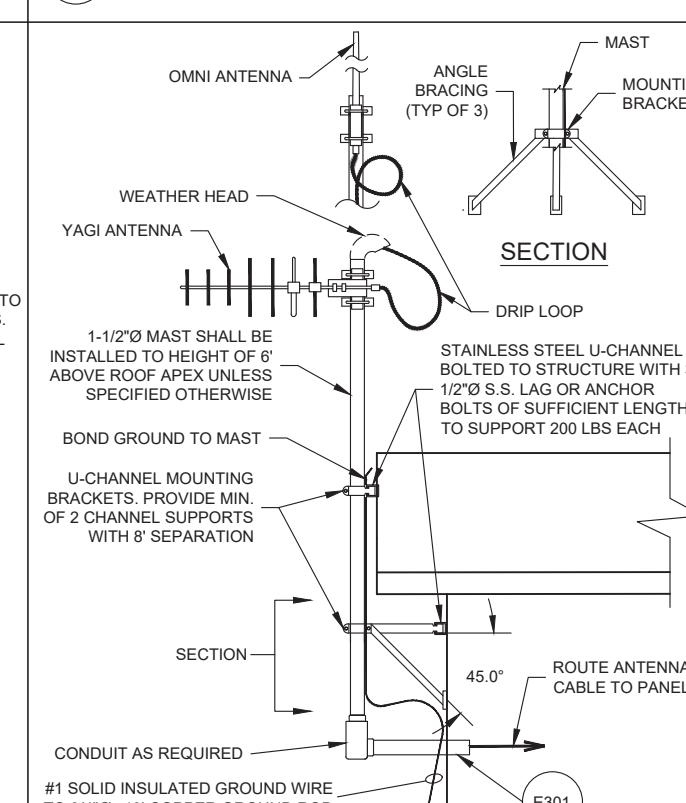
HATCH INTRUSION SWITCH
I802 NTS



FLANGE MOUNTED FLOAT
I143 NTS



MAGNETIC FLOWMETER
I011 NTS



ANTENNA MAST TO BUILDING
I701 NTS

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UV LIFT STATION

SECTION

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