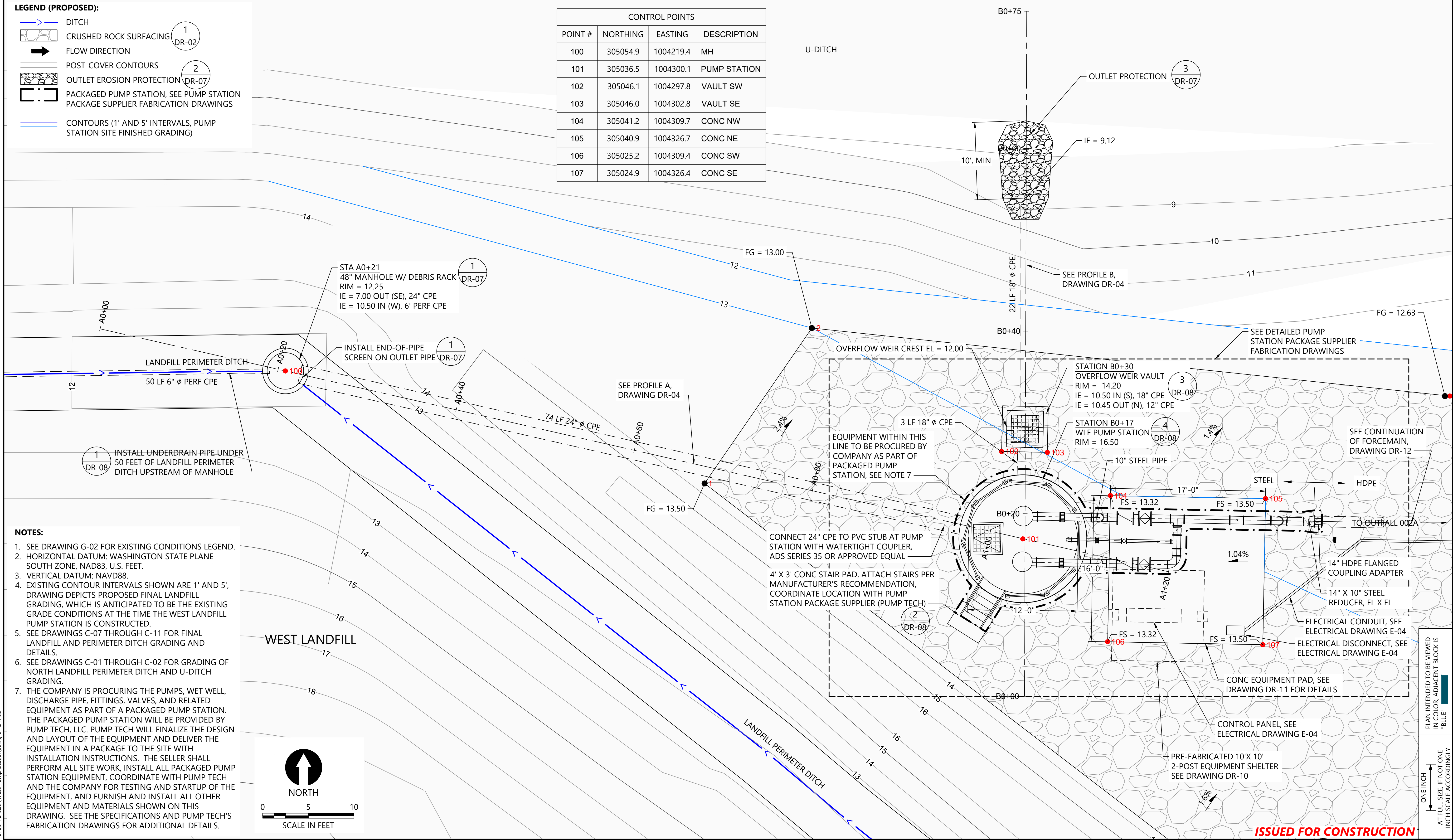


LEGEND (PROPOSED):

- DITCH
- CRUSHED ROCK SURFACING (1) DR-02
- FLOW DIRECTION
- POST-COVER CONTOURS
- OUTLET EROSION PROTECTION (2) DR-07
- PACKAGED PUMP STATION, SEE PUMP STATION PACKAGE SUPPLIER FABRICATION DRAWINGS
- CONTOURS (1' AND 5' INTERVALS, PUMP STATION SITE FINISHED GRADING)

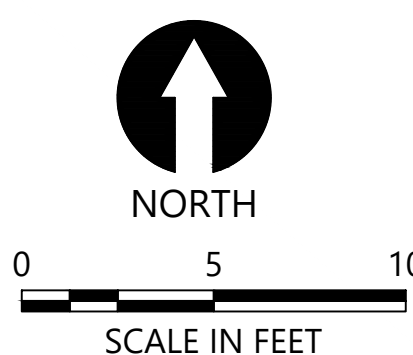
CONTROL POINTS			
POINT #	NORTHING	EASTING	DESCRIPTION
100	305054.9	1004219.4	MH
101	305036.5	1004300.1	PUMP STATION
102	305046.1	1004297.8	VAULT SW
103	305046.0	1004302.8	VAULT SE
104	305041.2	1004309.7	CONC NW
105	305040.9	1004326.7	CONC NE
106	305025.2	1004309.4	CONC SW
107	305024.9	1004326.4	CONC SE



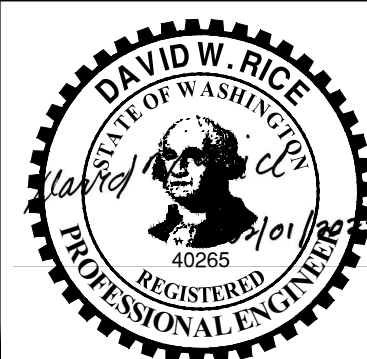
NOTES:

- SEE DRAWING G-02 FOR EXISTING CONDITIONS LEGEND.
- HORIZONTAL DATUM: WASHINGTON STATE PLANE SOUTH ZONE, NAD83, U.S. FEET.
- VERTICAL DATUM: NAVD88.
- EXISTING CONTOUR INTERVALS SHOWN ARE 1' AND 5', DRAWING DEPICTS PROPOSED FINAL LANDFILL GRADING, WHICH IS ANTICIPATED TO BE THE EXISTING GRADE CONDITIONS AT THE TIME THE WEST LANDFILL PUMP STATION IS CONSTRUCTED.
- SEE DRAWINGS C-07 THROUGH C-11 FOR FINAL LANDFILL AND PERIMETER DITCH GRADING AND DETAILS.
- SEE DRAWINGS C-01 THROUGH C-02 FOR GRADING OF NORTH LANDFILL PERIMETER DITCH AND U-DITCH GRADING.
- THE COMPANY IS PROCURING THE PUMPS, WET WELL, DISCHARGE PIPE, FITTINGS, VALVES, AND RELATED EQUIPMENT AS PART OF A PACKAGED PUMP STATION. THE PACKAGED PUMP STATION WILL BE PROVIDED BY PUMP TECH, LLC. PUMP TECH WILL FINALIZE THE DESIGN AND LAYOUT OF THE EQUIPMENT AND DELIVER THE EQUIPMENT IN A PACKAGE TO THE SITE WITH INSTALLATION INSTRUCTIONS. THE SELLER SHALL PERFORM ALL SITE WORK, INSTALL ALL PACKAGED PUMP STATION EQUIPMENT, COORDINATE WITH PUMP TECH AND THE COMPANY FOR TESTING AND STARTUP OF THE EQUIPMENT, AND FURNISH AND INSTALL ALL OTHER EQUIPMENT AND MATERIALS SHOWN ON THIS DRAWING. SEE THE SPECIFICATIONS AND PUMP TECH'S FABRICATION DRAWINGS FOR ADDITIONAL DETAILS.

WEST LANDFILL



0730-PL-020 (West Pump Station) Aug 61 DR-03
Feb 01, 2023 10:24am chewett



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
1	02/01/23	CH	RD	ISSUED FOR CONSTRUCTION

DESIGNED BY: J. SEXTON
 DRAWN BY: C. HEWETT
 CHECKED BY: E. VOGES
 APPROVED BY: D. RICE
 SCALE: AS NOTED
 DATE: FEBRUARY 2023

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

WLF PUMP STATION: SITE PLAN

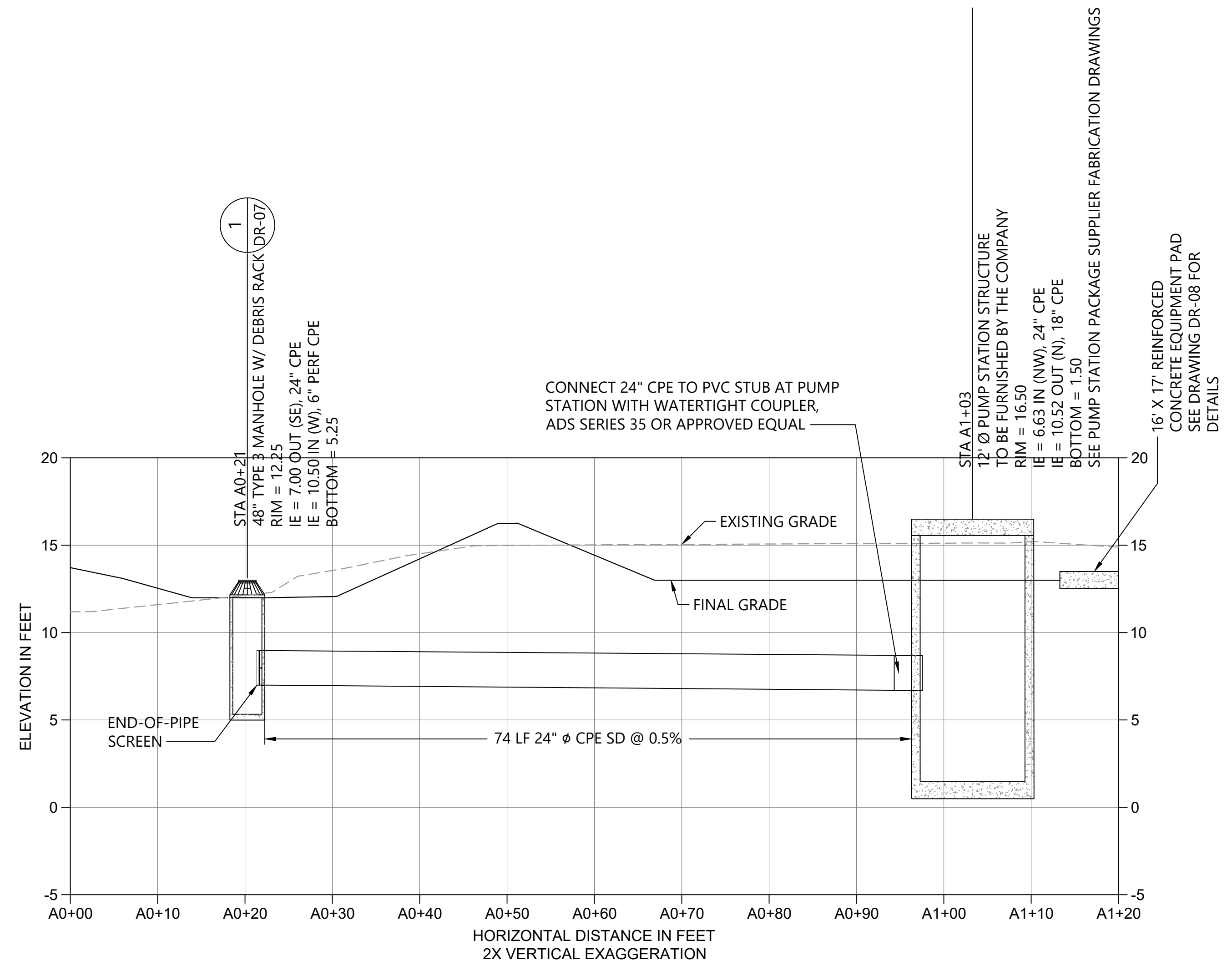
DR-03

SHEET # 63 OF 114

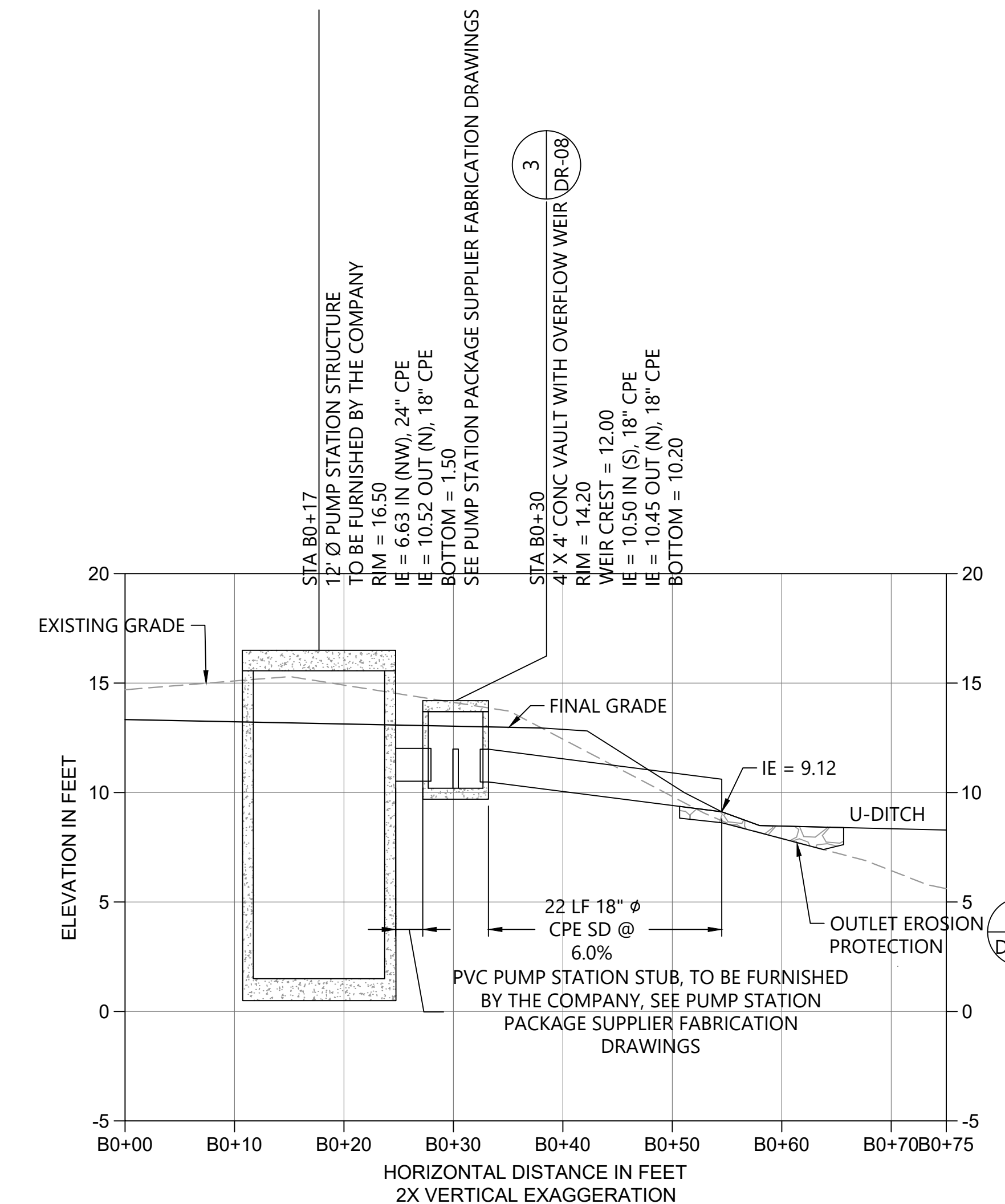
ISSUED FOR CONSTRUCTION

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" INCH SCALE ACCORDINGLY

Feb 01, 2023 10:24am ch Hewett 0730-PL-020 (West Pump Station).dwg DR-04



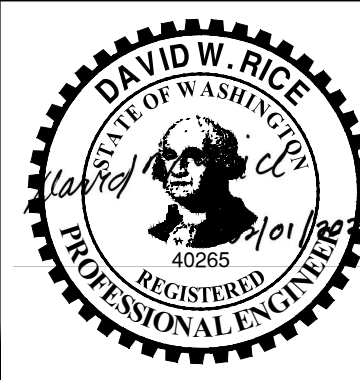
A WLF PUMP STATION GRAVITY INLET PROFILE
 DR-03 HORIZONTAL SCALE: 1" = 10'
 VERTICAL SCALE: 1" = 5'



B WLF PUMP STATION OVERFLOW PROFILE
 DR-03 HORIZONTAL SCALE: 1" = 10'
 VERTICAL SCALE: 1" = 5'

LEGEND (SECTIONS):
 - - - - - EXISTING GRADE
 ——— PROPOSED FINAL GRADE
 OUTLET EROSION PROTECTION

ISSUED FOR CONSTRUCTION



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
1	02/01/23	CH	RD	ISSUED FOR CONSTRUCTION

DESIGNED BY: J. SEXTON
 DRAWN BY: C. HEWETT
 CHECKED BY: K. SKELLENGER
 APPROVED BY: R. DESROSIERS
 SCALE: AS NOTED
 DATE: FEBRUARY 2023

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW







WLF PUMP STATION: STORMWATER PROFILES

DR-04

SHEET # **64** OF **114**

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE"
 ONE INCH AT FULL SIZE. IF NOT ONE INCH SCALE ACCORDINGLY

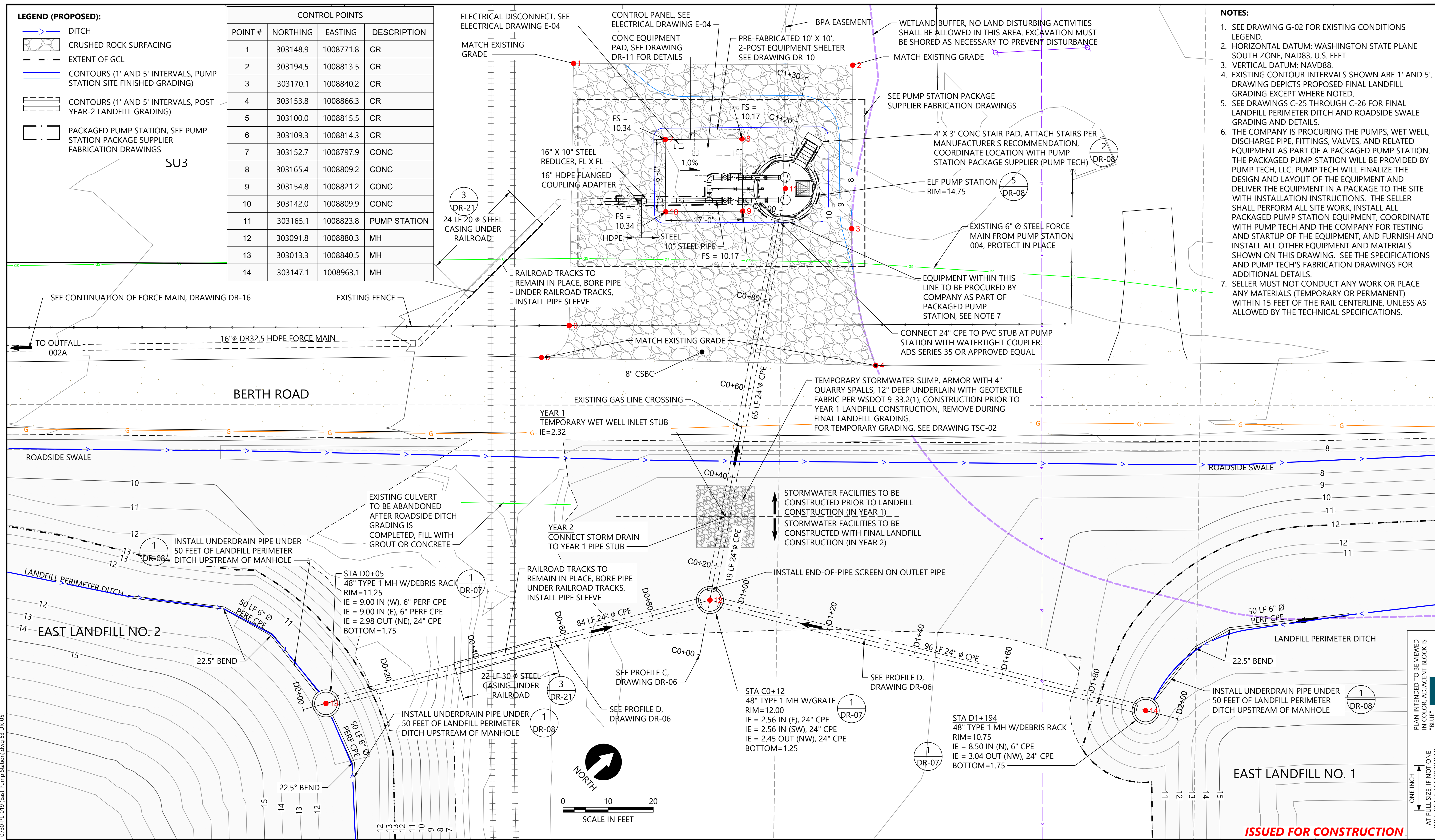
LEGEND (PROPOSED):

-  DITCH
-  CRUSHED ROCK SURFACING
-  EXTENT OF GCL
-  CONTOURS (1' AND 5' INTERVALS, PUMP STATION SITE FINISHED GRADING)
-  CONTOURS (1' AND 5' INTERVALS, POST YEAR-2 LANDFILL GRADING)
-  PACKAGED PUMP STATION, SEE PUMP STATION PACKAGE SUPPLIER FABRICATION DRAWINGS

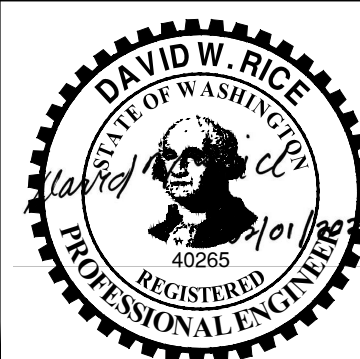
CONTROL POINTS			
POINT #	NORTHING	EASTING	DESCRIPTION
1	303148.9	1008771.8	CR
2	303194.5	1008813.5	CR
3	303170.1	1008840.2	CR
4	303153.8	1008866.3	CR
5	303100.0	1008815.5	CR
6	303109.3	1008814.3	CR
7	303152.7	1008797.9	CONC
8	303165.4	1008809.2	CONC
9	303154.8	1008821.2	CONC
10	303142.0	1008809.9	CONC
11	303165.1	1008823.8	PUMP STATION
12	303091.8	1008880.3	MH
13	303013.3	1008840.5	MH
14	303147.1	1008963.1	MH

NOTES:

1. SEE DRAWING G-02 FOR EXISTING CONDITIONS LEGEND.
2. HORIZONTAL DATUM: WASHINGTON STATE PLANE SOUTH ZONE, NAD83, U.S. FEET.
3. VERTICAL DATUM: NAVD88.
4. EXISTING CONTOUR INTERVALS SHOWN ARE 1' AND 5'. DRAWING DEPICTS PROPOSED FINAL LANDFILL GRADING EXCEPT WHERE NOTED.
5. SEE DRAWINGS C-25 THROUGH C-26 FOR FINAL LANDFILL PERIMETER DITCH AND ROADSIDE SWALE GRADING AND DETAILS.
6. THE COMPANY IS PROCURING THE PUMPS, WET WELL, DISCHARGE PIPE, FITTINGS, VALVES, AND RELATED EQUIPMENT AS PART OF A PACKAGED PUMP STATION. THE PACKAGED PUMP STATION WILL BE PROVIDED BY PUMP TECH, LLC. PUMP TECH WILL FINALIZE THE DESIGN AND LAYOUT OF THE EQUIPMENT AND DELIVER THE EQUIPMENT IN A PACKAGE TO THE SITE WITH INSTALLATION INSTRUCTIONS. THE SELLER SHALL PERFORM ALL SITE WORK, INSTALL ALL PACKAGED PUMP STATION EQUIPMENT, COORDINATE WITH PUMP TECH AND THE COMPANY FOR TESTING AND STARTUP OF THE EQUIPMENT, AND FURNISH AND INSTALL ALL OTHER EQUIPMENT AND MATERIALS SHOWN ON THIS DRAWING. SEE THE SPECIFICATIONS AND PUMP TECH'S FABRICATION DRAWINGS FOR ADDITIONAL DETAILS.
7. SELLER MUST NOT CONDUCT ANY WORK OR PLACE ANY MATERIALS (TEMPORARY OR PERMANENT) WITHIN 15 FEET OF THE RAIL CENTERLINE, UNLESS AS ALLOWED BY THE TECHNICAL SPECIFICATIONS.



0730-PL-019 (East Pump Station) dwg 63 DR-05
Feb 01, 2023 10:24am chewett



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
1	02/01/23	CH	RD	ISSUED FOR CONSTRUCTION

DESIGNED BY: J. SEXTON
 DRAWN BY: C. HEWETT
 CHECKED BY: E. VOGES
 APPROVED BY: D. RICE
 SCALE: AS NOTED
 DATE: FEBRUARY 2023

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

ELF PUMP STATION - SITE PLAN

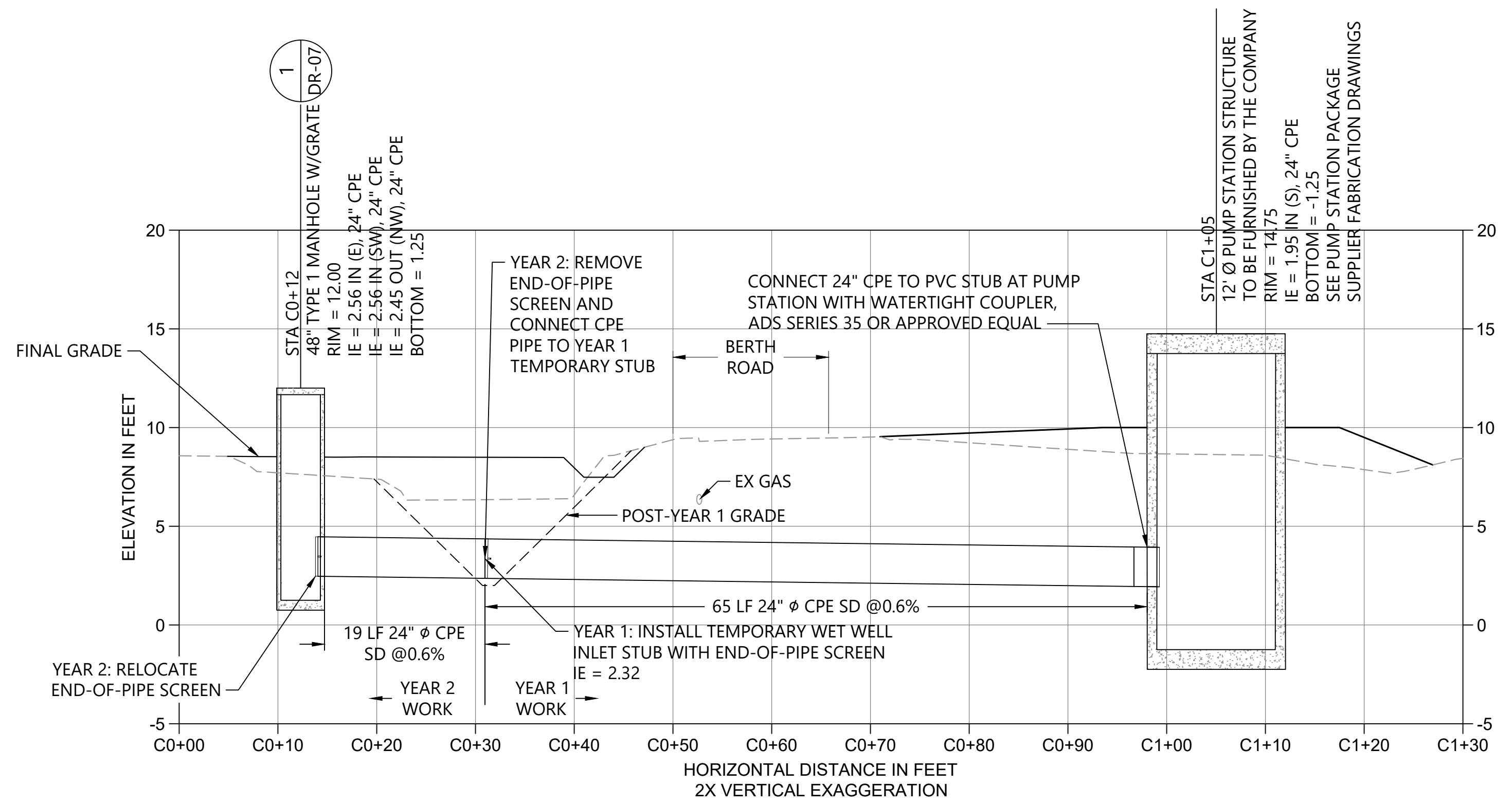
DR-05

SHEET # 65 OF 114

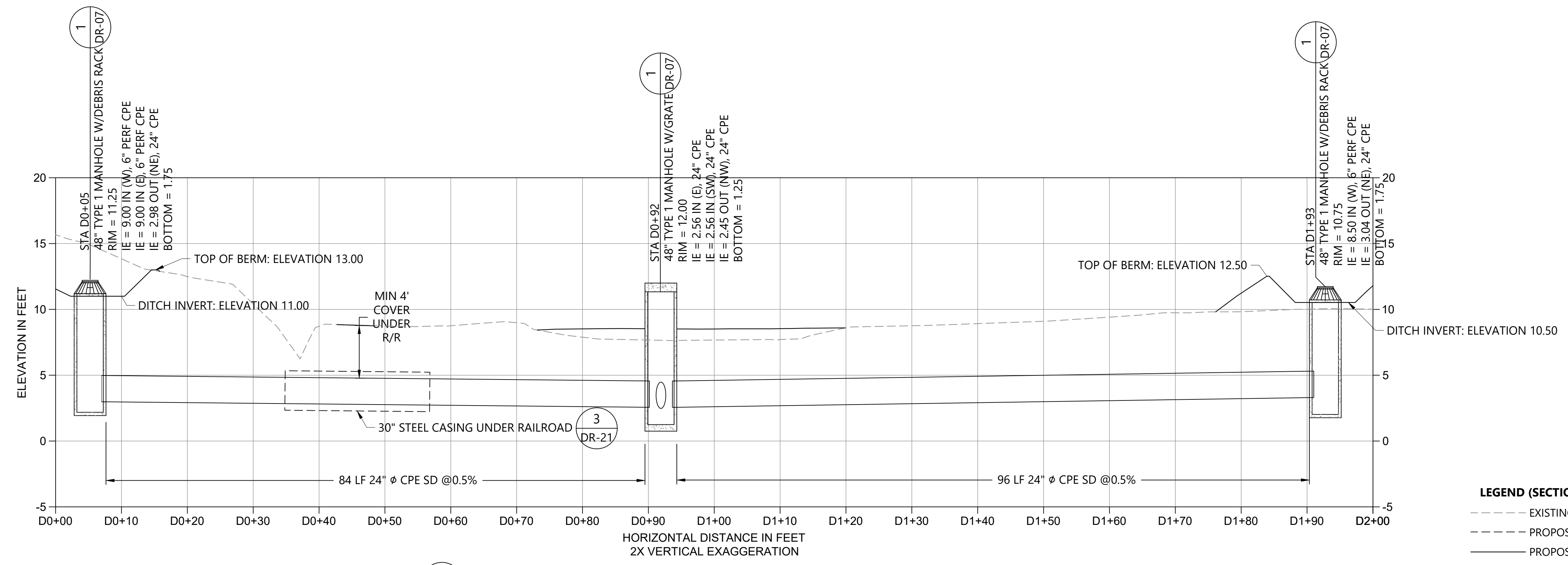
ISSUED FOR CONSTRUCTION

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" INCH SCALE ACCORDINGLY

Feb 01, 2023 10:24am ch Hewett 0730-PL-019 (East Pump Station)dwg 64 DR-06



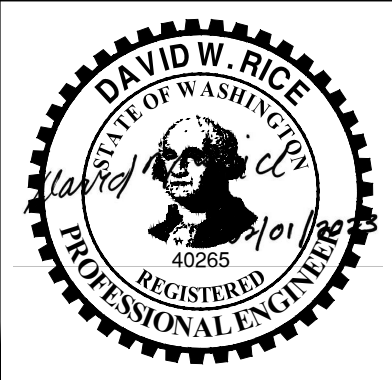
C WLF PUMP STATION GRAVITY INLET PROFILE
 DR-06 HORIZONTAL SCALE: 1" = 10'
 VERTICAL SCALE: 1" = 5'



D ELF PUMP STATION GRAVITY STORM DRAIN SYSTEM PROFILE
 DR-06 HORIZONTAL SCALE: 1" = 10'
 VERTICAL SCALE: 1" = 5'

LEGEND (SECTIONS):
 - - - - - EXISTING GRADE
 - - - - - PROPOSED POST-YEAR 1 GRADE
 _____ PROPOSED FINAL GRADE

ISSUED FOR CONSTRUCTION



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
1	02/01/23	CH	RD	ISSUED FOR CONSTRUCTION

DESIGNED BY: J. SEXTON
 DRAWN BY: C. HEWETT
 CHECKED BY: E. VOGES
 APPROVED BY: D. RICE
 SCALE: AS NOTED
 DATE: FEBRUARY 2023

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW
ELF PUMP STATION - GRAVITY INLET PROFILES

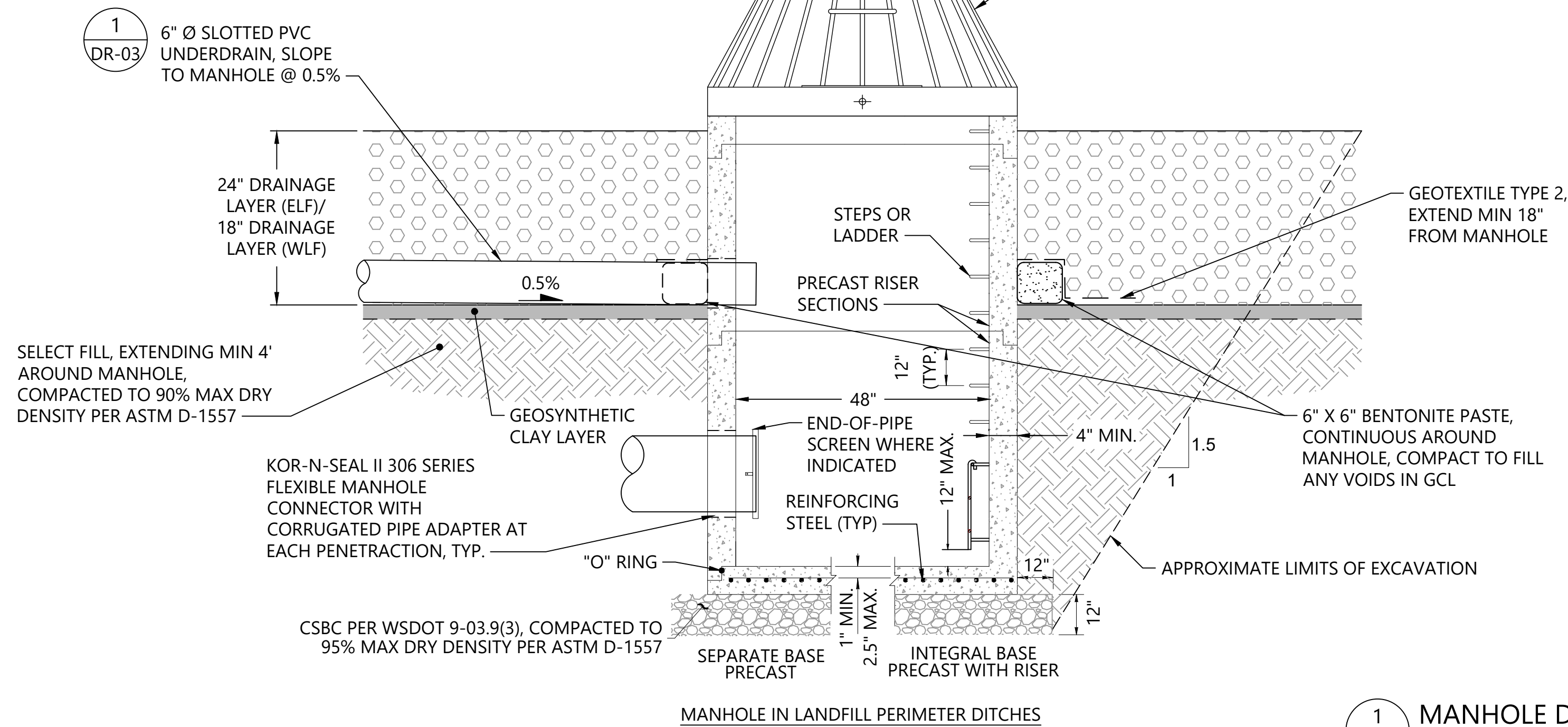
DR-06

SHEET # 66 OF 114

ONE INCH
 AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY
 PLAN INTENDED TO BE VIEWED IN COLOR, ADJACENT BLOCK IS "BLUE"

NOTES:

1. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MINIMUM TO 2.5" MAXIMUM.
2. FOR PIPE ALLOWANCES, SEE WSDOT STANDARD PLAN B-10.20.
3. FOR WASTE CONSOLIDATION AND COVER DETAILS, SEE CIVIL SHEETS



MANHOLE IN LANDFILL PERIMETER DITCHES

1 MANHOLE DETAILS
SCALE: NTS

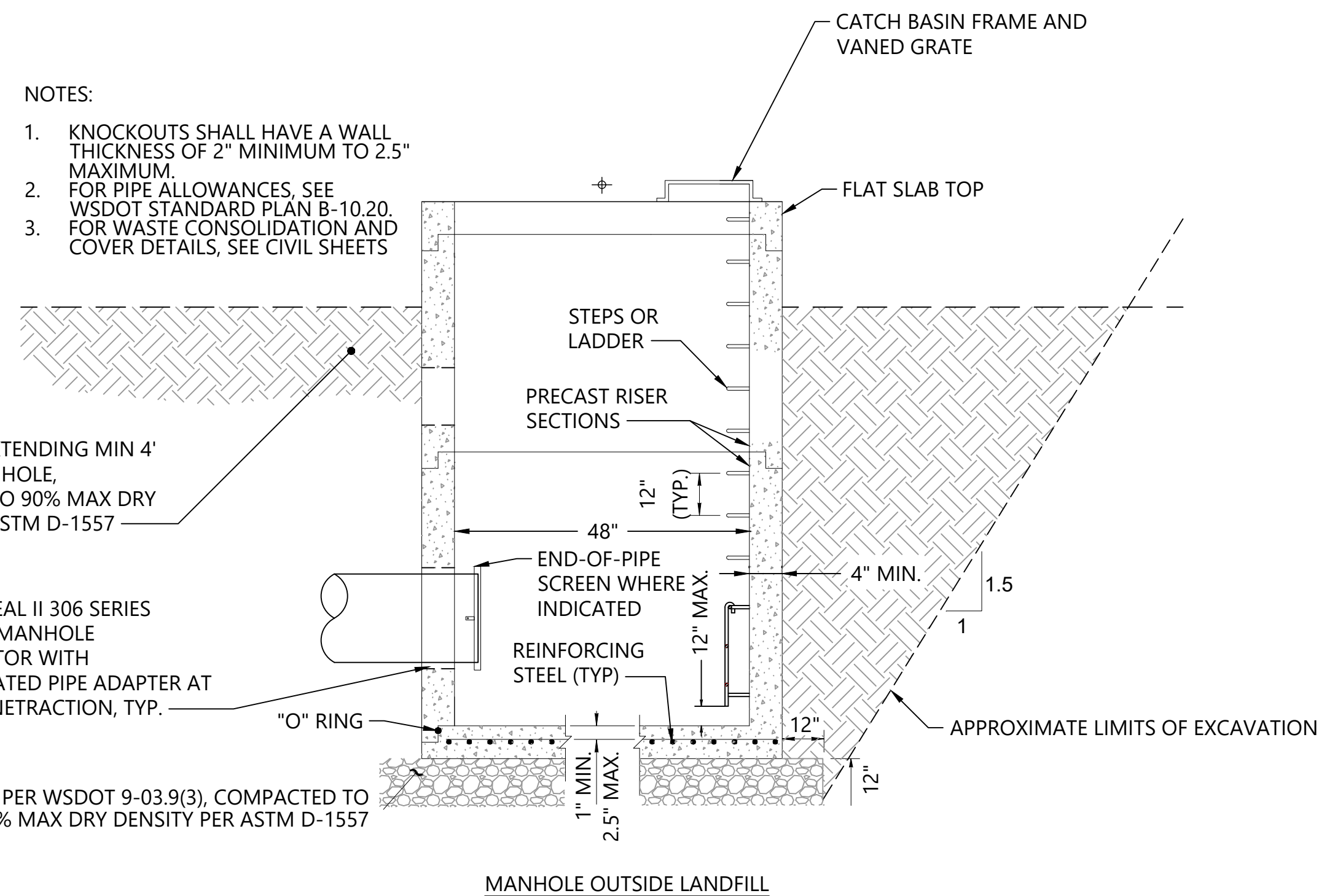
NOTES:

1. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MINIMUM TO 2.5" MAXIMUM.
2. FOR PIPE ALLOWANCES, SEE WSDOT STANDARD PLAN B-10.20.
3. FOR WASTE CONSOLIDATION AND COVER DETAILS, SEE CIVIL SHEETS

SELECT FILL, EXTENDING MIN 4' AROUND MANHOLE, COMPACTED TO 90% MAX DRY DENSITY PER ASTM D-1557

KOR-N-SEAL II 306 SERIES FLEXIBLE MANHOLE CONNECTOR WITH CORRUGATED PIPE ADAPTER AT EACH PENETRATION, TYP.

CSBC PER WSDOT 9-03.9(3), COMPACTED TO 95% MAX DRY DENSITY PER ASTM D-1557



MANHOLE OUTSIDE LANDFILL

3/4" DIA SMOOTH ROUND BARS, EQUALLY SPACED. WELD TO UPPER AND LOWER BANDS. (24 TOTAL, INCLUDING MAINTENANCE GATE).

3/4" DIA SMOOTH ROUND BARS EQUALLY SPACED (4" O.C. MAX)

7" MAX SPACING AT LOWER BAND

UPPER BAND, 3/4" X 4" GALV. STEEL, FORMED AS 24" DIA RING

LOWER BAND, 3/4" X 4" GALV. STEEL, FORMED TO FIT GROOVE OF CB RISER

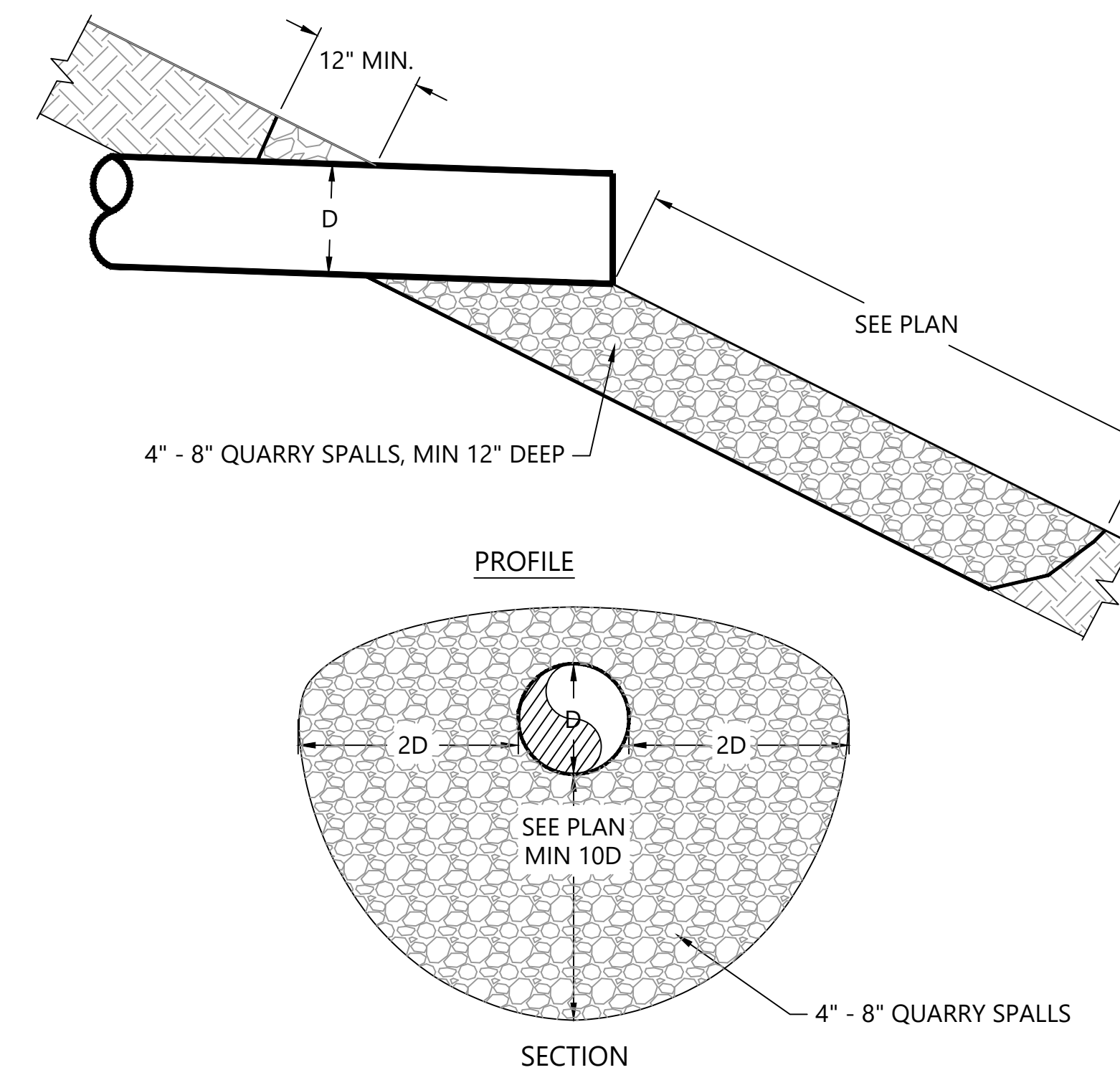
4-9/16" HOLES, EQUALLY SPACED, FOR ANCHORS

2 DEBRIS RACK DETAIL
SCALE: 1" = 2"

NOTES:

1. ALL STEEL IN PLATES, BARS AND BANDS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36.
2. DEBRIS CAGE SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123 (AASHTO M111).
3. PROVIDE 4 HOOK CLAMPS FOR ANCHOR TO PRECAST CB RISER.
4. SELLER SHALL SUPPLY SHOP DRAWINGS OF BAR RACK FOR APPROVAL BEFORE FABRICATION.

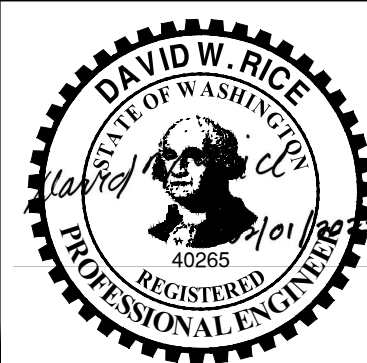
PROVIDE MAINTENANCE ACCESS GATE AS SHOWN. HINGE CENTER ENDS WITH FLANGES/BOLTS AND PROVIDE LOCKING (PADLOCK) MECHANISM ON LOWER END. LOCATE ENTRY GATE DIRECTLY ABOVE STEPS.



3 OUTLET EROSION PROTECTION DETAIL
SCALE: NTS

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" INCH SCALE ACCORDINGLY

0730-PL-019 (East Pump Station) dwg 65 DR-07
Feb 01, 2023 10:24am ch Hewett



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
1	02/01/23	CH	RD	ISSUED FOR CONSTRUCTION

DESIGNED BY: J. SEXTON
DRAWN BY: C. HEWETT
CHECKED BY: E. VOGES
APPROVED BY: D. RICE
SCALE: AS NOTED
DATE: FEBRUARY 2023

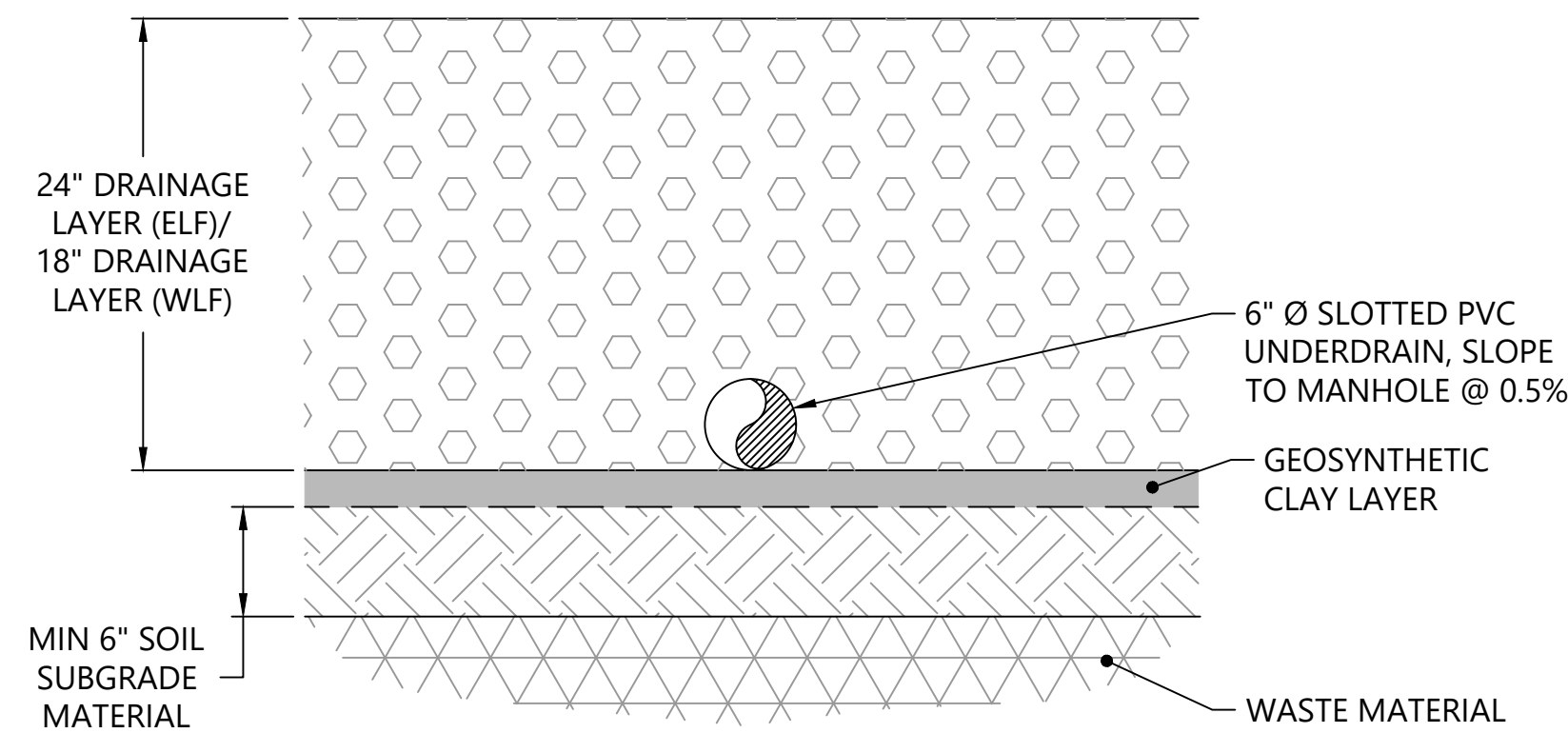
FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

STORMWATER COLLECTION AND PUMP STATION DETAILS (1 OF 3)

DR-07

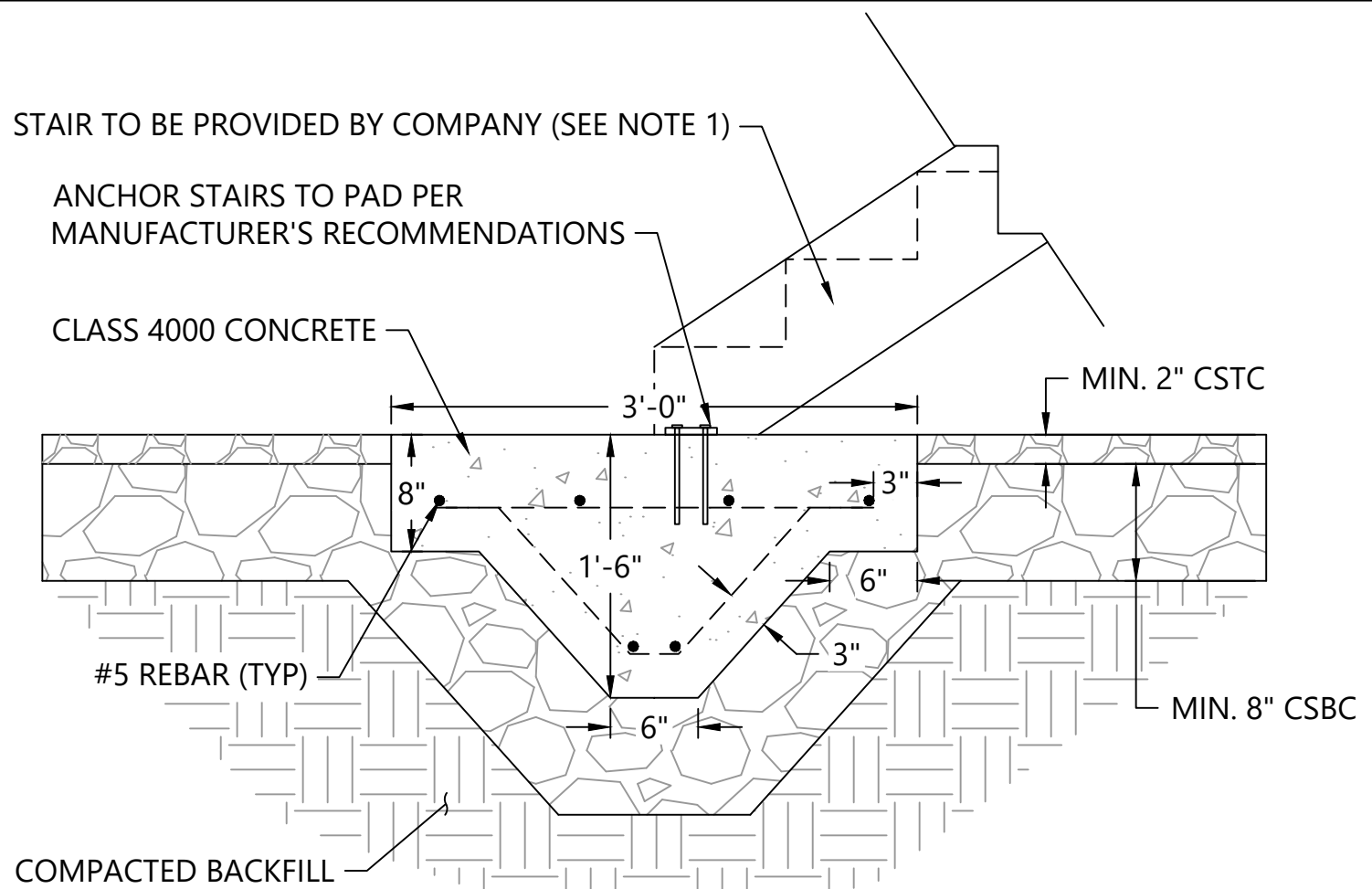
SHEET # 67 OF 114

ISSUED FOR CONSTRUCTION



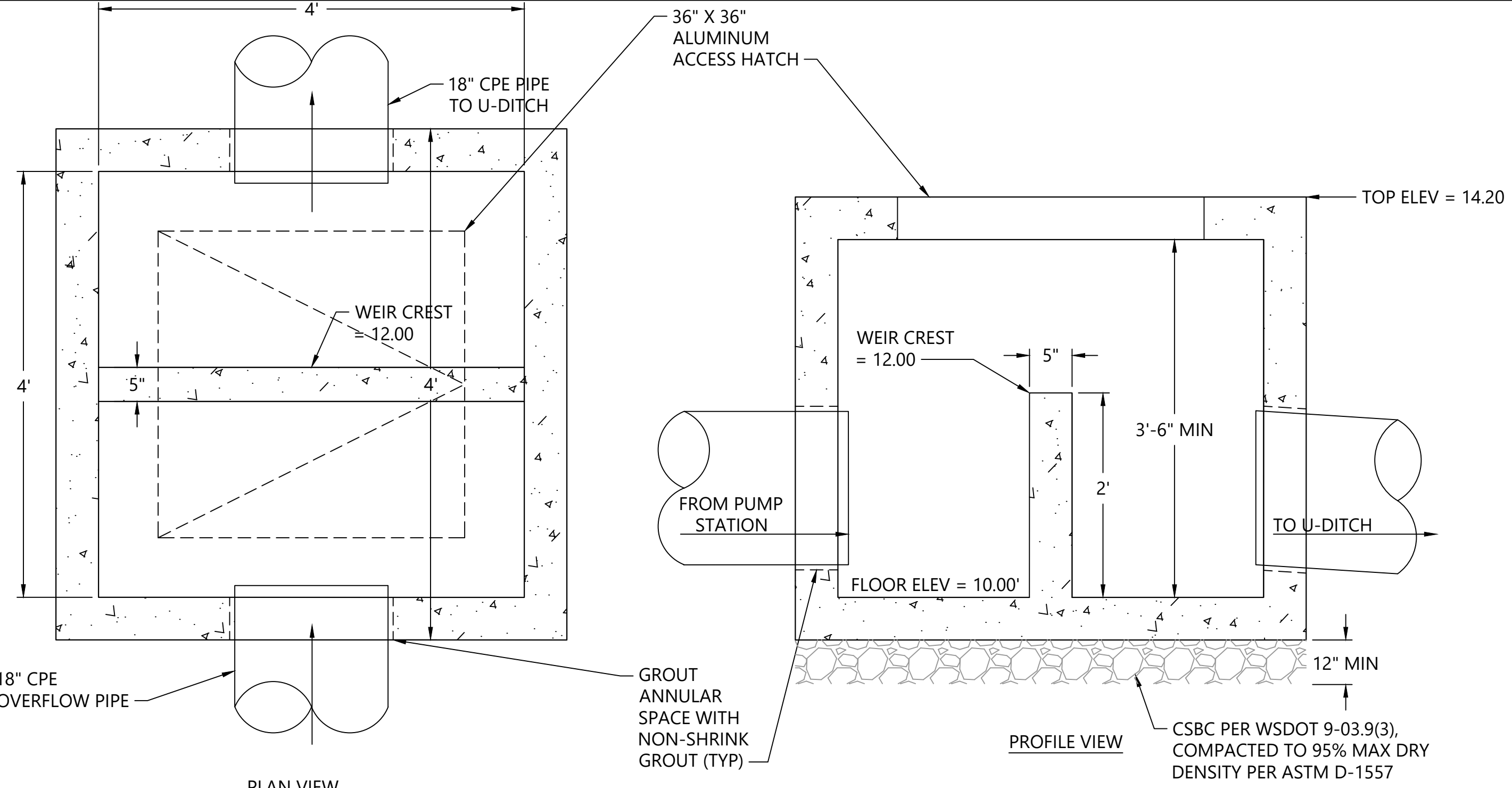
1 SLOTTED DRAIN PIPE DETAIL
SCALE: NTS
DR-03

NOTE: SEE C-SHEETS FOR WASTE CONSOLIDATION AND COVER DETAILS

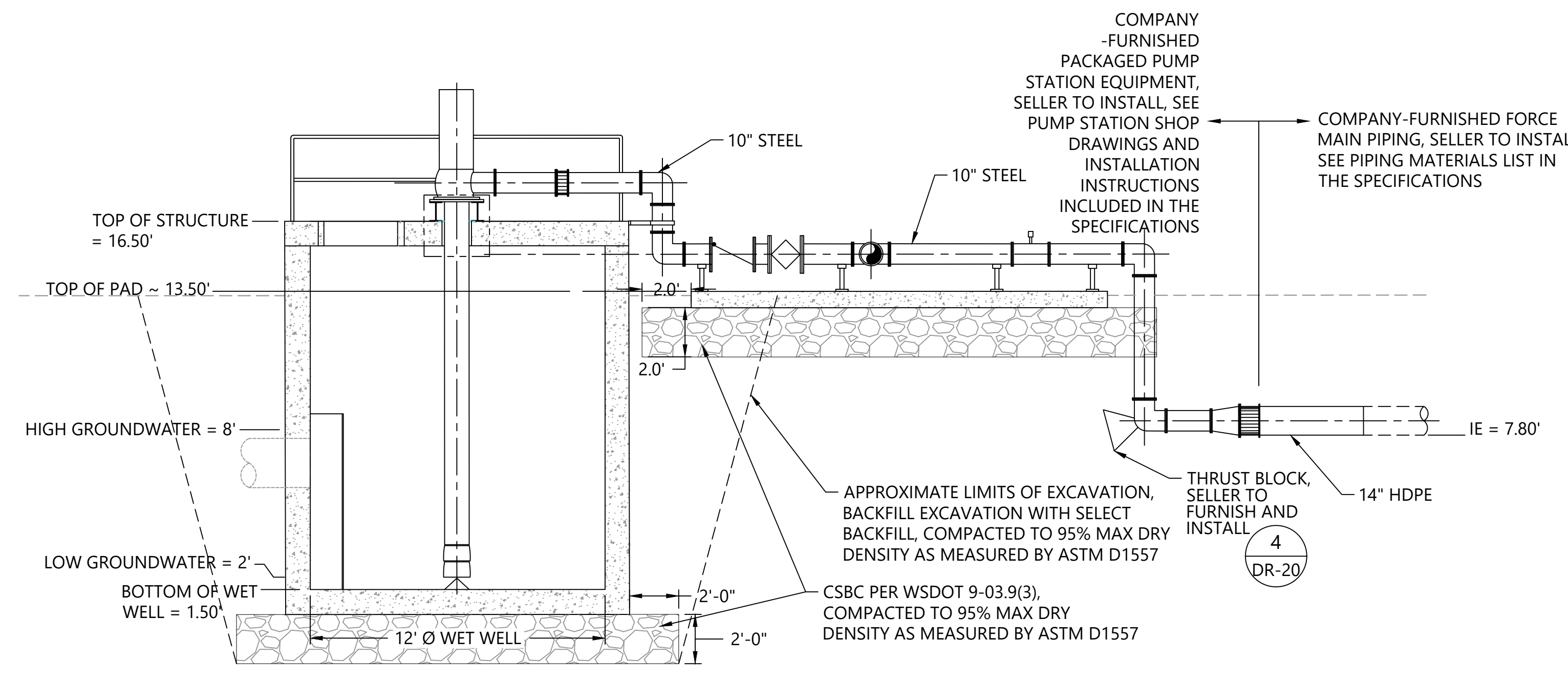


2 CONCRETE STAIR PAD DETAIL
SCALE: NTS

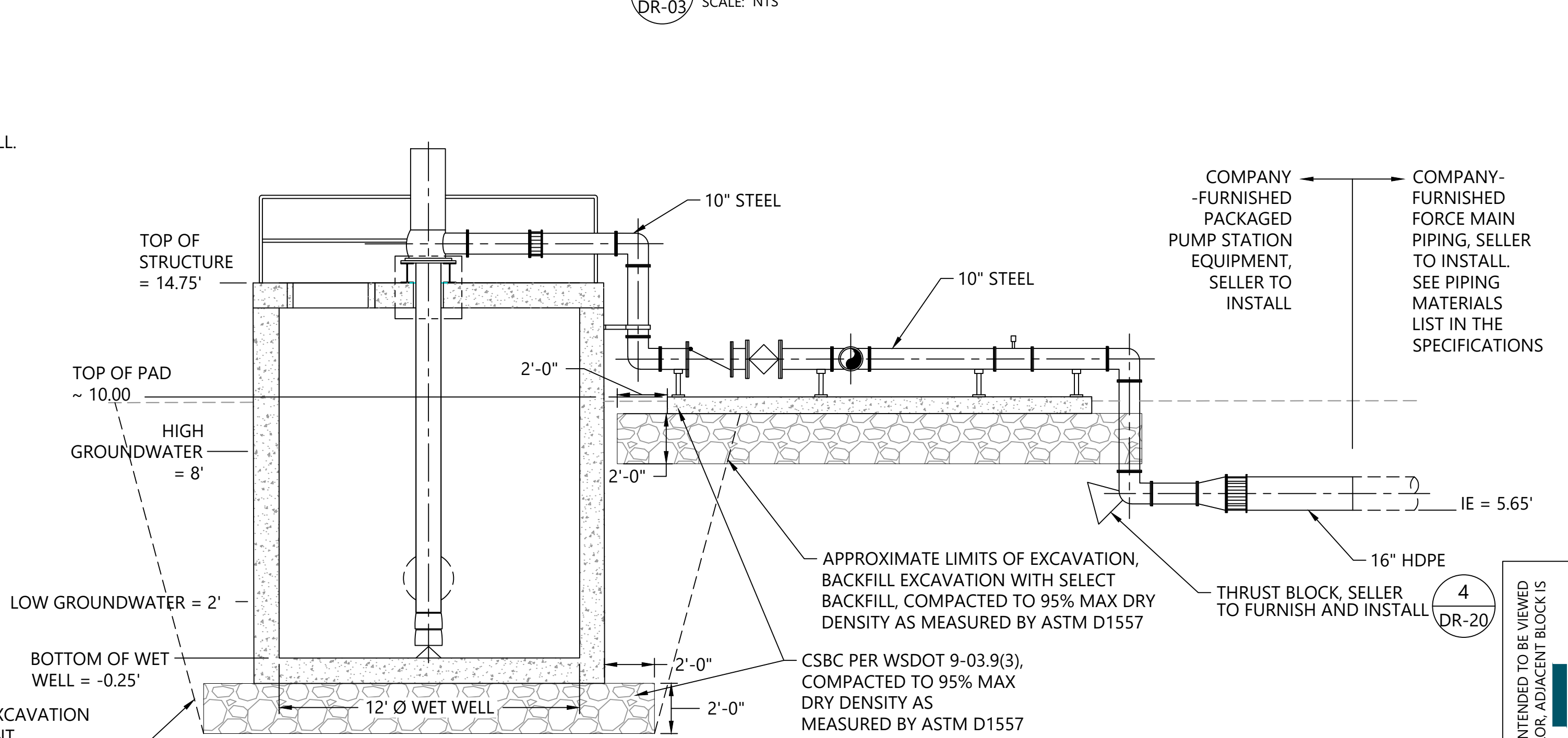
NOTES:
1. STAIRS TO BE DESIGNED BY PUMPTECH, LLC AND PROVIDED BY COMPANY. SELLER MUST COORDINATE WITH PUMPTECH FOR PRECISE LOCATION OF PAD. FASTEN STAIRS TO PAD PER MANUFACTURER'S RECOMMENDATIONS.
2. COMPACT CSTC AND CSBS TO 95% MAXIMUM DRY DENSITY PER ASTM D-1557.



3 OVERFLOW VAULT DETAIL
SCALE: NTS
DR-03



4 WEST PUMP STATION FOUNDATION DETAIL
SCALE: 1/4" = 1'-0"
DR-02



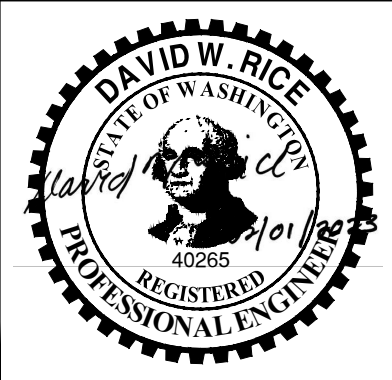
5 EAST PUMP STATION FOUNDATION DETAIL
SCALE: 1/4" = 1'-0"
DR-05

PROVIDE SHORING FOR EXCAVATION AS NECESSARY TO PREVENT DISTURBANCE WITHIN THE WETLAND BUFFER SHOWN ON DRAWING DR-05

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" INCH SCALE ACCORDINGLY

ISSUED FOR CONSTRUCTION

0730-PL-019 (East Pump Station) dwg 66 DR-08



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
1	02/01/23	CH	RD	ISSUED FOR CONSTRUCTION

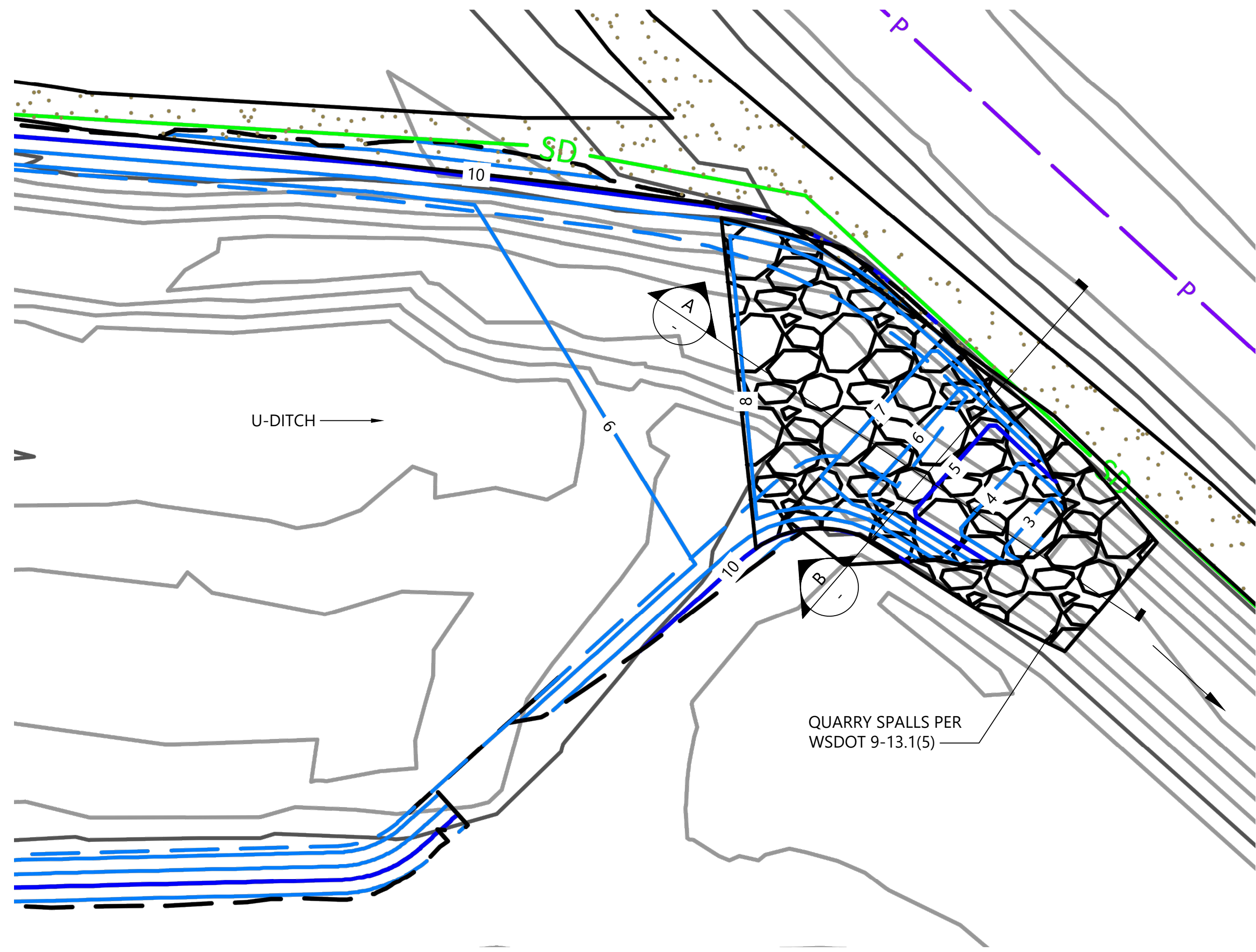
DESIGNED BY: J. SEXTON
DRAWN BY: C. HEWETT
CHECKED BY: E. VOGES
APPROVED BY: D. RICE
SCALE: AS NOTED
DATE: FEBRUARY 2023

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

STORMWATER COLLECTION AND PUMP STATION DETAILS (2 OF 3)

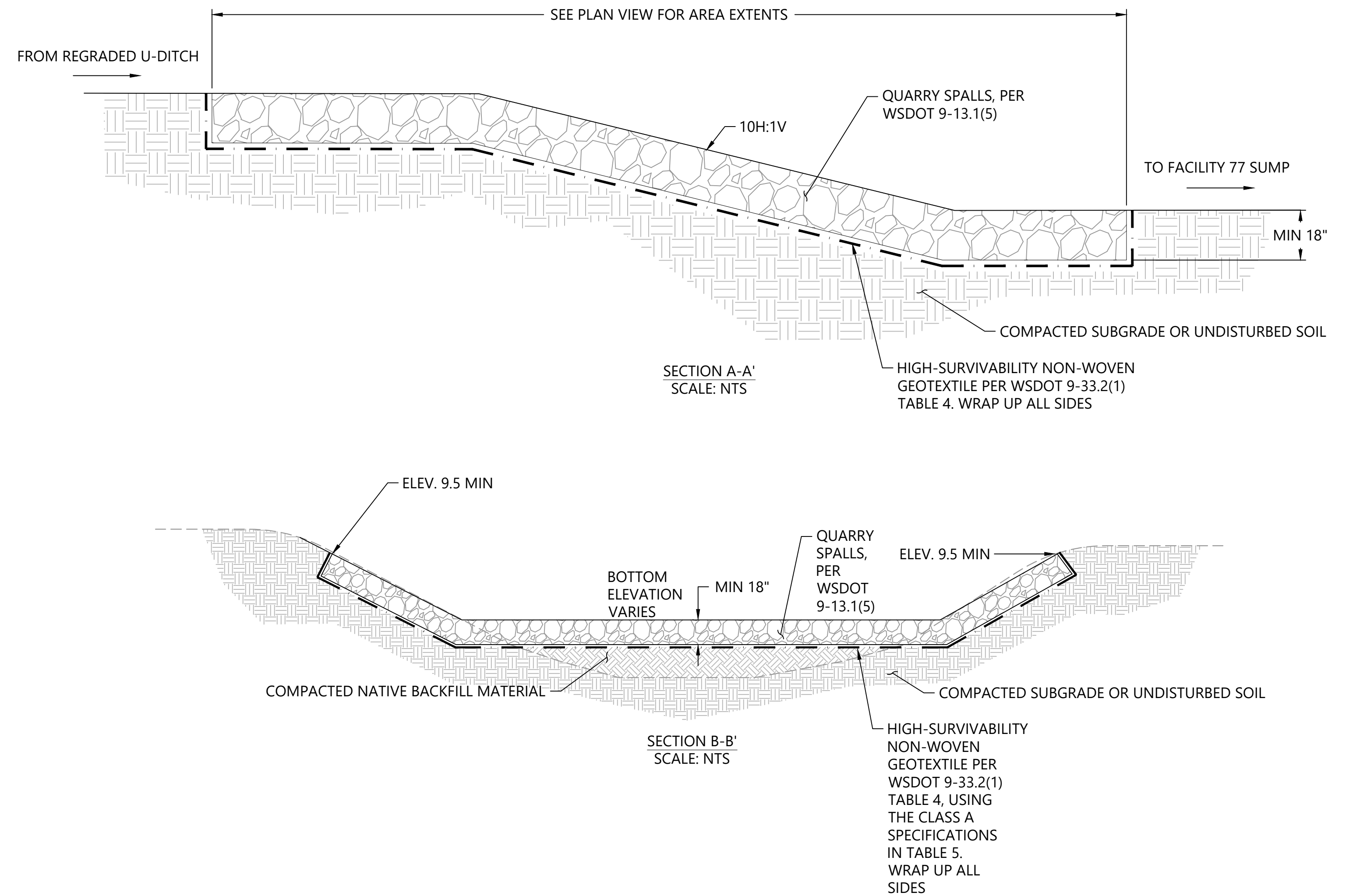
DR-08

SHEET # **68** OF **114**

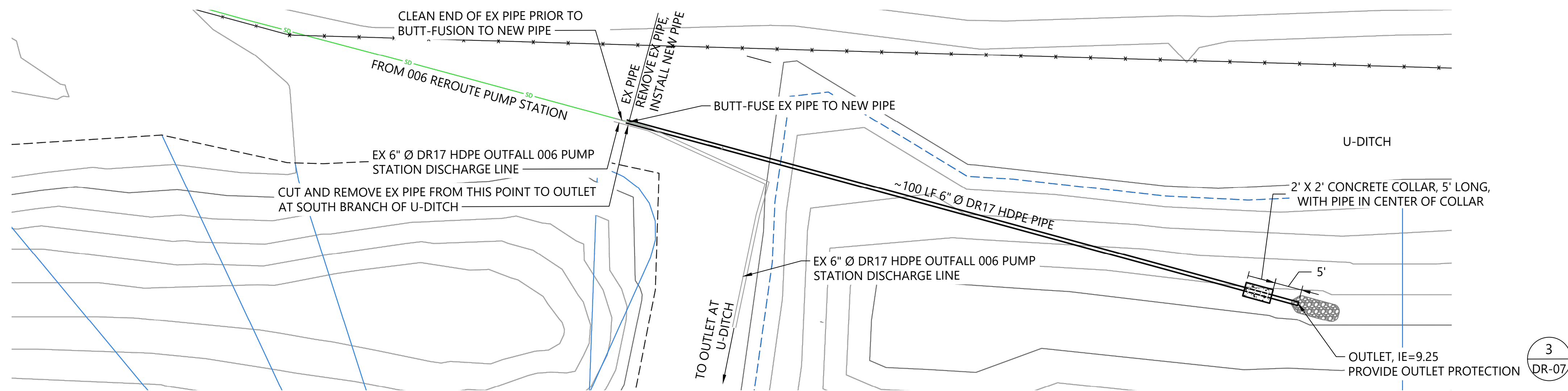


PLAN VIEW
SCALE: 1" = 20'

1 U-DITCH SCOUR PROTECTION
SCALE: NTS

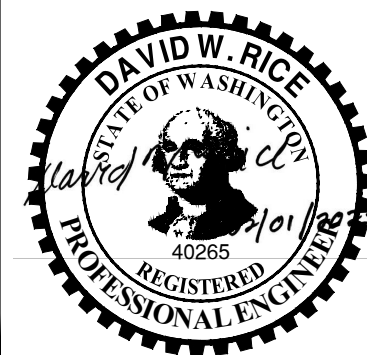


2 OUTFALL 006 REROUTE AND OUTFALL PROTECTION
SCALE: 1" = 10'



ISSUED FOR CONSTRUCTION

Feb 01, 2023 10:24am ch Hewett 0730-PL-019 (East Pump Station) dwg 67 DR-09



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
Δ	02/01/23	CH	RD	ISSUED FOR CONSTRUCTION

DESIGNED BY: J. SEXTON
 DRAWN BY: C. HEWETT
 CHECKED BY: E. VOGES
 APPROVED BY: D. RICE
 SCALE: AS NOTED
 DATE: FEBRUARY 2023

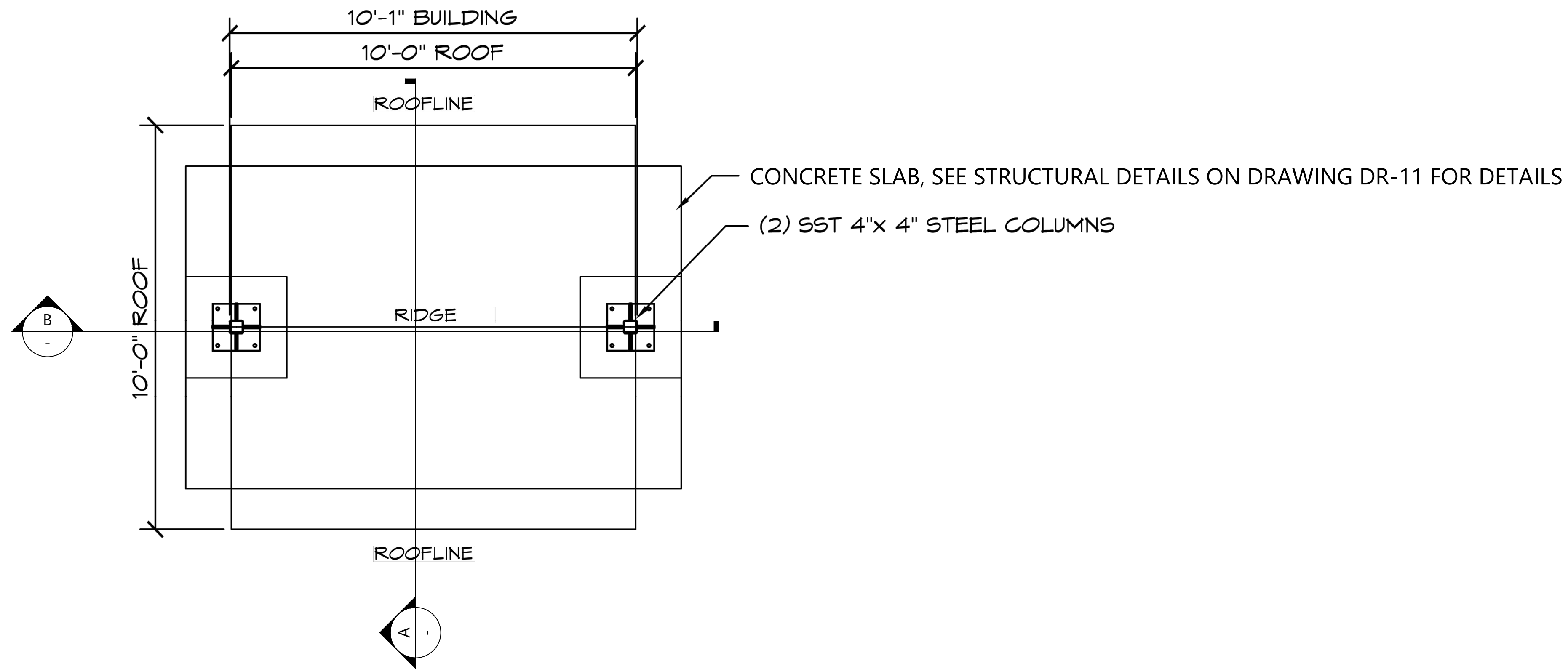
FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

STORMWATER COLLECTION AND PUMP STATION DETAILS (3 OF 3)

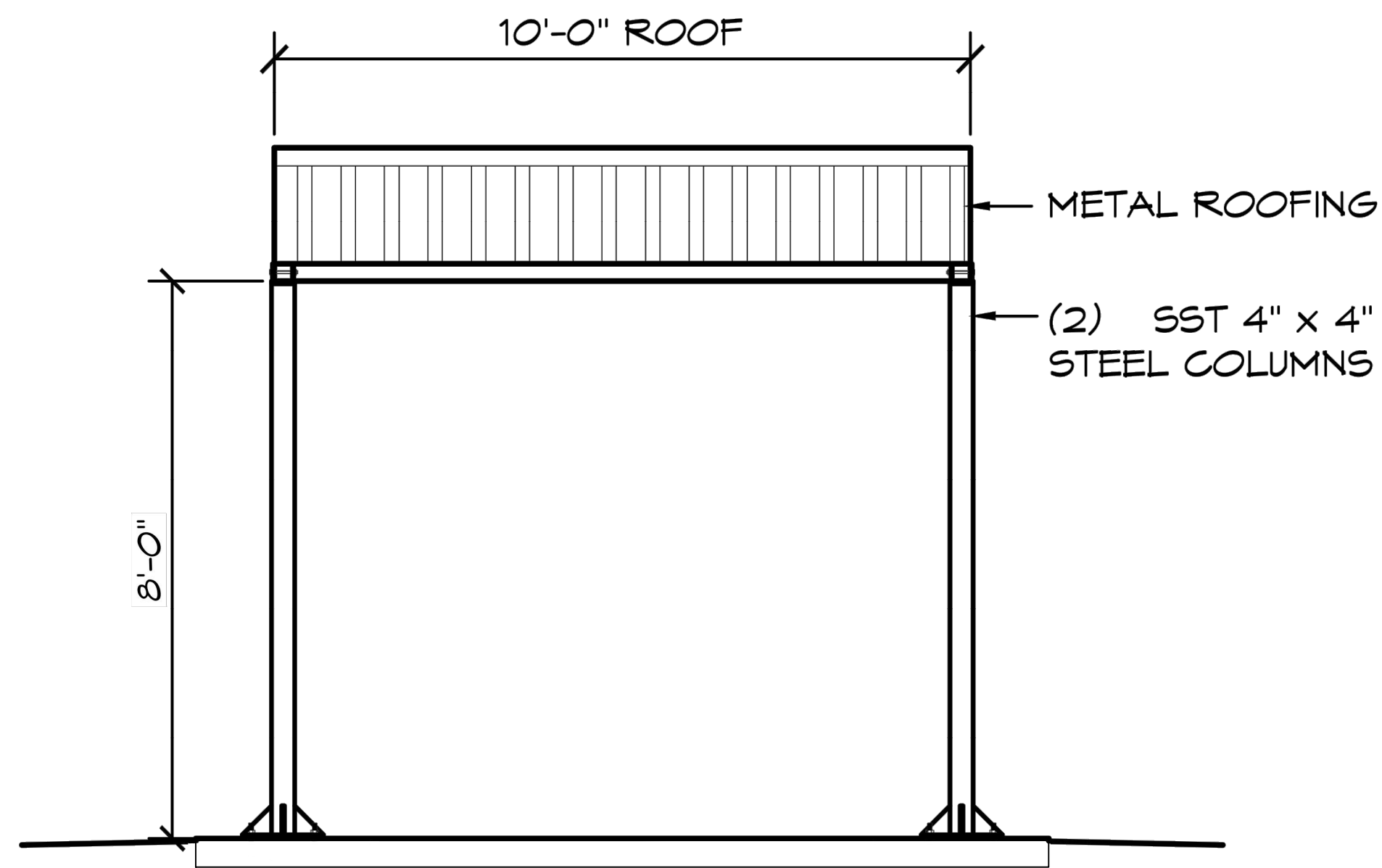
DR-09

SHEET # 69 OF 114

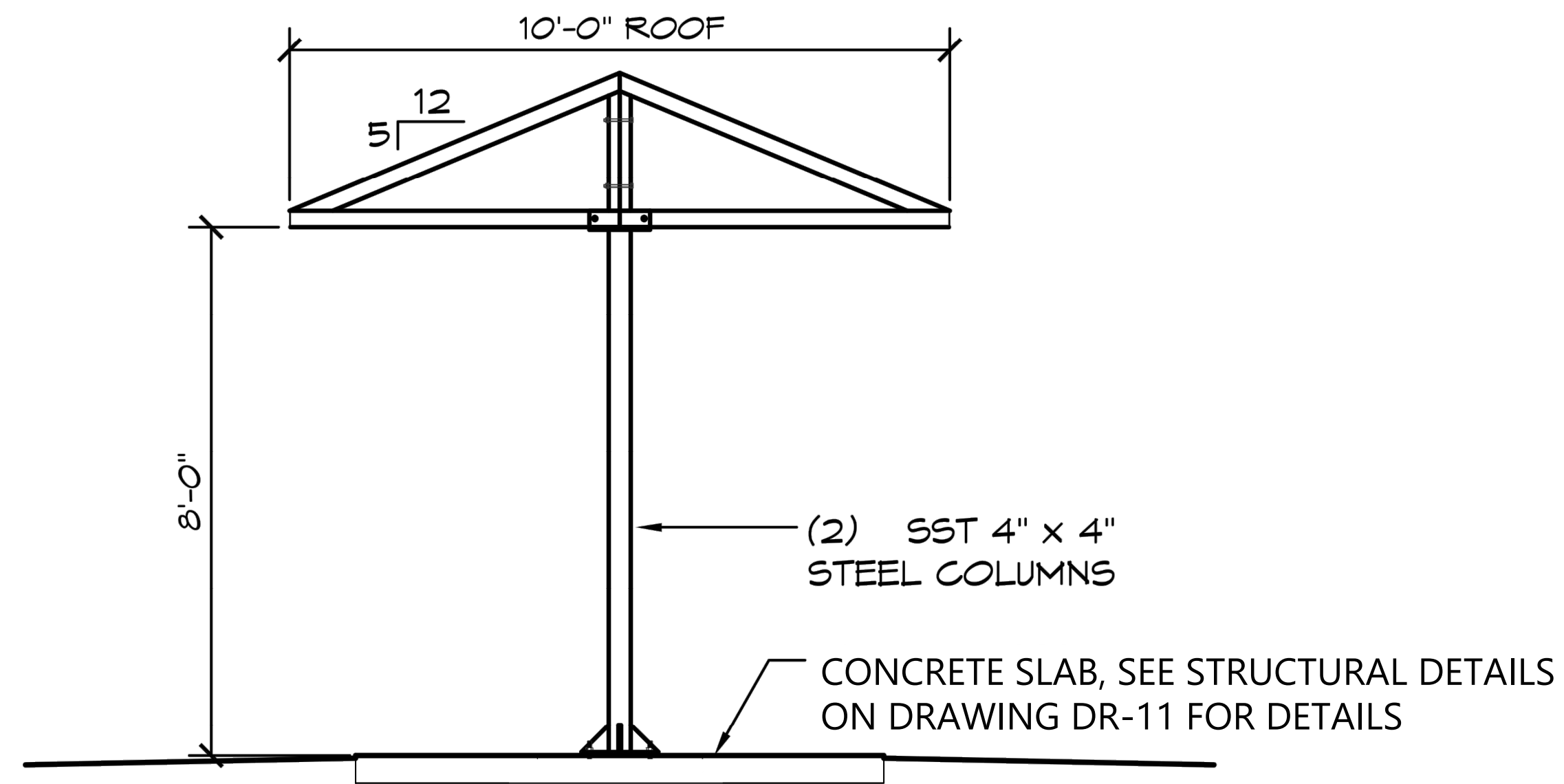
ONE INCH
↑
↓
AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY
PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE"



1 FLOOR PLAN
SCALE: NTS
SOURCE: DRAWING PROVIDED BY ROMTEC



A ELEVATION VIEW
SCALE: NTS
SOURCE: DRAWING PROVIDED BY ROMTEC

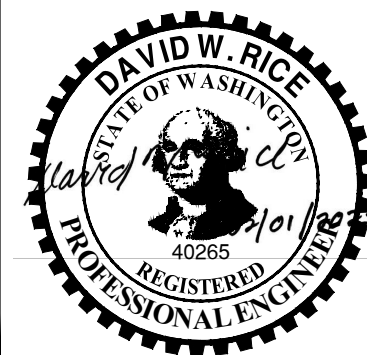


B ELEVATION VIEW
SCALE: NTS
SOURCE: DRAWING PROVIDED BY ROMTEC

PLAN INTENDED TO BE VIEWED
IN COLOR. ADJACENT BLOCK IS
"BLUE"
ONE INCH
AT FULL SIZE. IF NOT ONE
INCH SCALE ACCORDINGLY

ISSUED FOR CONSTRUCTION

Feb 01, 2023 10:25am chewett 0730-PL-019 (East Pump Station) dwg 68 DR-10



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
1	02/01/23	CH	RD	ISSUED FOR CONSTRUCTION

DESIGNED BY: J. SEXTON
DRAWN BY: C. HEWETT
CHECKED BY: E. VOGES
APPROVED BY: D. RICE
SCALE: AS NOTED
DATE: FEBRUARY 2023

**FORMER REYNOLDS METALS REDUCTION PLANT -
LONGVIEW**

**PUMP STATION EQUIPMENT SHELTER
DETAILS**

DR-10

SHEET # 70 OF 114

STRUCTURAL NOTES:

APPLY THE FOLLOWING MINIMUM SPECIFICATIONS UNLESS NOTED OTHERWISE ON THE CONSTRUCTION DOCUMENTS.

REFERENCE CODE:
INTERNATIONAL BUILDING CODE, 2018 – LATEST EDITION REFERS TO CURRENT LOCALLY ADOPTED EDITION OF THE INTERNATIONAL BUILDING CODE.

DESIGN DATA:
ROOF LOADS:
ROOF SNOW LOAD : 20 PSF (PROVIDED BY JURISDICTION)
ROOF RAIN LOAD : 5 PSF
ROOF DEAD LOAD : 10 PSF (ASSUMED)
TOTAL : 35 PSF

WIND DESIGN DATA:
WIND DESIGN DATA : MWFRS DIRECTIONAL PROCEDURE
ULTIMATE DESIGN WIND SPEED : VULT = 110 MPH (RISK CATEGORY II BLDG)
EXPOSURE CATEGORY : C
ENCLOSURE CATEGORY : OPEN

SEISMIC DESIGN DATA:
SEISMIC IMPORTANCE FACTOR, I : 1.0
RISK CATEGORY : II
MAPPED SPECTRAL RESPONSE ACCELERATIONS : S_{MS} = 0.97 ; S₁ = 0.45
SITE CLASS : D (ASSUMED)
SPECTRAL RESPONSE COEFFICIENTS : S_{DS} = 0.72 ; S₁ = 0.47
D

SEISMIC DESIGN CATEGORY : STEEL SPECIAL CANTILEVER COLUMN (ASSUMED)
SEISMIC RESPONSE COEFFICIENT(S), C_s : 0.29
RESPONSE MODIFICATION FACTOR(S), R : 2.5
ANALYSIS PROCEDURE USED : EQUIVALENT LATERAL FORCE

SOIL PROPERTIES:
ALLOWABLE SOIL BEARING PRESSURE : 1600 PSF
COEFFICIENT OF FRICTION : 0.55

SPECIAL LOADS : NONE

STRUCTURAL TESTS AND INSPECTIONS:
STRUCTURAL TESTS AND INSPECTIONS SHALL BE PERFORMED AS REQUIRED BY THE LOCAL BUILDING OFFICIAL AND AS SPECIFICALLY REQUIRED IN THE CONSTRUCTION DOCUMENTS.

FOUNDATIONS:
MAXIMUM ALLOWABLE SOIL BEARING PRESSURE IS 1600 PSF AS RECOMMENDED BY THE GEOTECHNICAL MEMORANDUM DATED SEPTEMBER 1, 2022 PREPARED BY ANCHOR QEA, LLC. REFER TO GEOTECHNICAL MEMORANDUM FOR ALL SOIL PREPARATION RECOMMENDATIONS.

EXTERIOR FOOTINGS SHALL BEAR 1'-0" MINIMUM (U.N.O.) BELOW NEAREST EXTERIOR FINISH GRADE ON MATERIAL PREPARED IN ACCORDANCE WITH THE GEOTECHNICAL MEMORANDUM. MATERIAL SUPPORTING SLABS ON GRADE AND STRUCTURAL FILL MATERIAL SHALL BE AS SPECIFIED, PLACED, AND COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL MEMORANDUM.

CONCRETE:
MIXING, PLACING, AND DESIGN OF ALL CONCRETE SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "INTERNATIONAL BUILDING CODE," ACI 318, AND ACI 301. CONCRETE SHALL BE MADE WITH PORTLAND CEMENT ASTM C150 TYPE I OR TYPE II, COARSE AND FINE AGGREGATE ASTM C33, WATER CLEAN AND POTABLE, POZZOLITH OR POZZOLITH POLYHEED ADMIXTURE ASTM C494. COARSE AGGREGATE FOR SLABS SHALL BE 1-1/2" MINUS.

THE AMBIENT TEMPERATURE MUST BE 40 DEGREES FAHRENHEIT AND RISING TO PLACE ANY CONCRETE UNLESS IT IS INSULATED OR HEATED TO MAINTAIN AT LEAST 50 DEGREES FAHRENHEIT FOR SEVEN DAYS. CONCRETE CONTAINING "POZZOLITH 20" AT 60 TO 90 OUNCES PER 100 LBS. OF CEMENT MAY BE PLACED IN AMBIENT TEMPERATURES AS LOW AS 20 DEGREES FAHRENHEIT UNTIL INITIAL SET HAS BEEN REACHED. AMBIENT TEMPERATURES MAY FALL BELOW 20 DEGREES FAHRENHEIT AFTER INITIAL SET HAS BEEN REACHED AND THE HARDENED CONCRETE HAS BEEN SEALED TO PREVENT THE INGRESS OF ADDITIONAL WATER.

RECOMMENDED CURING OF CONCRETE SLABS SHALL CONSIST OF WET CURING WITH BURLAP AND VISQUEEN (OR EQUAL) FOR A PERIOD OF NOT LESS THAN SEVEN DAYS. SLAB SHALL NOT BE ALLOWED TO DRY DURING THIS PERIOD. IF THE CONTRACTOR CHOOSES AN ALTERNATE METHOD OF CURING, HE ASSUMES THE RISK ASSOCIATED WITH THE ALTERNATE METHOD.

MATERIALS:

USE	MINIMUM F°C AT 28 DAYS	MAXIMUM SLUMP INCHES ¹	MAXIMUM WATER CEMENT RATIO ²		MINIMUM ³ SACKS/C.Y.
			NON-AIR-ENT	AIR-ENT	
EXTERIOR SLABS ON GRADE	3500	4	-	.40	5-1/2
SETTING BEARING PLATES	5000	-	-	-	-

NOTE: THESE SUGGESTED RATIOS ARE PRESENTED AS A GUIDELINE FOR BATCH PLANT OPERATOR TO DETERMINE FINAL MIX DESIGN. ALTERNATE MIXES MAY BE UTILIZED WHEN PAST PERFORMANCE OF SAID MIX HAS PROVEN TO MEET REQUIRED STRENGTH AND SERVICEABILITY REQUIREMENTS.

1. MAXIMUM SLUMP SHALL BE SLUMP CORRESPONDING TO MAXIMUM WATER/CEMENT RATIO OR AS INDICATED ABOVE WHICHEVER IS LESS. CONTRACTOR MAY ADD JOB SITE WATER TO THE CONCRETE MIX ONLY IF BATCH TICKET PROVIDES QUANTITY OF WATER (IN GALLONS ALLOWED) SO AS TO NOT EXCEED SPECIFIED CONCRETE WATER/CEMENT RATIO. AT CONTRACTOR'S OPTION, CONTRACTOR MAY USE MASTER BUILDERS INC. ADMIXTURE SYSTEMS TO PRODUCE FLOWABLE CONCRETE. MAXIMUM SLUMP WITH ADMIXTURES SHALL NOT EXCEED EIGHT INCHES. THE WATER/CEMENT RATIO OF THE APPROVED MIXES SHALL BE MAINTAINED OR LOWERED WHEN FLOWABLE CONCRETE IS USED. A MASTER BUILDERS CONCRETE TECHNICIAN SHALL ASSIST IN DETERMINING MIX PROPORTIONS FOR FLOWABLE CONCRETE.

2. ADD TO ALL CONCRETE FLATWORK EXPOSED TO ANY FREEZE/THAW CYCLES, MASTER BUILDERS MASTERAIR AE 90 AIR ENTRAINING AGENT TO ATTAIN 7 PERCENT ENTRAINED AIR, BY VOLUME, CONFORMING TO ASTM C260. AIR CONTENT SHALL BE GROSS CHECKED BY A UNIT WEIGHT OF THE SAME CONCRETE SAMPLE. ADJUST AIR AS REQUIRED TO CONFORM WITH ACI 318 TABLE 19.3.3.1 FOR MAXIMUM AGGREGATE SIZE.

3. SACKS OF CEMENT/CUBIC YARD ARE LISTED AS MINIMUM. ADDITIONAL CEMENT OR ADMIXTURES SHALL BE USED TO ATTAIN MAXIMUM WATER/CEMENT RATIO WHERE REQUIRED.

4. FOR BASE PLATE GROUT USE MASTER BUILDERS MASTERFLOW 928 OR EQUAL. GROUTING MAY BE PERFORMED WITH AMBIENT TEMPERATURES BETWEEN 40 DEGREES FAHRENHEIT AND 100 DEGREES FAHRENHEIT.

REINFORCING STEEL:
REINFORCING STEEL SHALL BE OF NEW BILLET STOCK ASTM A615-90, GRADE 60, F_y=60,000 PSI. REINFORCING STEEL SHALL BE SECURELY TIED IN PLACE WITH #16 DOUBLE ANNEALED IRON WIRE. REINFORCING STEEL SHALL BE SUPPORTED ON WELL CURED CONCRETE BLOCKS OR CHAIRS. REINFORCING STEEL SHALL BE DETAILED BY AN EXPERIENCED DETAILER IN ACCORDANCE WITH ACI 315 "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE," EXCEPT AS SHOWN. SHOP DRAWINGS INCLUDING PLACING PLANS SHALL BE SUBMITTED (IF REQUESTED) FOR REVIEW PRIOR TO FABRICATION. NO LAP SPICING OF REINFORCING STEEL IS ALLOWED.

REINFORCING SHALL BE WITHIN 1/2" TOLERANCE OF CLEAR DISTANCE SHOWN ON CONSTRUCTION DOCUMENTS. WET-SETTING OF REINFORCING STEEL IS NOT ACCEPTABLE.

EPOXY ANCHORS:
THE CONTRACTOR SHALL EPOXY GROUT THREADED RODS TO THE DEPTH IN EXISTING CONCRETE AS INDICATED IN THE PLANS. HOLE DIAMETER SHALL BE PER MANUFACTURER'S WRITTEN INSTRUCTIONS. EPOXY GROUT FOR CONCRETE SHALL BE SIMPSON "SET-XP", HILTI "HIT-HY 200", OR APPROVED EQUAL. DUST AND DEBRIS FROM THE DRILLING OPERATION SHALL BE CLEANED AND BLOWN FREE FROM THE HOLE PRIOR TO THE PLACEMENT OF THE EPOXY. EPOXY GROUT SHALL BE MIXED AND PLACED AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS. BARS SHALL BE INSERTED INTO THE HOLE WITHIN THE MANUFACTURER'S RECOMMENDED TIME PERIOD. ANY BARS WHICH ARE NOT SECURELY GROUTED SHALL BE REPLACED WITH PROPERLY GROUTED BARS.

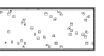

EPOXY ANCHOR RODS SHALL BE OF MINIMUM A307 QUALITY. INSTALLATION AND HOLE SIZE SHALL CONFORM TO MANUFACTURER'S SPECIFICATIONS.

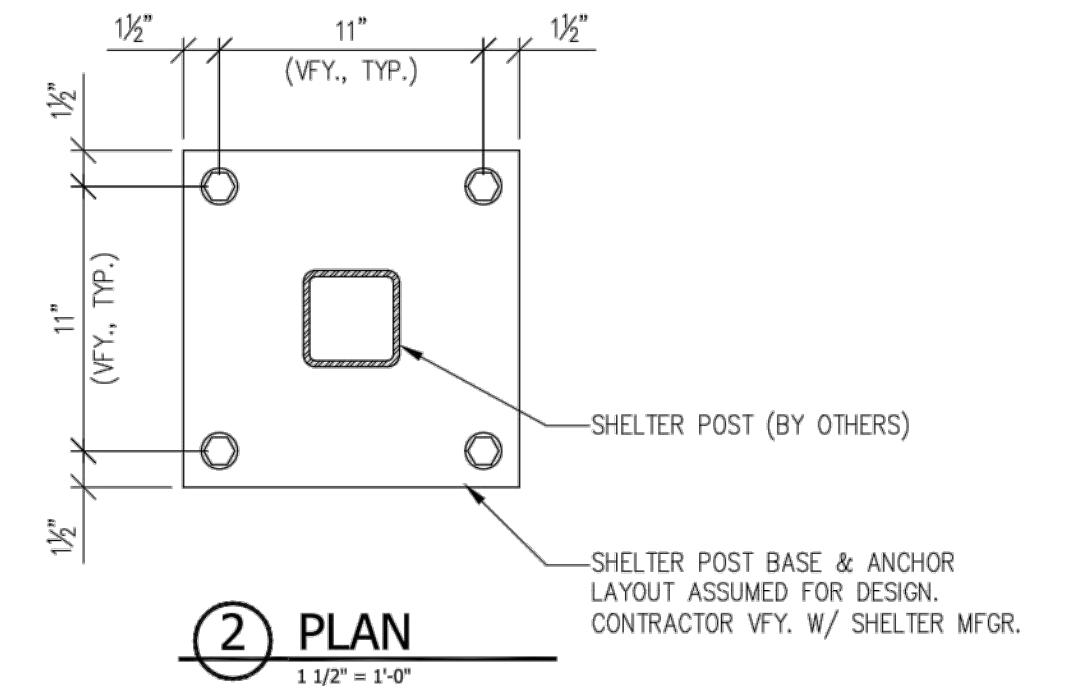
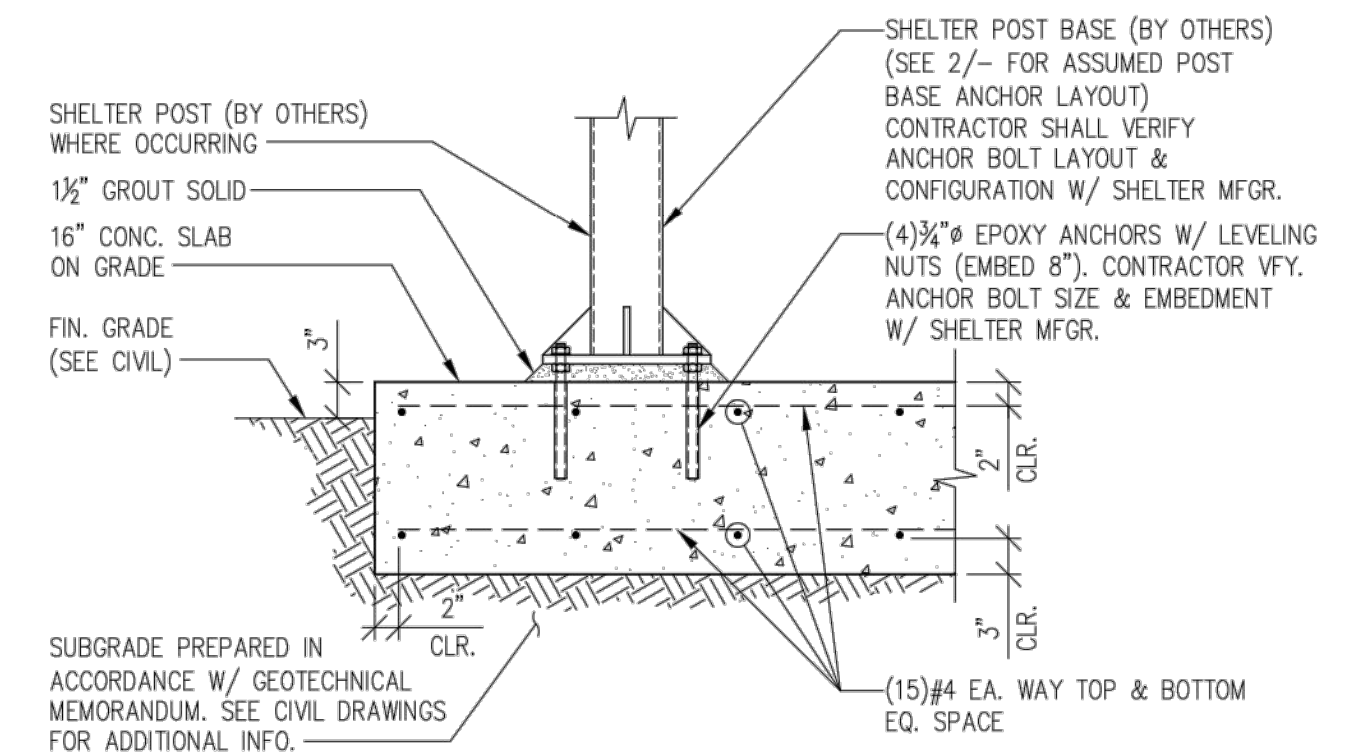
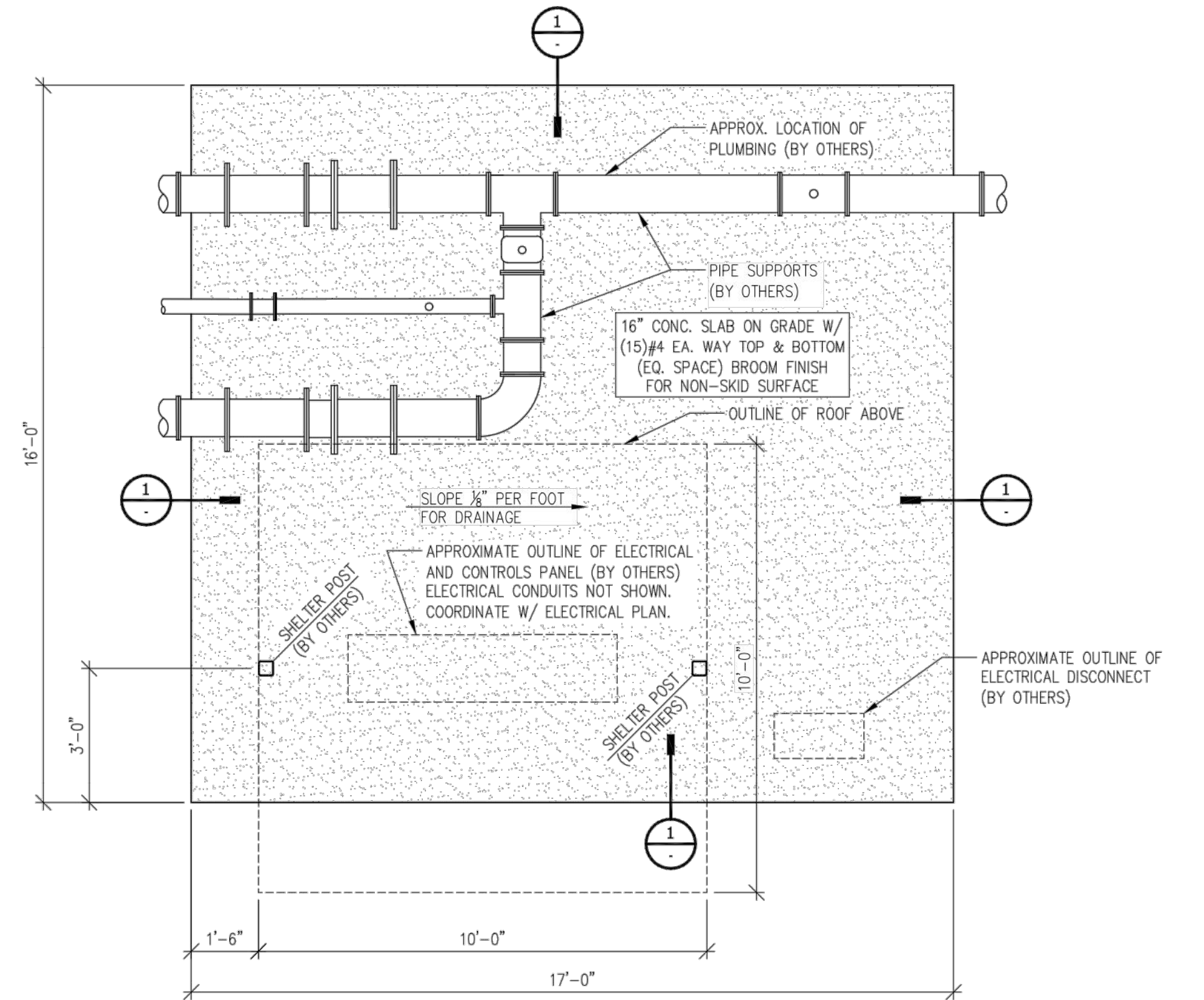
GENERAL NOTES:

- ALL CONSTRUCTION SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE 2018 EDITION.
- ALL WORK SHALL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES, THE MORE STRINGENT TO GOVERN DISCREPANCIES BETWEEN CONTRACT DOCUMENTS AND CODES. THESE DISCREPANCIES SHALL BE BROUGHT TO THE CONSULTANT'S ATTENTION PROMPTLY AND RESOLUTION OBTAINED BEFORE PROCEEDING.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE PROCEEDING WITH THE WORK. ALL DIMENSIONS AND EXISTING CONDITIONS MUST BE VERIFIED AND/OR DETERMINED IN THE FIELD.
- CONSTRUCTION DOCUMENTS ARE NOT TO BE SCALED. DIMENSIONAL DATA SHALL BE OBTAINED FROM WRITTEN INFORMATION ONLY. VERIFY ALL DIMENSIONS BEFORE PROCEEDING. ANY DIMENSIONAL DEVIATION FROM THAT SHOWN ON CONSTRUCTION DOCUMENTS, WHICH MAY AFFECT INTENT OF DESIGN OR PROPER INCORPORATION OF ELEMENTS, SHALL BE BROUGHT TO CONSULTANT'S ATTENTION PROMPTLY AND RESOLUTION OBTAINED BEFORE PROCEEDING.
- CONSTRUCTION DOCUMENTS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION AND ARE NOT INTENDED TO SHOW EVERY DETAIL OR CONDITION OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY AS INDICATED BUT ARE SIMILAR CHARACTER TO THE DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL. THE CONSULTANT ASSUMES NO LIABILITY OR RESPONSIBILITY FOR ERRORS OR CONFLICTS WHICH MAY OCCUR BECAUSE OF THE CONSULTANT'S EXCLUSION FROM PARTICIPATION IN THE ACTUAL CONSTRUCTION PHASE OF THE PROJECT.
- THE CONSTRUCTION SITE MAY HAVE LIMITED ACCESS. THE CONTRACTOR SHOULD INSPECT THE SITE AND MAKE THEIR OWN DETERMINATION REGARDING ACCESS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL THE REQUIRED SAFETY PRECAUTIONS AND THE MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE WORK.
- CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING UTILITIES WHICH MAY BE PRESENT AND ARE NOT SCHEDULED OR REQUIRED TO BE CHANGED.
- CONTRACTOR SHALL TEMPORARILY SUPPORT/SHORE, OR DISCONNECT AND MOVE, ALL EQUIPMENT AND MATERIALS TO REMAIN THAT CONFLICT WITH NEW CONSTRUCTION OR ARE CURRENTLY SUPPORTED ON OR NEAR EXISTING STRUCTURES SCHEDULED FOR REPLACEMENT. CONTRACTOR SHALL RECONNECT/RE-SUPPORT EXISTING EQUIPMENT IN SIMILAR FORM TO EXISTING AS A PART OF THE FINAL CONSTRUCTION PROCESS.
- CONSULTANT SHALL BE INFORMED IMMEDIATELY OF ANY DISCREPANCY BETWEEN CONSTRUCTION DOCUMENTS AND SITE CONDITIONS THAT CAUSE SPECIFIED DESIGN OR MATERIALS TO BE MODIFIED OR REVISED.
- THE INFORMATION PROVIDED ON THESE CONSTRUCTION DOCUMENTS IS SPECIFIC TO THE LIMITED SCOPE OF STRUCTURAL ENGINEERING SERVICES REQUESTED. THESE PLANS AND SPECIFICATIONS PERTAIN ONLY TO THOSE ITEMS DESIGNED BY PACIFIC ENGINEERING & DESIGN, P.L.L.C. AND NOTED ON THE PLANS AND DETAILS AS NEW DESIGN, LAYOUT, AND SPECIFICATION OF ALL OTHER MATERIALS, COMPONENTS, AND DETAILS ARE BY OTHERS AND ARE NOT THE RESPONSIBILITY OF PACIFIC ENGINEERING & DESIGN, P.L.L.C.
- CONTRACTOR SHALL VERIFY ANCHOR BOLT SIZE, LAYOUT AND CONFIGURATION WITH STEEL SHELTER MANUFACTURER.
- REINFORCING SHALL BE WITHIN 1/2" TOLERANCE OF CLEAR DISTANCE SHOWN ON CONSTRUCTION DOCUMENTS. WET-SETTING OF REINFORCING STEEL AND ANCHOR BOLTS IS NOT ACCEPTABLE.
- IF DUE TO THE ENGINEER'S OR OTHER CONSULTANT'S ERROR, ANY REQUIRED ITEM OR COMPONENT IS OMITTED FROM THE CONSTRUCTION DOCUMENTS, THE ENGINEER SHALL NOT BE RESPONSIBLE FOR PAYING THE COSTS TO ADD SUCH ITEM OR COMPONENT TO THE EXTENT THAT SUCH ITEM OR COMPONENT WOULD HAVE BEEN OTHERWISE NECESSARY TO THE PROJECT OR OTHERWISE ADDS VALUE OR BETTERMENT TO THE PROJECT. IN NO EVENT WILL THE ENGINEER BE RESPONSIBLE FOR ANY COST OR EXPENSE THAT PROVIDES BETTERMENT, UPGRADE, OR ENHANCEMENT OF THE PROJECT.
- SHOP DRAWINGS OR OTHER SUBMITTALS REVIEWED BY THE ENGINEER DO NOT BECOME CONTRACT DOCUMENTS AND DO NOT CONSTITUTE CHANGE ORDERS. THE PURPOSE OF SUBMITTAL REVIEW IS TO ESTABLISH A REPORTING PROCEDURE AND IS INTENDED FOR CONTRACTOR'S CONVENIENCE IN ORGANIZING THE WORK AND TO ALLOW THE ENGINEER TO MONITOR CONTRACTOR'S PROGRESS AND UNDERSTANDING OF THE DESIGN. DELAYS CAUSED BY THE NEED FOR RESUBMITTAL ARE NOT THE RESPONSIBILITY OF THE ENGINEER.
- CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY AND RISK FOR MISFITS DUE TO ANY ERROR IN CONTRACTOR SUBMITTAL DRAWINGS REGARDLESS OF ENGINEER'S SUBMITTAL REVIEW. ANY FABRICATION OR OTHER WORK PERFORMED IN ADVANCE OF THE RECEIPT OF SUBMITTAL REVIEW COMMENTS SHALL BE ENTIRELY AT CONTRACTOR'S RISK.
- THIS DESIGN IS SITE SPECIFIC FOR ONE-TIME USE AND MAY NOT BE REPRODUCED OR RE-USED.

PLAN NOTES:

- REFER TO CIVIL DRAWINGS FOR OTHER INFORMATION NOT SHOWN OR NOTED.
- THE CONSTRUCTION DOCUMENTS MAY NOT SHOW SOME OBSTRUCTIONS, EVEN THOUGH NOT SHOWN OR SPECIFICALLY MENTIONED, THE REMOVAL AND REPLACEMENT OF MINOR OBSTRUCTIONS SHOULD BE ANTICIPATED AND ACCOMPLISHED.
- CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AND/OR SHORING OF THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
- FOR FOUNDATION SOIL PREPARATION, SEE CIVIL DRAWINGS AND GEOTECHNICAL MEMORANDUM.
- CONTRACTOR SHALL VERIFY ANCHOR BOLT SIZE, LAYOUT AND CONFIGURATION WITH STEEL SHELTER MANUFACTURER.
- SEE STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.

LEGEND:
 - DENOTES NEW CONCRETE SLAB ON GRADE.
 - DENOTES STEEL COLUMN LOCATIONS.



NOTES:
1. CONTRACTOR SEE GEOTECHNICAL MEMORANDUM FOR SLAB SURCHARGE LOAD ON ADJACENT PUMPING WELL.

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE"

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

R:\DWG\2022\22085-05A - Longview Reynolds Pumping Station\AUTOCAD\22085-05A.dwg DR-12

Oct 04, 2022 10:25am mmccliland



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
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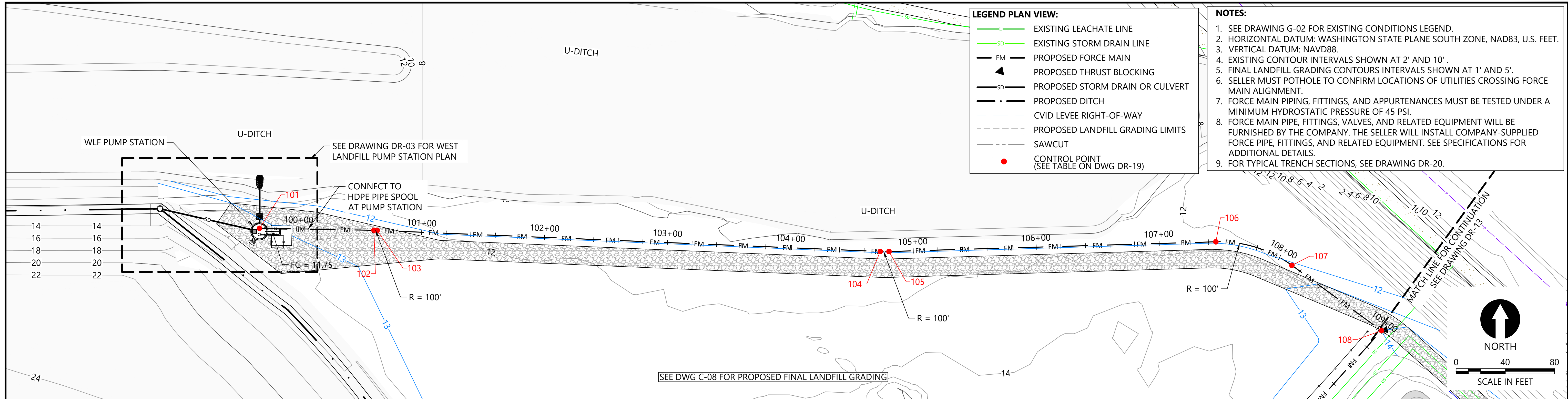
DESIGNED BY: APJ
 DRAWN BY: MGM
 CHECKED BY:
 APPROVED BY:
 SCALE: AS NOTED
 DATE: 10/4/22

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

PUMP STATION EQUIPMENT SLAB PLAN, DETAILS & NOTES

DR-11

SHEET # 71 OF 114

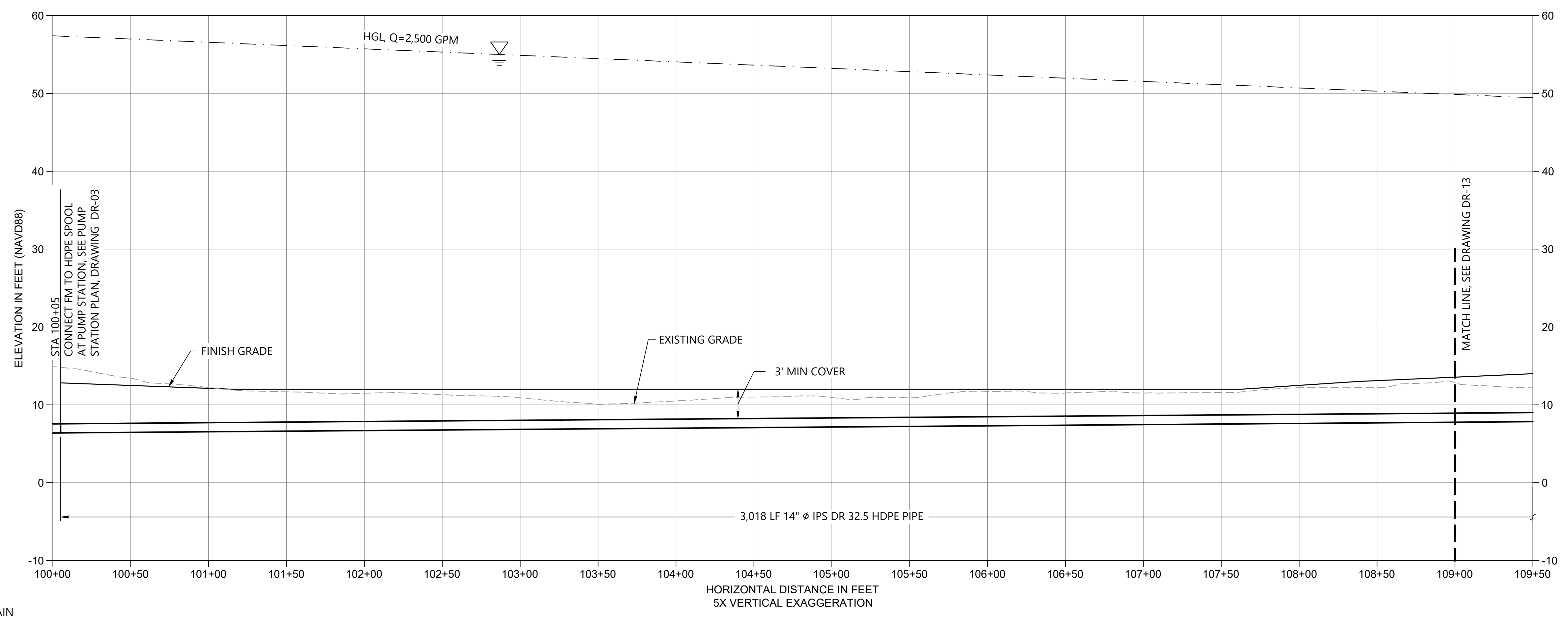


LEGEND PLAN VIEW:

- EXISTING LEACHATE LINE
- - - EXISTING STORM DRAIN LINE
- FM PROPOSED FORCE MAIN
- ▲ PROPOSED THRUST BLOCKING
- - - SD PROPOSED STORM DRAIN OR CULVERT
- PROPOSED DITCH
- - - CVID LEVEE RIGHT-OF-WAY
- - - PROPOSED LANDFILL GRADING LIMITS
- - - SAWCUT
- CONTROL POINT (SEE TABLE ON DWG DR-19)

- NOTES:**
1. SEE DRAWING G-02 FOR EXISTING CONDITIONS LEGEND.
 2. HORIZONTAL DATUM: WASHINGTON STATE PLANE SOUTH ZONE, NAD83, U.S. FEET.
 3. VERTICAL DATUM: NAVD88.
 4. EXISTING CONTOUR INTERVALS SHOWN AT 2' AND 10'.
 5. FINAL LANDFILL GRADING CONTOUR INTERVALS SHOWN AT 1' AND 5'.
 6. SELLER MUST POTHOLE TO CONFIRM LOCATIONS OF UTILITIES CROSSING FORCE MAIN ALIGNMENT.
 7. FORCE MAIN PIPING, FITTINGS, AND APPURTENANCES MUST BE TESTED UNDER A MINIMUM HYDROSTATIC PRESSURE OF 45 PSI.
 8. FORCE MAIN PIPE, FITTINGS, VALVES, AND RELATED EQUIPMENT WILL BE FURNISHED BY THE COMPANY. THE SELLER WILL INSTALL COMPANY-SUPPLIED FORCE PIPE, FITTINGS, AND RELATED EQUIPMENT. SEE SPECIFICATIONS FOR ADDITIONAL DETAILS.
 9. FOR TYPICAL TRENCH SECTIONS, SEE DRAWING DR-20.

SEE DWG C-08 FOR PROPOSED FINAL LANDFILL GRADING



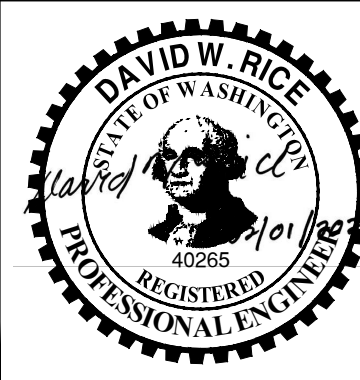
LEGEND PROFILE:

- - - EXISTING GRADE
- PROPOSED FORCE MAIN
- · · FORCE MAIN HYDRAULIC PROFILE

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" INCH SCALE ACCORDINGLY

ISSUED FOR CONSTRUCTION

0730-PL-017 (Drainage-Force Main) dwg DR-12



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
1	02/01/23	CH	RD	ISSUED FOR CONSTRUCTION

DESIGNED BY: J. SEXTON
 DRAWN BY: C. HEWETT
 CHECKED BY: E. VOGES
 APPROVED BY: D. RICE
 SCALE: AS NOTED
 DATE: FEBRUARY 2023

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

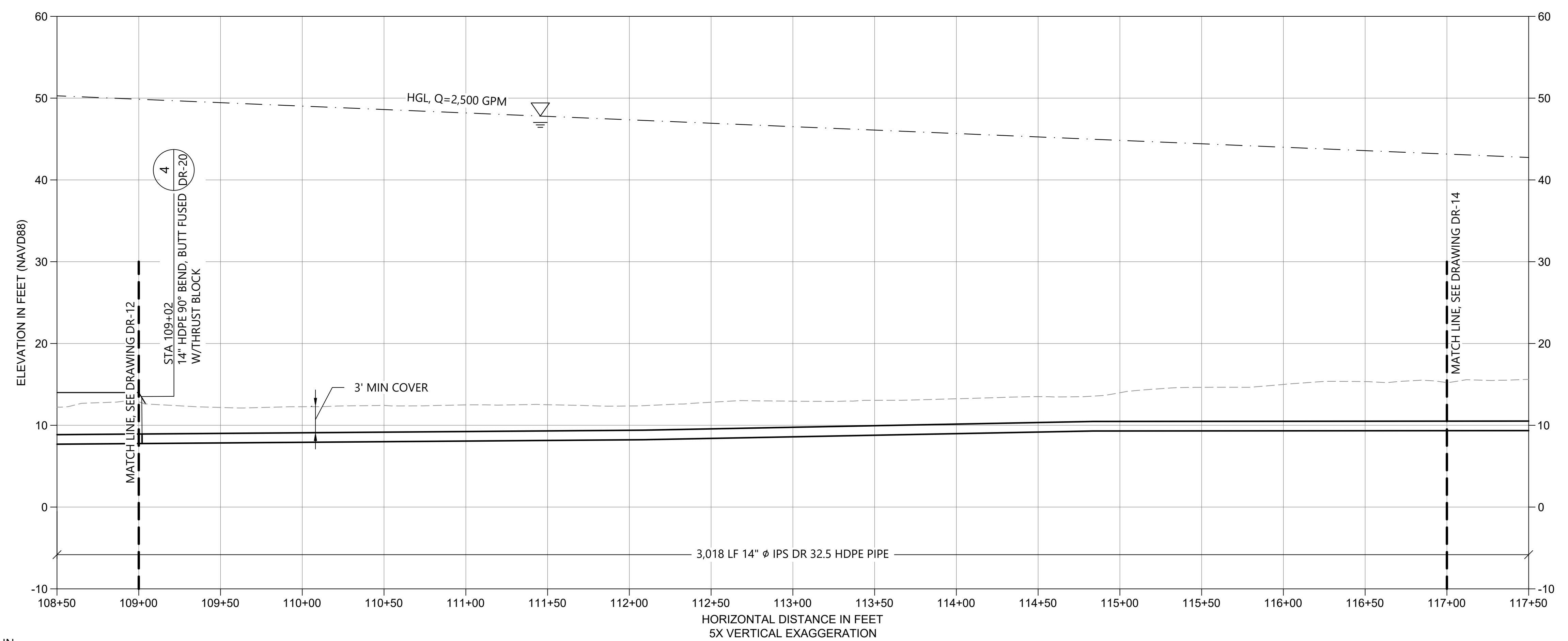
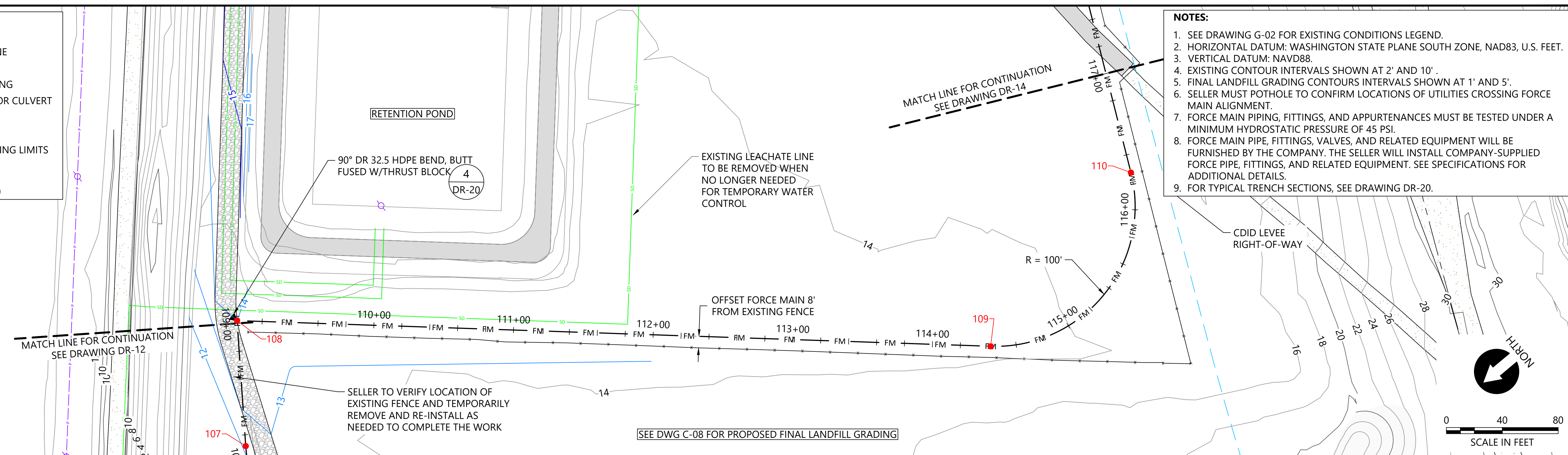
WEST FORCE MAIN PLAN AND PROFILE, STA 100+00 TO 109+00

DR-12

SHEET # 72 OF 114

- LEGEND PLAN VIEW:**
- EXISTING LEACHATE LINE
 - EXISTING STORM DRAIN LINE
 - PROPOSED FORCE MAIN
 - PROPOSED THRUST BLOCKING
 - PROPOSED STORM DRAIN OR CULVERT
 - PROPOSED DITCH
 - CVID LEVEE RIGHT-OF-WAY
 - PROPOSED LANDFILL GRADING LIMITS
 - SAWCUT
 - CONTROL POINT (SEE TABLE ON DWG DR-19)

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 8. FORCE MAIN PIPE, FITTINGS, VALVES, AND RELATED EQUIPMENT WILL BE FURNISHED BY THE COMPANY. THE SELLER WILL INSTALL COMPANY-SUPPLIED FORCE PIPE, FITTINGS, AND RELATED EQUIPMENT. SEE SPECIFICATIONS FOR ADDITIONAL DETAILS.
 9. FOR TYPICAL TRENCH SECTIONS, SEE DRAWING DR-20.

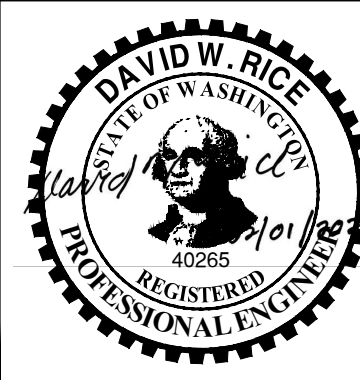


- LEGEND PROFILE:**
- EXISTING GRADE
 - PROPOSED FORCE MAIN
 - FORCE MAIN HYDRAULIC PROFILE

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" INCH SCALE ACCORDINGLY

ISSUED FOR CONSTRUCTION

0730-PL-017 (Drainage-Force Main) dwg DR-13



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
1	02/01/23	CH	RD	ISSUED FOR CONSTRUCTION

DESIGNED BY: J. SEXTON
 DRAWN BY: C. HEWETT
 CHECKED BY: E. VOGES
 APPROVED BY: D. RICE
 SCALE: AS NOTED
 DATE: FEBRUARY 2023

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

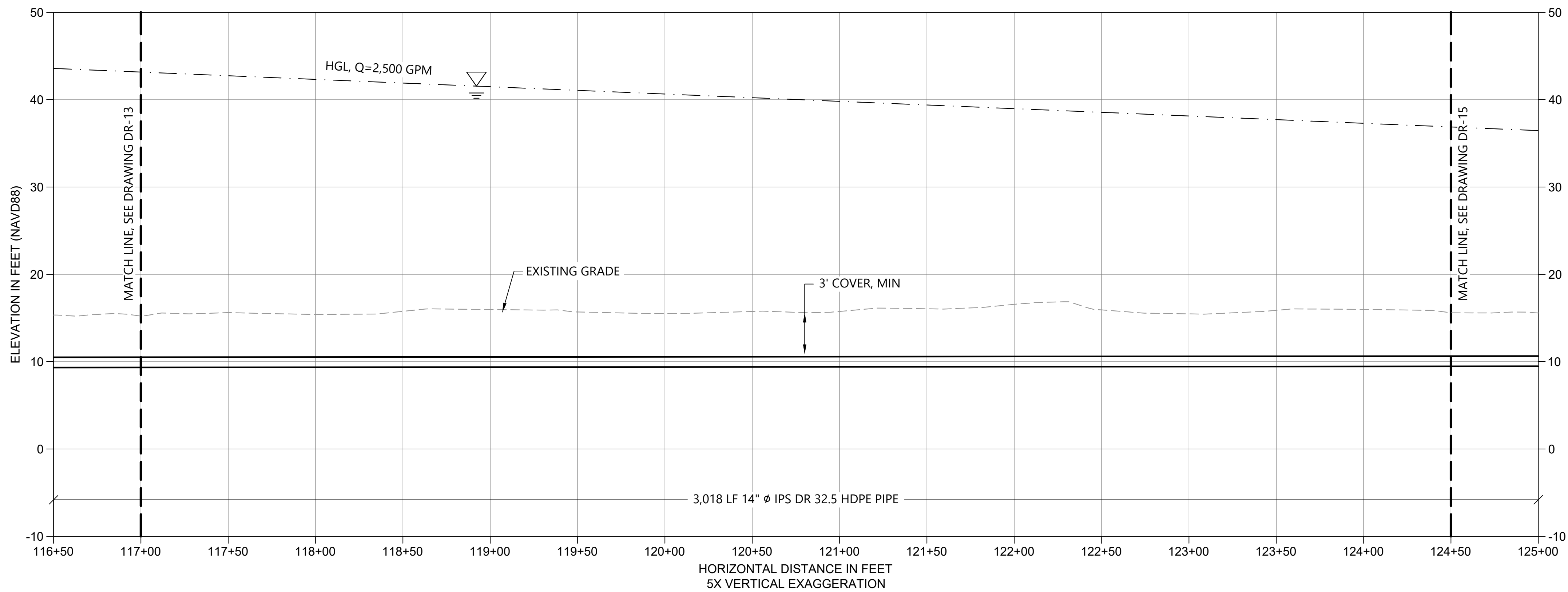
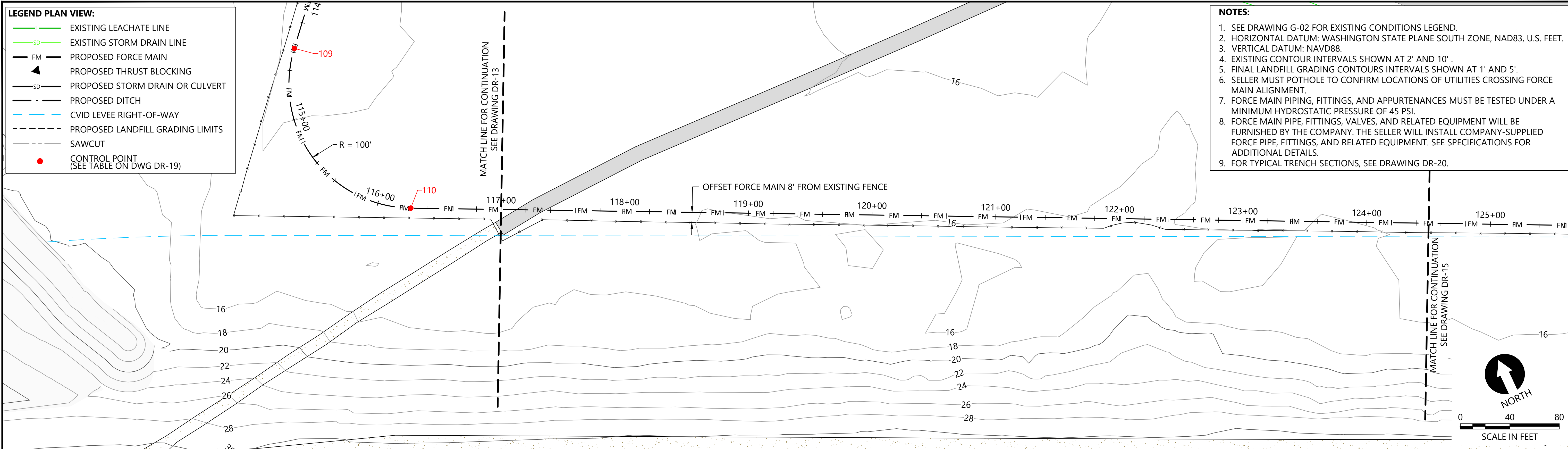
WEST FORCE MAIN PLAN AND PROFILE, STA 109+00 TO 117+00

DR-13

SHEET # 73 OF 114

- LEGEND PLAN VIEW:**
- EXISTING LEACHATE LINE
 - EXISTING STORM DRAIN LINE
 - PROPOSED FORCE MAIN
 - PROPOSED THRUST BLOCKING
 - PROPOSED STORM DRAIN OR CULVERT
 - PROPOSED DITCH
 - CVID LEVEE RIGHT-OF-WAY
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 - SAWCUT
 - CONTROL POINT (SEE TABLE ON DWG DR-19)

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 9. FOR TYPICAL TRENCH SECTIONS, SEE DRAWING DR-20.



- LEGEND PROFILE:**
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 - PROPOSED FORCE MAIN
 - FORCE MAIN HYDRAULIC PROFILE

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" INCH SCALE ACCORDINGLY

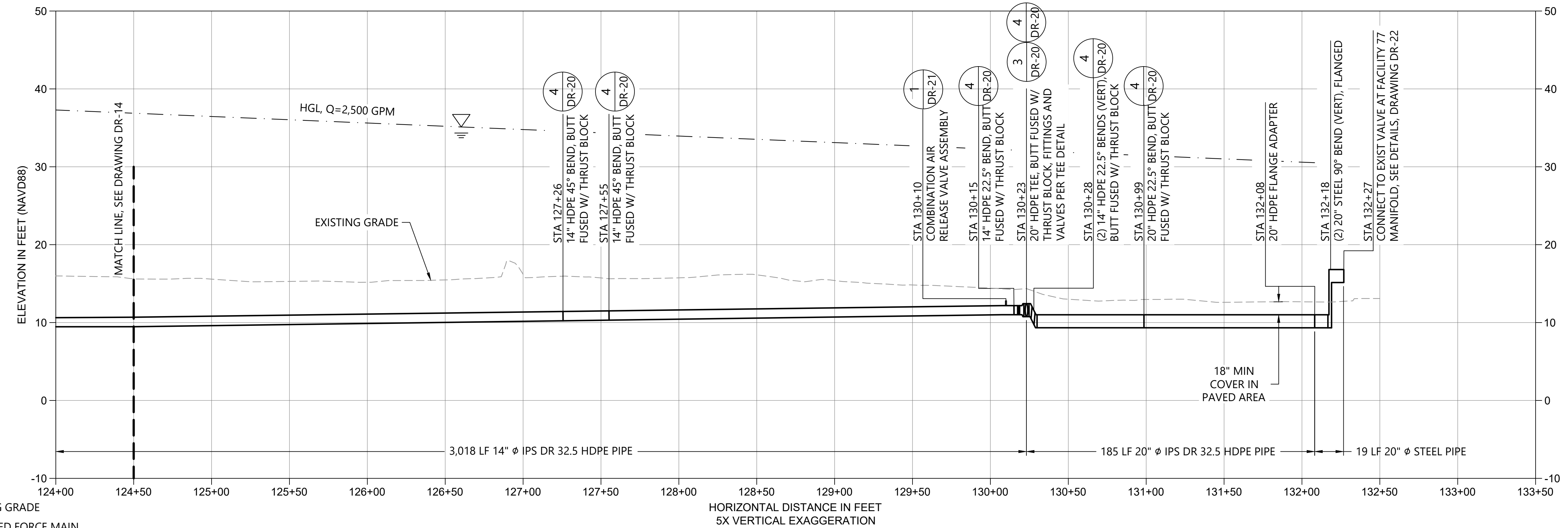
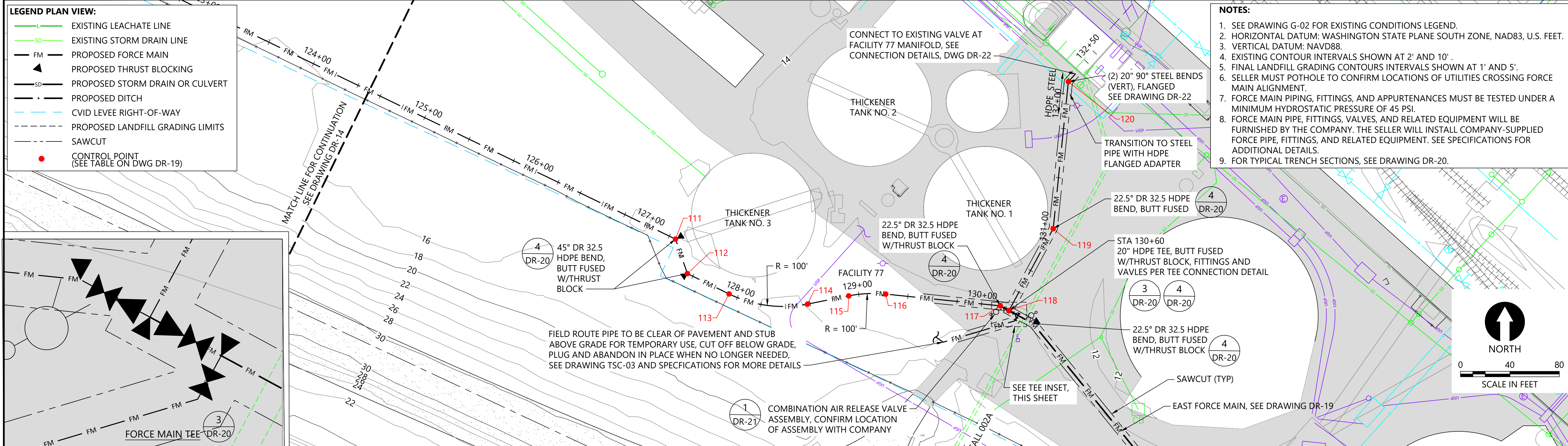
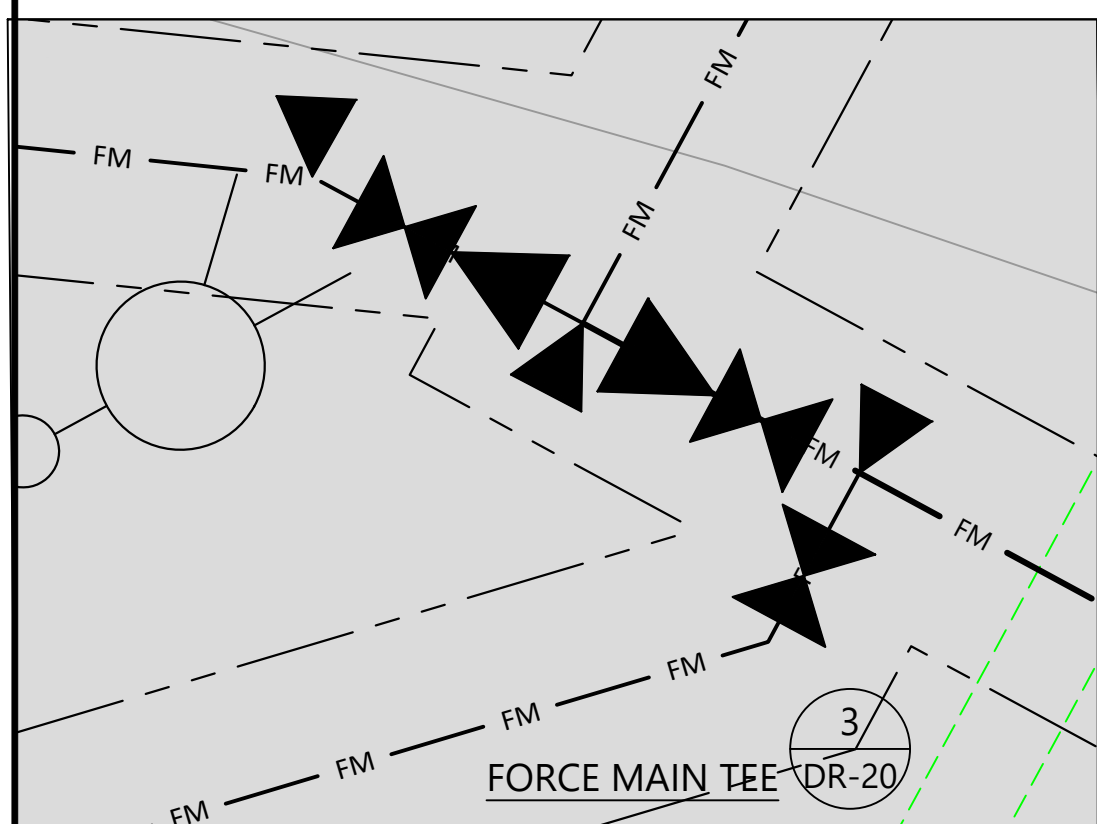
ISSUED FOR CONSTRUCTION

0730-PL-017 (Drainage-Force Main)dwg DR-15 Feb 01, 2023 10:26am ch Hewett

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			REVISIONS																		
REV	DATE	BY	APP'D	DESCRIPTION																	
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 9. FOR TYPICAL TRENCH SECTIONS, SEE DRAWING DR-20.

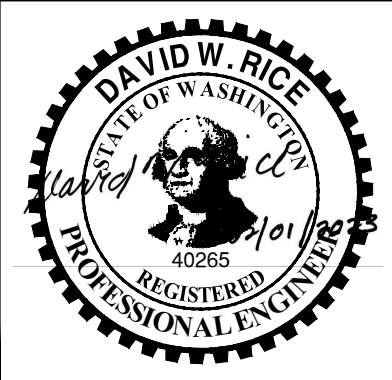


- LEGEND PROFILE:**
- EXISTING GRADE
 - PROPOSED FORCE MAIN
 - FORCE MAIN HYDRAULIC PROFILE

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" INCH SCALE ACCORDINGLY

ISSUED FOR CONSTRUCTION

0730-PL-017 (Drainage-Force Main) dwg DR-14



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
1	02/01/23	CH	RD	ISSUED FOR CONSTRUCTION

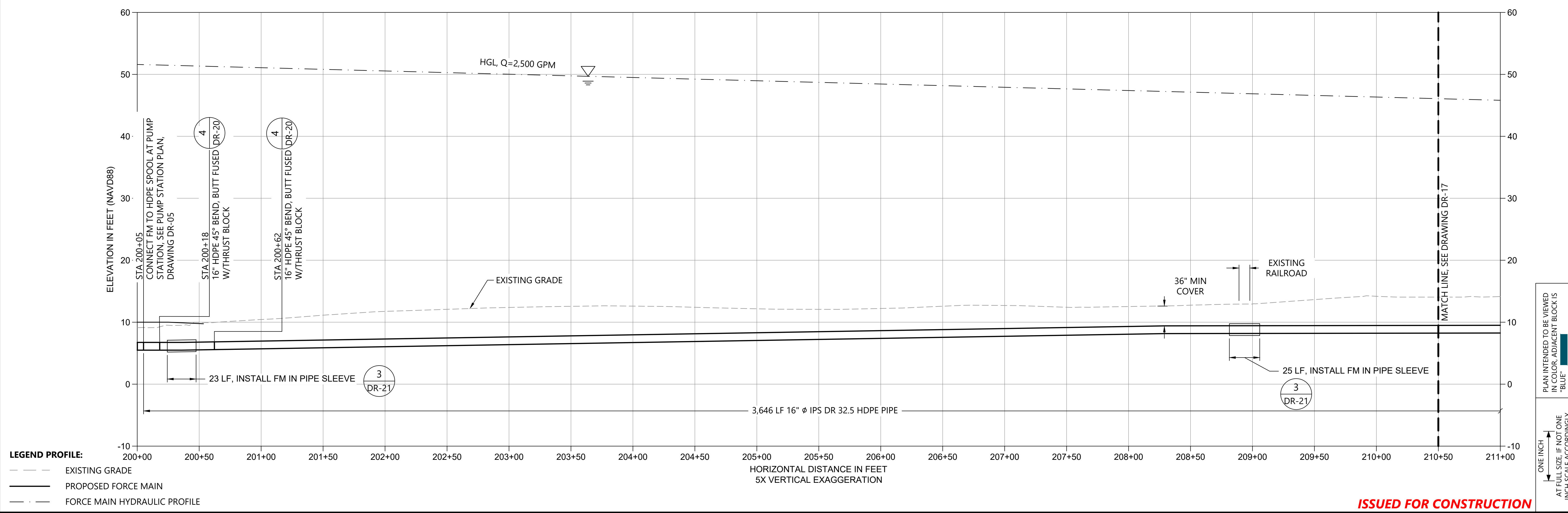
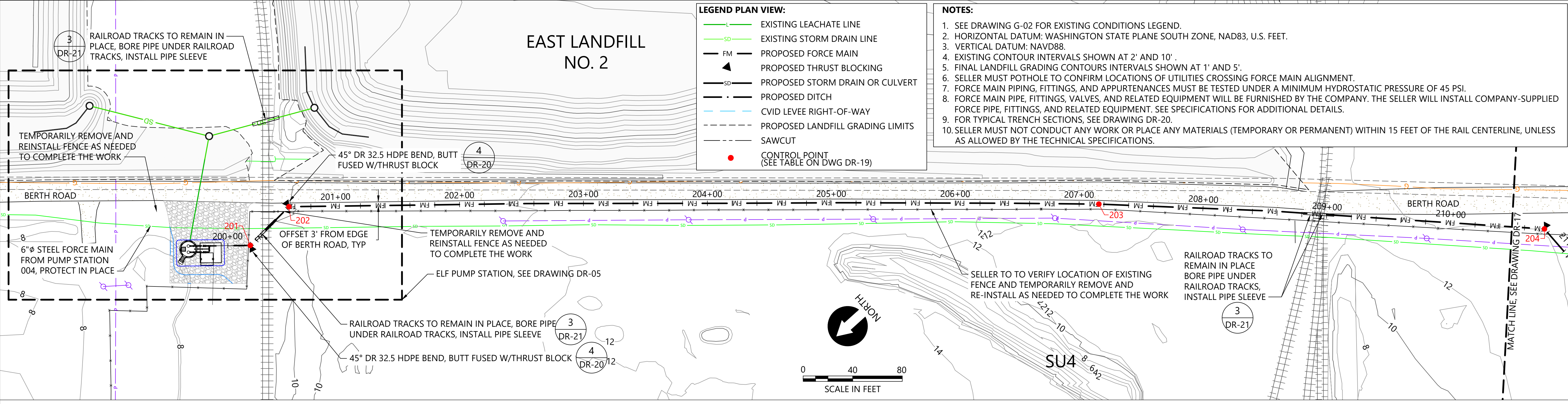
DESIGNED BY: J. SEXTON
 DRAWN BY: C. HEWETT
 CHECKED BY: E. VOGES
 APPROVED BY: D. RICE
 SCALE: AS NOTED
 DATE: FEBRUARY 2023

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

WEST FORCE MAIN PLAN AND PROFILE, STA 124+50 TO END

DR-15

SHEET # 74 OF 114



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
1	02/01/23	CH	RD	ISSUED FOR CONSTRUCTION

DESIGNED BY: J. SEXTON

DRAWN BY: C. HEWETT

CHECKED BY: E. VOGES

APPROVED BY: D. RICE

SCALE: AS NOTED

DATE: FEBRUARY 2023

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

EAST FORCE MAIN PLAN AND PROFILE, STA 200+00 TO 210+50

DR-16

SHEET # 76 OF 114

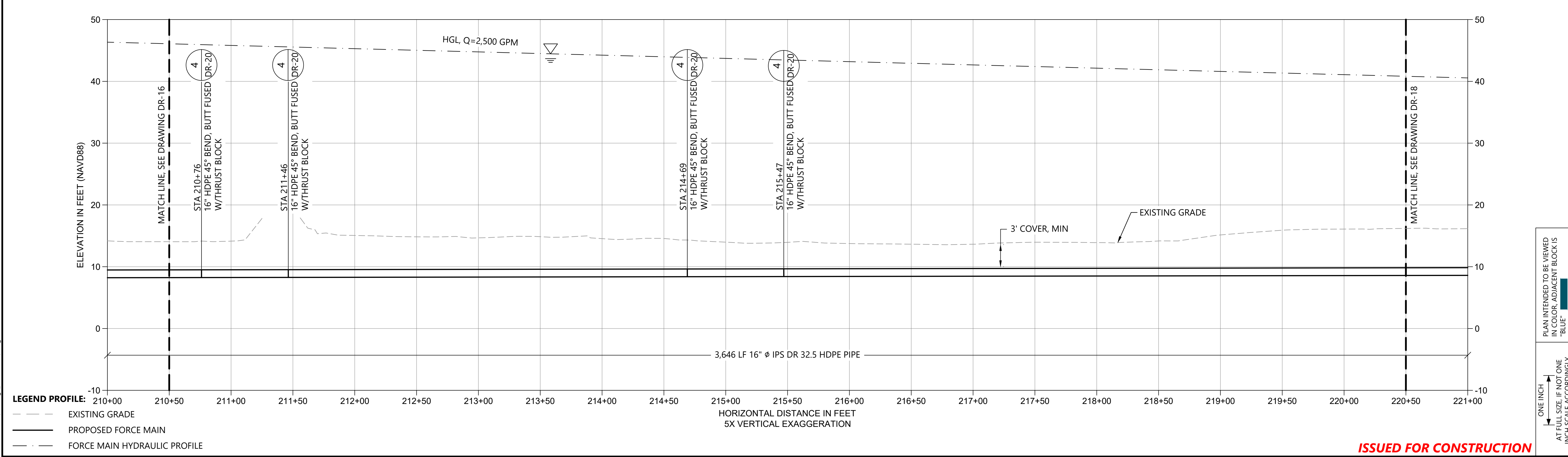
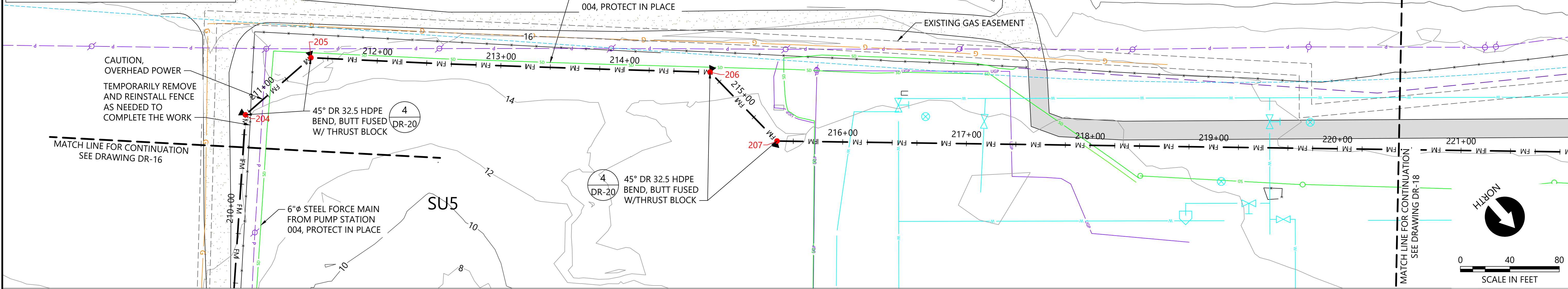
0730-PL-017 (Drainage-Force Main) dwg DR-16

ISSUED FOR CONSTRUCTION

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" INCH SCALE ACCORDINGLY

- LEGEND PLAN VIEW:**
- EXISTING LEACHATE LINE
 - EXISTING STORM DRAIN LINE
 - PROPOSED FORCE MAIN
 - PROPOSED THRUST BLOCKING
 - PROPOSED STORM DRAIN OR CULVERT
 - PROPOSED DITCH
 - CVID LEVEE RIGHT-OF-WAY
 - PROPOSED LANDFILL GRADING LIMITS
 - SAWCUT
 - CONTROL POINT (SEE TABLE ON DWG DR-19)

- NOTES:**
1. SEE DRAWING G-02 FOR EXISTING CONDITIONS LEGEND.
 2. HORIZONTAL DATUM: WASHINGTON STATE PLANE SOUTH ZONE, NAD83, U.S. FEET.
 3. VERTICAL DATUM: NAVD88.
 4. EXISTING CONTOUR INTERVALS SHOWN AT 2' AND 10'.
 5. FINAL LANDFILL GRADING CONTOURS INTERVALS SHOWN AT 1' AND 5'.
 6. SELLER MUST POT-HOLE TO CONFIRM LOCATIONS OF UTILITIES CROSSING FORCE MAIN ALIGNMENT.
 7. FORCE MAIN PIPING, FITTINGS, AND APPURTENANCES MUST BE TESTED UNDER A MINIMUM HYDROSTATIC PRESSURE OF 45 PSI.
 8. FORCE MAIN PIPE, FITTINGS, VALVES, AND RELATED EQUIPMENT WILL BE FURNISHED BY THE COMPANY. THE SELLER WILL INSTALL COMPANY-SUPPLIED FORCE PIPE, FITTINGS, AND RELATED EQUIPMENT. SEE SPECIFICATIONS FOR ADDITIONAL DETAILS.
 9. FOR TYPICAL TRENCH SECTIONS, SEE DRAWING DR-20.

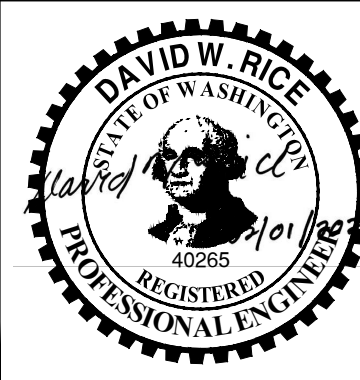


LEGEND PROFILE:

- EXISTING GRADE
- PROPOSED FORCE MAIN
- FORCE MAIN HYDRAULIC PROFILE

ISSUED FOR CONSTRUCTION

0730-PL-017 (Drainage-Force Main) dwg DR-17



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
1	02/01/23	CH	RD	ISSUED FOR CONSTRUCTION

DESIGNED BY: J. SEXTON
 DRAWN BY: C. HEWETT
 CHECKED BY: E. VOGES
 APPROVED BY: D. RICE
 SCALE: AS NOTED
 DATE: FEBRUARY 2023

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

EAST FORCE MAIN PLAN AND PROFILE, STA 210+50 TO 220+50

DR-17

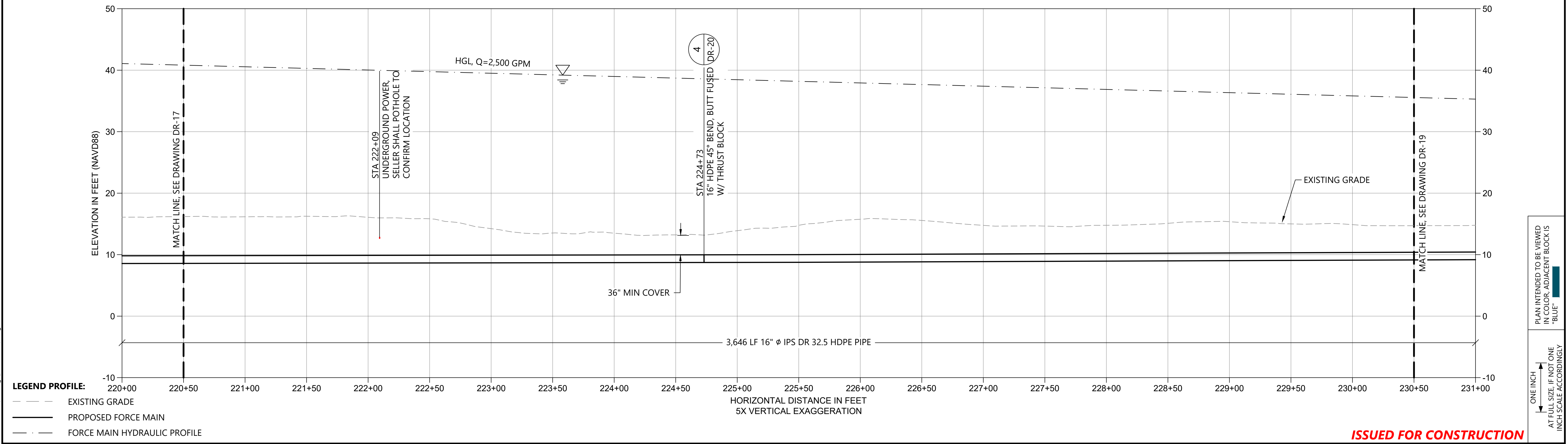
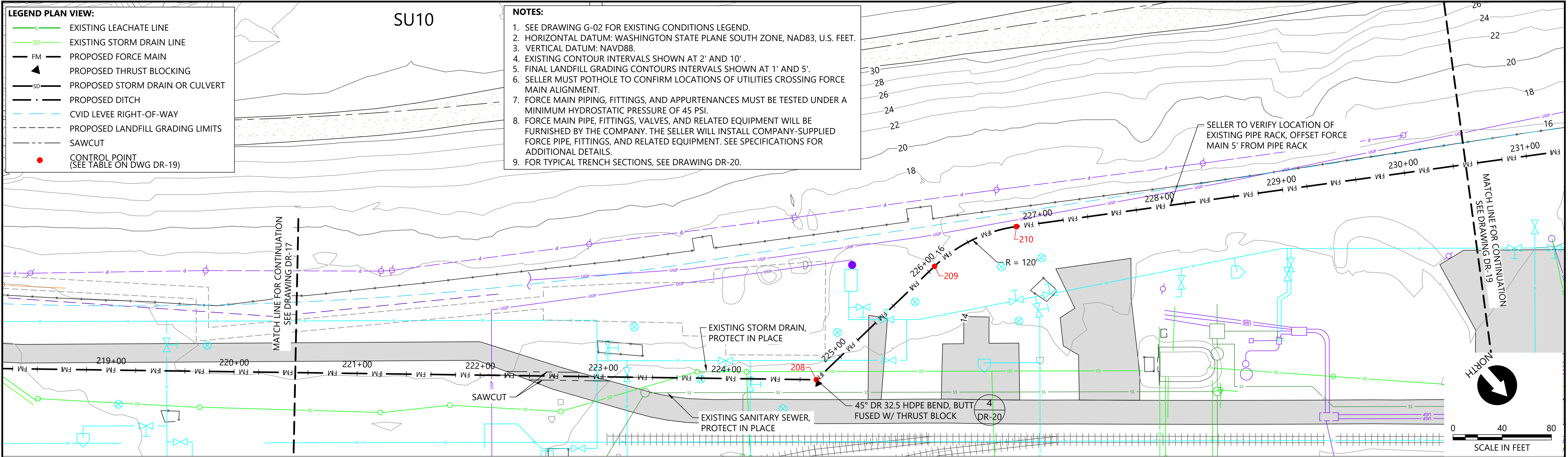
SHEET # 77 OF 114

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" INCH SCALE ACCORDINGLY

- LEGEND PLAN VIEW:**
- EXISTING LEACHATE LINE
 - EXISTING STORM DRAIN LINE
 - PROPOSED FORCE MAIN
 - PROPOSED THRUST BLOCKING
 - PROPOSED STORM DRAIN OR CULVERT
 - PROPOSED DITCH
 - CVID LEVEE RIGHT-OF-WAY
 - PROPOSED LANDFILL GRADING LIMITS
 - SAWCUT
 - CONTROL POINT (SEE TABLE ON DWG DR-19)

SU10

- NOTES:**
1. SEE DRAWING G-02 FOR EXISTING CONDITIONS LEGEND.
 2. HORIZONTAL DATUM: WASHINGTON STATE PLANE SOUTH ZONE, NAD83, U.S. FEET.
 3. VERTICAL DATUM: NAVD88.
 4. EXISTING CONTOUR INTERVALS SHOWN AT 2' AND 10'.
 5. FINAL LANDFILL GRADING CONTOURS INTERVALS SHOWN AT 1' AND 5'.
 6. SELLER MUST POTHOLE TO CONFIRM LOCATIONS OF UTILITIES CROSSING FORCE MAIN ALIGNMENT.
 7. FORCE MAIN PIPING, FITTINGS, AND APPURTENANCES MUST BE TESTED UNDER A MINIMUM HYDROSTATIC PRESSURE OF 45 PSI.
 8. FORCE MAIN PIPE, FITTINGS, VALVES, AND RELATED EQUIPMENT WILL BE FURNISHED BY THE COMPANY. THE SELLER WILL INSTALL COMPANY-SUPPLIED FORCE PIPE, FITTINGS, AND RELATED EQUIPMENT. SEE SPECIFICATIONS FOR ADDITIONAL DETAILS.
 9. FOR TYPICAL TRENCH SECTIONS, SEE DRAWING DR-20.

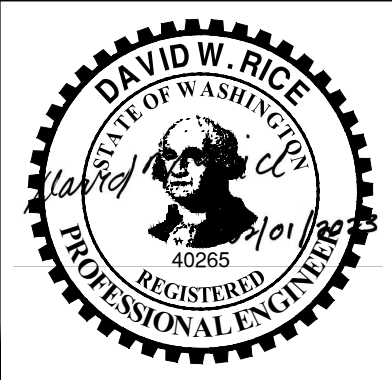


- LEGEND PROFILE:**
- EXISTING GRADE
 - PROPOSED FORCE MAIN
 - FORCE MAIN HYDRAULIC PROFILE

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" INCH SCALE ACCORDINGLY

ISSUED FOR CONSTRUCTION

0730-PL-017 (Drainage-Force Main) dwg DR-18



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
1	02/01/23	CH	RD	ISSUED FOR CONSTRUCTION

DESIGNED BY: J. SEXTON
 DRAWN BY: C. HEWETT
 CHECKED BY: E. VOGES
 APPROVED BY: D. RICE
 SCALE: AS NOTED
 DATE: FEBRUARY 2023

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

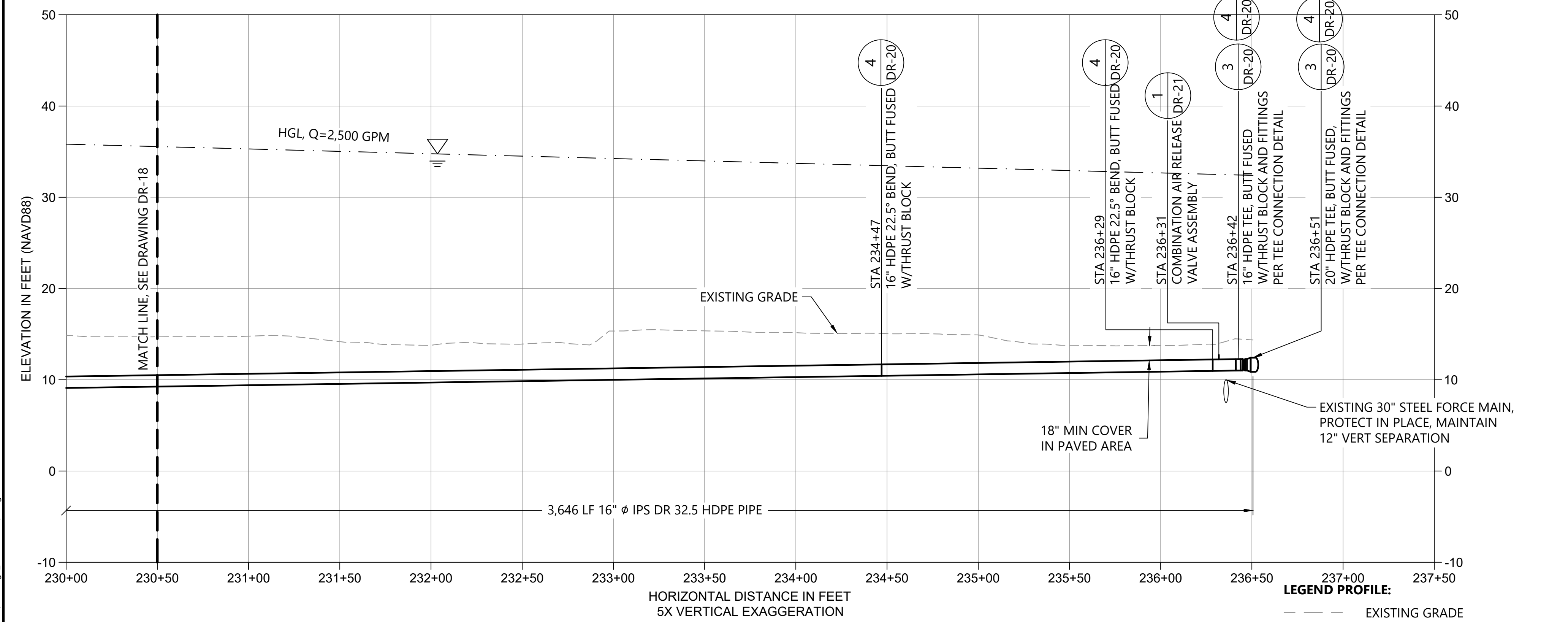
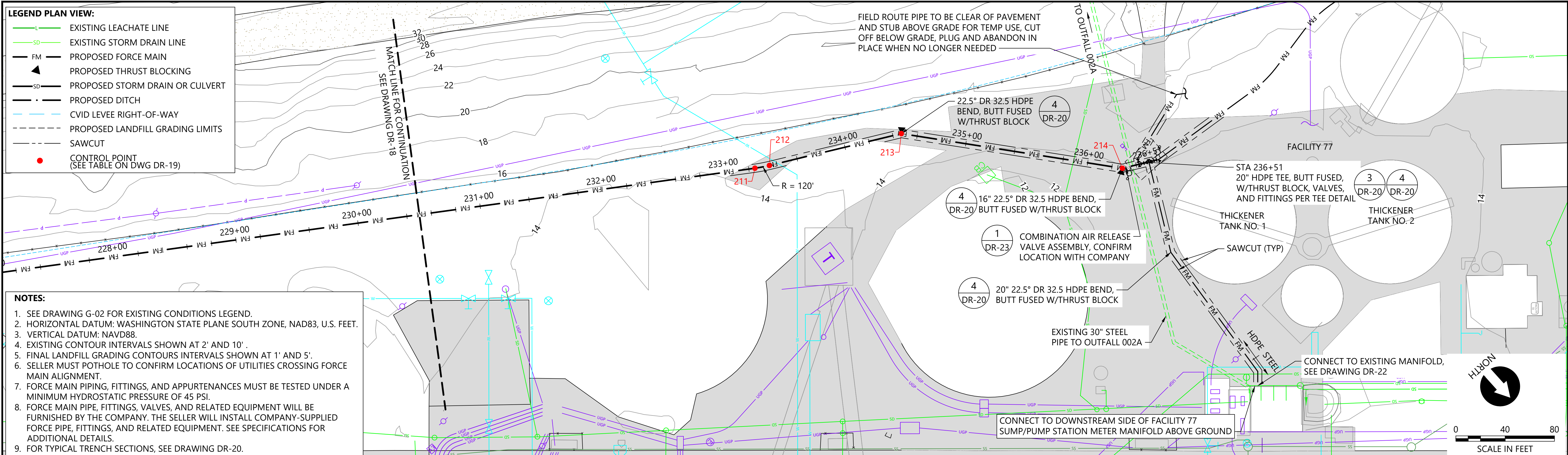
EAST FORCE MAIN PLAN AND PROFILE, STA 220+50 TO 230+50

DR-18

SHEET # **78** OF 114

- LEGEND PLAN VIEW:**
- EXISTING LEACHATE LINE
 - EXISTING STORM DRAIN LINE
 - PROPOSED FORCE MAIN
 - PROPOSED THRUST BLOCKING
 - PROPOSED STORM DRAIN OR CULVERT
 - PROPOSED DITCH
 - CVID LEVEE RIGHT-OF-WAY
 - PROPOSED LANDFILL GRADING LIMITS
 - SAWCUT
 - CONTROL POINT (SEE TABLE ON DWG DR-19)

- NOTES:**
1. SEE DRAWING G-02 FOR EXISTING CONDITIONS LEGEND.
 2. HORIZONTAL DATUM: WASHINGTON STATE PLANE SOUTH ZONE, NAD83, U.S. FEET.
 3. VERTICAL DATUM: NAVD88.
 4. EXISTING CONTOUR INTERVALS SHOWN AT 2' AND 10'.
 5. FINAL LANDFILL GRADING CONTOURS INTERVALS SHOWN AT 1' AND 5'.
 6. SELLER MUST POTHOLE TO CONFIRM LOCATIONS OF UTILITIES CROSSING FORCE MAIN ALIGNMENT.
 7. FORCE MAIN PIPING, FITTINGS, AND APPURTENANCES MUST BE TESTED UNDER A MINIMUM HYDROSTATIC PRESSURE OF 45 PSI.
 8. FORCE MAIN PIPE, FITTINGS, VALVES, AND RELATED EQUIPMENT WILL BE FURNISHED BY THE COMPANY. THE SELLER WILL INSTALL COMPANY-SUPPLIED FORCE PIPE, FITTINGS, AND RELATED EQUIPMENT. SEE SPECIFICATIONS FOR ADDITIONAL DETAILS.
 9. FOR TYPICAL TRENCH SECTIONS, SEE DRAWING DR-20.



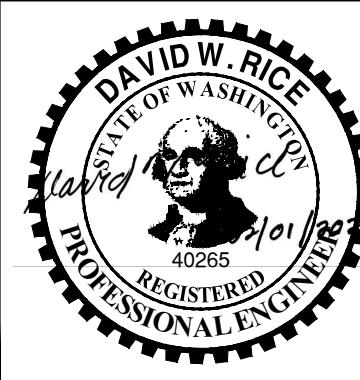
CONTROL POINTS			
POINT #	NORTHING	EASTING	DESCRIPTION
101	305039.01	1004300.19	BEGIN
102	305037.44	1004393.30	BC
103	305037.37	1004395.90	EC
104	305020.20	1004804.80	BC
105	305020.15	1004811.95	EC
106	305028.06	1005077.62	BC
107	305008.97	1005139.43	EC
108	304955.97	1005212.28	90 BEND
109	304554.60	1004851.47	BC
110	304397.75	1004882.23	EC
111	303918.70	1005870.96	45 BEND
112	303890.77	1005880.58	45 BEND
113	303874.28	1005914.30	BC
114	303866.07	1005977.77	ECE
115	303872.71	1006011.17	BC
116	303874.17	1006041.08	EC
117	303864.62	1006133.82	22.5 BEND
118	303860.82	1006140.86	TEE
119	303927.17	1006176.69	22.5 BEND
120	304046.18	1006188.94	END

CONTROL POINTS			
POINT #	NORTHING	EASTING	DESCRIPTION
201	303126.00	1008792.58	45 BEND
202	303081.95	1008794.96	45 BEND
203	302594.80	1008359.14	BEND
204	302340.97	1008103.64	45 BEND
205	302342.17	1008033.44	45 BEND
206	302566.78	1007801.43	45 BEND
207	302644.34	1007798.40	45 BEND
208	303273.57	1007118.55	45 BEND
209	303269.30	1006985.39	BC
210	303289.90	1006914.21	EC
211	303650.79	1006381.77	BC
212	303656.99	1006371.55	EC
213	303709.38	1006274.75	22.5 BEND
214	303850.29	1006160.31	END

- LEGEND PROFILE:**
- EXISTING GRADE
 - PROPOSED FORCE MAIN
 - FORCE MAIN HYDRAULIC PROFILE

ISSUED FOR CONSTRUCTION

0730-PL-017 (Drainage-Force Main) dwg DR-19



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
1	02/01/23	CH	RD	ISSUED FOR CONSTRUCTION

DESIGNED BY: J. SEXTON
 DRAWN BY: C. HEWETT
 CHECKED BY: E. VOGES
 APPROVED BY: D. RICE
 SCALE: AS NOTED
 DATE: FEBRUARY 2023

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

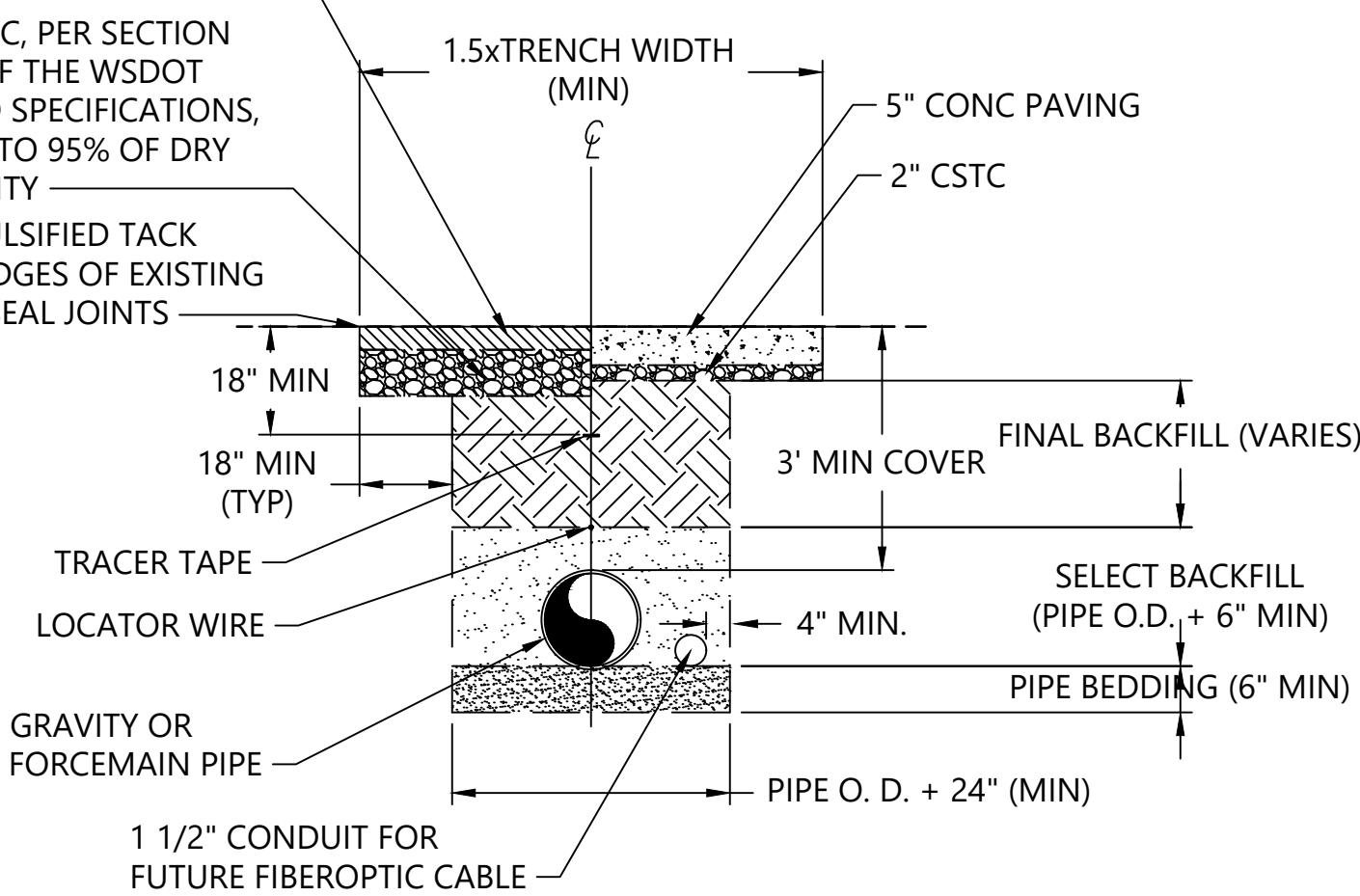
EAST FORCE MAIN PLAN AND PROFILE, STA 230+50 TO END

DR-19

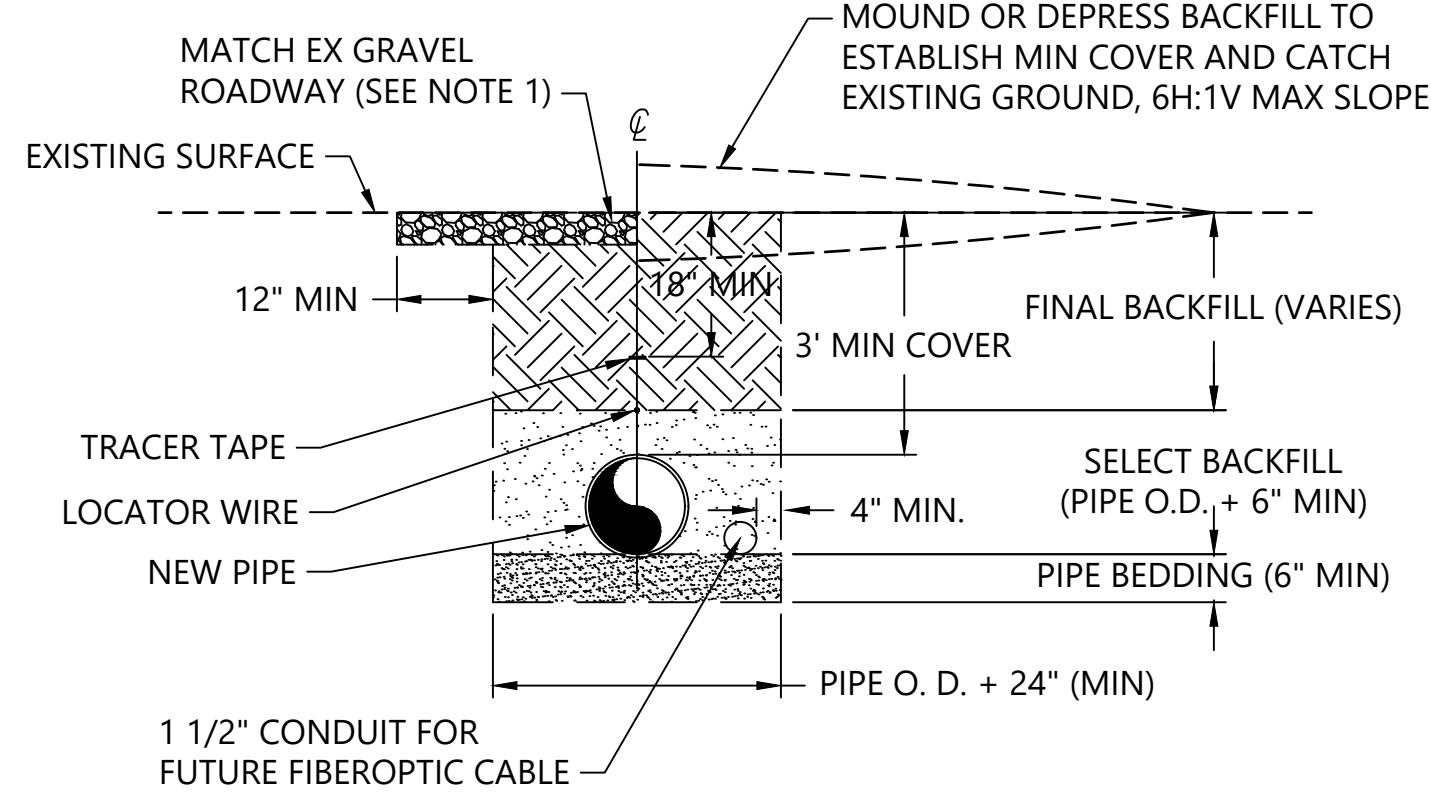
SHEET # 79 OF 114

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" INCH SCALE ACCORDINGLY

CLASS 1/2 PG 64-11, PER SECTION 5-04 OF THE WSDOT STANDARD SPECIFICATIONS
 MIN 6" CSTC, PER SECTION 9-03.9(3) OF THE WSDOT STANDARD SPECIFICATIONS, COMPACT TO 95% OF DRY MAX DENSITY
 APPLY EMULSIFIED TACK COAT AT EDGES OF EXISTING ASPHALT, SEAL JOINTS



1 PIPE INSTALLED IN PAVED SURFACE
 SCALE: NOT TO SCALE

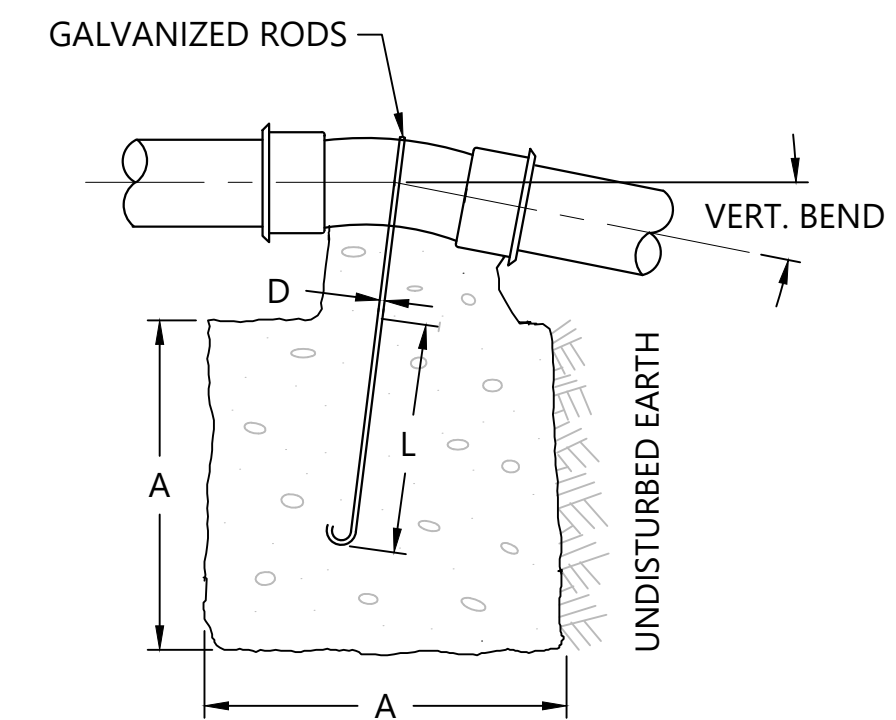


2 PIPE OUTSIDE EXISTING PAVED AREA
 SCALE: NOT TO SCALE

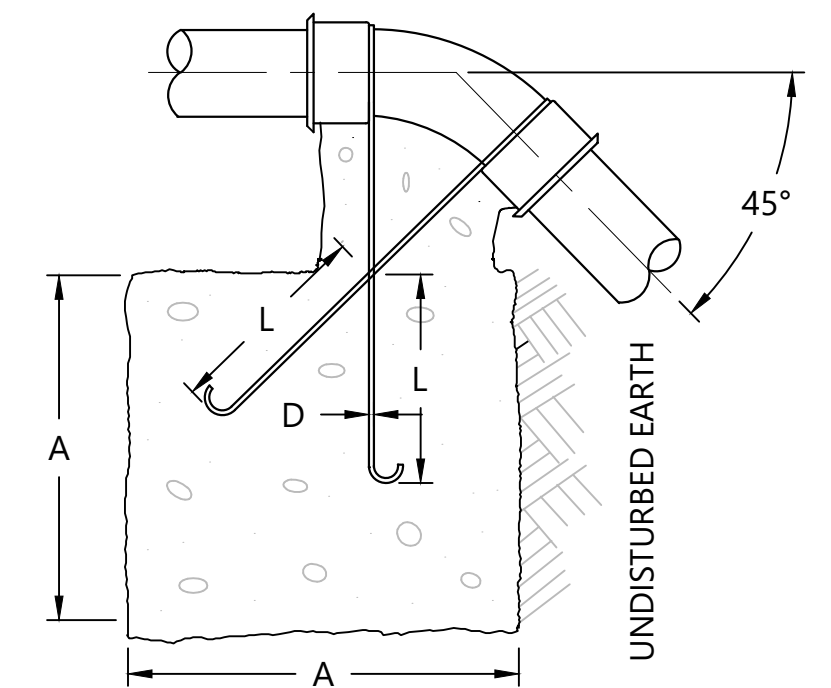
- NOTES:
- GRAVEL ROADWAYS AND AREAS: RESTORE WITH CSTC, MATCH THICKNESS OF EX GRAVEL, MIN 4".

TYPICAL TRENCH NOTES:

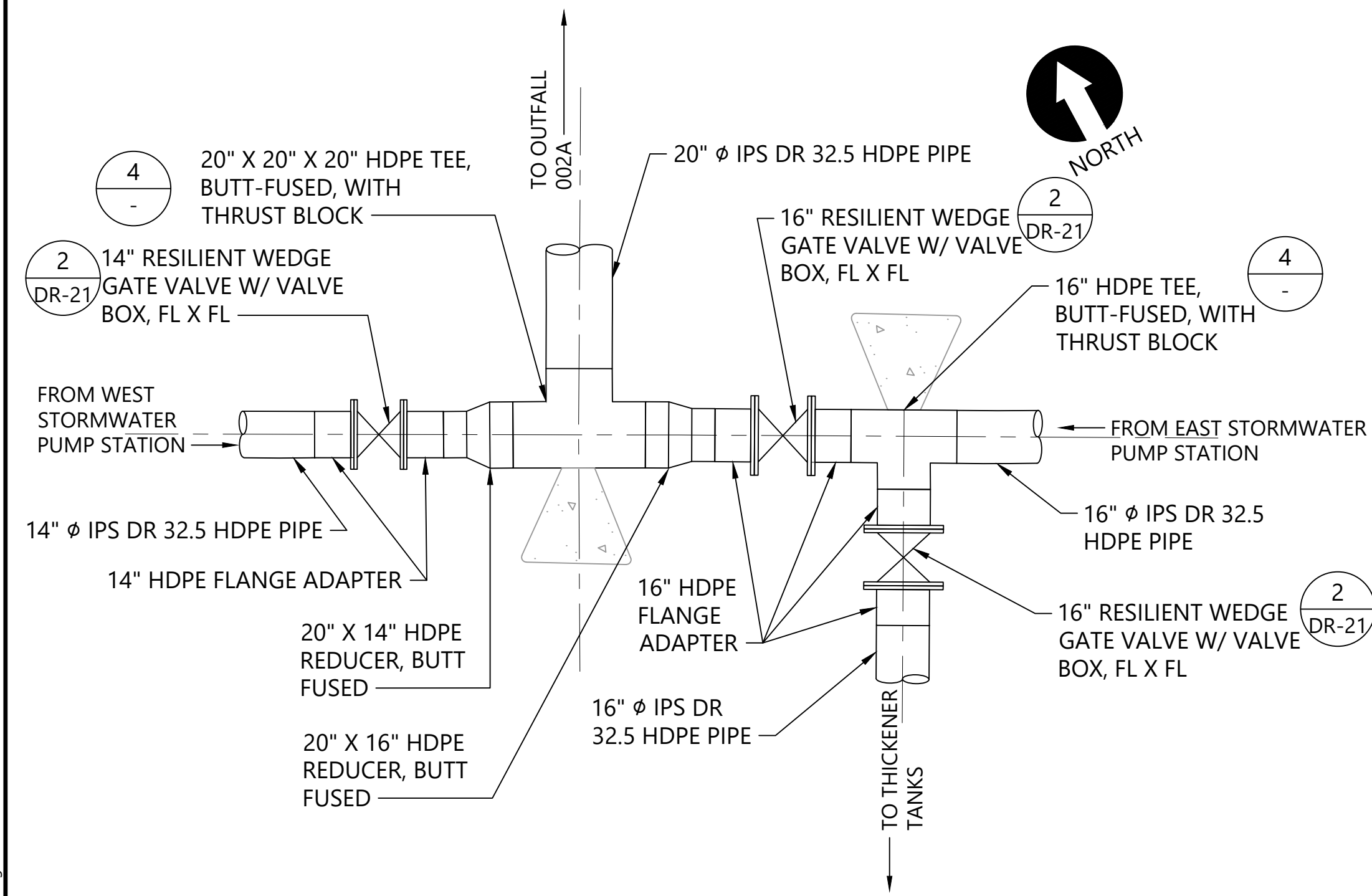
- MINIMUM COVER - MINIMUM COVER FOR PIPE MUST BE 3'-0" FROM TOP OF PIPE TO FINISH GRADE IN AREAS SUBJECT TO VEHICULAR TRAFFIC, UNLESS OTHERWISE SHOWN ON THE PLANS OR APPROVED BY THE COMPANY.
- PIPE BEDDING - PIPE BEDDING MUST BE AT LEAST 6 INCHES DEEP COMPACTED AND MUST MEET THE REQUIREMENTS OF SECTION 9-03.12(3) OF THE WSDOT "STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION" (2022 EDITION). IF EXCAVATED TRENCH BOTTOM IS UNSTABLE OR NOT SUITABLE, THE SELLER MUST EXCAVATE TO A DEPTH REQUIRED BY THE COMPANY AND BACKFILL WITH PIPE BEDDING. PLACE PIPE BEDDING IN MAXIMUM 6-INCH LIFTS AND COMPACT TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR METHOD (ASTM D1557). THE BOTTOM OF THE TRENCH MUST BE FREE OF ROCK AND SMOOTHED TO PREVENT BRIDGING.
- SELECT BACKFILL - SELECT BACKFILL MUST ALSO MEET THE REQUIREMENTS OF SECTION 9-03.12(3) OF THE WSDOT "STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION" (2022 EDITION). PLACE SELECT BACKFILL IN 6-INCH LIFTS TO A MINIMUM DEPTH OF 6 INCHES ABOVE THE CROWN OF THE PIPE AND COMPACT TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR METHOD (ASTM D1557).
- FINAL BACKFILL - THE SELLER MUST BACKFILL THE REMAINING PORTION OF THE TRENCH TO THE LINES AND GRADES SHOWN WITH EXCAVATED NATIVE MATERIAL OR IMPORTED MATERIAL THAT HAS A MAXIMUM PARTICLE SIZE OF 3 INCHES AND IS FREE FROM DEBRIS AND ORGANIC MATERIAL. THE BACKFILL MUST BE WELL DRAINED AND SUITABLE FOR PLACEMENT AND COMPACTION. FOR PIPELINES IN PAVED AREAS OR OTHER AREAS SUBJECT TO VEHICULAR TRAFFIC, PLACE BACKFILL IN MAXIMUM 6-INCH LOOSE LIFTS AND COMPACT TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR METHOD (ASTM D1557). FOR OTHER PIPELINES, PLACE BACKFILL IN MAXIMUM 6-INCH LOOSE LIFTS AND COMPACT TO 90% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR METHOD (ASTM D1557). THE AREA DIRECTLY OVER THE PIPE MUST NOT BE MECHANICALLY COMPACTED UNTIL THERE IS A MINIMUM OF 12" OF COVER OVER THE PIPE.
- TRACER TAPE - TRACER TAPE MUST MEET THE REQUIREMENTS OF SECTION 9-15.18 OF THE WSDOT "STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION" (2022 EDITION). THE TRACER TAPE MUST BE INSTALLED ALONG THE ENTIRE LENGTH OF PIPE INSTALLED.
- SAFETY - THE SELLER MUST BE RESPONSIBLE FOR THE SAFETY OF WORKERS. THE SELLER MUST PROVIDE SHORING, TRENCH BOXES, OR OTHER NECESSARY SAFETY SYSTEMS TO PROTECT WORKERS FROM SOIL, ROCKS AND DEBRIS THAT MAY FALL INTO THE TRENCH, IN ACCORDANCE WITH THE SPECIFICATIONS AND OSHA AND WSHA SAFETY REGULATIONS.
- EXISTING SOIL CONDITIONS - NO SUBSURFACE EXPLORATION HAS BEEN DONE ALONG THE ALIGNMENT OF THE PROPOSED PIPELINES. THE SELLER IS RESPONSIBLE FOR ASSESSING EXISTING SOIL CONDITIONS BEFORE TRENCH EXCAVATION. THE SELLER'S ATTENTION IS CALLED TO THE POTENTIAL FOR ENCOUNTERING COBBLES AND BOULDERS IN THE EXISTING SOIL.



VERTICAL BLOCKING FOR 11 1/4°, 22 1/2°, AND 30° BENDS



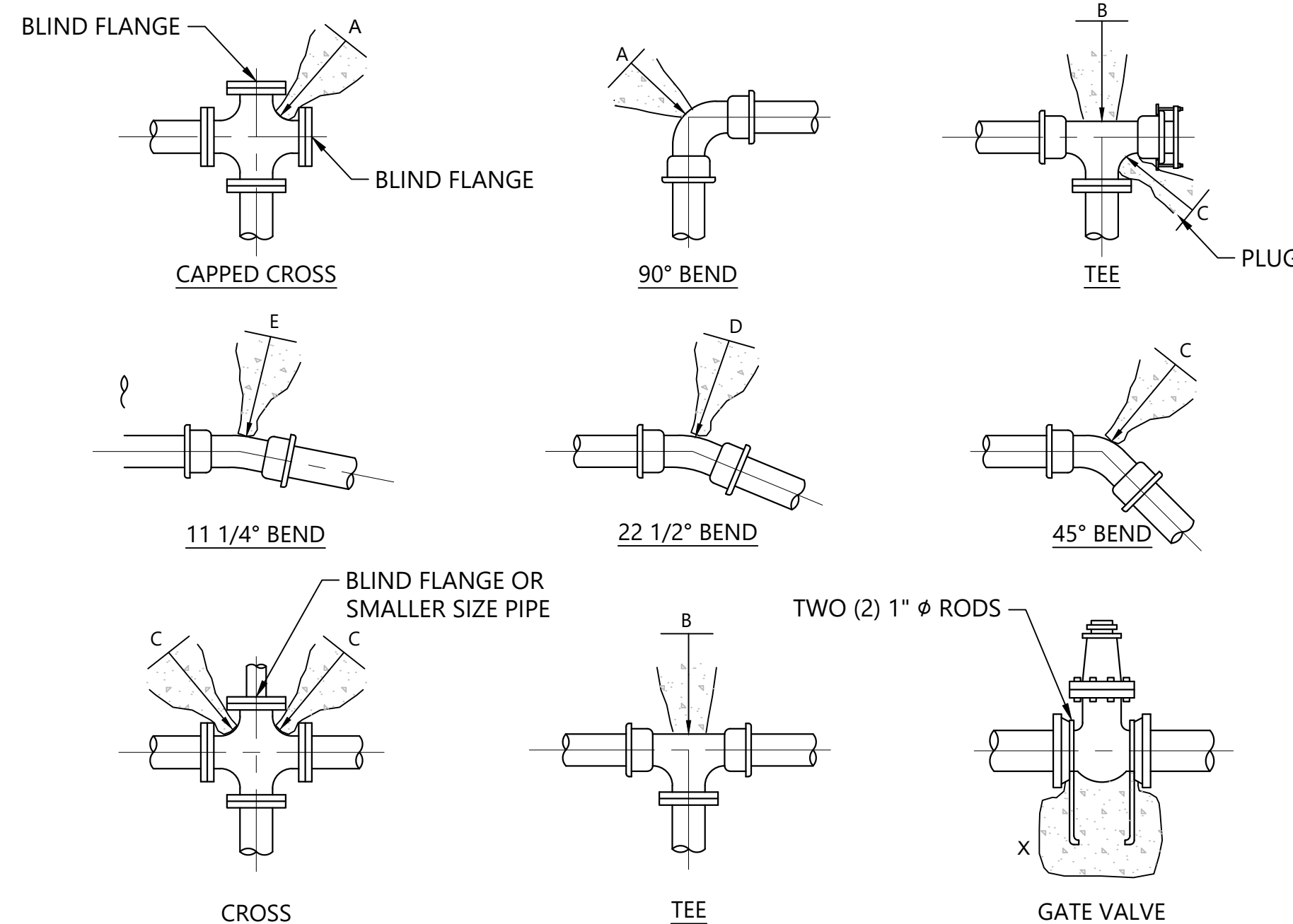
VERTICAL BLOCKING FOR 45° BENDS



3 FORCEMAIN TEE CONNECTION DETAIL
 SCALE: 1" = 3'

NOTES:

- BEARING AREA OF CONCRETE THRUST-BLOCK BASED ON 200 PSI PRESSURE AND SAFE SOIL BEARING LOAD OF 2,000 POUNDS PER SQUARE FOOT. DESIGN FOR THIS CONTRACT FOR TEST PRESSURE OF 200 PSI.
- AREAS MUST BE ADJUSTED FOR OTHER PIPE SIZES, PRESSURES AND SOIL CONDITIONS.
- CONCRETE BLOCKING MUST BE CAST IN PLACE AND HAVE A MINIMUM OF 1/4 SQUARE FOOT BEARING AGAINST THE FITTING.
- BLOCK MUST BEAR AGAINST FITTINGS ONLY AND MUST BE CLEAR OF JOINTS TO PERMIT TAKING UP OR DISMANTLING OF JOINT.
- SELLER MUST INSTALL BLOCKING ADEQUATE TO WITHSTAND FULL TEST PRESSURE AS WELL AS TO CONTINUOUSLY WITHSTAND OPERATION PRESSURE UNDER ALL CONDITIONS OF SERVICE.



4 THRUST BLOCKING
 SCALE: NTS

THRUST BLOCK TABLE MIN. BEARING AREA AGAINST UNDISTURBED SOIL (SQUARE FEET)						
PIPE SIZE	A (s.f.)	B (s.f.)	C (s.f.)	D (s.f.)	E (s.f.)	X (s.f.)
14"	22	19	12	6	3	12
16"	29	25	16	8	4	16
20"	45	39	24	13	6	24

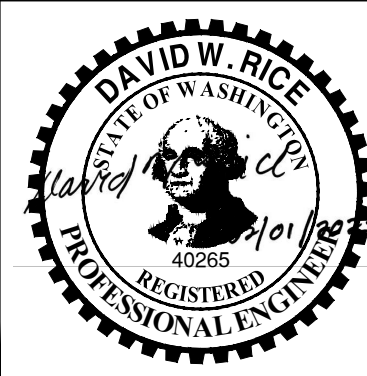
VERTICAL BLOCKING FOR 11 1/4°, 22 1/2°, AND 30° BENDS					
PIPE SIZE	V B	CU FT	A	D	L
14"	11 1/4°	51	3.7'	7/8"	2.5'
	22 1/2°	136	5.1'	1"	3.5'
	30°	204	5.8'		
16"	11 1/4°	70	4.1'	7/8"	3.0'
	22 1/2°	184	5.7'	1 1/8"	4.0'
	30°	275	6.5'	1 1/4"	
20"	11 1/4°	91	4.5'	7/8"	3.0'
	22 1/2°	225	6.1'	1 1/4"	4.0'
	30°	330	6.9'	1 3/8"	4.5'

VERTICAL BLOCKING FOR 45° BENDS					
PIPE SIZE	V B	CU FT	A	D	L
14"	45°	355	7.0'	1"	3.5'
16"		478	7.8'	1 1/8"	4.0'
20"		560	8.2'	1 1/4"	

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" INCH SCALE ACCORDINGLY

ISSUED FOR CONSTRUCTION

0730-PL-024 (Piping)dwg DR-20
 Feb 01, 2023 10:26am chewett



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
1	02/01/23	CH	RD	ISSUED FOR CONSTRUCTION

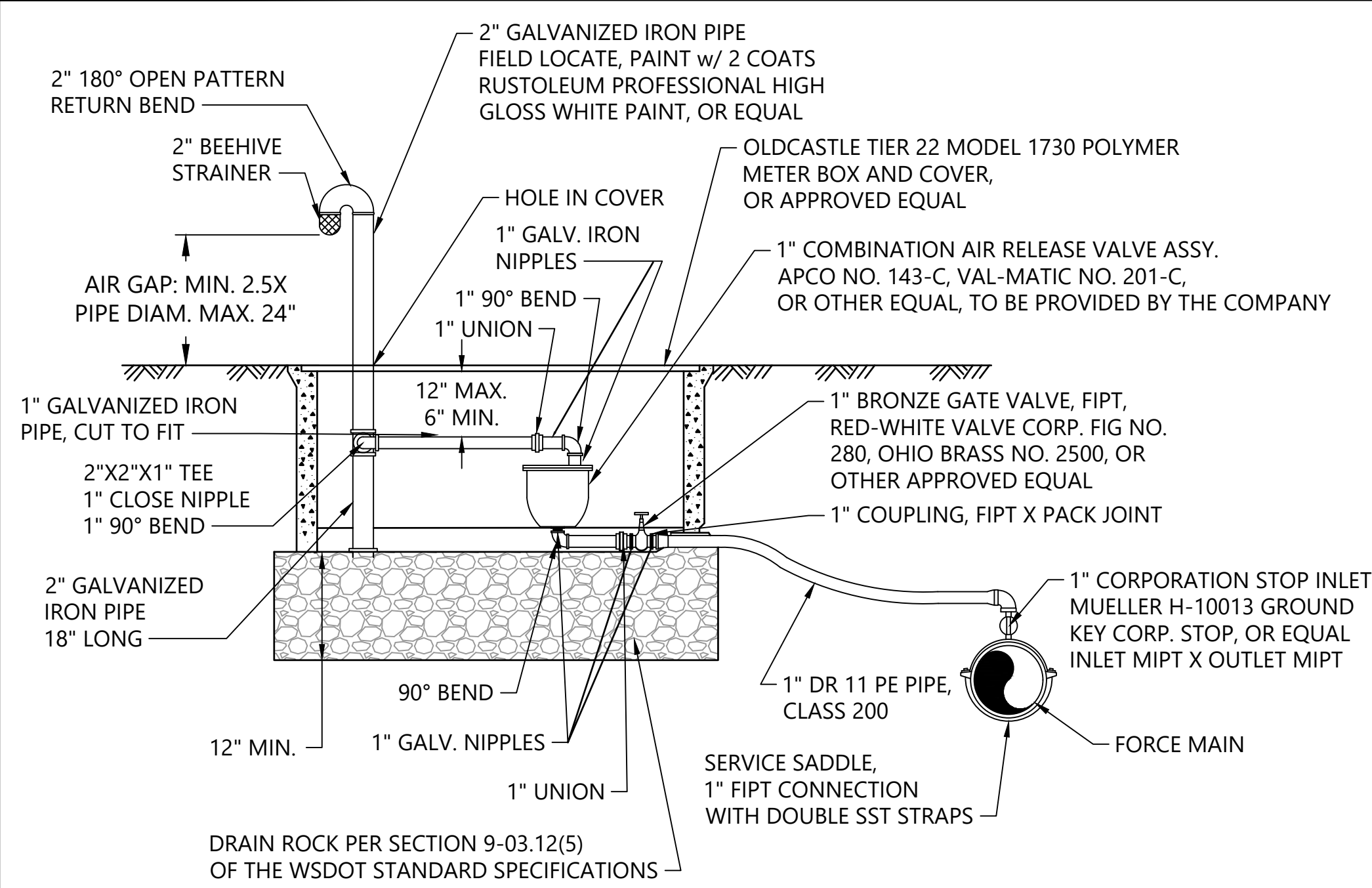
DESIGNED BY: J. SEXTON
 DRAWN BY: C. HEWETT
 CHECKED BY: E. VOGES
 APPROVED BY: D. RICE
 SCALE: AS NOTED
 DATE: FEBRUARY 2023

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

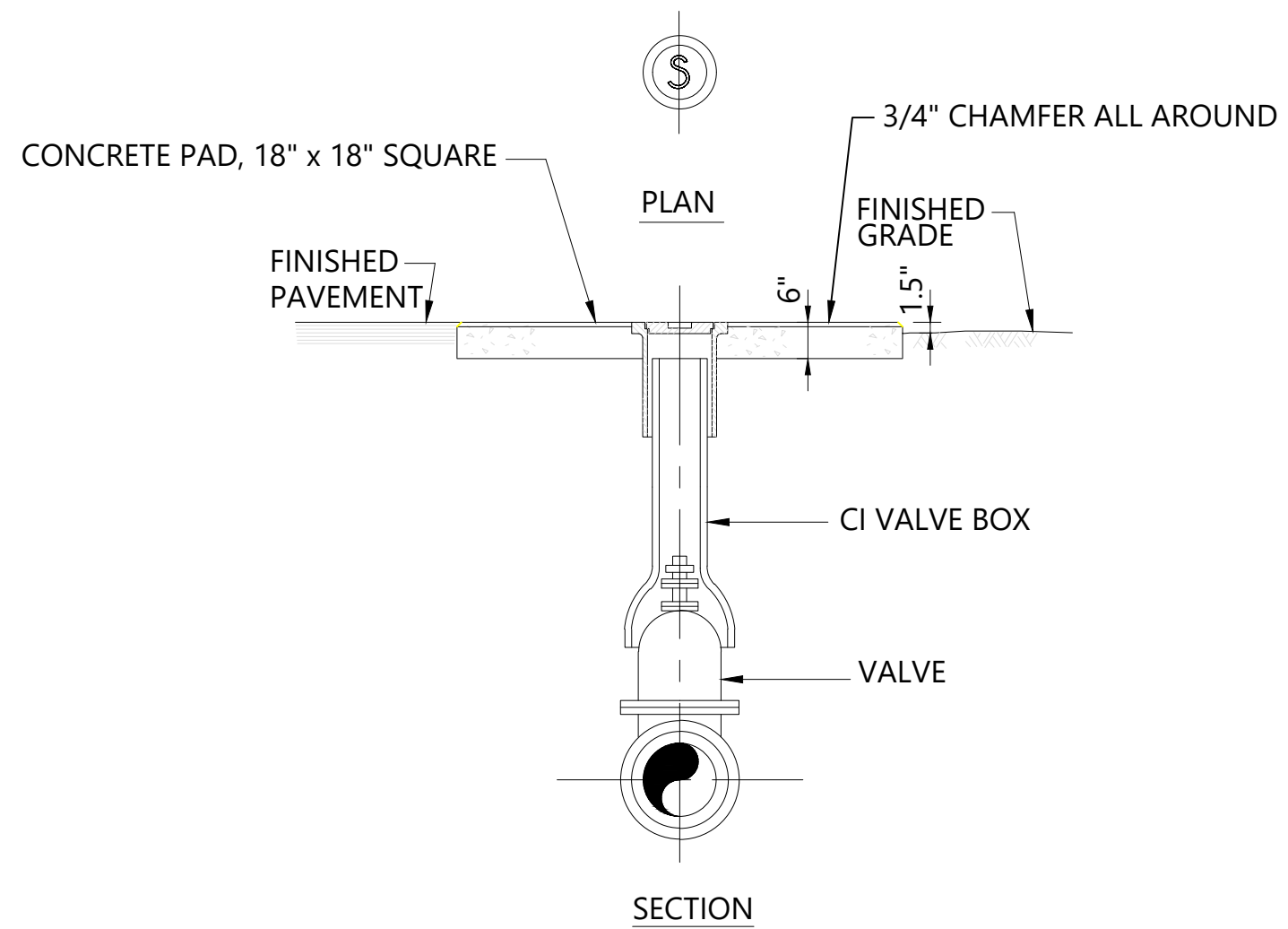
FORCE MAIN DETAILS (1 OF 2)

DR-20

SHEET # 80 OF 114



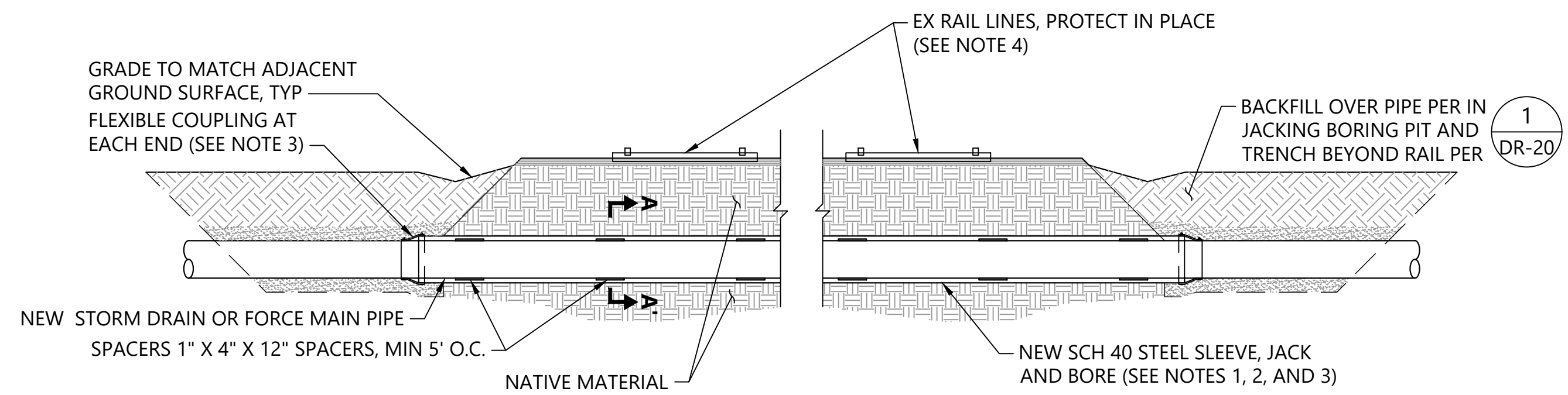
1 COMBINATION AIR RELEASE VALVE ASSEMBLY
SCALE: NOT TO SCALE



2 TYPICAL VALVE BOX DETAIL
SCALE: NTS

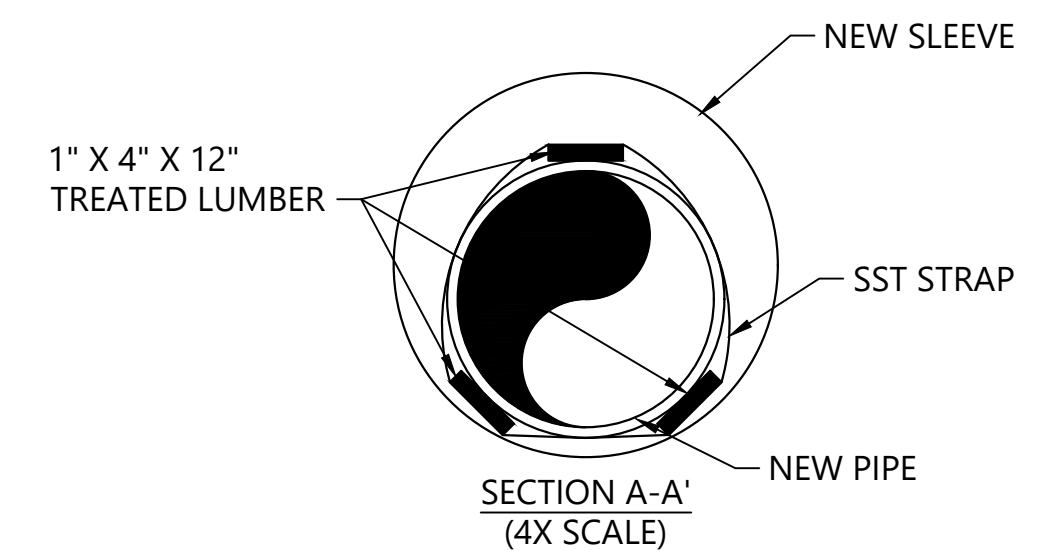
NOTE:

- TOP OF CONCRETE PAD MUST BE SET FLUSH WITH FINISHED PAVEMENT OR 1.5" ABOVE FG IN UNPAVED AREAS.



RAIL CROSSING NOTES:

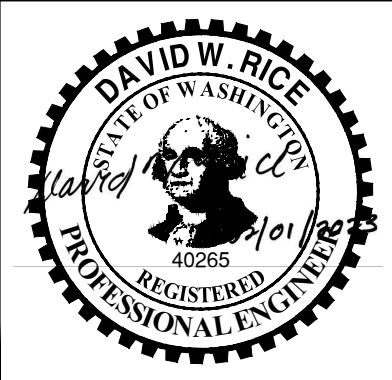
- PIPE SLEEVE: SCHEDULE 40 STEEL PIPE WITH WELDED JOINTS. WHERE INSTALLED ALONG FORCE MAIN, THE COMPANY WILL FURNISH THE PIPE SLEEVE. WHERE TO BE INSTALLED UNDER RAIL FOR GRAVITY STORM DRAIN CONNECTION, THE SELLER MUST FURNISH. FOR ALL LOCATIONS, THE SELLER MUST CUT, WELD, AND INSTALL STEEL CASING AS NEEDED TO INSTALL PIPE UNDER EXISTING RAILS, AS SHOWN ON THE DRAWINGS.
- MIN SLEEVE ID=PIPE OD+4 INCHES; SLEEVE LENGTH AS SHOWN ON PLAN VIEWS.
- PIPE SLEEVE SHALL BE INSTALLED USING TRENCHLESS METHODS (JACKING AND BORING OR OTHER APPROVED METHOD). SEE THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- EXISTING RAIL FACILITIES MUST BE PROTECTED IN PLACE AND OPERATIONAL THROUGHOUT CONSTRUCTION. THE SELLER MUST VERIFY THAT INSTALLATION OF PIPE UNDER EXISTING RAILS DOES NOT DISPLACE RAIL LINES BY MORE THAN 0.02 FEET VERTICALLY OR HORIZONTALLY. THE SELLER MUST COORDINATE WITH THE COMPANY TO CORRECT ANY DISPLACEMENT OUTSIDE THESE TOLERANCES OR REPAIR ANY DAMAGE TO RAILS CAUSED BY THE SELLER'S WORK.
- FLEXIBLE COUPLING: FERNCO OR APPROVED EQUAL.



3 TYPICAL CROSSING AT EXISTING RAIL LINES
SCALE: NTS

ISSUED FOR CONSTRUCTION

0730-PL-024 (Piping)dwg DR-22 Feb 01, 2023 10:26am ch Hewett



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
1	02/01/23	CH	RD	ISSUED FOR CONSTRUCTION

DESIGNED BY: J. SEXTON
DRAWN BY: C. HEWETT
CHECKED BY: E. VOGES
APPROVED BY: D. RICE
SCALE: AS NOTED
DATE: FEBRUARY 2023

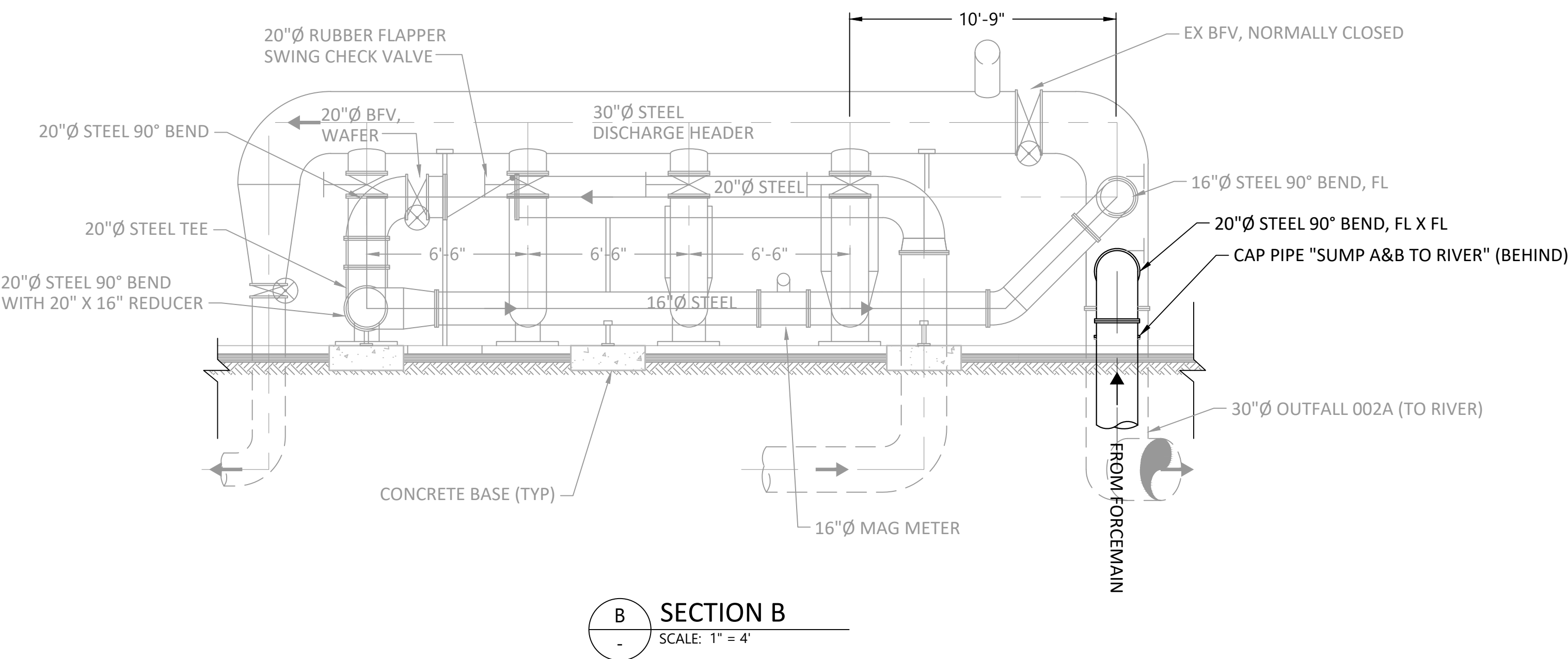
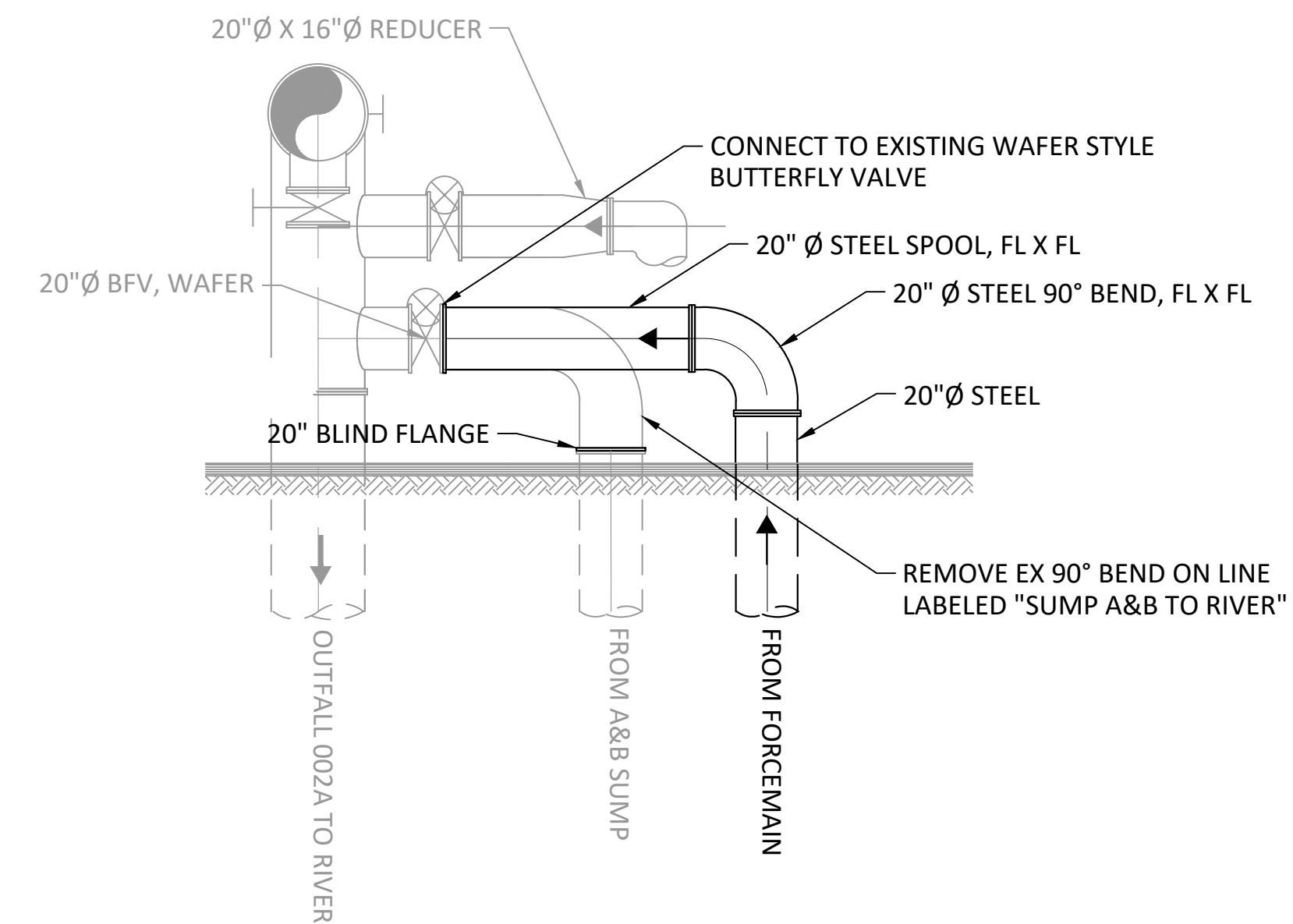
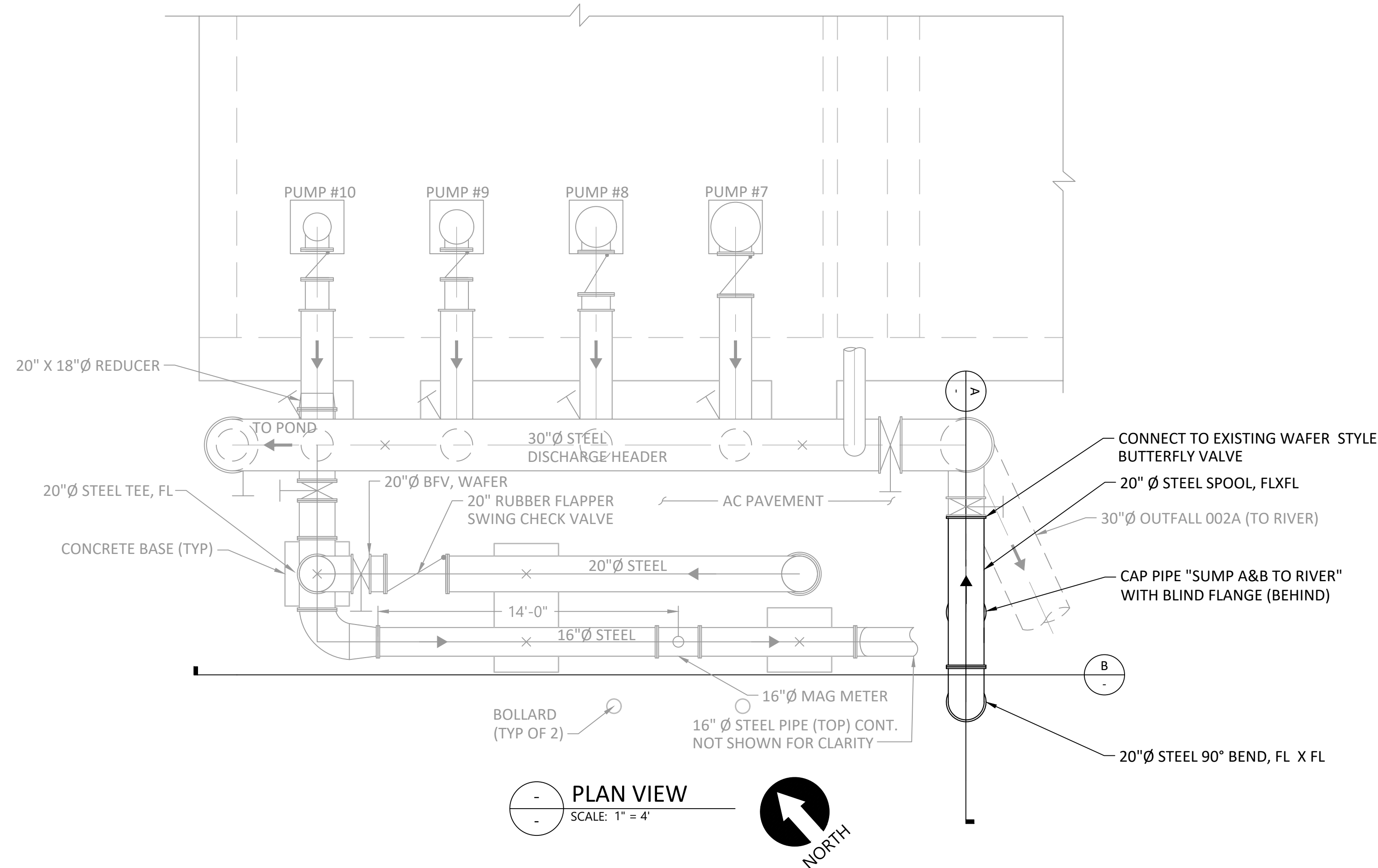
FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

FORCE MAIN DETAILS (2 OF 2)

DR-21

SHEET # **81** OF **114**

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" ONE INCH AT FULL SIZE. IF NOT ONE INCH SCALE ACCORDINGLY



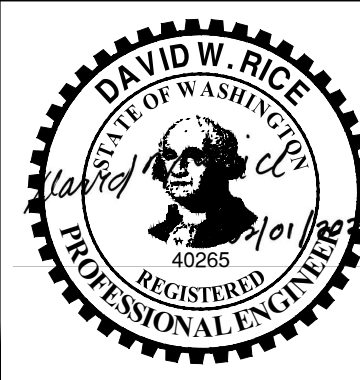
A SECTION A
SCALE: 1" = 4'

- NOTES:
1. THE DIMENSIONS, LAYOUT, AND MATERIALS SHOWN ON THIS DRAWING ARE BASED ON AVAILABLE AS-BUILT INFORMATION AND THE DESIGN OF MANIFOLD IMPROVEMENTS AT THE FACILITY 77 PUMP STATION DISCHARGE MANIFOLD THAT WERE INSTALLED IN 2012. DIMENSIONS HAVE NOT BEEN FIELD VERIFIED. THE SELLER MUST VERIFY THE DIMENSIONS, LAYOUT AND MATERIALS OF THE EXISTING FACILITY PRIOR TO CONSTRUCTION.
 2. THE CONFIGURATION AND DIMENSIONS OF PROPOSED PIPE, FITTINGS, VALVES AND OTHER EQUIPMENT MUST BE VERIFIED BY THE SELLER PRIOR TO ORDERING MATERIALS.
 3. THE SELLER WILL BE RESPONSIBLE FOR SELECTING AND SUBMITTING MATERIALS FOR THE COMPANY'S APPROVAL.
 4. STEEL PIPE AND FITTINGS MUST BE SCHEDULE 40 STEEL PIPE. FITTINGS MUST BE WELDED OR FLANGED. PIPE MUST CONFORM TO AWWA C200. WELDED JOINTS MUST CONFORM TO AWWA C206. FLANGED JOINTS MUST CONFORM TO AWWA C207. STEEL PIPE AND FITTINGS MUST BE LINED AND COATED AT THE PLACE OF FABRICATION BY A METHOD APPROVED BY THE COMPANY IN ACCORDANCE WITH AWWA SPECIFICATIONS FOR COATING AND LINING STEEL PIPE. PIPES MUST BE LABELED TO INDICATE CLEARLY THE DIRECTION OF FLOW.

0 4 8
SCALE IN FEET
ISSUED FOR CONSTRUCTION

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" INCH SCALE ACCORDINGLY

0730-PL-024 (Piping)dwg DR-21
Feb 01, 2023 10:27am ch Hewett



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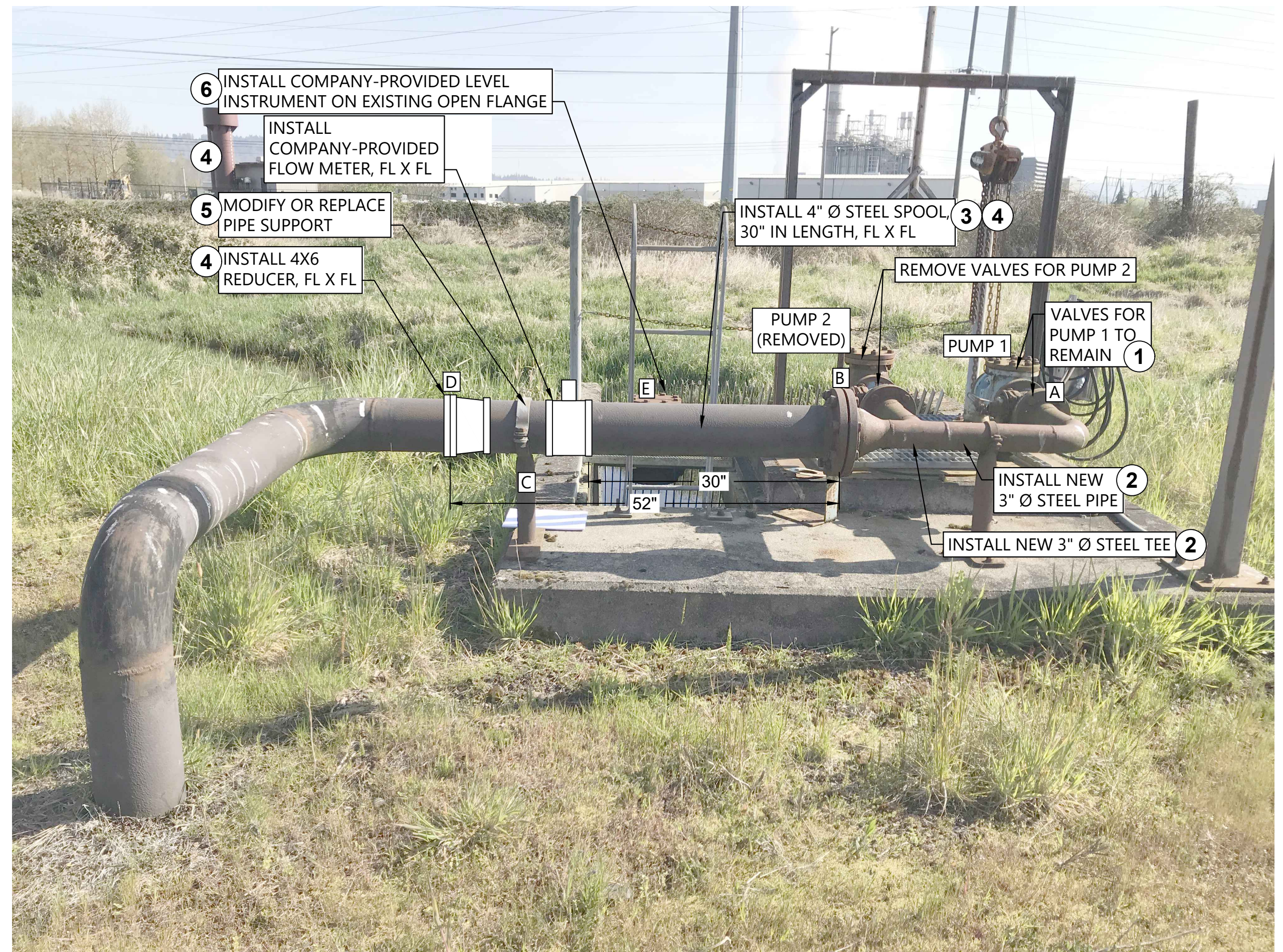
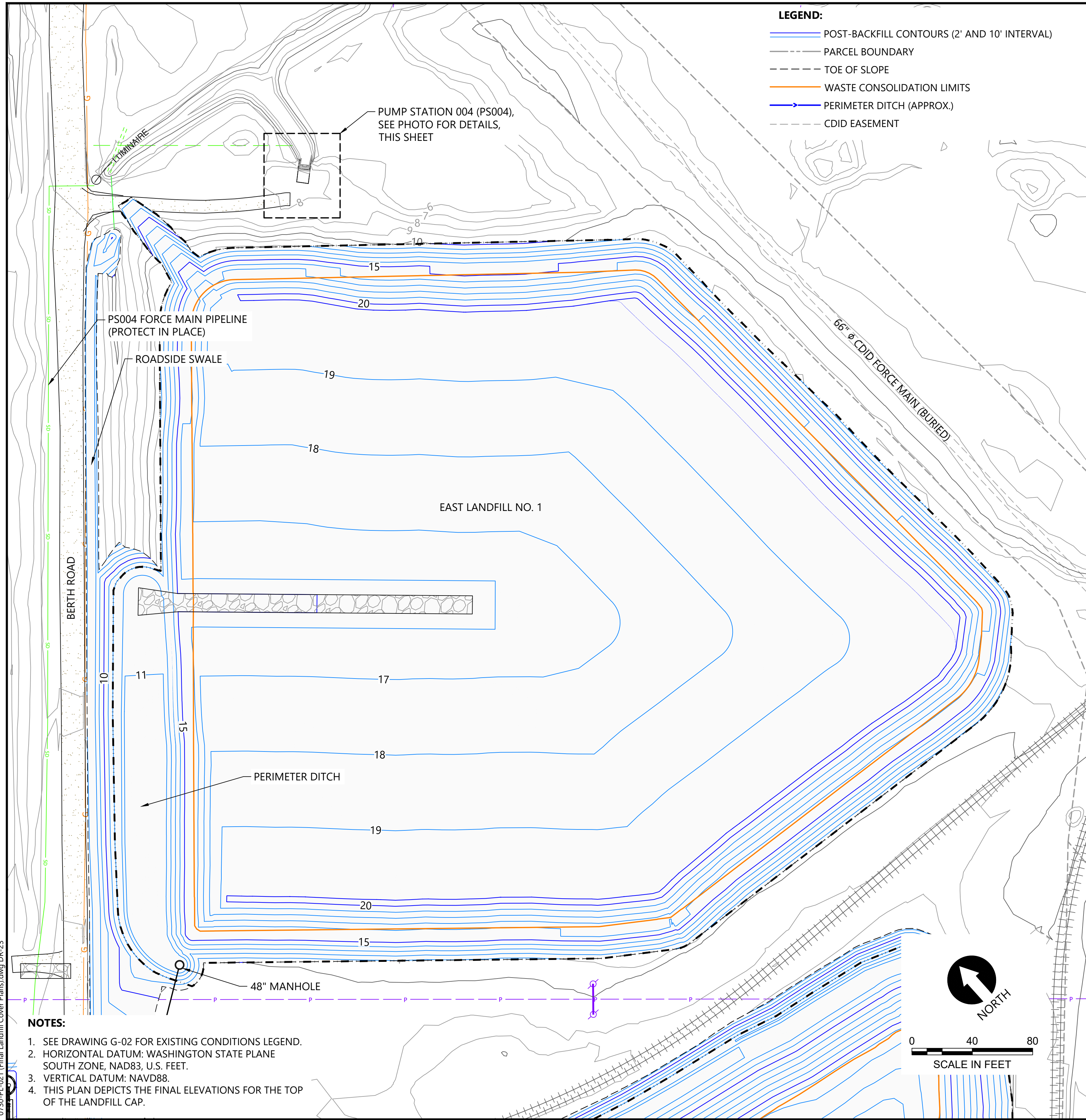
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SCALE: AS NOTED
DATE: FEBRUARY 2023

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

PROPOSED PIPING AND METER CONFIGURATION

DR-22

SHEET # 81 OF 114



NOTES:

1. REMOVE ALL PIPING AND VALVES FROM FLANGE AT POINT A TO CUT AT POINT C. VALVES FOR PUMP 1 AT POINT A TO REMAIN. POINT C IS 52" FROM FLANGE B. DISPOSE ALL REMOVED MATERIALS.
2. FROM A TO B, INSTALL NEW 3" STEEL PIPING. MATCH EXISTING PIPE MATERIAL. PROVIDE TEE WITH BLIND FLANGE IN ALIGNMENT WITH REMOVED PUMP 2 VALVES.
3. INCREASE LINE SIZE TO 4" AND INSTALL FLANGE AT POINT B.
4. IN ORDER, FROM B TO D, INSTALL: 30" LONG SPOOL, COMPANY-PROVIDED 4" ENDRESS+HAUSER W400 FLOW METER, REMAINING SPOOL LENGTH NEEDED TO MATCH UP AT POINT D AND 4X6 REDUCER, AND 6" FLANGE AT POINT D.
5. MODIFY OR INSTALL NEW PIPE SUPPORT AT POINT C.
6. INSTALL COMPANY-PROVIDED ENDRESS+HAUSER FMR50 LEVEL TRANSMITTER TO OPEN FLANGE AT POINT E.
7. REMOVE EXISTING FLOAT SWITCHES AND INSTALL COMPANY-PROVIDED LIQUIFLOAT FTS20 FLOAT SWITCHES IN WET WELL.

- NOTES:**
1. SEE DRAWING G-02 FOR EXISTING CONDITIONS LEGEND.
 2. HORIZONTAL DATUM: WASHINGTON STATE PLANE SOUTH ZONE, NAD83, U.S. FEET.
 3. VERTICAL DATUM: NAVD88.
 4. THIS PLAN DEPICTS THE FINAL ELEVATIONS FOR THE TOP OF THE LANDFILL CAP.

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" INCH SCALE ACCORDINGLY

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0730-PL-DR-23 (Final Landfill Cover Plans) dhw DR-23 Feb 01, 2023 10:27am ch Hewett



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FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW

PUMP STATION 004 IMPROVEMENTS

DR-23

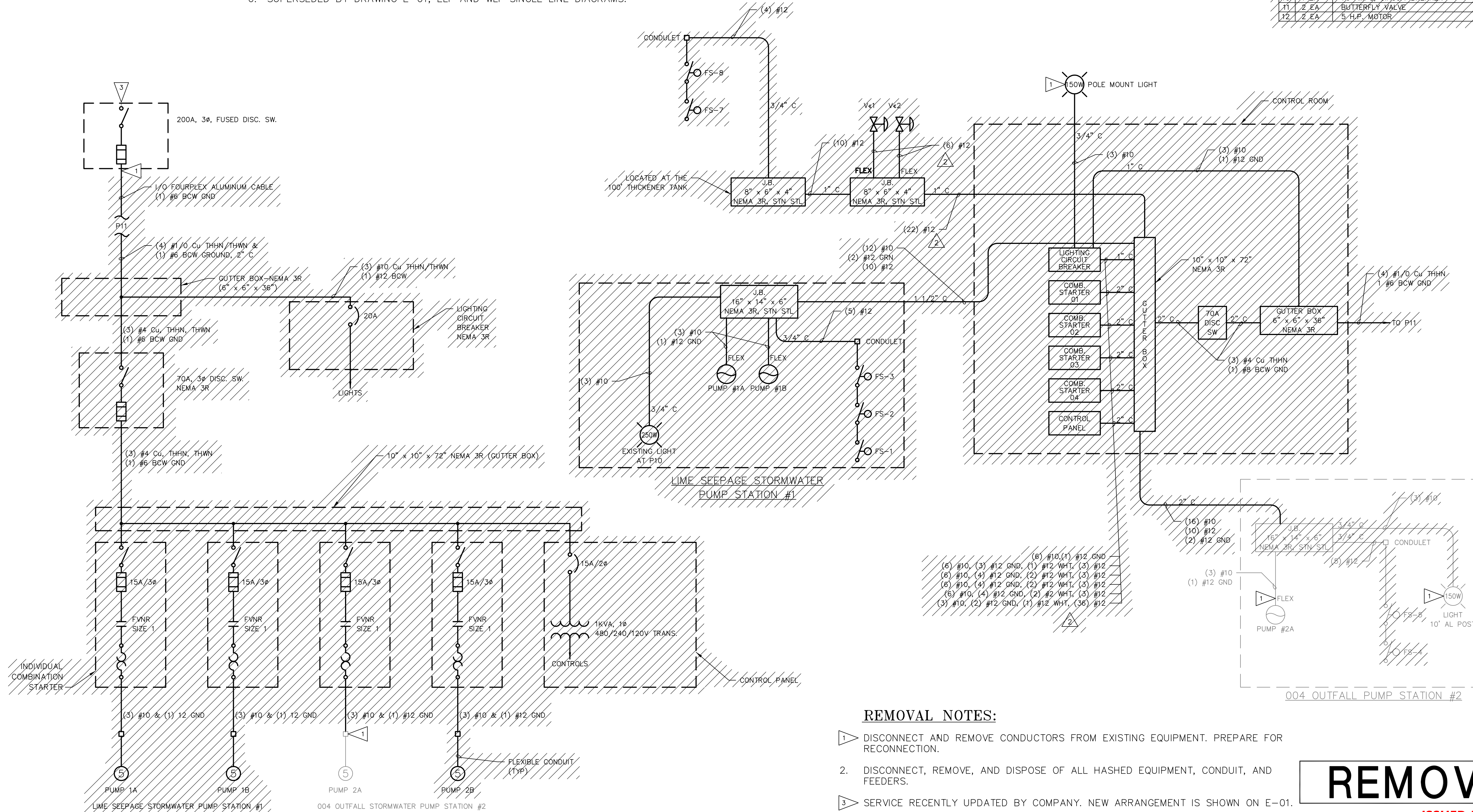
SHEET # 83 OF 114

GENERAL NOTES:

1. ALL WIRES SHALL BE STRANDED COPPER, THHN/THWN INSULATION, UNLESS NOTED
2. TRENCHES SHALL BE DUG BY ANOTHER CONTRACTOR.
3. PROVIDE PULL BOX FOR EVERY 200 FT OF CONDUIT RUN OR ANY FRACTION THEREOF
4. PULL BOXES SHALL BE WESTERN POWER PRODUCT CAT #SPN-9, UNLESS NOTED
5. ALL SPARE WIRES SHALL BE COILED NEATLY AT DESIGNATED BOXES
6. SUPERSEDED BY DRAWING E-01, ELF AND WLF SINGLE LINE DIAGRAMS.

**BILL OF MATERIALS
SUPPLIES BY RMC**

1	1 EA	PUMP CONTROL PANEL	FLYGT ENH-10
2	5	FLOAT SWITCH	G.E. #CR308CB041EAAAA
3	4	FVNR COMBINATION STARTER	ABB TYPE #LB4-11
4	1 SET	FUSE HOLDER (13.8KV)	ABB TYPE #LB4-11
5	1 BOX	8.0 AMP FUSE LINK	WESTINGHOUSE
6	1 EA	75 KVA, 13.8 KV-480V, 3P	WESTINGHOUSE
7	1 EA	DISCONNECT SWITCH, NEMA 3R	WESTINGHOUSE #RHF 384
8	3 EA	125 AMP FUSE	BUSSMAN #LPSR-125
9	1 EA	DISCONNECT SWITCH, NEMA 3R	WESTINGHOUSE #RFDN 100
10	1 EA	70 AMPS, CIRCUIT BREAKER	WESTINGHOUSE #D3070
11	2 EA	BUTTERFLY VALVE	
12	2 EA	5 H.P. MOTOR	



REMOVAL NOTES:

1. DISCONNECT AND REMOVE CONDUCTORS FROM EXISTING EQUIPMENT. PREPARE FOR RECONNECTION.
2. DISCONNECT, REMOVE, AND DISPOSE OF ALL HASHED EQUIPMENT, CONDUIT, AND FEEDERS.
3. SERVICE RECENTLY UPDATED BY COMPANY. NEW ARRANGEMENT IS SHOWN ON E-01.

REMOVAL
ISSUED FOR CONSTRUCTION

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" INCH SCALE ACCORDINGLY

Feb 01, 2023 11:39am HamaS.Gil ED-0216R.dwg ED-0216R

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Northwest Alloys, Inc.

CURTIS E. CLUTE
PROFESSIONAL ENGINEER
NO. 35276
STATE OF WASHINGTON
02/01/23

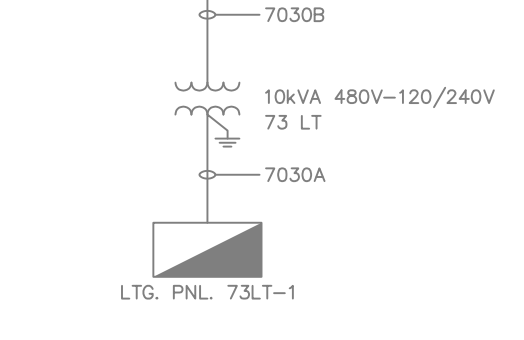
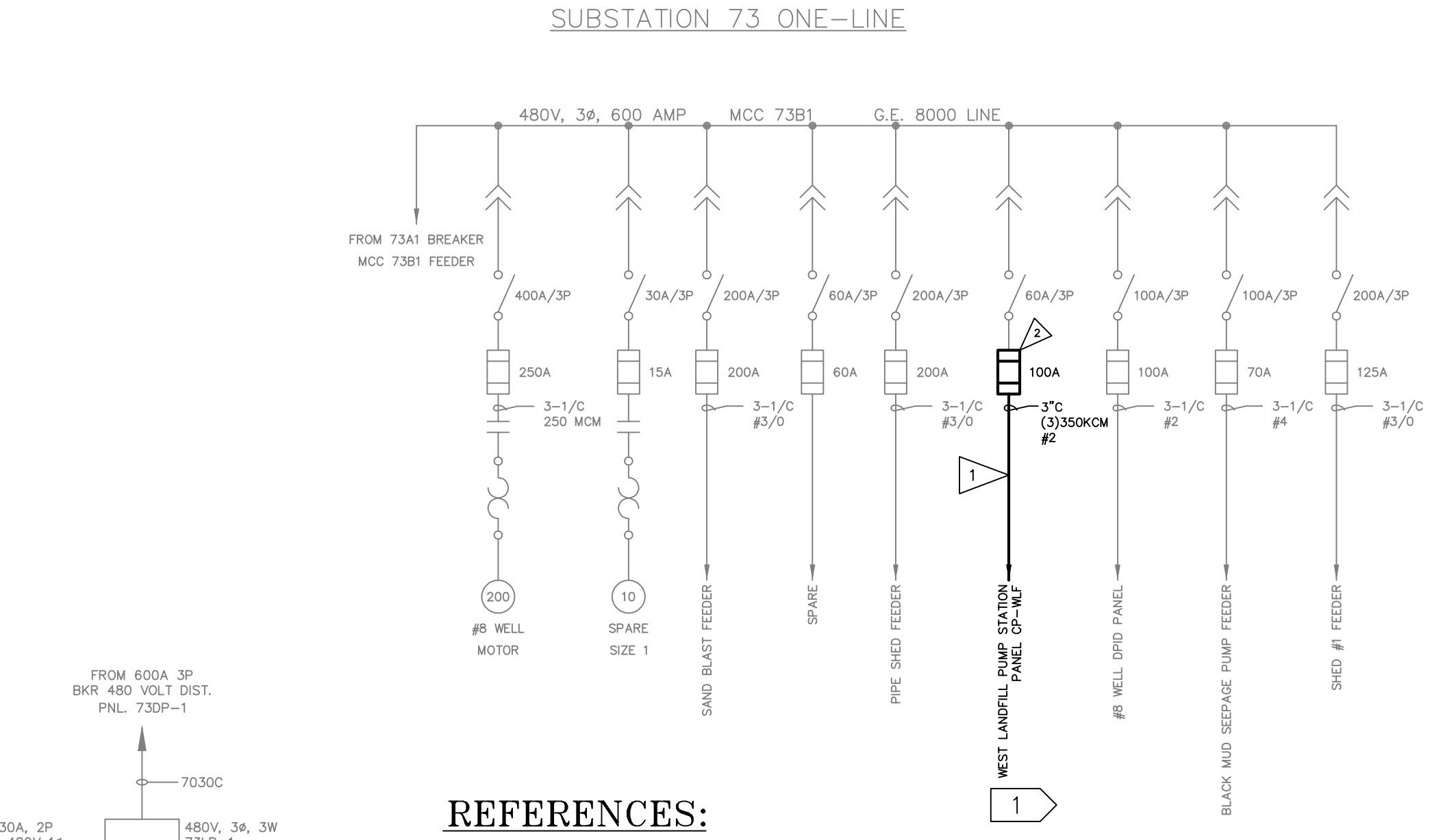
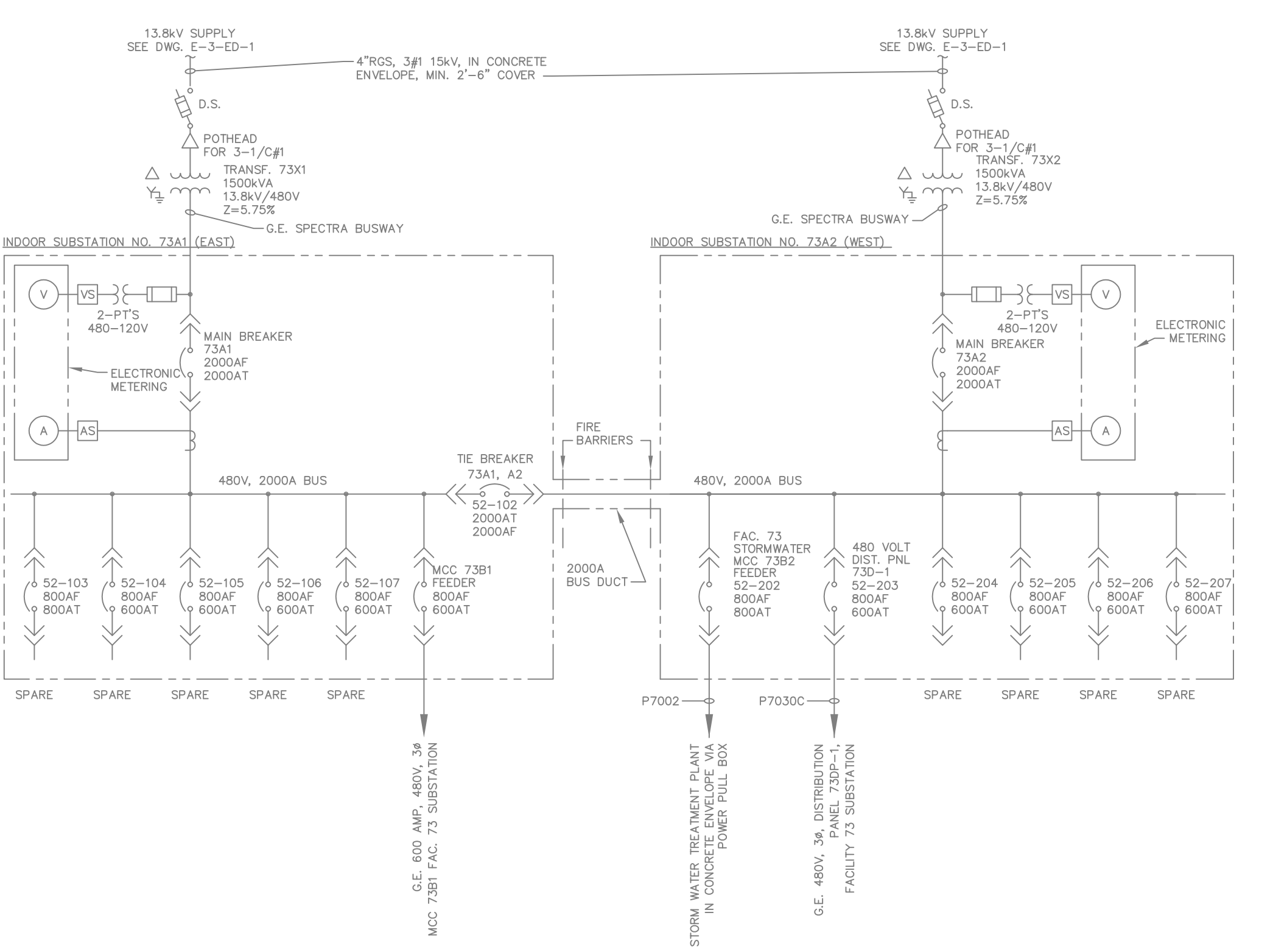
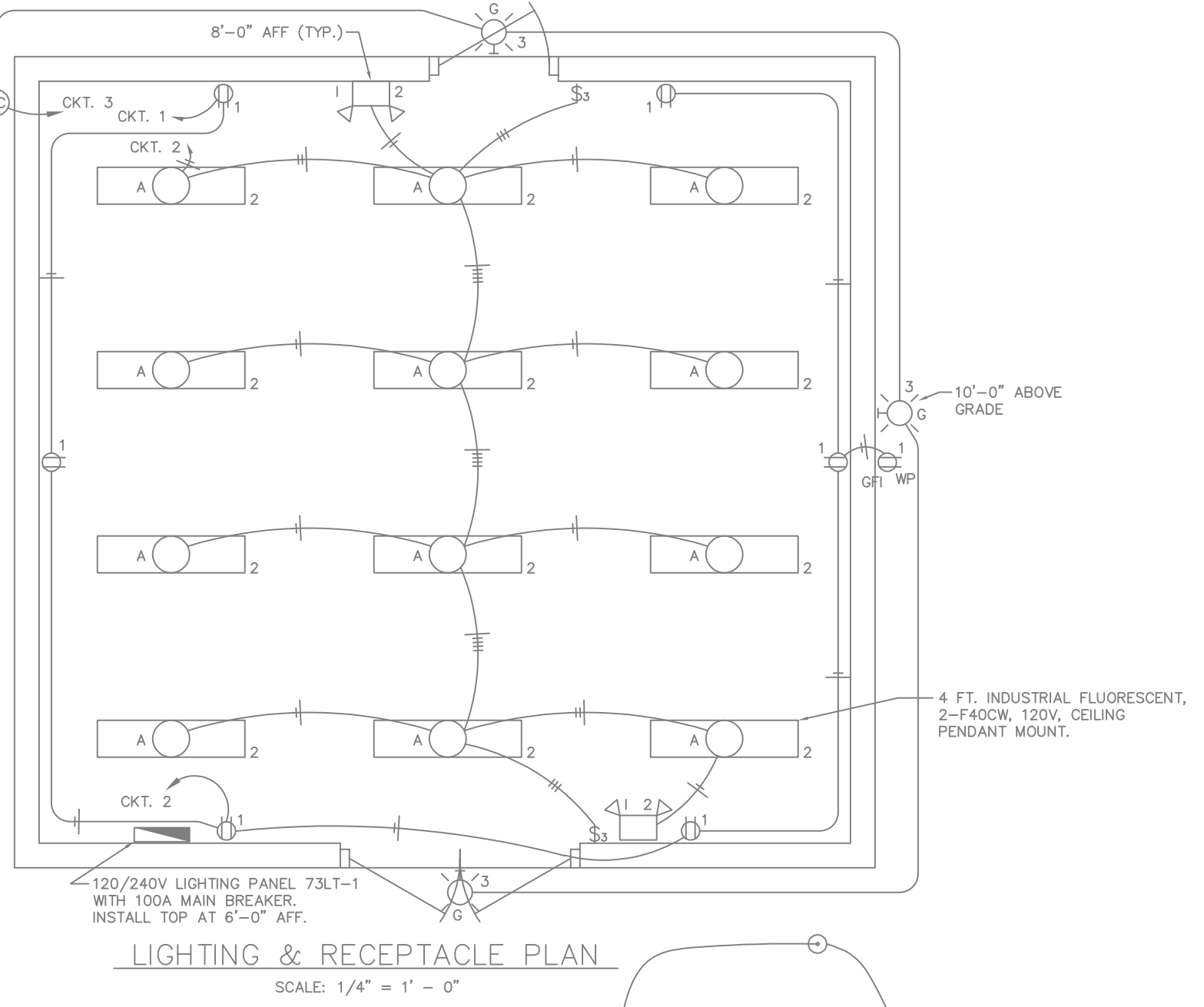
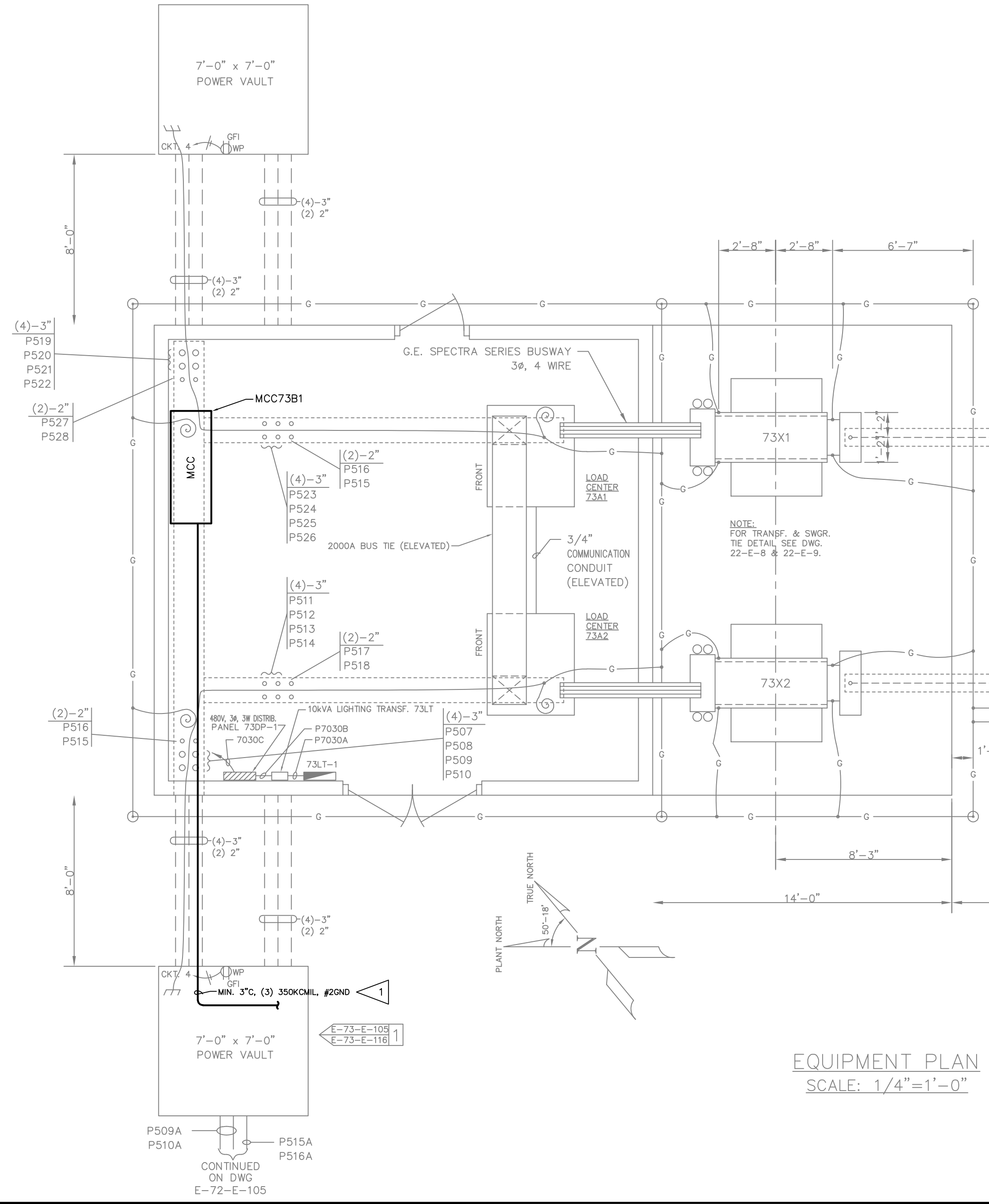
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DESIGNED BY: J. OHARA
DRAWN BY: R. FARLEY
CHECKED BY: O. DYE
APPROVED BY: C. CLUTE
SCALE: AS NOTED
DATE: FEBRUARY 2023

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW
LIME SEEPAGE STORMWATER & 004 OUTFALL PUMP STATIONS
SINGLE LINE DIAGRAM

ED-0216R
SHEET # 84 OF 114

Jan 31, 2023 5:28pm Hanns.Gil ED0125.dwg Layout1



REFERENCES:

1 E-01

CONSTRUCTION NOTES:

- 1 PROVIDE AND INSTALL CONDUCTORS TO OVERHEAD POLE SHOWN ON E-03. USE MINIMUM 3" EXISTING CONDUIT AND PATHWAY.
- 2 PROVIDE AND INSTALL FUSE. MATCH EXISTING FUSE TYPE.

ISSUED FOR CONSTRUCTION

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02/01/23

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SCALE: AS NOTED
DATE: FEBRUARY 2023

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW
SUBSTATION 73 ELECTRICAL PLAN & ONE-LINE

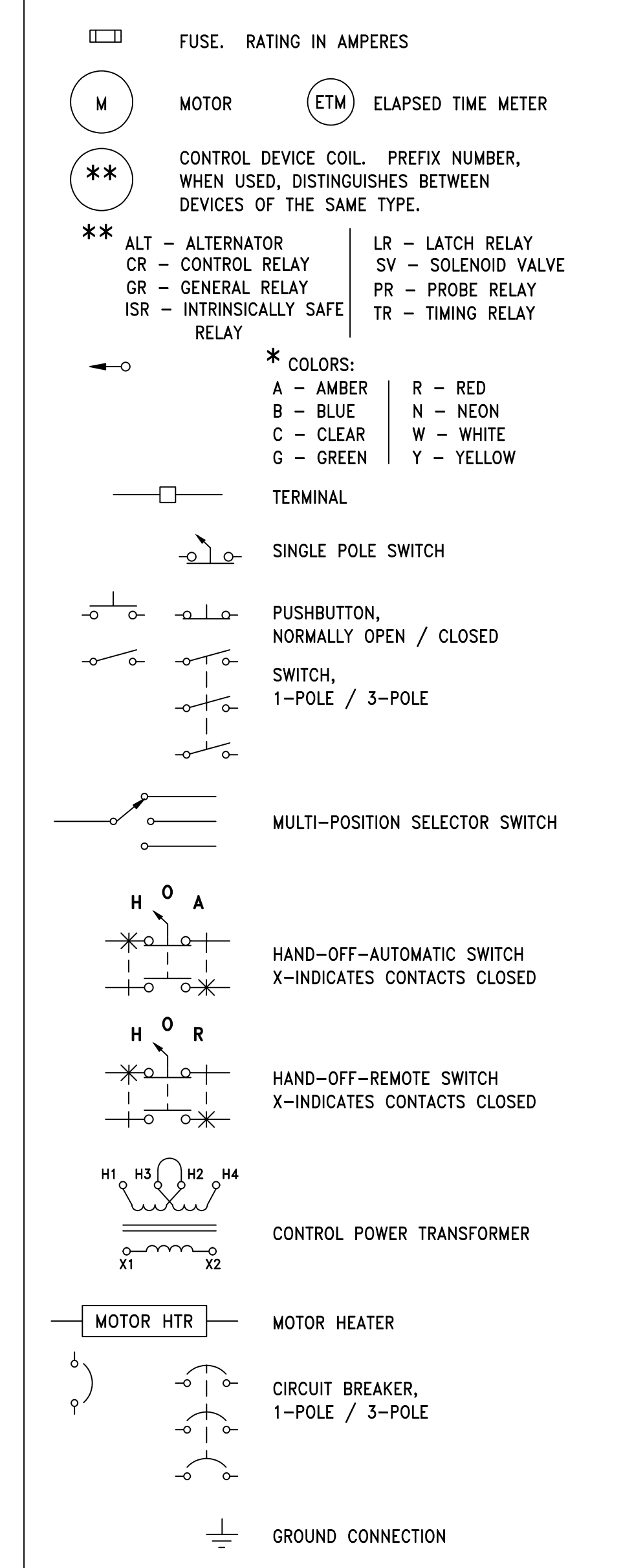
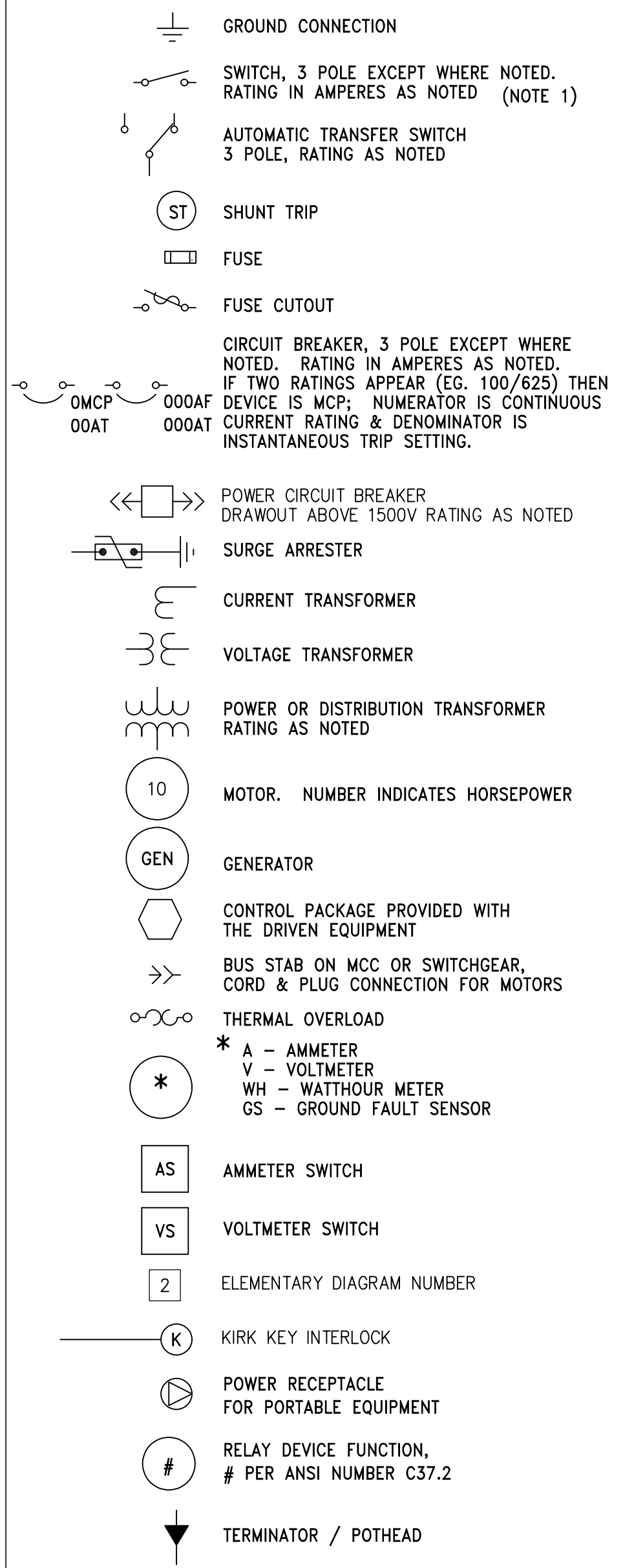
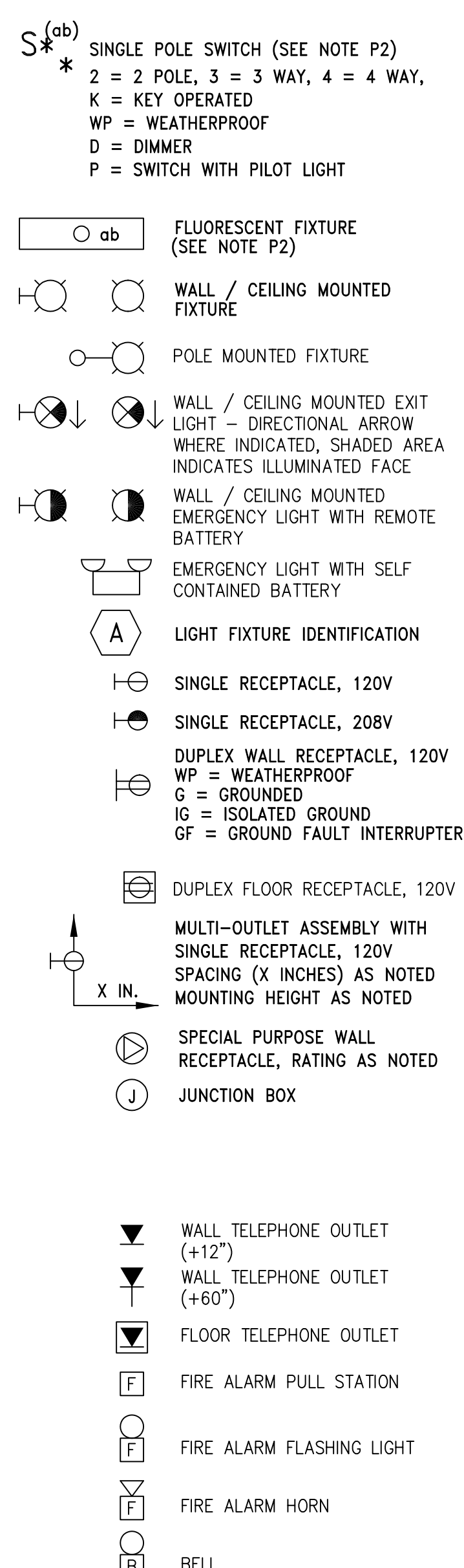
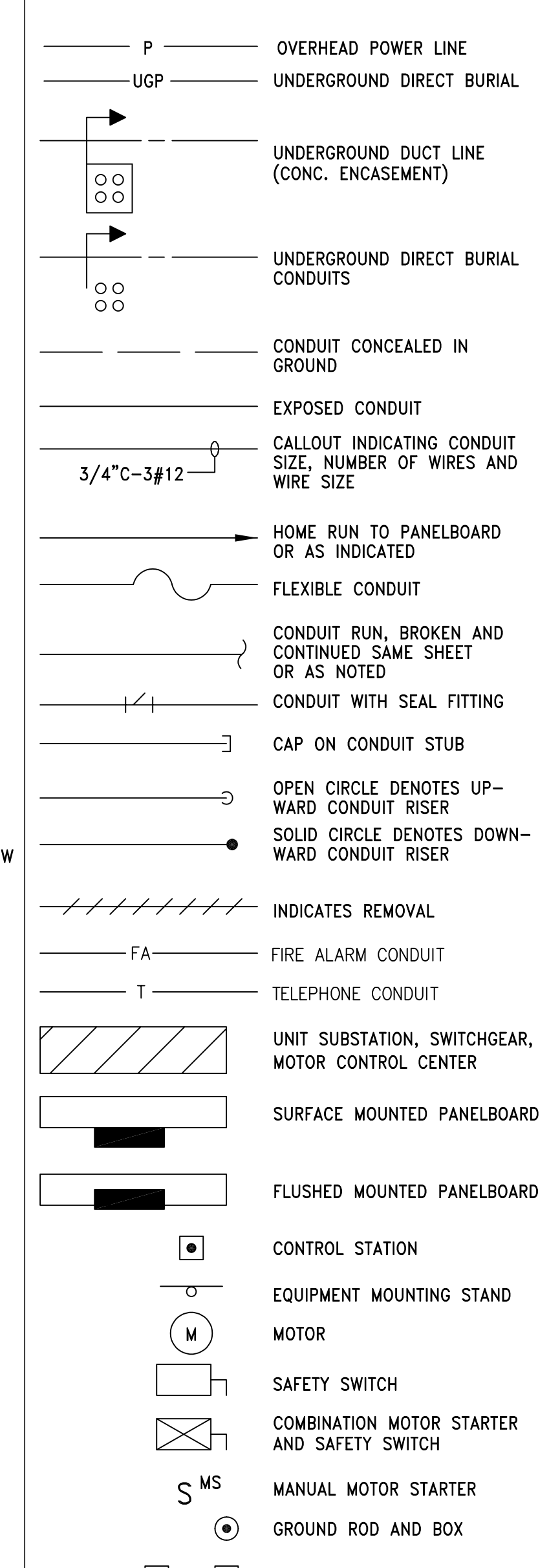
ED0125
SHEET # 85 OF 114

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" INCH SCALE ACCORDINGLY

ABBREVIATIONS
o CIRCUIT BREAKER AUX. CONTACT, CLOSED WHEN BREAKER IS CLOSED
A AMMETER, AMPERES
AC ALTERNATING CURRENT
A/D ANALOG TO DIGITAL
ADJ ADJUSTABLE
AF AMPERE FRAME
AFD ADJUSTABLE FREQUENCY DRIVE
AIC AMPERES INTERRUPTING CAPACITY
AL ALUMINUM
ALT ALTERNATOR
AMP AMPERES
ANN ANNUNCIATOR
APPROX APPROXIMATE
AS AMMETER SWITCH
AT AMMETER TRIP
ATS AUTOMATIC TRANSFER SWITCH
AUTO AUTOMATIC
AUX AUXILIARY
AWG AMERICAN WIRE GAGE
b CIRCUIT BREAKER AUX. CONTACT, CLOSED WHEN BREAKER IS OPEN
BCG BARE COPPER GROUND
BLDG BUILDING
C CONDUIT
CAB CABINET
CAP CAPACITOR
CB CIRCUIT BREAKER
CC CONTROL CABLE, CLOSING COIL
CHH COMMUNICATION HANDHOLE
CC CLARIFIER CONSOLE
CL CHLORINE
CKT CIRCUIT
CMH COMMUNICATION MANHOLE
CO CONDUIT ONLY
COMM COMMUNICATION
COND CONDUCTOR
CONT CONTINUED, CONTINUATION
CPT CONTROL POWER TRANSFORMER
CP CONTROL PANEL
CR CONTROL RELAY
CS CONTROL SWITCH
CT CURRENT TRANSFORMER
DB DIRECT BURIAL
DC DIRECT CURRENT
DIA DIAMETER
DIAG DIAGRAM
DISC DISCONNECT
DISTR DISTRIBUTION
DN DOWN
DP DISTRIBUTION PANEL
DPDT DOUBLE POLE, DOUBLE THROW
DPST DOUBLE POLE, SINGLE THROW
DWG DRAWING
(E) EXISTING
EA EACH
EF EXHAUST FAN
EHH ELECTRICAL HANDHOLE
EL ELEVATION
ELEC ELECTRIC, ELECTRICAL
ELEM ELEMENTARY
EMERG EMERGENCY
ENCL ENCLOSURE
EFFL EFFLUENT
EQ EQUAL
EQPT EQUIPMENT
ETM ELAPSED TIME METER

FDR FEEDER
FLEX FLEXIBLE
FLUOR FLUORESCENT
FREQ FREQUENCY
FT FEET, FOOT
FU FUSE
FUT, (F) FUTURE
FVNR FULL VOLTAGE, NON REVERSING
FVR FULL VOLTAGE, REVERSING
FWD FORWARD
GA GAUGE
GALV GALVANIZED
GEN GENERATOR
GFI GROUND FAULT INTERRUPTER
GND GROUND
GRS GALVANIZED RIGID STEEL
H₂O₂ HYDROGEN PEROXIDE
HH HANDHOLE
HOA HAND-OFF-AUTOMATIC
HOR HAND-OFF-REMOTE
HORIZ HORIZONTAL
HP HORSEPOWER
HPS HIGH PRESSURE SODIUM
HTR HEATER
HV HIGH VOLTAGE
HZ HERTZ (CYCLES PER SECOND)
IND LT INDICATING LIGHT
INCAND INCANDESCENT
INSTR INSTRUMENT, INSTRUMENTATION
ISR INTRINSIC SAFE RELAY
I/O INPUT/OUTPUT
JB JUNCTION BOX
KA KILOAMPERES
KCMIL THOUSANDS OF CIRCULAR MILS
KV KILOVOLTS
KVA KILOVOLT AMPERES
KVAR KILOVOLT AMPERES REACTIVE
KVARH KILOVOLT AMPERES REACTIVE HOURS
KW KILOWATTS
KWH KILOWATT HOURS
LTG LIGHTING
LTS LIGHTS
LP LIGHTING PANEL
(M) MODIFIED
mA MILLIAMPERES
MAX MAXIMUM
MCC MOTOR CONTROL CENTER
MCP MOTOR CIRCUIT PROTECTION
MFR MANUFACTURER
MH MANHOLE
MIN MINIMUM
MISC MISCELLANEOUS
MOV MOTOR OPERATED VALVE
MS MOTOR STARTER
MTD MOUNTED
MTG MOUNTING
MTS MANUAL TRANSFER SWITCH
(N) NEW
NC NORMALLY CLOSED
NEMA NATIONAL ELECTRICAL MANUFACTURER'S ASSOC.
NEUT NEUTRAL
NIC NOT IN CONTRACT
NO NORMALLY OPEN, NUMBER
NTS NOT TO SCALE
OCP OZONE CONTROL PANEL
OH OVERHEAD
OT OVER TEMPERATURE
OVL THERMAL OVERLOAD RELAY

PB PULLBOX
PBUS PUSHBUTTON SWITCH
PEC PHOTOELECTRIC CELL
PF POWER FACTOR
pH MEASURE OF ACIDITY OR ALKALINITY
PH PHASE
PIOP PLC I/O PANEL
PLC PROGRAMMABLE LOGIC CONTROLLER
PNL PANEL
PNLBD PANELBOARD
POSN POSITION
PRI PRIMARY
PS PRESSURE SWITCH
PSI POUNDS PER SQUARE INCH
PVC POLYVINYL CHLORIDE
PWR POWER
(R) RELOCATED
RCPT RECEPTACLE
RCT REPEAT CYCLE TIMER
REQD REQUIRED
RM ROOM
RPM REVOLUTIONS PER MINUTE
RT RESET TIMER
SCR SILICON CONTROLLED RECTIFIER
SD SMOKE DETECTOR
SEC SECONDS, SECONDARY
SECT SECTION
SF SUPPLY FAN
SHT SHEET
KA SIGNAL
SIG SOLID NEUTRAL
SPEC SPECIFICATION
SPDT SINGLE POLE, DOUBLE THROW
SS STAINLESS STEEL
SW SWITCH
SWBD SWITCHBOARD
SWGR SWITCHGEAR
SYNC SYNCHRONIZING
TB TERMINAL BOX
TC TELEPHONE CABINET
TEL TELEPHONE
TEMP TEMPERATURE
TERM TERMINAL
TO TIMED OPENING
TOA TEST-OFF-AUTOMATIC
TSP TWISTED SHIELDED PAIR
TYP TYPICAL
UGND UNDERGROUND
UH UNIT HEATER
UON UNLESS OTHERWISE NOTED
V VOLTS
VA VOLT-AMPERES
VAR VOLT AMPERES REACTIVE
VERT VERTICAL
VH VAR-HOUR
VS VOLTMETER SWITCH
W WIRE, WATTS
WH WATTHOUR METER
WHDM WATTHOUR DEMAND METER
WP WEATHERPROOF
WR WEATHER RESISTANT
WT WATERTIGHT
WWR WASHWATER RECOVERY TRANSFORMER
XFMR TRANSFORMER



SENSING SWITCHES

CLOSE ON		SENSED VARIABLE
RISING	FALLING	
		FLOW
		LEVEL
		PRESSURE
		TEMPERATURE

LIMIT SWITCHES

	CLOSE ON REACHING LIMIT
	CLOSE ON LEAVING LIMIT

TIMED CONTACTS

SYMBOL	NORMAL	OPEN TO CLOSED	CLOSED TO OPEN
	OPEN	DELAYED	INSTANTANEOUS
	CLOSED	INSTANTANEOUS	DELAYED
	OPEN	INSTANTANEOUS	DELAYED
	CLOSED	DELAYED	INSTANTANEOUS

ELEMENTARY DIAGRAMS

E1 UNDERLINED WORDS SHOWN AT A PUSHBUTTON, LIGHT, SELECTOR SWITCH, ETC. INDICATE THE LEGEND PLATE REQUIREMENT FOR THAT PARTICULAR DEVICE. ANY ADDITIONAL NAMEPLATES ARE INDICATED ON ELEVATIONS WITH THE REQUIRED NAMEPLATE INSCRIPTIONS.

E2 "NORMAL" STATUS OF SWITCHES OR CONTACTS IS THE SHELF POSITION.

E3 NUMBERS AND LETTERS IDENTIFY DEVICE.

GENERAL NOTES

G1 THESE DRAWINGS ARE DIAGRAMMATIC ONLY; EXACT LOCATIONS OF ELECTRICAL EQUIPMENT SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER. THE INSTALLATION OF ALL EQUIPMENT SHOWN ON THESE DRAWINGS OR DESCRIBED IN THE SPECIFICATIONS SHALL CONFORM TO THE REQUIREMENTS SET FORTH IN THE LATEST EDITIONS OF ALL APPLICABLE CODES AND UTILITY COMPANY STANDARDS. CONTACT THE UTILITY COMPANY REPRESENTATIVES AND VERIFY THEIR REQUIREMENTS.

G2 THIS IS A GENERALIZED LEGEND SHEET. THIS CONTRACT MAY NOT USE ALL INFORMATION SHOWN.

G3 NOTIFY THE ENGINEER IMMEDIATELY IF CONFLICTS IN EQUIPMENT LOCATIONS ARE DISCOVERED OR IF PROBLEMS ARISE DUE TO FIELD CONDITIONS, LACK OF INFORMATION OR ANY OTHER REASON. NO PAYMENT WILL BE MADE FOR CHANGES WHICH HAVE NOT BEEN FAVORABLY REVIEWED BY THE ENGINEER.

G4 INFORMATION SHOWN MAY NOT BE ALL INCLUSIVE. SEE ALSO ANSI C37.2, Y1.1, Y32.2, AND Y32.9.

G5 VERIFY ALL COLOR REQUIREMENTS BEFORE ORDERING MATERIALS.

G6 REFER TO THE MECHANICAL DRAWINGS FOR CERTAIN CONTROL DIAGRAMS AND EXACT LOCATIONS OF MECHANICAL EQUIPMENT AND FOR CERTAIN CONNECTIONS TO BE MADE TO ELECTRICAL CIRCUITS.

G7 ALL EQUIPMENT SHOWN CROSS HATCHES IS TO BE REMOVED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.

G8 ALL EQUIPMENT SHOWN IN BOLD IS TO BE PROVIDED AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.

G9 CONTRACTOR SHALL PROVIDE CONDUIT AND WIRE FOR ALL CIRCUITS SHOWN ON DRAWINGS.

GENERAL NOTES

G10 CONTRACTOR SHALL PROVIDE CONDUIT AND WIRE FROM WALL SWITCHES TO LIGHTING FIXTURES FOR CONTROL OF LIGHTING FIXTURES SHOWN.

G11 ALL FEEDERS AND BRANCH CIRCUITS SHALL CONTAIN AN EQUIPMENT GROUND CONDUCTORS SIZED PER NEC TABLE 250-122.

G12 ALL SINGLE PHASE LOADS SHALL BE SERVED BY A DEDICATED NEUTRAL (I.E. EACH SINGLE PHASE CIRCUIT SHALL CONTAIN A SEPARATE NEUTRAL).

G13 ALL BRANCH CIRCUITS SHALL BE 3/4" C, 2#12, #12G, U.O.N., WHERE CONTRACTOR CHOOSES TO RUN MORE THAN THREE CURRENT CARRYING CONDUCTORS WITHIN ONE RACEWAY OR CABLE, CONDUCTORS SHALL BE INCREASED IN SIZE TO COMPENSATE FOR THE DERATING REQUIRED PER NEC SECTION 310-15(B). CONDUCTOR AMPACITIES SHALL BE TAKEN FROM THE 60°C COLUMN OF NEC TABLE 310-16.

G14 ALL EQUIPMENT SHOWN IN BOLD IS TO BE PROVIDED AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.

PLANS

P1 CONDUIT SIZE AND FILL SHALL BE AS INDICATED. WHERE NO SIZE IS SHOWN, THE CONDUIT SHALL BE SIZED IN ACCORDANCE WITH THE EDITION OF THE NATIONAL ELECTRICAL CODE ADOPTED BY THE AUTHORITY HAVING CODE ENFORCEMENT JURISDICTION. WHERE NO FILL IS INDICATED, THE FILL SHALL BE 2#12. PROVIDE 3/16 INCH NYLON PULL ROPE IN EACH EMPTY CONDUIT.

P2 LOWER CASE LETTERS ADJACENT TO A SWITCH OR LIGHT FIXTURE INDICATE A SWITCHED CIRCUIT. FOR FOUR LAMP FLUORESCENT FIXTURES WIRED IN PAIRS WITHIN EACH FIXTURE, THE "a" SWITCH CONTROLS THE OUTER LAMPS AND THE "b" SWITCH CONTROLS THE INNER LAMPS; WIRE 3 LAMP FIXTURES SIMILARLY.

P3 CONDUIT AND WIRE LAYOUT FOR LIGHTING AND RECEPTACLES NOT SHOWN. PROVIDE PER NEC.

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PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE".

ONE INCH AT FULL SIZE IF NOT ONE INCH SCALE ACCORDINGLY

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CURT E. CLUTE
REGISTERED PROFESSIONAL ENGINEER
STATE OF WASHINGTON
NO. 3326
02/01/23

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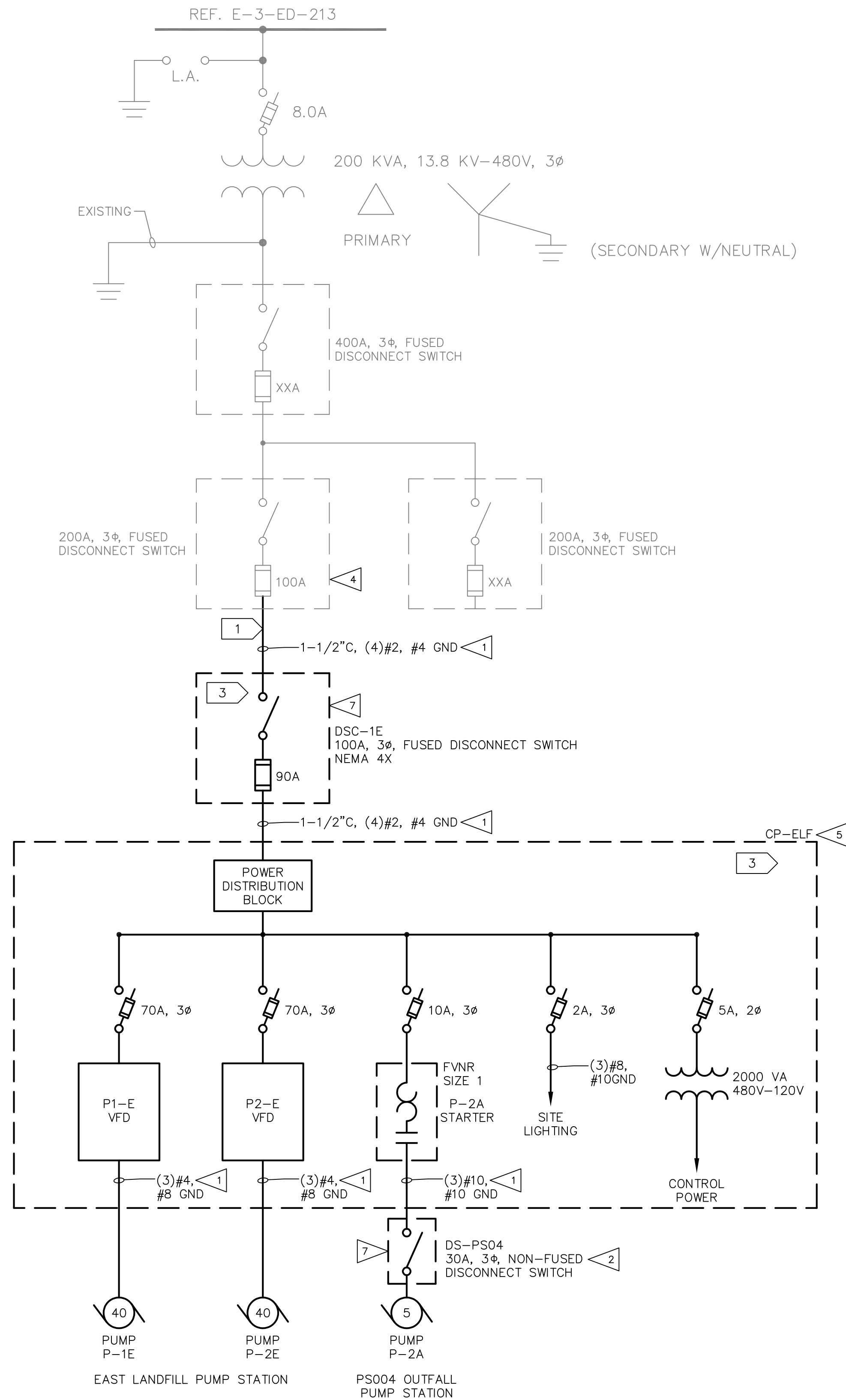
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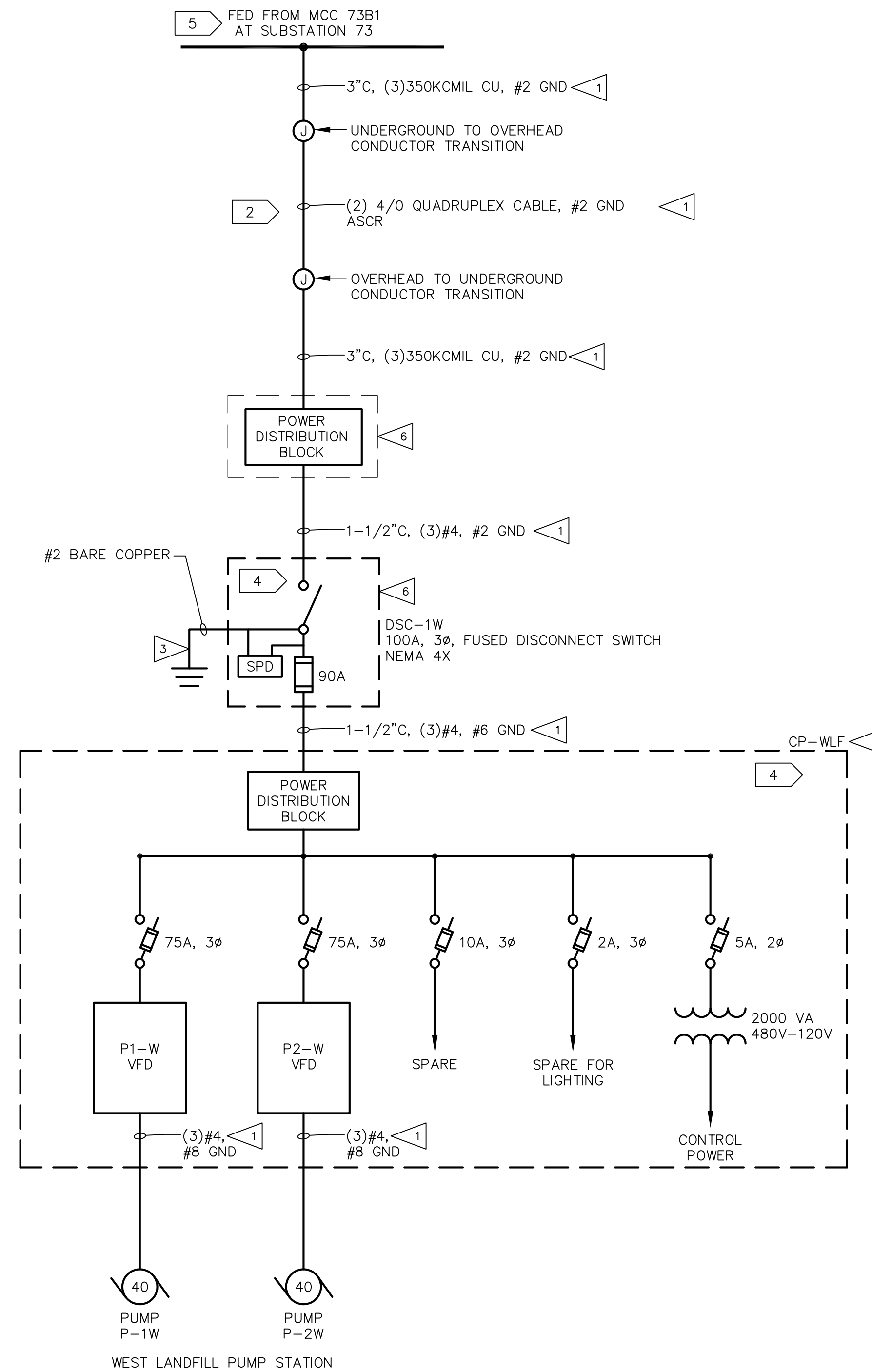
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ELECTRICAL SYMBOLS, LEGEND, AND ABBREVIATIONS

SHEET # 86 OF 114



EAST LANDFILL PUMP STATION SINGLE-LINE



WEST LANDFILL PUMP STATION SINGLE-LINE

NOTES:

- EAST LANDFILL PUMP STATION SINGLE LINE DRAWING SUPERSEDES ED-0216.

REFERENCES:

- E-02
- E-03 TO E-04
- IC-01 TO IC-07
- IC-11 TO IC-17
- ED0125

CONSTRUCTION NOTES:

- PROVIDE AND INSTALL CONDUIT, CONDUCTORS, BOXES, SUPPORTS, FITTINGS, AND ALL ANCILLARY HARDWARE.
- INSTALL DISCONNECT, REROUTE CONDUIT TO DISCONNECT, AND LAND EXISTING PUMP FEEDER CABLE ON DISCONNECT.
- PROVIDE AND INSTALL (2) 10' GROUND RODS, MINIMUM 6' APART, AND BARE COPPER CONDUCTOR.
- TERMINATE CONDUIT AND CONDUCTOR AT EXISTING 200A DISCONNECT. VERIFY/CONFIRM FUSE SIZE IS 100A.
- CONTROL PANELS AND RELATED EQUIPMENT PROVIDED BY EP SUPPLIER. SELLER TO INSTALL EP SUPPLIER PANEL AND EQUIPMENT. SELLER TO PROVIDE FIELD WIRING, CONNECTIONS AND TERMINATIONS. COORDINATE WITH COMPANY TO SUPPORT STARTUP AND COMMISSIONING. REFER TO SPECIFICATION SECTIONS 01 64 00 AND 26 00 00.
- INSTALL DISCONNECT AND SPLICE BOX PROVIDED BY EP SUPPLIER. PROVIDE AND INSTALL SUPPORT STRUCTURE.
- INSTALL DISCONNECT PROVIDED BY EP SUPPLIER. PROVIDE AND INSTALL SUPPORT STRUCTURE.

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" ONE INCH AT FULL SIZE. IF NOT ONE INCH SCALE ACCORDINGLY.

ISSUED FOR CONSTRUCTION

Jan 31, 2023 5:08pm Hanns.Gil E-01.dwg Layout1

ANCHOR QEA
CASNE Engineering
 3545 FACTORIA BOULEVARD SE., SUITE 200
 BELLEVUE, WA 98006
 (425) 522-1000 WWW.CASNE.COM JOB NO. 201-127

Northwest Alloys, Inc.

CURTIS E. CLUTE
 STATE OF WASHINGTON
 REGISTERED PROFESSIONAL ENGINEER
 35276
 02/01/23

REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
1	02/01/23	JO	CC	ISSUED FOR CONSTRUCTION

DESIGNED BY: J. OHARA
 DRAWN BY: R. FARLEY
 CHECKED BY: O. DYE
 APPROVED BY: C. CLUTE
 SCALE: AS NOTED
 DATE: FEBRUARY 2023

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW
ELF AND WLF PUMP STATION SINGLE LINE DIAGRAMS

E-01
 SHEET # 87 OF 114

CONSTRUCTION NOTES:

- 1 INSTALL DISCONNECT PROVIDED BY EP SUPPLIER. PROVIDE AND INSTALL SUPPORT STRUCTURE.
- 2 PROVIDE AND INSTALL UNDERGROUND CONDUIT, CONDUCTORS, BOXES, SUPPORTS, FITTINGS, AND ALL ANCILLARY HARDWARE.
- 3 PROVIDE AND INSTALL CONDUIT, CONDUCTOR AND ALL ANCILLARY HARDWARE NECESSARY FOR CONNECTION TO FIELD INSTRUMENT/EQUIPMENT.
- 4 PROVIDE AND INSTALL CONDUIT, VENDOR SUPPLIED CABLE, BOXES, FITTINGS, AND ALL ANCILLARY HARDWARE.
- 5 INSTALL CONTROL PANEL. CONNECT CONDUIT AND PULL CONDUCTORS INTO PANEL.
- 6 PROVIDE AND INSTALL LIGHT FIXTURE. MOUNT ON POLE AT 15' ABOVE GRADE. COORDINATE LOCATION WITH CIVIL PLANS.
- 7 PROVIDE AND INSTALL LIGHT FIXTURE. MOUNT ON POLE AT 28' ABOVE GRADE. COORDINATE POLE LOCATION WITH CIVIL PLANS.
- 8 RECONNECT RETAINED EQUIPMENT.
- 9 UNDERGROUND CONDUIT ROUTING SHOWN IS DIAGRAMMATIC. COORDINATE ROUTING WITH OTHER DISCIPLINES.
- 10 PROVIDE AND INSTALL LIGHT FIXTURE. MOUNT ON SHELTER ABOVE CONTROL PANEL.
- 11 CONTROL PANELS AND RELATED EQUIPMENT PROVIDED BY EP SUPPLIER. SELLER TO INSTALL EP SUPPLIER PANEL AND EQUIPMENT. SELLER TO PROVIDE FIELD WIRING, CONNECTIONS AND TERMINATIONS. COORDINATE WITH COMPANY TO SUPPORT STARTUP AND COMMISSIONING. REFER TO SPECIFICATION SECTIONS 01 64 00 AND 26 00 00.
- 12 INSTALL AND WIRE DEVICE/INSTRUMENT IN COORDINATION WITH OTHER DISCIPLINES. REFER TO I-03.
- 13 INSTALL PHOTOCELL ON CONTROL PANEL SHELTER EXTERIOR IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. PROVIDE AND INSTALL CONDUIT AND CONDUCTOR TO CONTROL PANEL. REFER TO EC-05.
- 14 TERMINATE CONDUIT AND CONDUCTOR ON EXISTING 200A DISCONNECT.
- 15 MOUNT POLE ON CONCRETE FOUNDATION. SEE SHEET E-06 FOR TYPICAL FOUNDATION INSTALLATION DETAIL.
- 16 INSTALL OR MODIFY EXISTING UNISTRUT STRUCTURE FOR INSTALLATION OF DS-PS04.

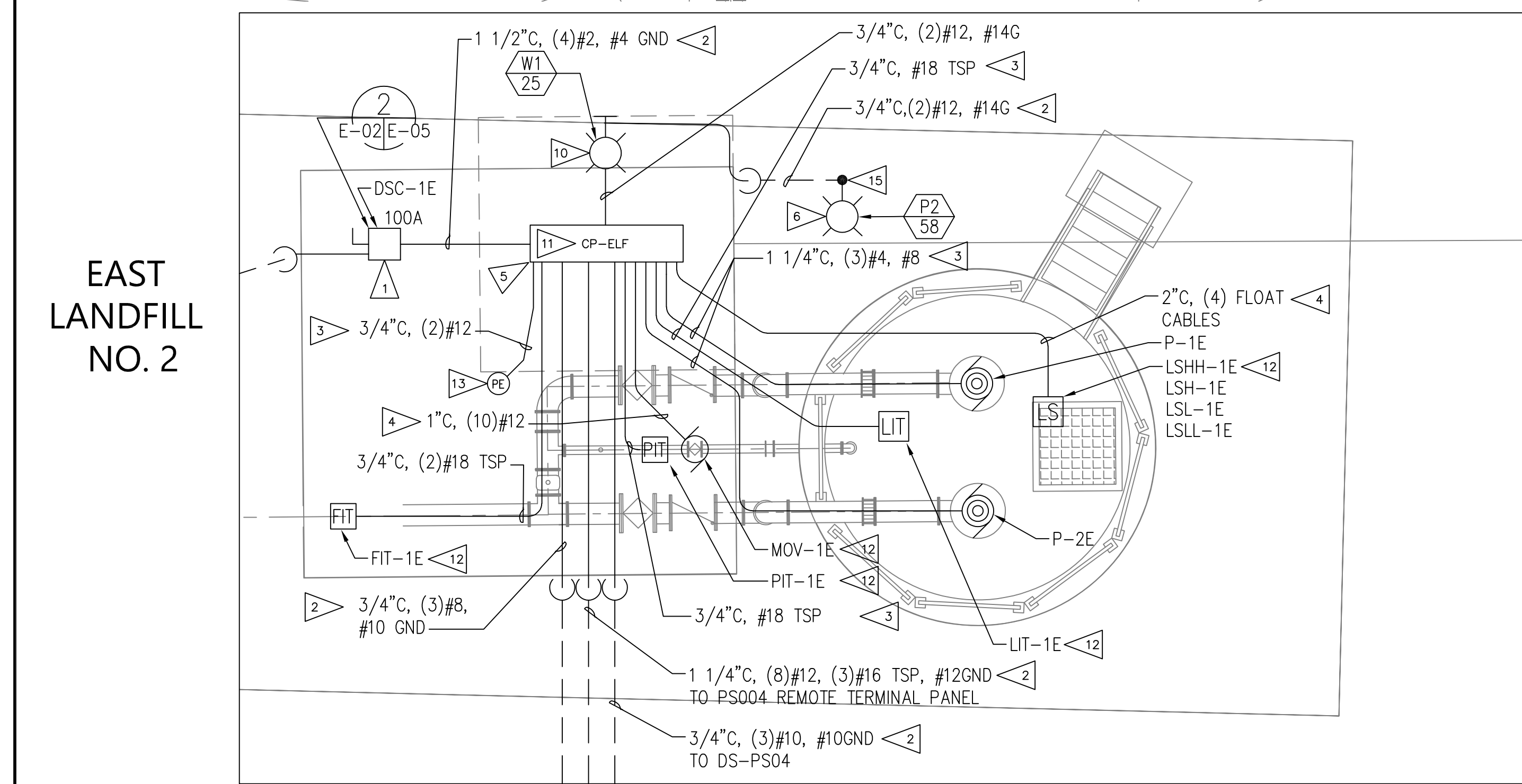
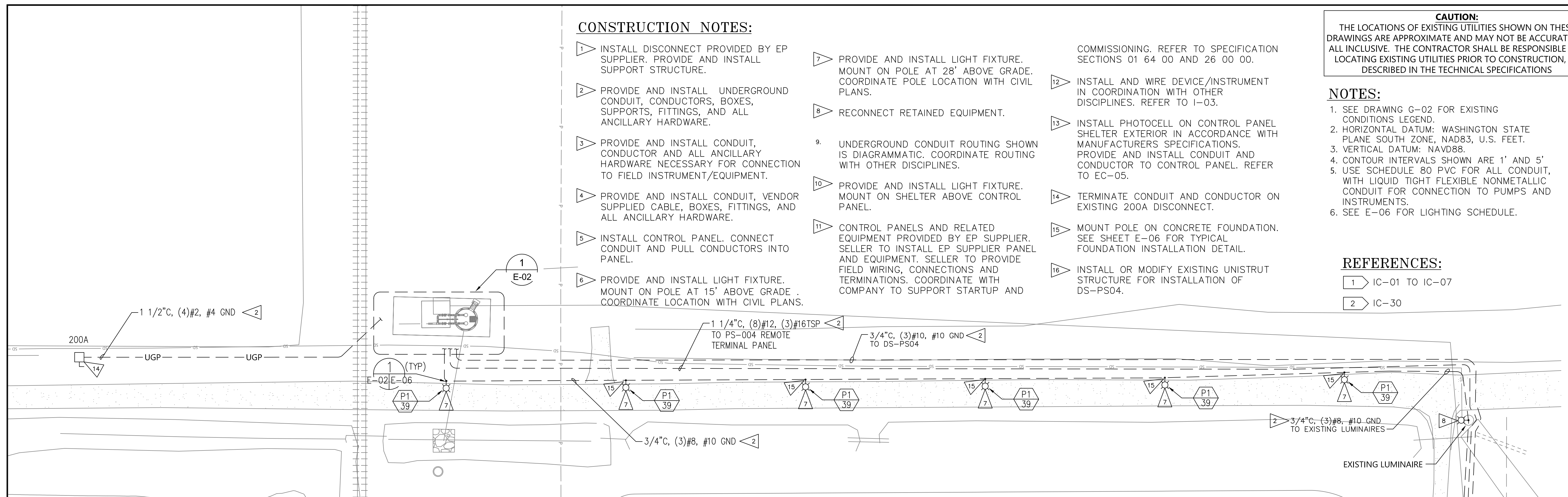
CAUTION:
THE LOCATIONS OF EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND MAY NOT BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING UTILITIES PRIOR TO CONSTRUCTION, AS DESCRIBED IN THE TECHNICAL SPECIFICATIONS

NOTES:

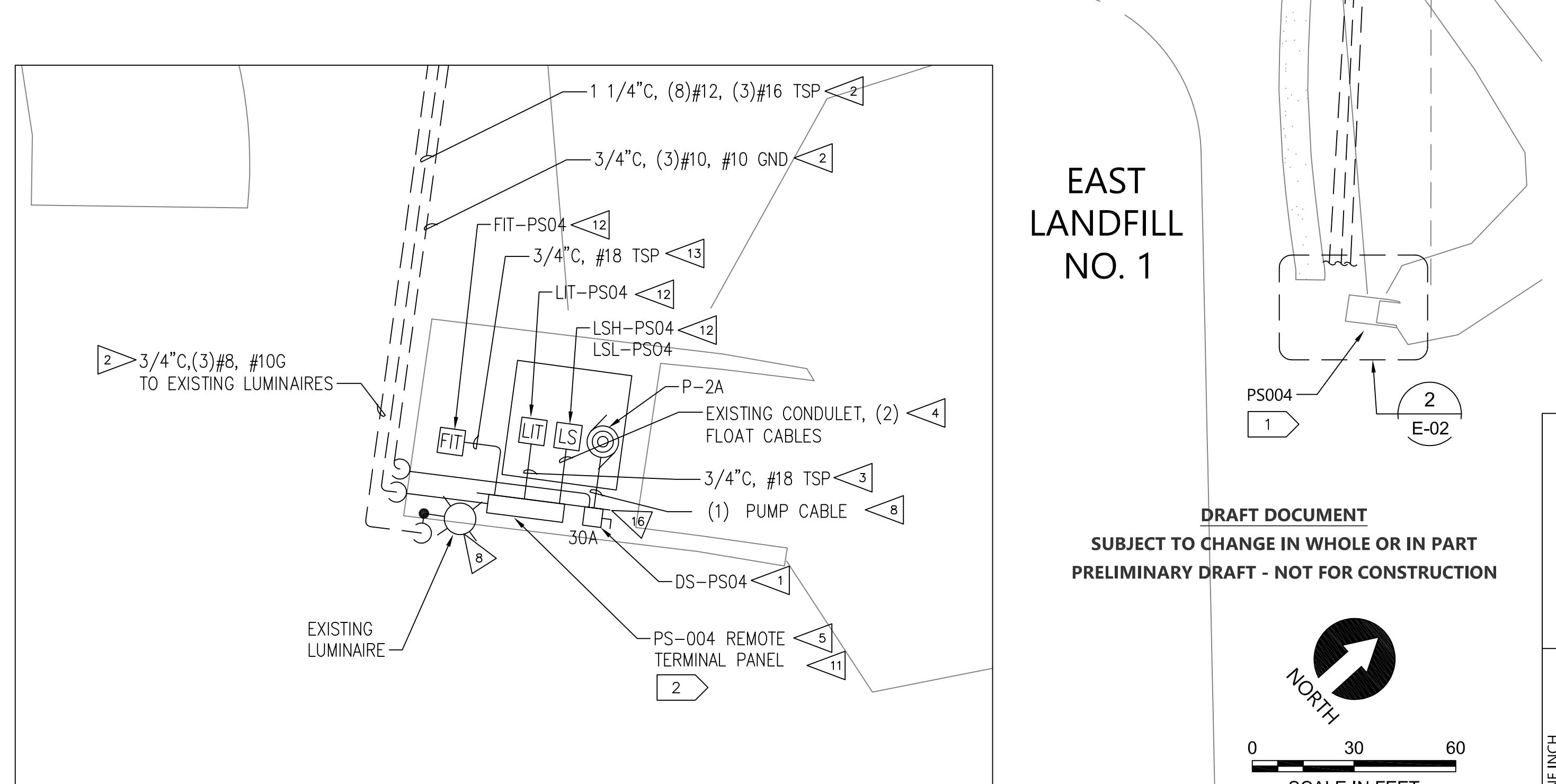
- 1. SEE DRAWING G-02 FOR EXISTING CONDITIONS LEGEND.
- 2. HORIZONTAL DATUM: WASHINGTON STATE PLANE SOUTH ZONE, NAD83, U.S. FEET.
- 3. VERTICAL DATUM: NAVD88.
- 4. CONTOUR INTERVALS SHOWN ARE 1' AND 5'.
- 5. USE SCHEDULE 80 PVC FOR ALL CONDUIT, WITH LIQUID TIGHT FLEXIBLE NONMETALLIC CONDUIT FOR CONNECTION TO PUMPS AND INSTRUMENTS.
- 6. SEE E-06 FOR LIGHTING SCHEDULE.

REFERENCES:

- 1 IC-01 TO IC-07
- 2 IC-30



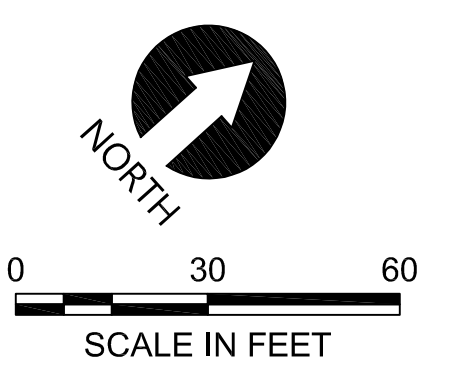
1 ELF PUMP STATION EQUIPMENT PLAN DETAIL
NO SCALE



2 PS-004 EQUIPMENT PLAN DETAIL
NO SCALE

EAST LANDFILL NO. 1

DRAFT DOCUMENT
SUBJECT TO CHANGE IN WHOLE OR IN PART
PRELIMINARY DRAFT - NOT FOR CONSTRUCTION



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Jan 31, 2023 5:10pm Hanns.Gil E-02.dwg E-02

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1	02/01/23	JO	CC	ISSUED FOR CONSTRUCTION

DESIGNED BY: J. OHARA
DRAWN BY: R. FARLEY
CHECKED BY: O. DYE
APPROVED BY: C. CLUTE
SCALE: AS NOTED
DATE: FEBRUARY 2023

FORMER REYNOLDS METALS REDUCTION PLANT - LONGVIEW
ELF PUMP STATION ELECTRICAL SITE AND EQUIPMENT PLAN

E-02
SHEET # 88 OF 114

PLAN INTENDED TO BE VIEWED IN COLOR. ADJACENT BLOCK IS "BLUE" INCH SCALE ACCORDINGLY