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UMATILLA, OREGON

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MARY DEURKK

CITY COUNCIL:
CORINNE FUNDERBURK
MICHAEL ROXBURY
LESLIE SMITH
ASHLEY WHEELER
JOSY CHAVEZ
ROAK TENEYCK

CITY MANAGER:
DAVE STOCKDALE

AGENCY AND ENTITY CONTACTS:

CITY OF UMATILLA WATER, SEWER, STORM DRAIN	(541) 922-3226
POLICE	911
AMBULANCE	911
DIG LINE	1-800-332-2344
OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY	1-800-452-4011
UTILITY LOCATES	811
POWER BY UMATILLA ELECTRIC COOPERATIVE	1-800-452-2273
GAS BY CASCADE NATURAL GAS	1-888-522-1130
FIBER OPTICS BY ZAYO	(360)558-4215
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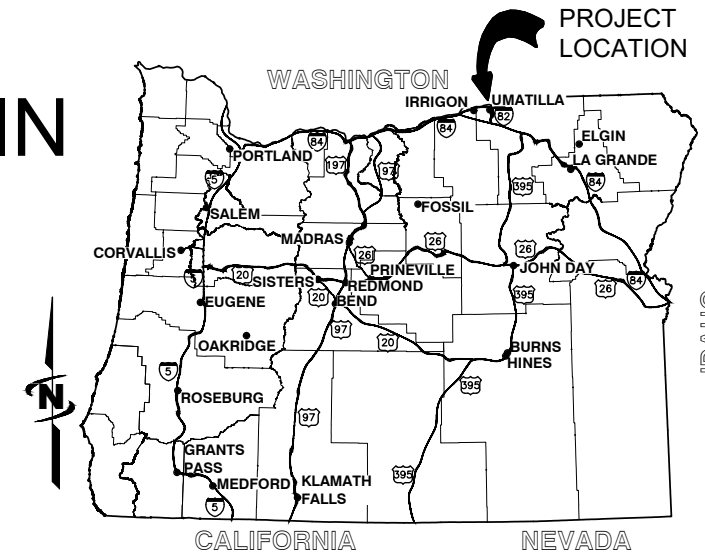
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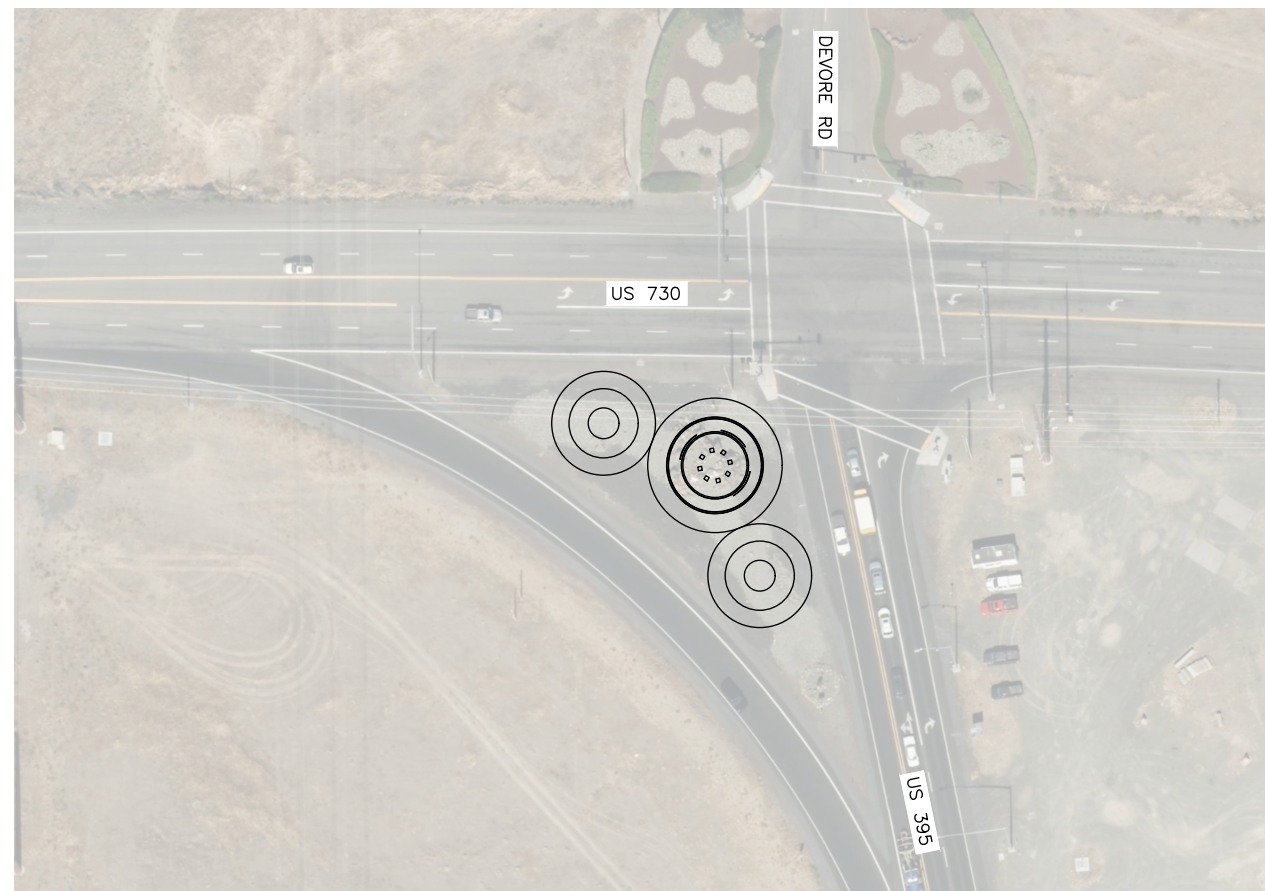
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CITY OF UMATILLA

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN UMATILLA, OREGON



VICINITY MAP



UMATILLA FALLS ENTRY MONUMENT PERSPECTIVE VIEW

SEPTEMBER 2022
PROJECT NO: 33-21-003



J-U-B ENGINEERS, INC.

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LAST UPDATED: 9/6/2022

SHEET NUMBER:

G-001

Proj Date: 9/7/2022 \JUB\COM\CENTRAL\CLIENTS\OR\UMATILLA\ACTIVITY\PROJECTS\33-21-003_KIWANIS FALLS\SCONCEPT\DESIGN\CAD\SHSHEET\33-21-003_G-001.DWG

LINE LEGEND

LINE DESCRIPTION	PROPOSED LINE	EXISTING LINE
POWER / COMMUNICATIONS		
OVERHEAD POWER	— OHP —	— OHP —
UNDERGROUND POWER	— UP —	--- UP ---
FIBER OPTIC	— FO —	--- FO ---
UNDERGROUND TELEPHONE	— UT —	--- UT ---
STORM DRAIN		
STORM DRAIN (GENERAL)	— SD —	--- SD ---
STORM DRAIN	— X*SD —	--- X*SD ---
WASTEWATER		
PROCESS WASTEWATER	— PW —	--- PW ---
SANITARY SEWER (GENERAL)	— SS —	--- SS ---
SANITARY SEWER	— X*SS —	--- X*SS ---
SANITARY SEWER SERVICE	— SS — SS —	--- SS --- SS ---
SEWER FORCE MAIN	— FM —	--- FM ---
WATER		
WATER (GENERAL)	— W —	--- W ---
WATER (SPECIFIED SIZE)	— X*W —	--- X*W ---
WATER SERVICE	— WS — WS —	--- WS --- WS ---
GAS		
NATURAL GAS	— G —	--- G ---
NATURAL GAS SERVICE	— G — G —	--- G --- G ---
SITE		
FENCE	— X —	--- X ---
MAJOR CONTOUR	— 2521 —	---
MINOR CONTOUR	---	---
GRADE BREAK	---	— GB —
TOP OF BANK	---	— TOB —
TOE OF SLOPE	---	— TOE —
CUT LIMITS	---	---
FILL LIMITS
DITCH	---	---
ROADWAY		
ROAD SHOULDER	---	---
ROAD CENTERLINE	---	---
ROAD ASPHALT	---	--- EP ---
ROAD GRAVEL	---	--- EG ---
TOP BACK OF CURB	---	---
LIP OF GUTTER	---	---
LANDSCAPING LIMITS	— LS —	--- LS ---
BOUNDARY		
PROPERTY LINE	— P/L —	— P/L —
PROPERTY LINE	---	---
RIGHT OF WAY	— R/W —	— R/W —
TEMPORARY EASEMENT	— T/E —	— T/E —
PERMANENT EASEMENT	— P/E —	— P/E —

NOTE:
NOT ALL OF THESE LINETYPES MAY APPEAR ON THE PLAN SET

ABBREVIATIONS

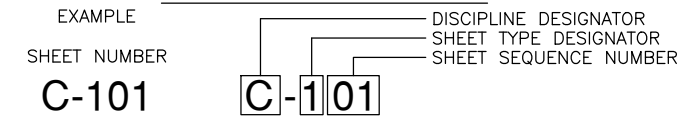
ASSY	ASSEMBLY
>	ANGLE
@	AT (MEASUREMENTS)
BLDG	BUILDING
BM	BENCH MARK
BSC	BITUMINOUS SURFACE COURSE
BSW	BACK OF SIDEWALK
BW	BOTH WAYS
C	CHANNEL (STRUCTURAL)
CDF	CONTROLLED DENSITY FILL
C/L	CENTER LINE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
CONT	CONTINUOUS
CPLG	COUPLING
CSBC	CRUSHED SURFACING BASE COURSE
CSTC	CRUSHED SURFACING TOP COURSE
CU FT	CUBIC FEET
CU YD	CUBIC YARD
DEG OR °	DEGREE
DET	DETAIL
DIA OR Ø	DIAMETER
DIP	DUCTILE IRON PIPE
DIST	DISTRIBUTION
DWG	DRAWING
EA	EACH
ELB	ELBOW
ELEC	ELECTRICAL
ELEV	ELEVATION
EW	EACH WAY
EXIST	EXISTING
FG	FINISH GRADE
FH	FIRE HYDRANT
FLG	FLANGE
FM	FORCEMAIN
FT OR '	FEET
GALV	GALVANIZED
GV	GATE VALVE
HORIZ	HORIZONTAL
ID	INSIDE DIAMETER
IN OR "	INCH
LB OR #	POUND
LF	LINEAL FEET
LN	LINEAL
MAX	MAXIMUM
MIN	MINIMUM
MJ	MECHANICAL JOINT
NO OR #	NUMBER
PE	PLAIN END
PL	PLATE
PL	PROPERTY LINE
PVC	POLYVINYL-CHLORIDE
R	RADIUS
RP	RADIUS POINT
R&R	REMOVE & REPLACE
REM	REMOVE
REQ'D	REQUIRED
REV	REVISION
R/W	RIGHT-OF-WAY
S	SLOPE
SPEC	SPECIFICATION
SS	SANITARY SEWER

STA	STATION
STD	STANDARD
STL	STEEL
ST STL	STAINLESS STEEL
TBC	TOP BACK OF CURB
TOS	TOP OF SLAB
TYP	TYPICAL
TFC	TOP FACE OF CONCRETE
W/	WITH
W/O	WITHOUT
W/REQ'D	WHERE REQUIRED

STANDARD SYMBOLS

SYMBOL DESCRIPTION	EXISTING SYMBOL & BLOCK NAME	PROPOSED SYMBOL & BLOCK NAME
CTRL PT TEMPORARY BENCH MARK	△ TBM	
BOLLARD	⊠	⊠
SPOT ELEVATION	⊗	⊗
TELE. PEDESTAL	⊕	⊕
FIRE HYDRANT	⊕	⊕
VALVE	⊗	⊗
SS MANHOLE	⊙	●
ELEC. METER	⊕	⊕
ELEC. TRANS.	⊗	⊗
GUY WIRE	↓	↓
JUNCTION BOX	⊠	⊠
POWER POLE	⊕	⊕
STREET/SITE LIGHT	⊕	⊕
STREET SIGN	⊕	⊕
TEST HOLE	⊕	⊕
REFLECTIVE ROADWAY DELINEATOR	•	•

SHEET NUMBERING



DISCIPLINE DESIGNATORS

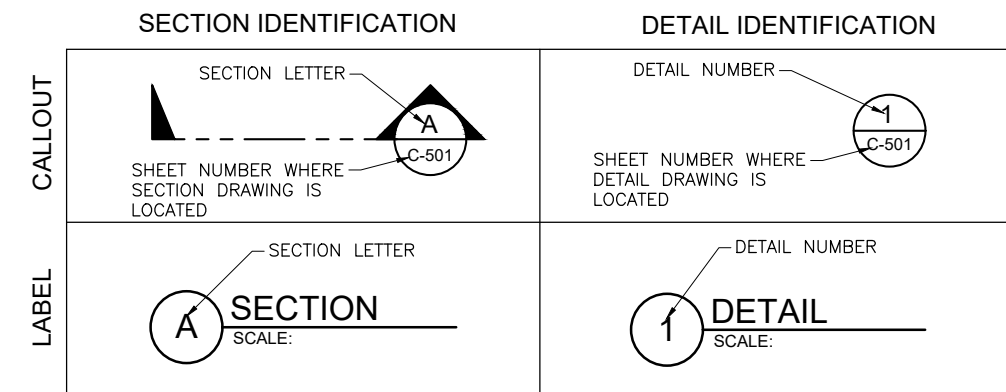
DISCIPLINE	DESIGNATOR	DESCRIPTION
GENERAL	G	ALL GENERAL
SURVEY/MAPPING	V	ALL SURVEY
CIVIL	C	ALL CIVIL
LANDSCAPE	L	ALL LANDSCAPE
PROCESS	P	ALL PROCESS
STRUCTURAL	S	ALL STRUCTURAL
ELECTRICAL	E	ALL ELECTRICAL

SHEET TYPE DESIGNATORS

DESIGNATOR	SHEET TYPE
0	GENERAL (SYMBOLS, LEGENDS, NOTES, ETC.)
1	PLANS (HORIZONTAL VIEWS)
2	ELEVATIONS, PROFILES, COMBINED PLAN AND PROFILES
3	SECTIONS (SECTIONAL VIEWS)
4	LARGE-SCALE VIEWS (PLANS, ELEVATIONS, ECT.)
5	DETAILS OR COMBINED DETAILS AND SECTIONS
6	SCHEDULES OR DIAGRAMS

SECTION AND DETAIL IDENTIFIERS

NOTE:
A DASH MAY BE PLACED IN THE LOWER PORTION OF THE IDENTIFIER IF THE DETAIL DRAWING OR SECTION VIEW IS LOCATED ON THE SAME SHEET.



J-U-B ENGINEERS, INC.

J-U-B ENGINEERS, INC.
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Kennewick, WA 99337
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EXPIRES: 6/30/23

NO.	REVISION	DESCRIPTION	DATE
1	PROCESS WASTEWATER LINE TYPE	GER	4/19/2021

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
UMATILLA, OREGON
LEGEND, LINETYPES AND ABBREVIATIONS

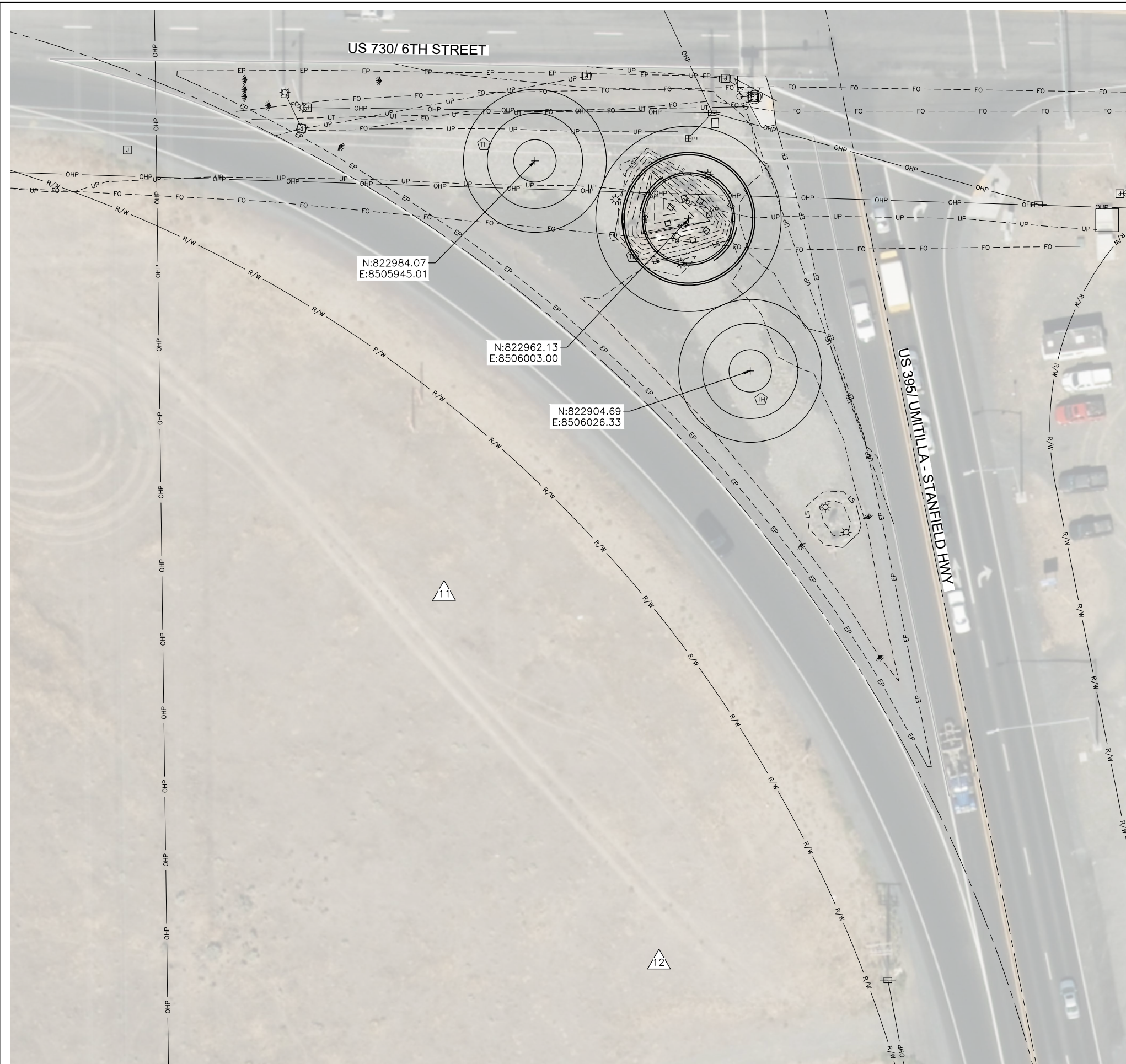
FILE: 33-21-003_G-002
JUB PROJ. #: 33-21-003
DRAWN BY: MCH
DESIGN BY: GER
CHECKED BY: TMG

LAST UPDATED: 9/6/2022

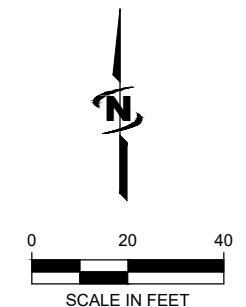
SHEET NUMBER:

G-002

Plot Date: 07/20/22 11:42 AM Plotted By: Michael Harvey
 Date Created: 07/20/22 JUB.COM\CENTRAL\CLIENTS\OR\UMATILLA\LACTY\PROJECT\SS3\21-003_KIWANSIS\ALISON\CONCEPT\DESIGN\ROADSHEET\SS3-21-003_V-101.DWG



PLAN - US 395, US 730 INTERSECTION



BASIS OF BEARING

THE BASIS OF BEARINGS FOR THIS PROJECT IS A LOCAL SITE PROJECTION ORIGINATING FROM THE 2011 ADJUSTMENT OF THE NORTH AMERICAN DATUM OF 1983 (NAD 83/2011), OREGON STATE PLANE COORDINATE SYSTEM, NORTH ZONE (3601) BASED UPON STATIC GPS OBSERVATIONS PROCESSED THROUGH THE NATIONAL GEODETIC SURVEY (NGS) ONLINE POSITIONING USER SYSTEM (OPUS). THE PROJECT DATA HAS BEEN PROJECTED TO GROUND AT CONTROL POINT NO. 1; LOCAL LATITUDE N45°54'14.59711", LOCAL LONGITUDE W119°18'08.24868" USING A GROUND SCALE FACTOR OF 1.0000406083. ALL BEARINGS ARE GRID, ALL DISTANCES ARE GROUND EXPRESSED IN INTERNATIONAL FEET

VERTICAL DATUM

VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) BASED UPON STATIC GPS OBSERVATIONS PROCESSED THROUGH THE NATIONAL GEODETIC SURVEY (NGS) ONLINE POSITIONING USER SYSTEM (OPUS) USING GEOID MODEL 12B. THE PROJECT BENCH MARK IS A CONTROL POINT NO. 1. A HUB AND TACK, ELEVATION BEING 440.26 FEET

SURVEY CONTROL				
NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
1*	817976.93	8506998.55	440.26	*CP-HUB & TACK
11	822820.48	8505910.67	464.79	RB5 JUB CAP
12	822681.21	8505991.85	463.11	SCRIBE
231*	822143.09	8505626.98	456.89	2.5-INCH ALUMINUM CAP

* POINT NOT SHOWN IN THIS VIEW

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NO.	REVISION	DESCRIPTION	BY	APPR.	DATE

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
 UMATILLA, OREGON
 GEOMETRIC CONTROL

FILE: 33-21-003_V-101
 JUB PROJ. #: 33-21-003
 DRAWN BY: MCH
 DESIGN BY: JJS
 CHECKED BY: TMG
 AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY
 LAST UPDATED: 7/6/2022
 SHEET NUMBER:
V-101

GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS, THE CITY OF UMATILLA DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS FOR PUBLIC WORKS IMPROVEMENTS, 2021 EDITION OF THE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND SPECIAL PROVISIONS.
- A PRECONSTRUCTION CONFERENCE SHALL BE HELD A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO START OF WORK. ALL CONTRACTORS, SUBCONTRACTORS AND/OR UTILITY CONTRACTORS SHALL BE PRESENT.
- THE CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION STAKING FOR VERTICAL AND HORIZONTAL CONTROL. ALL CONSTRUCTION STAKING SHALL BE COMPLETED UNDER THE SUPERVISION OF A P.L.S. LICENSED IN THE STATE OF OREGON. CONSTRUCTION STAKING SHALL BE INCIDENTAL TO THE PROJECT.
- THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL BE LICENSED BY THE STATE OF OREGON AND BONDED TO DO WORK IN THE PUBLIC RIGHT-OF-WAY.
- THE CONTRACTOR IS REQUIRED TO PROVIDE THE OWNER WITH A 24 HOUR, SEVEN DAY A WEEK, EMERGENCY CONTACT PERSON FOR THE PROJECT. THE EMERGENCY CONTACT SHALL HAVE A MAXIMUM ONE HOUR RESPONSE TIME AND SHALL HAVE THE AUTHORITY TO MOBILIZE EQUIPMENT AND MANPOWER AS REQUIRED.
- ALL CONTRACTORS WORKING WITHIN THE PROJECT BOUNDARIES ARE RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE SAFETY LAWS OF ANY JURISDICTIONAL BODY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BARRICADES, SAFETY DEVICES AND CONTROL OF TRAFFIC WITHIN AND AROUND THE CONSTRUCTION AREA.
- ALL MATERIALS FURNISHED ON OR FOR THE PROJECT MUST MEET THE MINIMUM REQUIREMENTS IN THE PLANS AND SPECIFICATIONS AND CONTRACTORS MUST FURNISH PROOF THAT ALL MATERIALS INSTALLED ON THIS PROJECT MEET THE REQUIREMENTS OF THE SPECIFICATIONS WHERE A SUBMITTAL IS REQUIRED OR REQUESTED BY THE ENGINEER.
- WORK SUBJECT TO APPROVAL PRIOR TO (A) BACKFILLING TRENCHES FOR PIPE; (B) PLACING OF AGGREGATE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH OWNER. WORK DONE WITHOUT SUCH APPROVAL SHALL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF PERFORMING THE WORK IN AN ACCEPTABLE MANNER.
- THE CONTRACTOR SHALL OBTAIN AND HAVE AVAILABLE COPIES OF THE APPLICABLE STANDARDS AT THE JOB SITE FOR THE DURATION OF THE RELATED CONSTRUCTION OPERATIONS.
- PROTECT EXISTING SIGNS, STREET LIGHTS, UTILITIES, AND ANY OTHER ADJACENT FACILITIES. ANY DAMAGE TO EXISTING FACILITIES BY THE CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO ADDITIONAL COMPENSATION SHALL BE PROVIDED TO REPAIR THE DAMAGE. REPAIRS SHALL BE TO THE SATISFACTION OF THE OWNER.
- INSPECTION OF WORK WITHIN THE RIGHT-OF-WAYS SHALL BE BY THE THE OWNER'S REPRESENTATIVE.
- EQUIPMENT MAINTENANCE LOG TO BE KEPT ON SITE AT ALL TIMES AND AVAILABLE UPON REQUEST. LOG MUST DOCUMENT INSPECTIONS AND ACTIONS IN ACCORDANCE WITH THE ODEQ MAO.
- ALL DIMENSIONS SHOWN ON THESE PLANS AND ANY EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL WARRANT IMMEDIATE ATTENTION OF THE ENGINEER TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE MATERIAL TESTING BY A CERTIFIED TESTING LABORATORY. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE MATERIAL TESTING. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND CONTACT THE INSPECTOR 24 BUSINESS HOURS IN ADVANCE OF CONSTRUCTION WORK REQUIRING TESTING. A COPY OF THE MATERIAL TESTS SHALL BE PROVIDED TO THE OWNER AND/OR THE OWNER'S REPRESENTATIVE. ALL MATERIAL TESTING IS INCIDENTAL TO THE PROJECT.
- CONTRACTOR'S HOURS OF OPERATION SHALL BE: WORKING HOURS ARE MONDAY-FRIDAY 7 AM TO 7 PM. NO WORK IS ALLOWED ON WEEKENDS OR NATIONAL HOLIDAYS EXCEPT FOR INSPECTION AND MAINTENANCE OF TRAFFIC CONTROL AND/OR EROSION AND SEDIMENT CONTROL BMP'S.
- AT COMPLETION OF PROJECT, CONTRACTOR SHALL NOTIFY OWNER AND/OR OWNER'S REPRESENTATIVE FOR FINAL PUNCH LIST WALK THROUGH. FINAL PUNCH LIST ITEMS SHALL BE COMPLETED NO LATER THAN TWO (2) WEEKS AFTER FINAL PUNCH LIST WALK THROUGH.
- THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE TELECOMMUNICATION UTILITY FOR EXCAVATING WITHIN 10 FEET OF A BURIED FIBER OPTIC COMMUNICATIONS CABLE.

- CITY WILL SUPPLY WATER FOR COMPACTION AND DUST CONTROL. CITY WILL SUPPLY A METER TO QUANTIFY WATER USE.
- GROUNDWATER WAS NOT OBSERVED DURING THE GEOTECHNICAL EXPLORATION, HOWEVER, CONTRACTOR MAY ENCOUNTER SHALLOW GROUNDWATER PERCHED ON TOP OF BEDROCK. DE-WATERING ACTIVITIES ARE INCIDENTAL TO THE PROJECT.
- PRIOR TO FINAL PROJECT ACCEPTANCE, CONTRACTOR SHALL CLEAN ALL STRUCTURES, INCLUDING BUT NOT LIMITED TO ENCLOSURES, VAULTS, INTERIOR OF FOUNTAIN, ETC. CONTRACTOR SHALL POWER SWEEP ROADWAY TO REMOVE ALL DEBRIS, SEDIMENT, STAINS, SPILLS, AND OTHER FOREIGN DEPOSITS.

EXISTING UTILITIES/EROSION CONTROL NOTES:

- ALL EXISTING UTILITIES DEPICTED IN THESE PLANS ARE AN APPROXIMATION ONLY AND ARE BASED ON PAINTED LOCATE MARKS AND SUPPLEMENTED WITH DRAWINGS WHEN PROVIDED BY UTILITIES. THE CONTRACTOR SHALL CALL FOR LOCATES AND PROTECT ALL EXISTING UTILITIES. DIG AND VERIFY EFFORTS ARE INCIDENTAL.
- APPROXIMATE LOCATIONS OF UTILITIES ARE SHOWN ON THE PLANS. THEY ARE TO BE USED FOR GENERAL INFORMATION ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE APPROPRIATE UTILITY COMPANIES WHEN CONSTRUCTION MIGHT INTERFERE WITH NORMAL OPERATION OF ANY UTILITIES. IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE THE APPROPRIATE UTILITY COMPANY FIELD-LOCATE ANY UTILITY INSTALLATIONS WHICH MIGHT BE AFFECTED BY CONSTRUCTION PRIOR TO BEGINNING WORK IN THAT AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SERVICE OF EXISTING UTILITIES AND FOR RESTORING ANY UTILITIES DAMAGED DUE TO CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER. DEPTHS AND ELEVATIONS OF UTILITIES ARE UNKNOWN UNLESS OTHERWISE SHOWN. CONTRACTOR SHALL FIELD VERIFY UTILITY DEPTHS, ELEVATIONS, ANY DISCREPANCIES AND/OR CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- THE CONTRACTOR SHALL SUBMIT A COMPLETE EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. THE SUBMITTAL IS REQUIRED 7 DAYS IN ADVANCE OF CONSTRUCTION START. EROSION CONTROL PLAN TO FOLLOW/COMPLY WITH ACCEPTED BMP'S AND INCLUDE NARRATIVE FOR MAINTENANCE OF EROSION CONTROL DEVICES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY PERMITS REQUIRED FOR EROSION CONTROL.
- THE CONTRACTOR SHALL MAINTAIN ALL EXISTING DRAINAGE FACILITIES WITHIN THE CONSTRUCTION AREA UNTIL THE FINAL DRAINAGE IMPROVEMENTS ARE IN PLACE AND FUNCTIONING.


WATER IMPROVEMENTS NOTES:

- THE MINIMUM COVERAGE FOR ALL WATER LINES SHALL BE 3.5' (4' PREF) UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- ALL MATERIAL PLACED AS FILL OR BACKFILL SHALL BE PLACED, COMPACTED, AND TESTED IN ACCORDANCE WITH THE SPECIFICATIONS AND THE PLANS.
- NO CONNECTIONS TO EXISTING WATER PIPES SHALL BE MADE UNTIL THE NEW PIPE HAS BEEN INSTALLED, PRESSURE TESTED, DISINFECTED AND APPROVED BY THE CITY.
- COORDINATE ALL WATER WORK WITH THE CITY OF UMATILLA, AND PROVIDE MINIMUM 48 HOURS NOTICE TO CITY WHEN THEIR ASSISTANCE AND/OR APPROVAL IS REQUIRED.
- ALL WATERLINES SHALL BE CONSTRUCTED TO MEET OAR 333-061-0050 AND PART 01100 OF THE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION. ALL WATERLINES MUST PASS HYDROSTATIC AND DISINFECTION TESTING PRIOR TO CONNECTION TO EXISTING WATERLINES. FILLING AND FLUSHING OF WATERLINES SHALL MEET 01140.50 OF THE STANDARD SPECIFICATIONS, UTILIZING TEMPORARY BLOWOFF ASSEMBLIES WITH RESTRAINED JOINTS PER THE PLANS AND SPECIFICATIONS. FILLING AND FLUSHING FROM THE EXISTING DISTRIBUTION SYSTEM IS NOT ALLOWED. UPON THE SUCCESSFUL HYDROSTATIC AND DISINFECTION TESTING PER 01140.51 AND 01140.52 OF THE STANDARD SPECIFICATIONS, THE CONNECTION TO THE EXISTING MAINS SHALL BE COMPLETED PER 01140.47 TO PROVIDE UNINTERRUPTED SERVICE. ALL CONNECTIONS TO THE EXISTING MAINLINE SHALL BE MADE WITHIN 5 FEET OF THE SUCCESSFULLY TESTED WATERLINE. THE CONNECTION SPOOL, VALVES, AND APPURTENANCES SHALL BE CHLORINATED AND THOROUGHLY FLUSHED PER 01140.52(g) OF THE STANDARD SPECIFICATIONS.
- ALL EXISTING UTILITIES THAT CROSS THE PROPOSED UTILITY TRENCHES SHALL BE PROTECTED DURING EXCAVATION UNLESS THE CONTRACTOR IS GRANTED PERMISSION FROM THE OWNER OF THE UTILITY TO TEMPORARILY CUT AND REPAIR THE LINE.

Plot Date: 9/7/2022 1:42 AM Plotted By: Michael Harvey
 Date Created: 8/22/2022 J:\B.COM\CENTRAL\CLIENTS\OR\UMATILLA\ACTIVITY\PROJECT\SS3-27-003_KIWANIS\ALL\SCONCEPT\DESIGN\CAD\SHEET\03-21-003_C-001.DWG



J-U-B ENGINEERS, INC.
 J-U-B ENGINEERS, INC.
 3611 S. Zintel Way
 Kennewick, WA 99337
 Phone: 509.783.2144
 www.jub.com



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 75581 PE
 OREGON
 TROY M. GREEN
 EXPIRES: 6/30/23

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NO.	REVISION	DESCRIPTION	DATE
1	PROCESS WASTE WATER LINE TYPE	GER	BBH 4/19/2021

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
 UMATILLA, OREGON
 CIVIL GENERAL NOTES

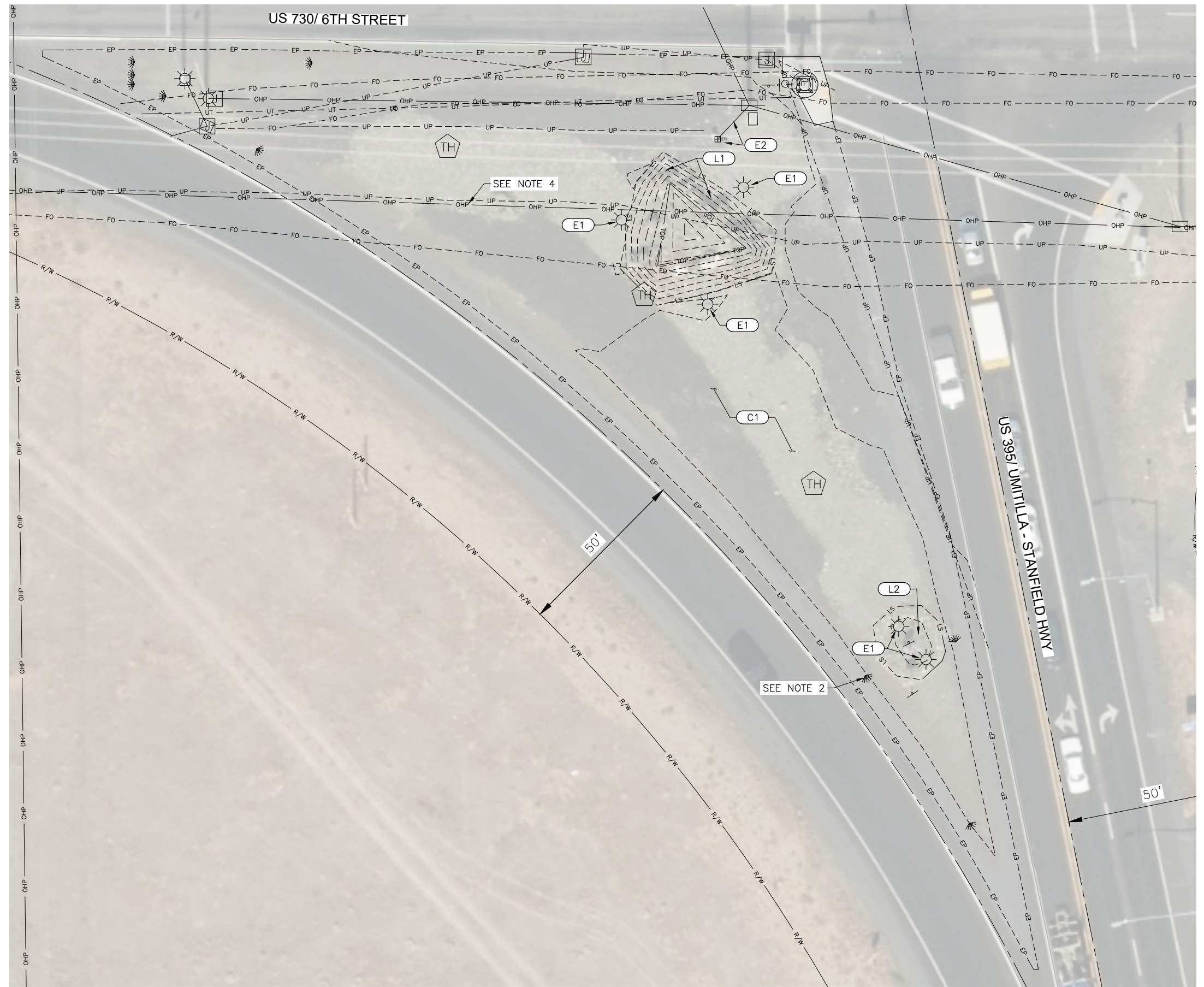
FILE :	33-21-003_C-001
JUB PROJ. # :	33-21-003
DRAWN BY :	MCH
DESIGN BY :	GER
CHECKED BY :	TMG
LAST UPDATED :	9/6/2022
SHEET NUMBER :	C-001



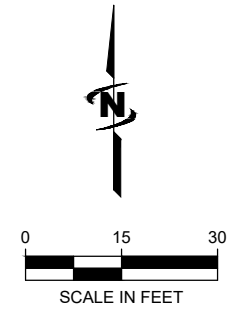
**Know what's below.
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CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

Plot Date: 9/7/2022 11:42 AM Plotted By: Michael Harvey
 Date Created: 8/2/2022 JUB.COM\CENTRAL\CLIENTS\OR\UMATILLA\ACTIVITY\PROJECT\33-21-003_KIWANIS\ALSCONCEPT\DESIGN\CAD\SHEET\33-21-003_C-101.DWG



PLAN - US 395, US 730 INTERSECTION



KEYED NOTES

CONSTRUCTION

- (C1) RETAIN AND PROTECT EXISTING ROAD SHOULDERS FROM DAMAGE OR CONTAMINATION. REMOVE ALL LANDSCAPING ROCK AND GRAVEL SURFACING BETWEEN ROAD SHOULDERS. SEPARATE AND STOCKPILE BROWN BASALT ROCK 1 1/2 INCH AND SMALLER FOR REUSE IN FINAL LANDSCAPING. SEE SHEET L-102 FOR LOCATIONS.

LANDSCAPE

- (L1) REMOVE EXISTING ROCK FOUNTAIN.
- (L2) REMOVE EXISTING SIGN AND LANDSCAPING ROCKS.

ELECTRICAL

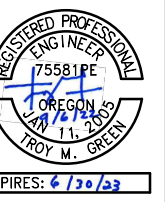
- (E1) REMOVE EXISTING SITE LIGHTING. SEE NOTE 6, THIS SHEET.
- (E2) REMOVE EXISTING ELECTRICAL SERVICE, METER AND PANEL - COORDINATE WITH UMATILLA ELECTRIC COOPERATIVE.

NOTES:

1. CONTRACTOR SHALL PROVIDE A METHOD OF CONSTRUCTION THAT WILL ALLOW MINIMAL DISTURBANCE TO TRAFFIC FLOWS DURING DEMOLITION WORK.
2. PROTECT EXISTING UTILITIES, STREET SIGNS, STREETLIGHTS, POWER POLES, ETC. FROM DAMAGE DURING CONSTRUCTION. DAMAGE BY THE CONTRACTOR'S OPERATIONS WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
3. CONTRACTOR IS REQUIRED TO MAINTAIN A DISTANCE NO LESS THAN 10 FEET (SAFETY WORK ZONE) FROM THE OVERHEAD POWER LINES AT ANY TIME DURING DEMOLITION OR CONSTRUCTION OF IMPROVEMENTS.
4. THE CONTRACTOR MAY NEED TO SCHEDULE A "SAFETY WATCH" AND POSSIBLE "COVER UP" WITH UMATILLA ELECTRIC IF ANY CRANE WORK WILL BE TAKING PLACE. THE CREW CAN CALL THE OPERATIONS DEPARTMENT AT (541) 564-4358 OR (541) 564-4360 FOR SCHEDULING.
5. ENSURE ALL ELECTRICAL IS DE-ENERGIZED PRIOR TO PERFORMING DEMOLITION ACTIVITIES.
6. ABANDON IN PLACE EXISTING CONDUITS AND ELECTRICAL CIRCUITS TO EXISTING DECORATIVE SITE LIGHTING BEING REMOVED.
7. REMOVE ALL EXISTING PIPING OR CONDUITS TO BE ABANDONED WHEN ENCOUNTERED IN TRENCHES OR STRUCTURAL EXCAVATIONS. ALL PIPES, CONDUITS, OR OTHER OPENING WHICH ARE CUT OR OPENED DURING CONSTRUCTION SHALL BE CAPPED OR CONCRETE PLUGGED PRIOR TO BACKFILLING.
8. CONTRACTOR SHALL PROVIDE A DISPOSAL SITE AND MEET ALL REQUIREMENTS OF FEDERAL, STATE, AND LOCAL RULES AND REGULATIONS REGARDING HEALTH, SAFETY, AND PUBLIC WELFARE IN THE DISPOSAL OF ALL DEBRIS.



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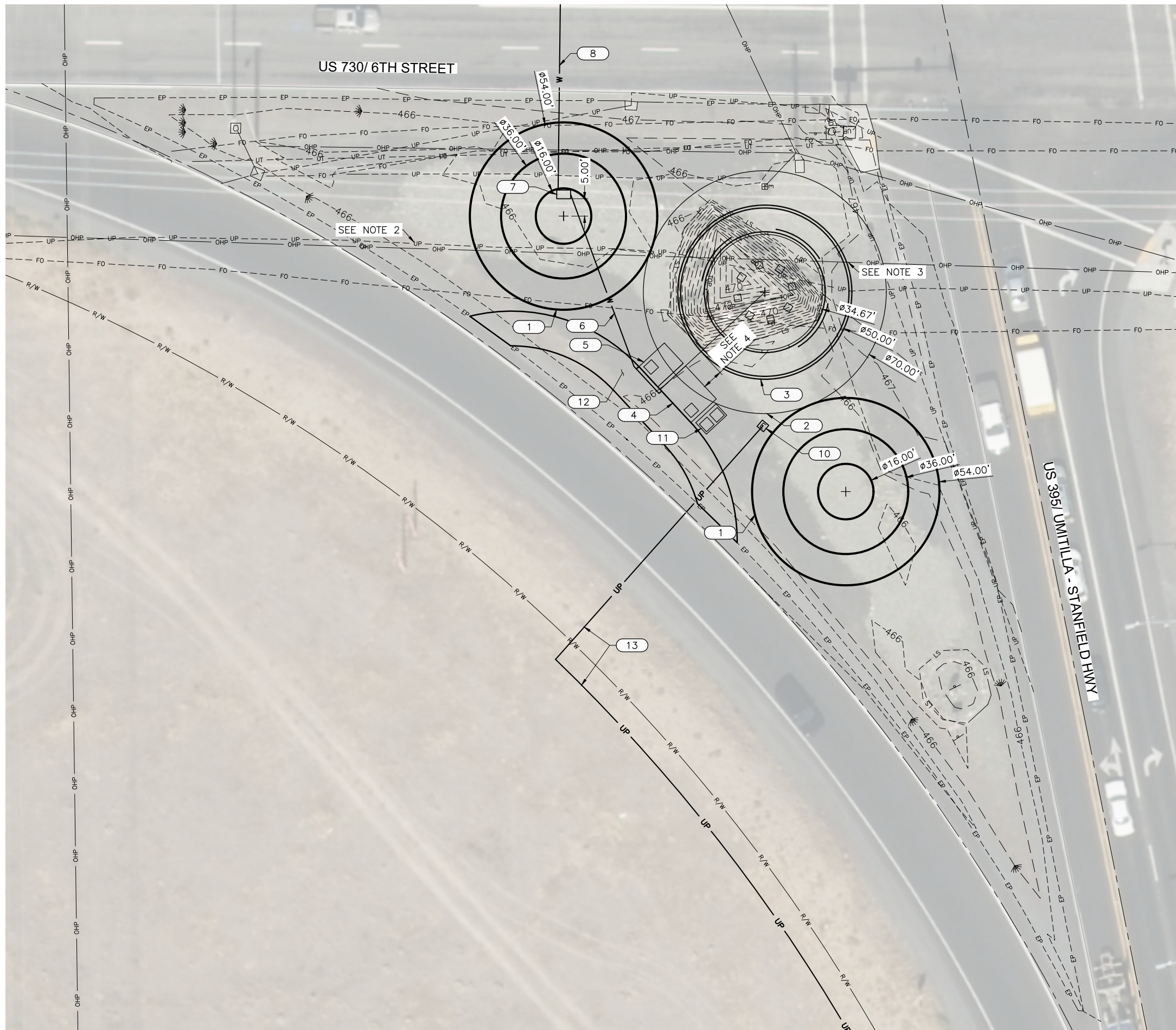


NO.	REVISION	DESCRIPTION	BY	DATE

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
UMATILLA, OREGON
SITE DEMOLITION PLAN

FILE: 33-21-003_C-101
 JUB PROJ #: 33-21-003
 DRAWN BY: MCG
 DESIGN BY: GER
 CHECKED BY: TMG
 AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY
 LAST UPDATED: 9/5/2022
 SHEET NUMBER:
C-101

Plot Date: 9/7/2022 11:42 AM Plotted By: Michael Harvey
 Date Created: 2/22/2022 JUB.COM\CENTRAL\CLIENTS\OR\UMATILLA\ACTIVITY\PROJECT\33-21-003_KIWANIS\FINAL\SCONCEPT\DESIGN\CAD\SHEET\33-21-003_C-102.DWG

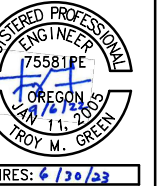


PLAN - US 395, US 730 INTERSECTION



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NO.	REVISION	DESCRIPTION	BY	APPR.	DATE

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
 UMATILLA, OREGON
 SITE LAYOUT AND DIMENSION

FILE: 33-21-003_C-102
 JUB PROJ. #: 33-21-003
 DRAWN BY: MCH
 DESIGN BY: GER
 CHECKED BY: TMG
 AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY
 LAST UPDATED: 9/5/2022

SHEET NUMBER:
C-102



KEYED NOTES

- 1 ORNAMENTAL LANDSCAPE RINGS (TYPICAL OF 2).
- 2 FOUNTAIN LANDSCAPE RING.
- 3 FOUNTAIN.
- 4 PRECAST 10'x13'x8' (MINIMUM) EQUIPMENT VAULT.
- 5 PRECAST 10'x8'x8' (MINIMUM) ELECTRICAL VAULT.
- 6 2" WATER LINE.
- 7 REDUCED PRESSURE BACKFLOW ASSEMBLY (RPBA) STATION.
- 8 2" WATER SERVICE INSIDE BORED 4" CARRIER PIPE.
- 9 2" WATER SERVICE CONNECTION.
- 10 ELECTRICAL SERVICE TRANSFORMER AND SERVICE METER.
- 11 PRECAST 8'x4.5'x6' CHEMICAL VAULT.
- 12 GRAVEL ACCESS ROAD.
- 13 PRIMARY ELECTRICAL SERVICE.

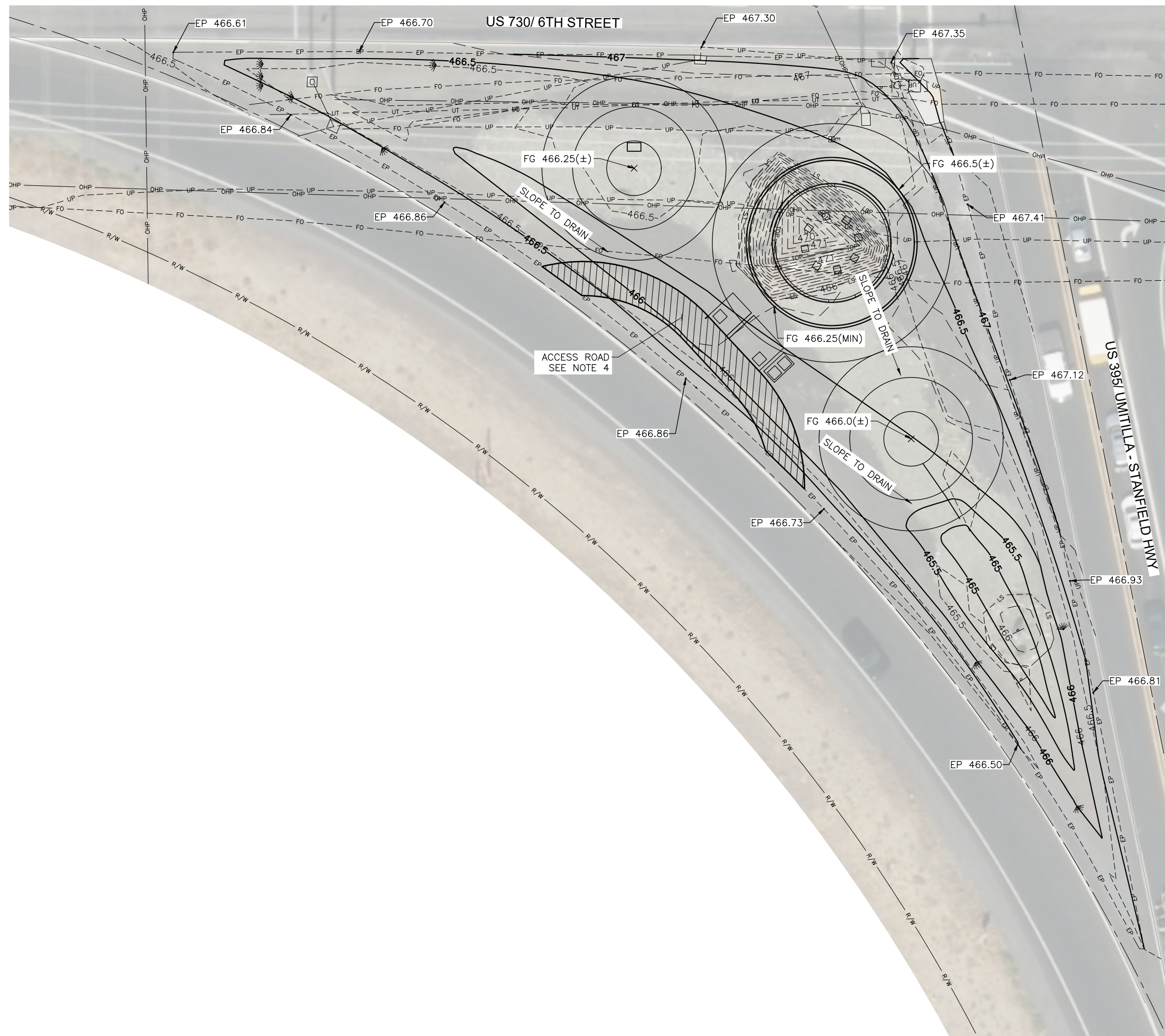
NOTES:

- 1. SEE SHEET V-101 FOR COORDINATES OF PROJECT IMPROVEMENTS.
- 2. RETAIN AND PROTECT EXISTING UNDERGROUND POWER ACROSS SITE. DIG AND VERIFY AT ALL CROSSINGS.
- 3. MAINTAIN A MINIMUM VERTICAL SEPARATION OF 11 FEET BETWEEN OVERHEAD POWER AND FOUNTAIN.
- 4. VAULT SHOWN IN APPROXIMATE WAY ONLY. LOCATE VAULTS PER SHEET P-102.
- 5. RETAIN AND PROTECT EXISTING ROAD SHOULDERS FROM DAMAGE OR CONTAMINATION.
- 6. PROTECT EXISTING UTILITIES, STREET SIGNS, STREET LIGHTS, POWER POLES, ETC. FROM DAMAGE DURING CONSTRUCTION. DAMAGE BY THE CONTRACTOR'S OPERATIONS WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 7. REMOVE ALL EXISTING PIPING OR CONDUITS TO BE ABANDONED WHEN ENCOUNTERED IN TRENCHES OR STRUCTURAL EXCAVATIONS. ALL PIPES, CONDUITS, OR OTHER OPENING WHICH ARE CUT OR OPENED DURING CONSTRUCTION SHALL BE CAPPED OR CONCRETE PLUGGED PRIOR TO BACKFILLING.
- 8. FOUNTAIN PIPING AND ELECTRICAL TO/FROM VAULTS NOT SHOWN - SEE ELECTRICAL AND FOUNTAIN PLANS.

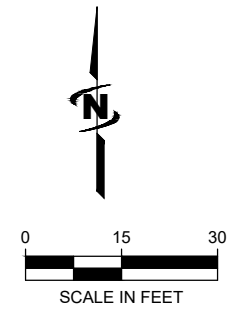


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 Date Created: 2/22/2022 JUB.COM\CENTRAL\CLIENTS\OR\UMATILLA\LACTY\PROJECT\SS3-21-003_KIWANIS\AL\SCONCEPT\DESIGN\CAD\SHEET\33-21-003_C-103.DWG




PLAN - US 395, US 730 INTERSECTION



NOTES:


1. ALL SPOT ELEVATIONS SHOWN ARE TO FINISHED GRADE (F.G.). F.G. IS TO TOP OF LANDSCAPE ROCK, SEE LANDSCAPE PLANS.
2. RETAIN AND PROTECT EXISTING ROAD SHOULDERS FROM DAMAGE OR CONTAMINATION.
3. GRADE ENTIRE SITE TO THE APPROXIMATE FINAL CONTOURS SHOWN. INTENT OF SITE GRADING IS TO SLOPE UNIFORMLY, AS MUCH AS PRACTICAL, TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE FOUNTAIN AND TO THE LOW STORMWATER COLLECTION BASIN LOCATED IN THE SOUTHERN CORNER OF THE SITE.
4. CONSTRUCT A 10 FOOT WIDE ACCESS ROAD FOR FOUNTAIN MAINTENANCE AS SHOWN. ROAD SHALL INCLUDE 6" MINIMUM DEPTH OF BASE COURSE BENEATH THE LANDSCAPE ROCK COMPACTED TO 95% MAXIMUM DENSITY AS DETERMINED PER ASTM D1557. FINISH GRADE SHALL BE AT THE TOP OF LANDSCAPE ROCK, SEE LANDSCAPE PLANS.
5. PROTECT EXISTING UTILITIES, STREET SIGNS, STREETLIGHTS, POWER POLES, ETC. FROM DAMAGE DURING CONSTRUCTION. DAMAGE BY THE CONTRACTOR'S OPERATIONS WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
6. CONTRACTOR IS REQUIRED TO MAINTAIN A DISTANCE NO LESS THAN 10 FEET (SAFETY WORK ZONE) FROM THE OVERHEAD POWER LINES AT ANY TIME DURING DEMOLITION OR CONSTRUCTION OF IMPROVEMENTS.
7. THE CONTRACTOR MAY NEED TO SCHEDULE A "SAFETY WATCH" AND POSSIBLE "COVER UP" WITH UMATILLA ELECTRIC IF ANY CRANE WORK WILL BE TAKING PLACE. THE CREW CAN CALL THE OPERATIONS DEPARTMENT AT (541) 564-4358 OR (541) 564-4360 FOR SCHEDULING.


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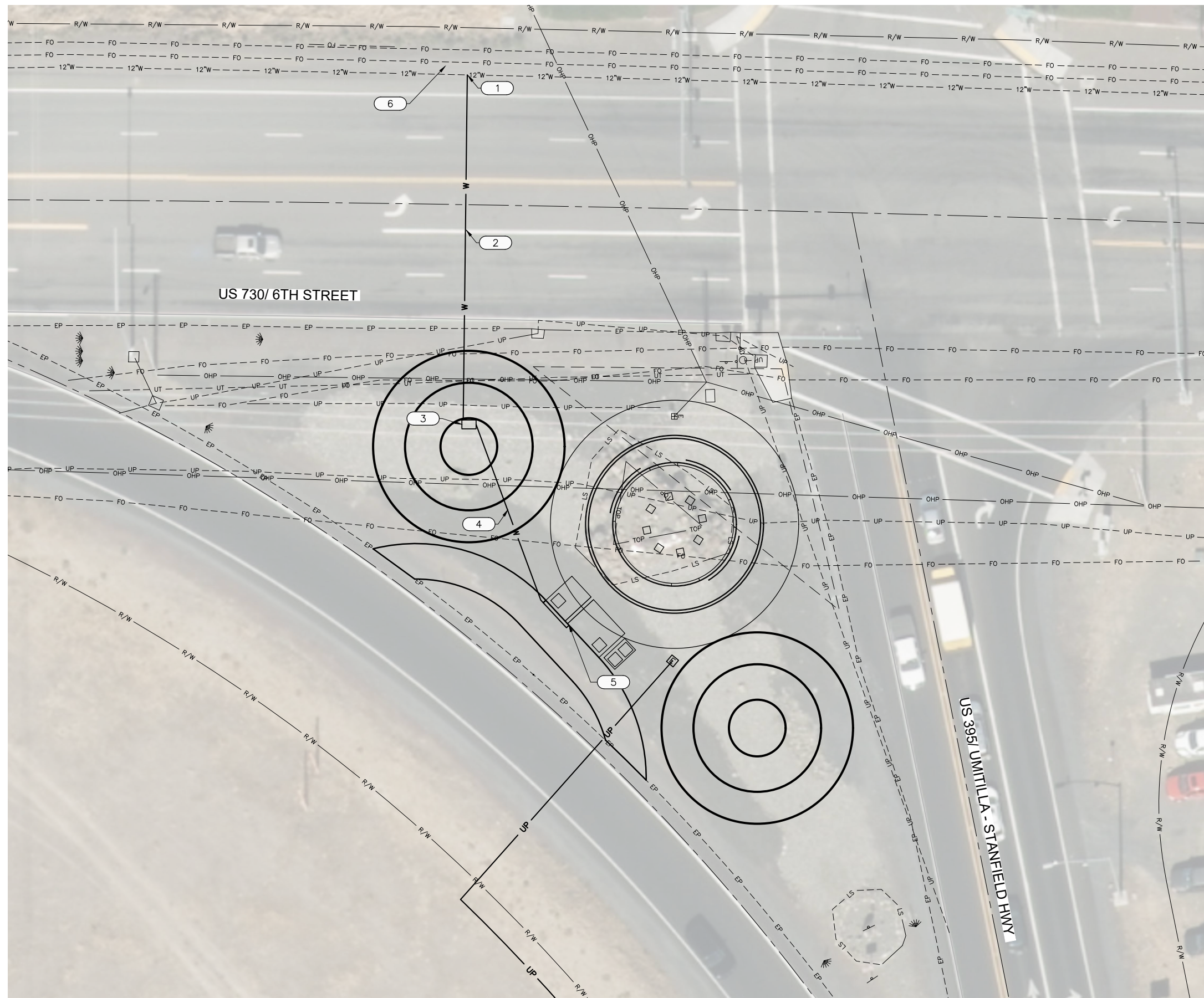

 REGISTERED PROFESSIONAL ENGINEER
 OREGON
 TROY M. GREEN
 75581 PE
 11, 2005
 EXPIRES: 6/30/23

NO.	REVISION	DESCRIPTION	BY	DATE

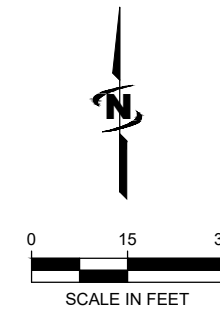
UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
 UMATILLA, OREGON
 GRADING AND DRAINAGE

FILE: 33-21-003_C-103
JUB PROJ. #: 33-21-003
DRAWN BY: MCH
DESIGN BY: GER
CHECKED BY: TMG
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AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY LAST UPDATED: 9/6/2022 SHEET NUMBER: C-103

Plot Date: 9/7/2022 11:43 AM Plotted By: Michael Harvey
 Date Created: 8/31/2022 J:\B\COM\CENTRAL\CLIENTS\OR\UMATILLA\CAD\PROJECT\SS3-21-003_KIWANIS\ALIS\CONCEPT\DESIGN\CAD\SHEET\SS3-21-003_C-104.DWG



PLAN - US 395, US 730 INTERSECTION



KEYED NOTES

- 1 2" WATER SERVICE CONNECTION AND METER. TIE TO EXISTING 12" WATER LINE. SEE CITY STD. DETAIL W-3, SHEET C-501.
- 2 98LF ± 2" HDPE SDR 9 WATER LINE INSIDE BORED 4" HDPE SDR 13.5 CARRIER PIPE - SEE NOTE 3.
- 3 REDUCED PRESSURE BACKFLOW ASSEMBLY (RPBA) STATION. SEE CITY STD. DETAIL W-17, SHEET C-502. SEE NOTE 2.
- 4 70LF ± 2" HDPE SDR 9 WATER LINE. SEE CITY STD. DETAIL W-20, SHEET C-502 FOR TYPICAL WATER TRENCH SECTION.
- 5 EXTEND 2" WATER INTO FOUNTAIN EQUIPMENT VAULT. SEE FOUNTAIN PLANS.
- 6 RESTORE SHOULDER -3" COMPACTED DEPTH SHOULDER AGGREGATE MEETING SECTION 02640.

NOTES:

- 1. SEE SHEET C-102 FOR SITE LAYOUT AND DIMENSIONS TO IMPROVEMENTS.
- 2. RPBA ASSEMBLY SHALL BE LOCATED IN A HEATED ENCLOSURE. SEE SPECIFICATIONS FOR REQUIREMENTS.
- 3. CONTRACTOR SHALL DIG AND VERIFY ALL UTILITY CROSSINGS AND CONNECTION POINTS BEFORE BEGINNING BORING. BORING DEPTH SHALL BE ESTABLISHED TO PROVIDE 1 FOOT MINIMUM CLEARANCE BELOW LOWEST UTILITY CROSSING.



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NO.	REVISION	DESCRIPTION	BY	DATE

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
 UMATILLA, OREGON

WATER SYSTEM IMPROVEMENTS

FILE: 33-21-003_C-104
 JUB PROJ. #: 33-21-003
 DRAWN BY: MCH
 DESIGN BY: GER
 CHECKED BY: TMG
 AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY
 LAST UPDATED: 9/5/2022

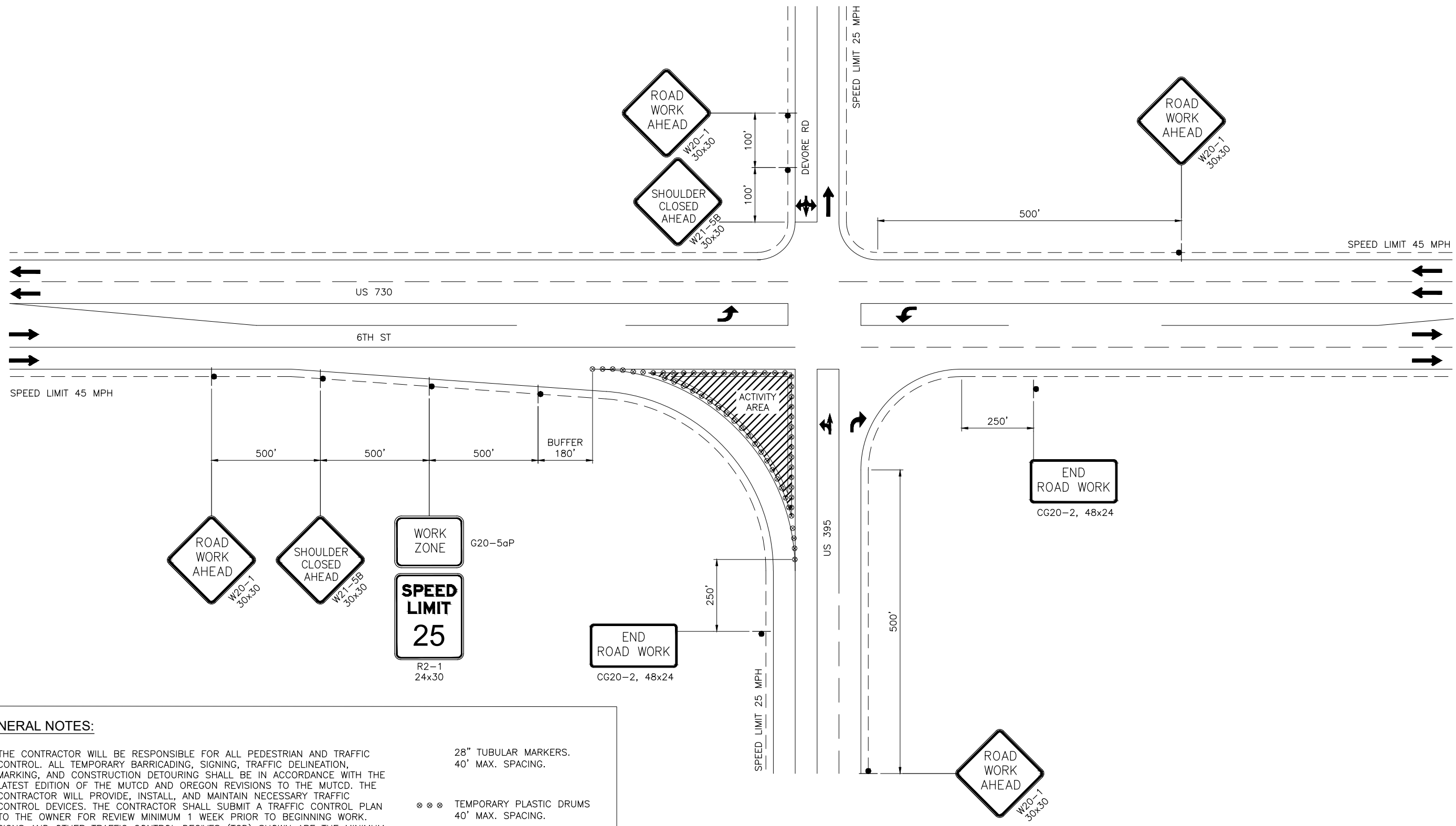
SHEET NUMBER:

C-104

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NO.	REVISION	DESCRIPTION	BY	APPR.	DATE

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
 UMATILLA, OREGON
 TRAFFIC CONTROL PLAN
 TYPICAL FOUNTAIN WORK ZONE



SHOULDER CLOSURE - TYPICAL FOUNTAIN WORK ZONE
 SCALE: NOT TO SCALE

GENERAL NOTES:

1. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL PEDESTRIAN AND TRAFFIC CONTROL. ALL TEMPORARY BARRICADING, SIGNING, TRAFFIC DELINEATION, MARKING, AND CONSTRUCTION DETOURING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD AND OREGON REVISIONS TO THE MUTCD. THE CONTRACTOR WILL PROVIDE, INSTALL, AND MAINTAIN NECESSARY TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE OWNER FOR REVIEW MINIMUM 1 WEEK PRIOR TO BEGINNING WORK.
2. SIGNS AND OTHER TRAFFIC CONTROL DEVICES (TCD) SHOWN ARE THE MINIMUM REQUIRED.
3. ARROWS SHOWN IN ROADWAY ARE DIRECTIONAL ARROWS TO INDICATE TRAFFIC MOVEMENTS.
4. ALL SIGNS ARE 48"x48" UNLESS OTHERWISE SHOWN. USE FLUORESCENT ORANGE SHEETING FOR THE BACKGROUND OF ALL TEMPORARY WARNING SIGNS. DO NOT LOCATE THE SIGN SUPPORTS IN LOCATIONS DESIGNED FOR BICYCLE OR PEDESTRIAN TRAFFIC.
5. ADDITIONAL TRAFFIC CONTROL MEASURES (TCM) MAY BE REQUIRED FOR ALL LEGS OF THE INTERSECTION.
6. PLACE CHANNELIZING DEVICES AROUND INTERSECTION RADII, BUSINESS ACCESSES AND DRIVEWAYS AT 10' SPACING.

28" TUBULAR MARKERS.
 40' MAX. SPACING.

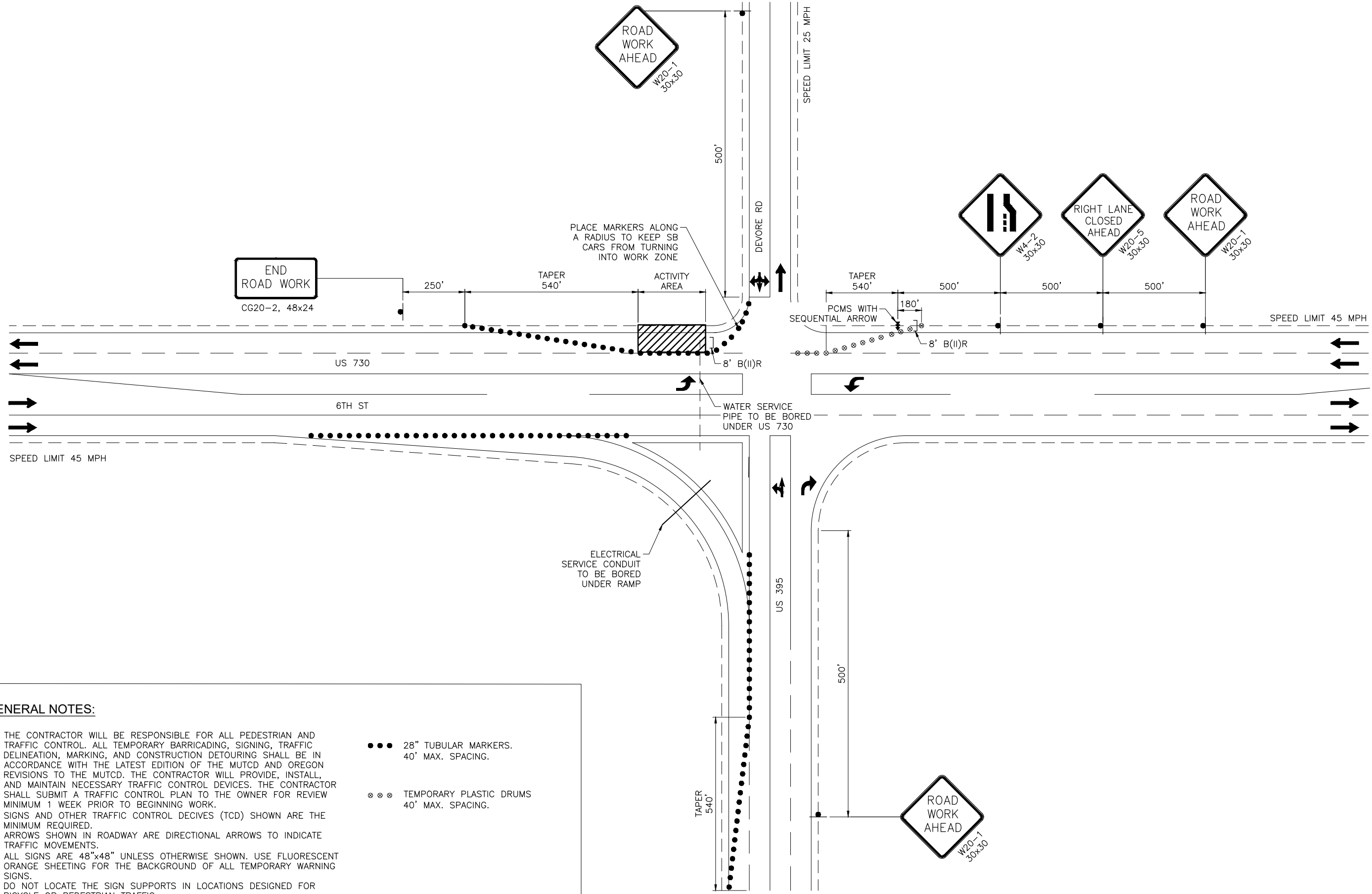
⊗ ⊗ ⊗ TEMPORARY PLASTIC DRUMS
 40' MAX. SPACING.



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NO.	REVISION	DESCRIPTION	DATE

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
 UMATILLA, OREGON
 TRAFFIC CONTROL PLAN
 WATER SERVICE CONNECTION



GENERAL NOTES:

1. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL PEDESTRIAN AND TRAFFIC CONTROL. ALL TEMPORARY BARRICADING, SIGNING, TRAFFIC DELINEATION, MARKING, AND CONSTRUCTION DETOURING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD AND OREGON REVISIONS TO THE MUTCD. THE CONTRACTOR WILL PROVIDE, INSTALL, AND MAINTAIN NECESSARY TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE OWNER FOR REVIEW MINIMUM 1 WEEK PRIOR TO BEGINNING WORK.
2. SIGNS AND OTHER TRAFFIC CONTROL DEVICES (TCD) SHOWN ARE THE MINIMUM REQUIRED.
3. ARROWS SHOWN IN ROADWAY ARE DIRECTIONAL ARROWS TO INDICATE TRAFFIC MOVEMENTS.
4. ALL SIGNS ARE 48"x48" UNLESS OTHERWISE SHOWN. USE FLUORESCENT ORANGE SHEETING FOR THE BACKGROUND OF ALL TEMPORARY WARNING SIGNS.
5. DO NOT LOCATE THE SIGN SUPPORTS IN LOCATIONS DESIGNED FOR BICYCLE OR PEDESTRIAN TRAFFIC.
6. ADDITIONAL TRAFFIC CONTROL MEASURES (TCM) MAY BE REQUIRED FOR ALL LEGS OF THE INTERSECTION.
7. PLACE CHANNELIZING DEVICES AROUND INTERSECTION RADII, BUSINESS ACCESSES AND DRIVEWAYS AT 10' SPACING.

- ● ● 28" TUBULAR MARKERS.
40' MAX. SPACING.
- ⊗ ⊗ ⊗ TEMPORARY PLASTIC DRUMS
40' MAX. SPACING.

WESTBOUND LANE CLOSURE - WATER SERVICE CONNECTION
 SCALE: NOT TO SCALE

Plot Date: 9/7/2022 1:43 AM Plotted By: Michael Harvey
 Date Created: 9/7/2022 JUB.COM\CENTRAL\CLIENTS\OR\UMATILLA\ACTIVITY\PROJECT\33-21-003_KIWANIS\FINAL\CONCEPT DESIGN\CAD\SHEET\33-21-003_C-106.DWG



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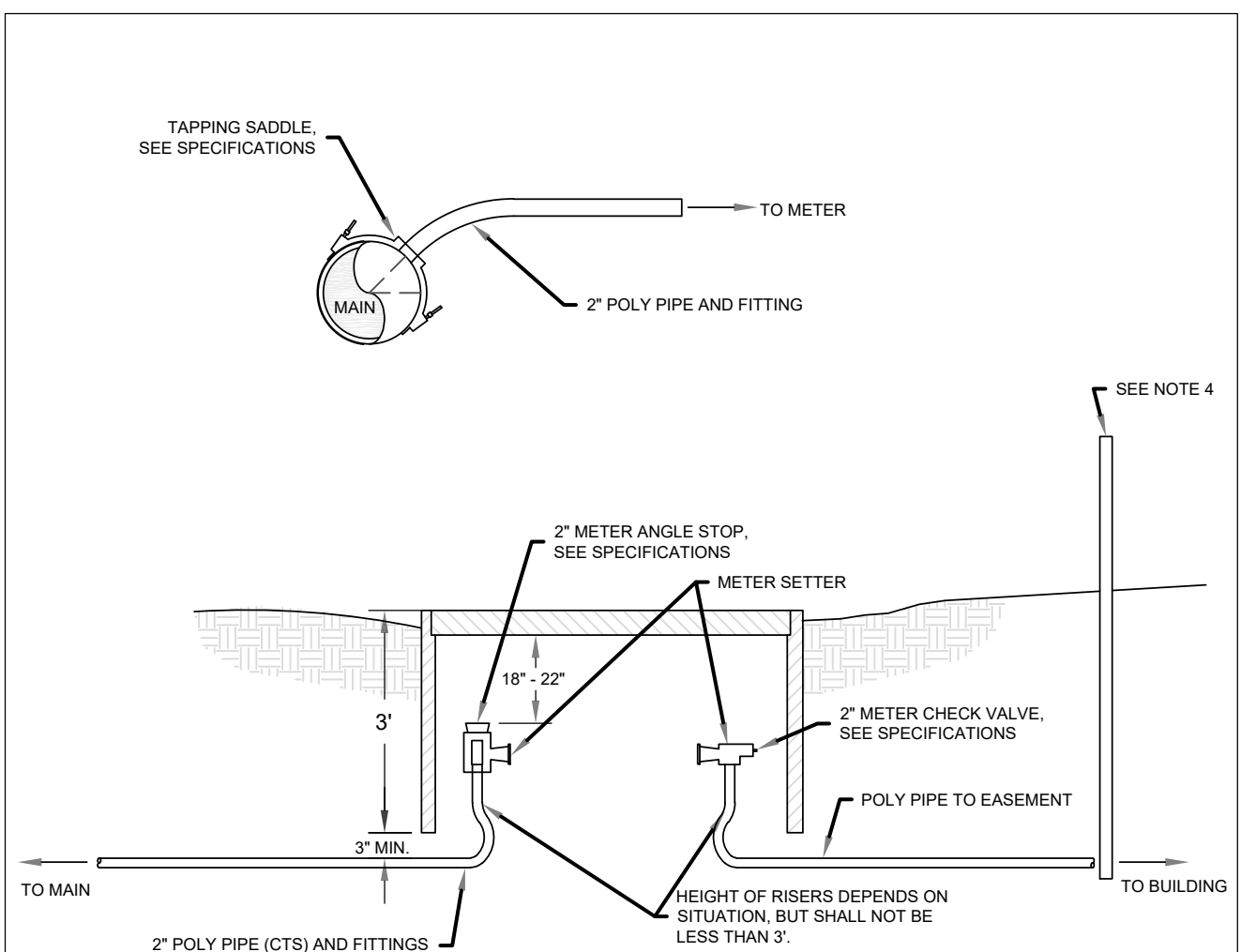
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NO.	REVISION	DESCRIPTION	BY	DATE

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
UMATILLA, OREGON
CITY STANDARD DETAILS

FILE: 33-21-003_C-501
JUB PROJ. #: 33-21-003
DRAWN BY: MCH
DESIGN BY: GER
CHECKED BY: TM
AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY
LAST UPDATED: 9/9/2022
SHEET NUMBER:
C-501



- NOTES:
- IF METER NOT INSTALLED, A POLY PIPE JUMPER CUT TO THE SIZE AND THREAD OF THE APPROPRIATE SERVICE SHALL BE PLACED BETWEEN THE ANGLE METER STOP AND METER CHECK VALVE. DRILL TWO 3/16" HOLES IN JUMPER.
 - SMALLER METER SIZES REDUCED IN BETWEEN ANGLE METER STOP AND METER.
 - DO NOT BURY METER ANGLE STOP BEFORE INSTALLING METER BOX.
 - WATER SERVICE TAIL PIECE SHALL BE EXTENDED TO THE PROPERTY LINE OR EASEMENT LINE, WHICHEVER IS FURTHER, AND MARKED WITH AN 8' TREATED 2x4 INSIDE AN 8' STEEL STUD, PAINTED BLUE, EXTENDING 36-48" ABOVE FINISHED GROUND SURFACE. MARKER BOARD TO BE CUT OFF FLUSH WITH THE GROUND IN ALREADY ESTABLISHED AREAS.
 - WATER METER BOX TO HAVE 18" CLEARANCE FROM ANY CONCRETE OR ASPHALT DRIVEWAY, SIDEWALK, ETC. THE ISOLATION VALVE SHALL BE NO LESS THAN 36" FROM THE METER BOX.
 - WATER METER BOX SHALL HAVE A WHITE RESIN INTERNAL LINER.
 - BOXES ARE TO BE SET PERPENDICULAR TO THE STREET.
 - TRACER WIRE SHALL BE WRAPPED AROUND PIPE FOR LENGTH OF SERVICE TO MARKER POST.

2" SERVICE INSTALLATION		PUBLIC WORKS ENGINEERING	
		DATE: TBD	
		DWG: W-3	

W-3 2" SERVICE INSTALLATION
SCALE: NTS

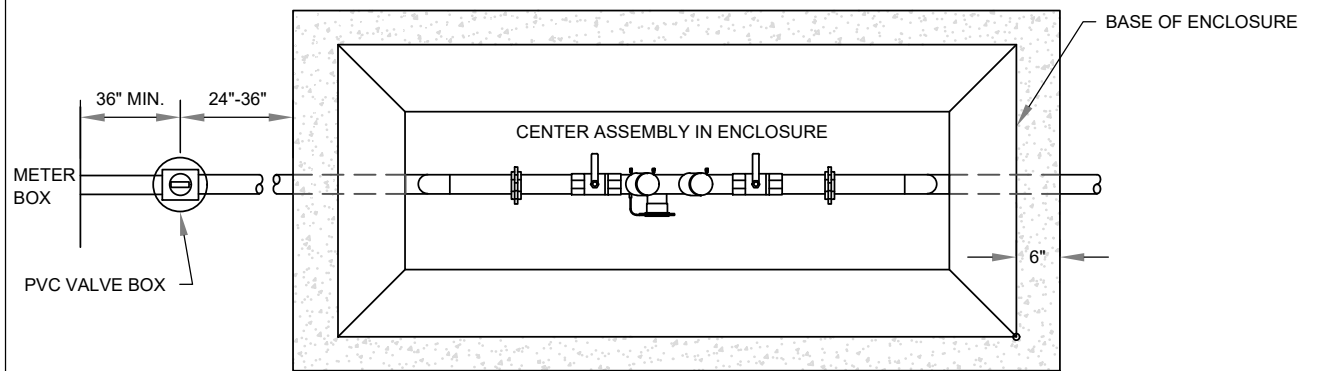
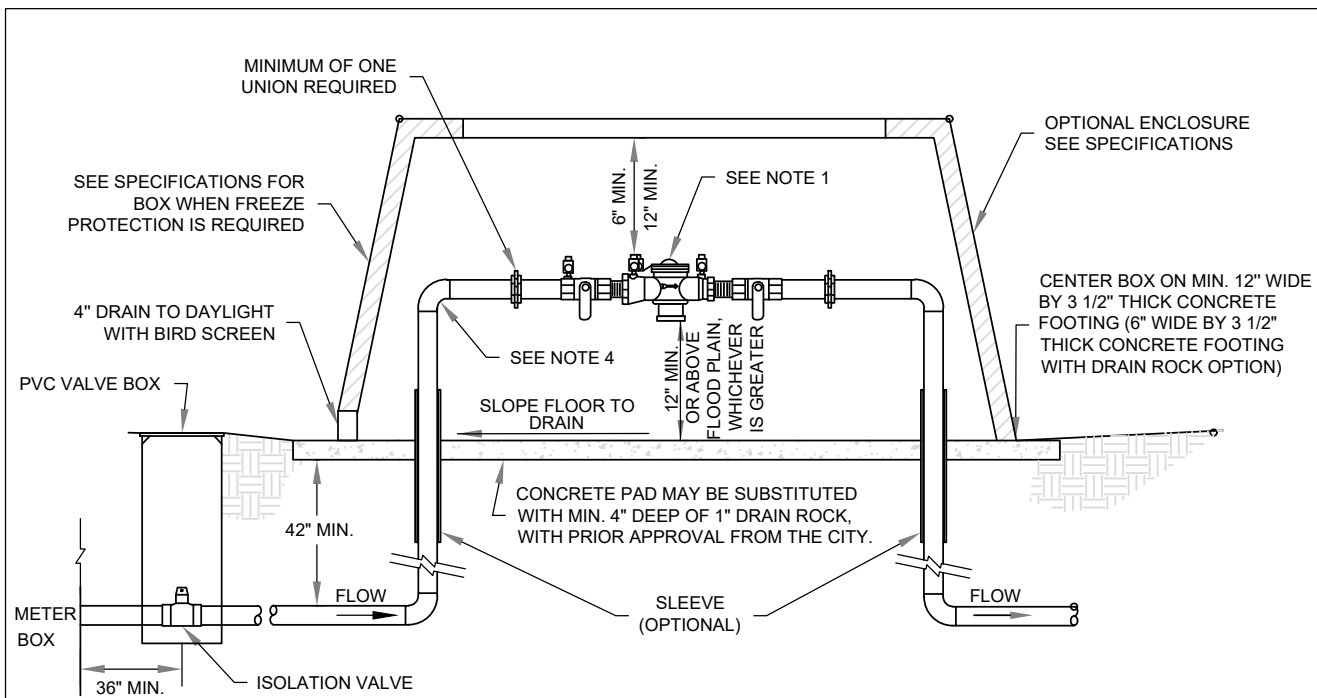


Plot Date: 9/7/2022 1:44 AM Plotted By: Michael Harvey
Date Created: 8/12/2022 JUB.COM\CENTRAL\CLIENTS\OR\UMATILLA\CITY\PROJECT\33-21-003_KIWANIS\ALUSCONCEPT\DESIGN\CAD\SHEET\33-21-003_C-501.DWG

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NO.	REVISION	DESCRIPTION	BY	DATE



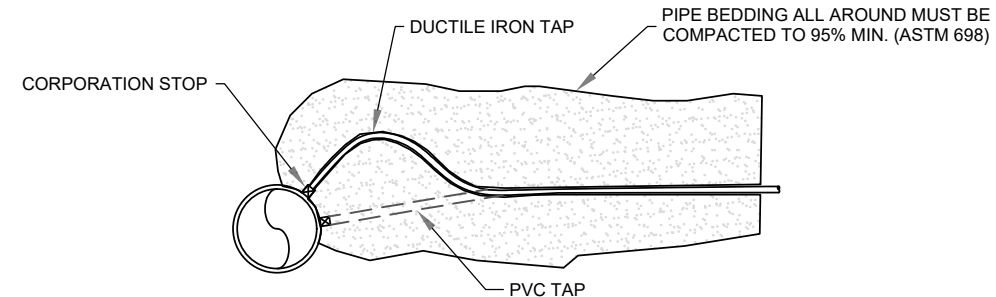
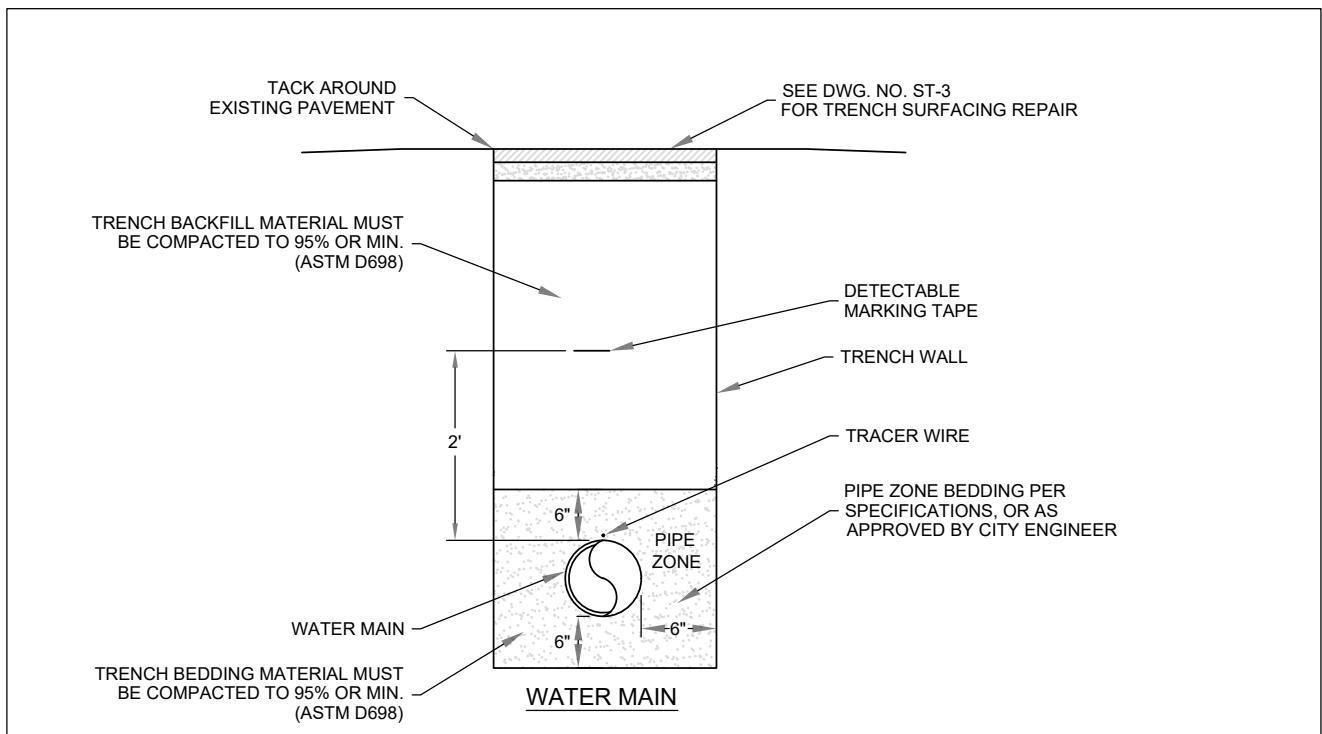
RPBA INSTALLATION
 FOR REDUCED PRESSURE BACKFLOW ASSEMBLY
 FOR ASSEMBLIES 3/4" TO 2"

- NOTES:**
- MUST BE ON THE LATEST USFCCHR LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES.
 - MUST BE INSTALLED ABOVE GROUND, MINIMUM 12" CLEARANCE ABOVE THE FLOOD PLAIN AND IN THE ORIENTATION AS APPROVED BY USC TESTING LAB AND ACCEPTED BY DEPT OF HEALTH. THE ENCLOSURE MUST ALLOW FOR ROUTINE MAINTENANCE AND TESTING (REMOVABLE ENCLOSURE OR OPENS ON THE SIDE FOR ACCESS TO TEST COCKS).
 - ASSEMBLY INSTALLATIONS ABOVE GROUND REQUIRE COPPER OR GALVANIZED PIPE WITH AT LEAST ONE UNION. OPTIONAL PVC SLEEVE TO EXTEND 6" ABOVE AND 12" BELOW CONCRETE PAD TO ALLOW FOR SETTLEMENT OF PAD.
 - FREEZE PROTECTION IS THE RESPONSIBILITY OF THE OWNER.
 - THE BACKFLOW ASSEMBLY IS TO BE TESTED AT THE TIME OF INSTALLATION BY A CERTIFIED TESTER APPROVED BY THE CITY UNLESS PRE-APPROVED BY THE CROSS CONNECTION SPECIALIST.
 - FOR PREMISES ISOLATION, THE ENCLOSURE MUST HAVE A MINIMUM 3 1/2" CONCRETE PAD.
 - THESE BACKFLOW PREVENTION ASSEMBLY INSTALLATION STANDARDS REFLECT MINIMUM REQUIREMENTS TO COMPLY WITH OREGON HEALTH AUTHORITY REGULATIONS AND UNIFORM PLUMBING CODE. UNAPPROVED DEVIATION MAY RESULT IN THE CITY REJECTING THE INSTALLATION AND THE CERTIFICATE OF OCCUPANCY AS WELL. ALL REQUESTS FOR DEVIATION TO THESE STANDARDS MUST BE SUBMITTED IN WRITING AND APPROVED BY THE CITY'S CROSS-CONNECTION SPECIALIST.

RPBA INSTALLATION 3/4" TO 2"

PUBLIC WORKS ENGINEERING	
DATE:	TBD
DWG:	W-17

W-17 RPBA INSTALLATION 3/4" TO 2"
 SCALE: NTS



WATER SERVICE

- NOTES:**
- THIS STANDARD IS ACCEPTABLE FOR DEPTHS UP TO 14 FEET. PIPES THAT EXCEED 14 FEET SHALL CONFORM TO MANUFACTURER'S RECOMMENDATIONS FOR BEDDING.
 - TRENCH SHALL BE EXCAVATED TO ACCOMMODATE PIPE BELL.

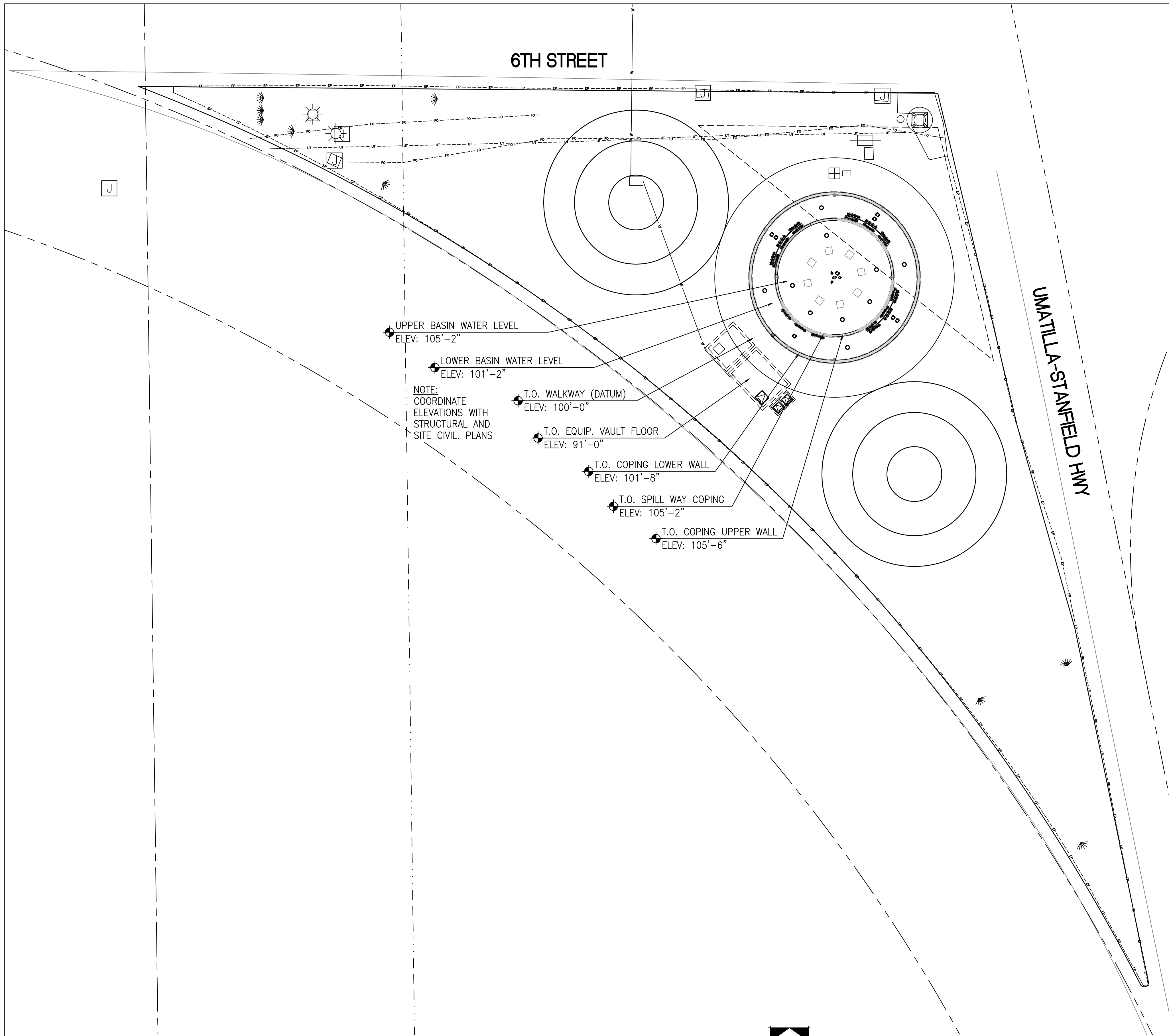
TYPICAL WATER TRENCH SECTION

PUBLIC WORKS ENGINEERING	
DATE:	TBD
DWG:	W-20

W-20 TYPICAL WATER TRENCH SECTION
 SCALE: NTS



Plot Date: 9/7/2022 1:44 AM Plotted By: Michael Harvey
 Date Created: 12/22/22 JUB.COM/CENTRAL/Clients/SR/UMATILLA/CITY/PROJECT/33-21-003_KIWANIS/AL/SCONCEPT/DESIGN/CAD/SHEET/33-21-003_C-502.DWG



- UPPER BASIN WATER LEVEL
ELEV: 105'-2"
- LOWER BASIN WATER LEVEL
ELEV: 101'-2"
- NOTE:
COORDINATE
ELEVATIONS WITH
STRUCTURAL AND
SITE CIVIL PLANS
- T.O. WALKWAY (DATUM)
ELEV: 100'-0"
- T.O. EQUIP. VAULT FLOOR
ELEV: 91'-0"
- T.O. COPING LOWER WALL
ELEV: 101'-8"
- T.O. SPILL WAY COPING
ELEV: 105'-2"
- T.O. COPING UPPER WALL
ELEV: 105'-6"

OVERALL WATER FEATURE LAYOUT
SCALE: 1/16"=1'-0"



FOUNTAIN GENERAL ITEMS:

1. THE CONTRACTOR SHALL VERIFY THE LOCATION OF CABLES, CONDUITS, PIPES, SEWERS AND OTHER UNDERGROUND UTILITIES AND SHALL TAKE PROPER PRECAUTIONS TO AVOID DAMAGE TO SUCH UTILITIES. IN THE EVENT OF A CONFLICT OR DISCREPANCIES, THE GENERAL CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER AND REQUEST FOR NECESSARY RELOCATION. FAILURE TO FOLLOW THIS PROCEDURE PLACES UPON THE GENERAL CONTRACTOR THE RESPONSIBILITY OF MAKING REPAIR OR REPLACE SUCH DAMAGE AT HIS OWN EXPENSE.
2. CONTRACTOR TO PROVIDE NECESSARY ELECTRICAL AND MECHANICAL WORK IN FOUNTAIN AREAS AND EQUIPMENT ROOM INCLUDING: AREA LIGHTING, VENTILATION, DRAINAGE, ETC. ACCORDING TO LOCAL CODES.
3. ALL SURFACE WATER SHALL DRAIN AWAY FROM THE FOUNTAIN.
4. CONTRACTOR IS RESPONSIBLE FOR FILLING THE FOUNTAIN WITH WATER.
5. VAULT SYSTEMS USED FOR THE WATER FEATURE EQUIPMENT SHALL BE DESIGNED TO PREVENT CONDENSATION AND MOISTURE BUILD-UP. DESIGN WITH AIR CIRCULATION VENTS AND/OR FANS AS NEEDED.
6. CONTRACTOR SHALL PROVIDE THE OWNER WITH LITERATURE ON ALL EQUIPMENT AND FITTINGS AS PART OF THE REQUIRED O. & M. MANUAL. THIS INCLUDES PUMPS, LIGHTS, ETC.
7. CONTRACTOR SHALL PROVIDE INSTRUCTION ON OPERATION AND MAINTENANCE (O. & M.) AS PART OF THE CLOSEOUT REQUIREMENTS.
8. CONTRACTOR SHALL INSURE THAT THE FOUNTAIN CONSTRUCTION COMPLIES WITH ALL LOCAL AND STATE CODES.
9. CONTRACTOR SHALL PROVIDE ACCURATE, DIMENSIONED, AND COLOR CODED AS-BUILT DRAWINGS AS PART OF SUBSTANTIAL COMPLETION.

FOUNTAIN MECHANICAL AND PLUMBING ITEMS:

ITEMS PROVIDED AND INSTALLED BY MECHANICAL/PLUMBING CONTRACTOR:

1. VAULTS CONTAINING EQUIPMENT ROOMS MUST BE VENTILATED IN ACCORDANCE WITH AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS STANDARD 62.1-2004.
2. PROVIDE REQUIRED AIR FOR VENTILATION AND AIR FOR COMBUSTION IN EQUIPMENT ROOM AT MINIMUM ONE SQUARE INCH PER 1000 INPUT BTU HIGH AND ONE SQUARE INCH LOW PER HEATER MANUFACTURERS SPECIFICATION AND LOCAL CODES.
3. PROVIDE REQUIRED FUEL CONNECTIONS, REGULATORS, GAS VALVES, AND GAS LINE VENTS FOR HEATER PER MANUFACTURERS SPECIFICATIONS AND LOCAL CODES.
4. PROVIDE REQUIRED DUCT WORK AND/OR VENT PIPING AND CONNECTIONS FOR HEATER PER MANUFACTURERS SPECIFICATIONS AND LOCAL CODES.
5. PROVIDE FLOOR DRAINS AND SEWER CONNECTIONS AS REQUIRED BY LOCAL CODES AND AS SHOWN ON DRAWINGS (I.E. IN BOTTOM OF BACKWASH SLUMP, OTHER PITS).
6. PROVIDE CULINARY WATER LINE WITH SHUT-OFF VALVES TO LOCATIONS SHOWN ON DRAWINGS OR AS DIRECTED BY THE ENGINEER.

FOUNTAIN ELECTRICAL ITEMS:

GENERAL:

1. "N.E.C." IN THESE NOTES AND ON THESE PLANS REFERS TO 2020 NATIONAL ELECTRIC CODE (NFPA 70), ARTICLE 680. WATER DESIGN INC. TAKES NO EXCEPTION TO THE USE OF CURRENT ADOPTED ELECTRICAL CODE, IF PERMITTED BY LOCAL BUILDING AUTHORITY, OR AS SPECIFIED BY ELECTRICAL ENGINEER. ALL INSTALLATION OF THE ELECTRICAL EQUIPMENT SHALL COMPLY WITH THE APPLICABLE PROVISIONS SET FORTH IN THE LOCAL CURRENT ADOPTED ELECTRICAL CODE.

ITEMS PROVIDED BY ELECTRICAL CONTRACTOR:

(THE FOLLOWING ITEMS SHALL BE ENGINEERED AND SPECIFIED BY AN ELECTRICAL ENGINEER LICENSED IN THE STATE OF OREGON AND PROVIDED BY A LICENSED ELECTRICAL CONTRACTOR. THE ELECTRICAL TRADES' RESPONSIBILITIES ARE NOT LIMITED TO THESE ITEMS.)

2. PROVIDE ELECTRICAL SERVICE AND CONNECTIONS TO ALL PUMP MOTORS, CIRCUIT BREAKERS, DISCONNECTS, PANELS, RELAYS, CONTROLLERS, J-BOXES, LIGHTS, AND OTHER FOUNTAIN EQUIPMENT IN EQUIPMENT ROOM.
3. PROVIDE BONDING AND GROUNDING OF FOUNTAIN MOTORS AND OTHER EQUIPMENT IN THE EQUIPMENT ROOM (INCLUDING G.F.C.I. PROTECTION ON ALL FOUNTAIN EQUIPMENT). IN ADDITION TO THE G.F.C.I. A FUSE SYSTEM IS REQUIRED ON THE CIRCUITS.
4. FOUNTAIN EQUIPMENT INTERLOCKING: INTERLOCK THE CIRCULATION PUMP WITH ALL CHEMICAL FEEDERS.
5. NO OUTLETS WITHIN 6 FT. OF FOUNTAIN. ALL OUTLETS 6 FT. TO 20 FT. FROM FOUNTAIN TO BE G.F.C.I. PROTECTED. G.F.C.I. PROTECTION MUST BE PROVIDED IN ACCORDANCE WITH THE CURRENT ADOPTED EDITION OF THE NATIONAL ELECTRIC CODE (N.E.C.). IN ADDITION, ENTIRE INSTALLATION SHALL BE IN COMPLIANCE WITH LOCAL CODES FOR LIGHTING CIRCUITS, MOTORS, OUTLETS, AND ELECTRICAL CIRCUITS IN AND AROUND THE FOUNTAIN AREA OR SERVING THE FOUNTAIN.
6. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT AND WIRE FROM PANEL TO LIGHTS' J-BOX AND SHALL MAKE CONNECTIONS. SEE UNDERWATER LIGHT AND J-BOX DETAILS. SEE ELECTRICAL PLAN. ALL ELECTRICAL WORK, GROUNDING, AND BONDING SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (N.E.C.) ARTICLE 680.
7. IF APPLICABLE, PROVIDE LIGHT SWITCHES FOR UNDERWATER LIGHTS IN A LOCATION WHERE THEY ARE NOT ACCESSIBLE BY THE PUBLIC. (SWITCH LOCATION DETERMINED BY OWNER/ARCHITECT).
8. ELECTRICAL WIRE SHALL BE SIZED APPROPRIATELY FOR VOLTAGE DROP OVER ITS LENGTH. USE ONLY WATER RESISTANT, STRANDED COPPER WIRE.
9. ELECTRICAL SYSTEMS SHALL COMPLY WITH NEC ARTICLE 680 WHERE POSSIBLE AND MEET LOCAL CODES TO INSURE A SAFE ELECTRICAL INSTALLATION.

ITEMS PROVIDED AND INSTALLED BY FOUNTAIN CONTRACTOR:

10. FOUNTAIN CONTRACTOR SHALL BE RESPONSIBLE FOR BONDING OF ALL EQUIPMENT AND METAL ITEMS IN OR NEAR THE FOUNTAIN, INCLUDING: LIGHTS, NICHES, J-BOXES, METAL FITTINGS, METAL PIPING, ETC. WITH A #8 BARE GROUND WIRE. ALL BONDING SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ARTICLE 680.
11. FOUNTAIN CONTRACTOR TO PROVIDE UNDERWATER LIGHTS WITH SUFFICIENT LENGTH OF CORD TO REACH FROM EACH UNDERWATER LIGHT TO ITS J-BOX AND TO ALLOW FOR LIGHT TO SAFELY REMOVED FOR RE-LAMPING. SEE JUNCTION BOX DETAIL. SEE ELECTRICAL PLANS FOR J-BOX LOCATIONS.
12. PROTECT FIXTURES WITH APPROPRIATE LENS GUARDS. PROVIDE SUPPORT FOR FREESTANDING FIXTURES WHERE WATER MOVEMENT OCCURS.
13. IF LIGHTS ARE LINE VOLTAGE, PROVIDE LIGHTS WITH THERMAL OVERLOAD PROTECTION AND LOW-WATER SHUT-OFF.

CLEANING EQUIPMENT

CONTRACTOR TO FURNISH THE FOLLOWING TO THE OWNER:

- ONE - 24" VACUUM HEAD
- ONE - VACUUM HOSE 1 1/2" (LENGTH AS REQ'D.)
- ONE - 12' VACUUM EXTENSION HANDLE
- ONE - WALL BRUSH
- ONE - LEAF SKIMMER
- ONE - 16' HANDLE EXTENSION
- ONE - TEST KIT - (WHICH INCLUDES A TEST KIT FOR CYANURIC ACID)

EVACUATION NOTE:

FOUNTAIN EVACUATION (EMPTY FOUNTAIN) BY CITY USING A TANK TRUCK.



J-U-B ENGINEERS, INC.



6740 S. 1300 E. Suite 110
Salt Lake City, UT 84121
Phone: (801) 261-4009
Fax: (801) 261-4089



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NO.	REVISION	DESCRIPTION	BY	DATE

KIWANIS FALLS ENTRY MONUMENT/FOUNTAIN
UMATILLA, OREGON

FOUNTAIN
OVERALL LAYOUT

FILE: UMATILLA - SP100
WDI PROJ. #: 22-705FS
DRAWN BY: BH
DESIGN BY: BA
CHECKED BY: BA

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

PRINTED 2022-09-06

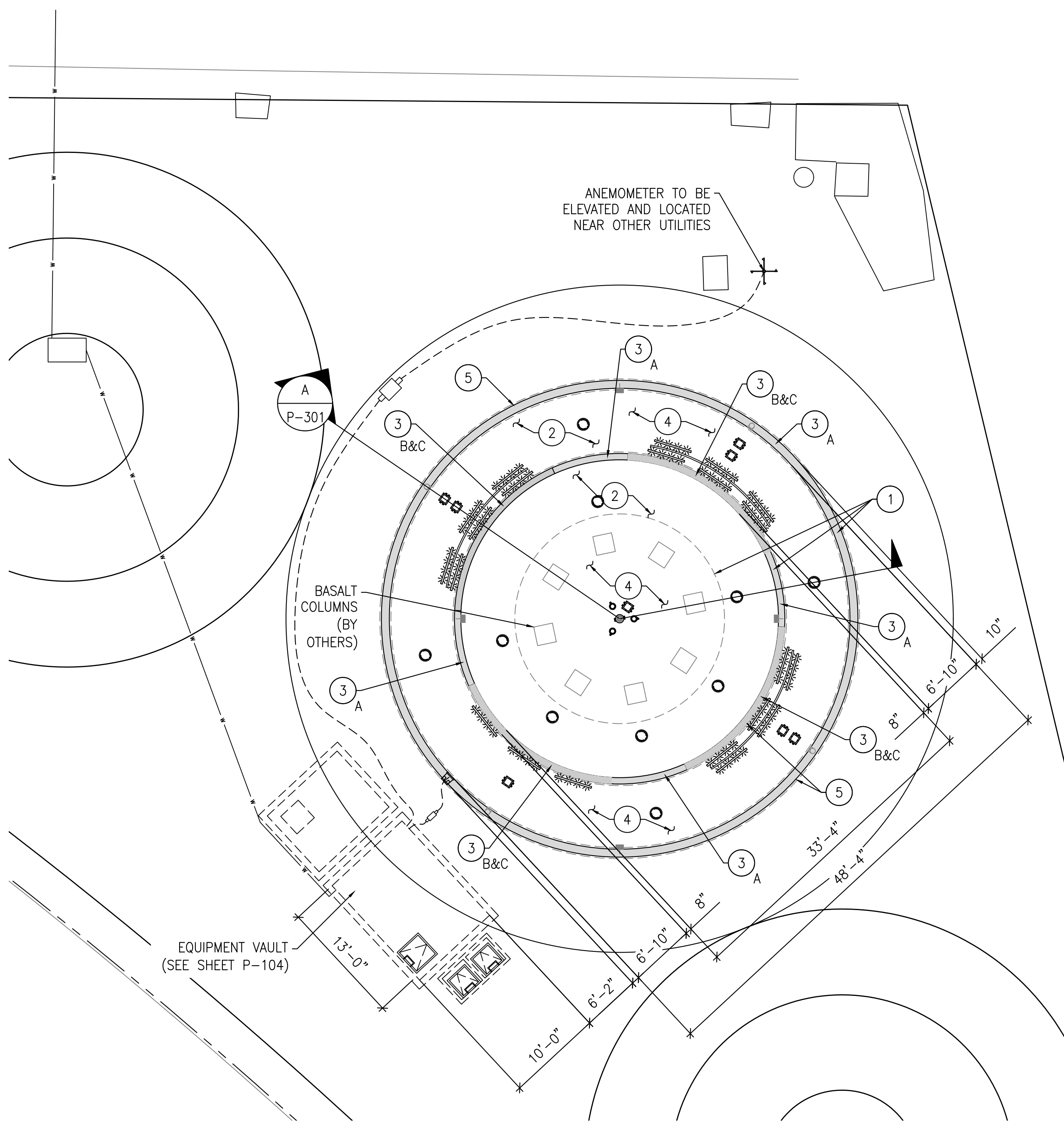
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WATER FEATURE PLAN
SCALE: 1/8"=1'-0"

MATERIAL SCHEDULE

MARK	DESCRIPTION	QUANTITY	DETAIL	REQUIREMENT
1	STRUCTURE (SEE STRUCTURAL PLANS)	BY OTHERS	(A) P-301	POURED-IN-PLACE REINFORCED CONCRETE WITH XYPEX REMARKS: CONCRETE SHALL CONTAIN XYPEX CRYSTALLINE WATERPROOFING ADMIXTURE (OR EQUAL). SEE STRUCTURAL PLANS AND LANDSCAPE ARCHITECT PLANS.
2	SURFACE-APPLIED WATERPROOFING	ENTIRE FOUNTAIN INTERIOR	(A) P-301	MAPEI MAPELASTIC AQUADEFENSE REMARKS: APPLY TO ALL FOUNTAIN INTERIOR CONCRETE. PER MANUFACTURER'S RECOMMENDATIONS OVER PROPERLY PREPARED CONCRETE INCLUDING JOINT REINFORCING AS REQUIRED AT CORNERS AND JOINTS. SEE ITEM #1 ABOVE FOR CONCRETE WATERPROOFING ADMIXTURE REQUIREMENTS.
3	COPING (DRY)	FOUNTAIN PERIMETER	(A) P-301	NATURAL STONE REMARKS: PROVIDE J-U-B PLANS FOR REQUIREMENTS. FINISH SHALL BE FROST PROOF, WITH LOW ABSORPTION.
3	COPING (WET)	AT SPILL WAYS	(A) P-301	NATURAL STONE REMARKS: SEE J-U-B PLANS FOR REQUIREMENTS. FINISH SHALL BE FROST PROOF, WITH LOW ABSORPTION.
3	MORTAR AND GROUT	PER PLAN	N/A	MAPEI KERAPOXY MORTAR AND ULTRACOLOR PLUS MAX GROUT, WITH AQURON MGS ADDITIVE REMARKS: PROVIDE AQURON MGS ADDITIVE PER MANUFACTURER'S REQUIREMENTS TO MORTAR AND GROUT. MORTAR AND GROUT SHALL BE COMPATIBLE WITH WATERPROOFING SYSTEM.
4	INTERIOR FINISH	ENTIRE INTERIOR	(A) P-301	TILE REMARKS: PROVIDE FROST-PROOF CERAMIC TILE FINISH. FINISH SHALL BE WATERPROOF AND FREE FROM DEFECTS. TILE AT WATERLINE SHALL BE GLAZED. ALL OTHER INTERIOR TILE SHALL BE NON-SLIP UNGLAZED. FINISH COLOR SHALL BE BLACK OR DARK IN COLOR.
5	EXTERIOR FINISH	FOUNTAIN EXTERIOR WALL	(A) P-301	STACKED STONE REMARKS: SEE J-U-B PLANS FOR REQUIREMENTS. FINISH SHALL BE FROST PROOF, WITH LOW ABSORPTION.

FITTING LEGEND

SEE FITTING SCHEDULES SHEETS SP300

◆	DYNAMITE BLAST NOZZLE	○	FLOOR INLET
○	SUCTION OUTLET	◻	SKIMMER
■	VACUUM FITTING		

WATER FEATURE DATA

OVERALL SIZE:	48'-4" DIAMETER
WATER DEPTH (UPPER):	1'-6"
WATER DEPTH (LOWER):	2'-2"
SHAPE:	ROUND
CONST. TYPE:	CONCRETE WITH ADMIX
UPPER BASIN AREA:	873 SQ.FT.
LOWER BASIN AREA:	890 SQ.FT.
TOTAL AREA:	1,763 SQ.FT.
WEIR LENGTH: (TYP OF 3)	19'-1"
TOTAL WEIR LENGTH:	76'-4"
VOLUME:	24,200 GALLONS
MIN. CIRC. FLOW:	68 GPM
MAX. CIRC. FLOW:	100 GPM
TURNOVER:	6 HOURS 0 MIN.
SPILL WAY FLOW:	~800 GPM

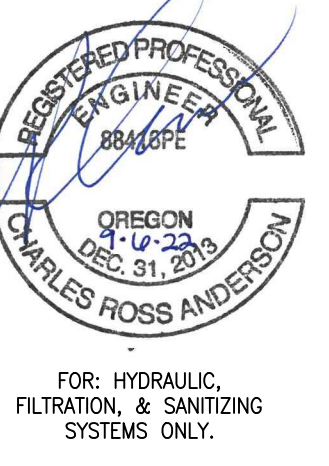
COMPONENT SCHEDULE

MARK	DESCRIPTION	QUANTITY	DETAIL	REQUIREMENT
*****	UNDERWATER COLOR LED LIGHTS	9	(1) P-507	CRYSTAL FOUNTAIN LINEAR LIGHT 4' #NL300006 RBGACL REMARKS: LED STAND MOUNT WET/DRY LED LIGHT FIXTURE WITH CUSTOM STAINLESS STEEL STAND. LOW VOLTAGE PROVIDE 115-25 VDC, 15 WATT PER LINEAR FOOT. PROVIDE TUNABLE WHITE LED LIGHTS. FIXTURE SHALL BE INSTALLED BY ELECTRICAL CONTRACTOR WITH A GROUND FAULT INTERRUPTER. PROVIDE LIGHT WITH 9 FEET OF 18-55TW TYPE SUBMERSIBLE CORD, VERIFY REQUIRED LENGTH BEFORE ORDERING. SEE UNDERWATER LIGHT JUNCTION BOX REMARKS BELOW. PROVIDE DMX/RDM CONTROLLER (SEE WF400).
*****	UNDERWATER COLOR LED LIGHTS BEHIND SIGNS	4 PER SIGN 12 TOTAL	(1) P-507	CRYSTAL FOUNTAIN LINEAR LIGHT 4' #NL300006 RBGACL REMARKS: PROVIDE ADDITIONAL LIGHTS BEHIND SIGNS WITH ALL APPURTENANCES (J-BOX, STUB-UPS, CORD SEALS, POTTING, CONTROLS, ETC...).
○	LIGHTS AT DYNAMITE BLAST	3	(1) P-507	CRYSTAL FOUNTAINS LED360 SERIES #LED360006 REMARKS: UNDERWATER FLOOR MOUNTED LIGHT FIXTURE. FURNISH WITH R.B.G.A.C.L. LED (12-24VDC/68W) LIGHT. CAST BRONZE FIXTURE. PROVIDE WITH 18 DEGREE SPOT OPTIC. PROVIDE 9' LENGTH OF SUBMERSIBLE 16/5 STW TYPE CABLE WITH QUICK DISCONNECT. ALSO SEE UNDERWATER LIGHT JUNCTION BOX REMARKS BELOW. INSTALL WITH ALL TAMPERPROOF SCREWS AND FASTENERS.
□	CONDUIT-MOUNTED UNDERWATER LIGHT JUNCTION BOX	1 BY DYNAMITE BLAST 1 EA. AT SIGNS 1 EA. AT WATERFALLS 3 TOTAL	(2) P-507	CRYSTAL FOUNTAINS #EBJ-208 REMARKS: CONDUIT MOUNTED JUNCTION BOX PROVIDED BY FOUNTAIN CONTRACTOR. PROVIDE COMPLETE WITH ALL NECESSARY SEALS, STUB-UP FITTINGS, ETC. FOUNTAIN CONTRACTOR SHALL PROVIDE AND USE BRASS COMPRESSION CORD SEALS, CRYSTAL FOUNTAIN EGS SERIES. CONDUIT, WIRING AND CONNECTIONS BY ELECTRICAL CONTRACTOR PER NEC ARTICLE 680. JUNCTION BOXES SHALL BE FILLED WITH AN APPROVED RE-ENTERABLE ENCAPSULANT POTTING COMPOUND TO PREVENT MOISTURE FROM ENTERING OR PASSING THROUGH THE BOX. ALL WIRE AND CONDUIT FROM POWER SUPPLY/TRANSFORMERS TO J-BOXES AND LIGHTS BY ELECTRICAL CONTRACTOR.
□	WATER LEVEL SENSOR HOUSING	1	(6) P-507	CRYSTAL FOUNTAIN ESP-200 REMARKS: FOUNTAIN CONTRACTOR SHALL PROVIDE AND INSTALL HOUSING IN FOUNTAIN WALL. EXTEND SENSOR CONDUIT AND WIRE TO INTERMEDIATE JUNCTION BOX (SEE INTERMEDIATE JUNCTION BOX BELOW).
□	WATER LEVEL SENSOR DECK MOUNTED INTERMEDIATE JUNCTION BOX		(6) P-507	CRYSTAL FOUNTAIN #EBJ202 REMARKS: FOUNTAIN CONTRACTOR SHALL PROVIDE JUNCTION BOX FOR INSTALLATION IN PLANTER OR WALKWAY. FIELD LOCATE J-BOX TO ACCOMMODATE THE LENGTH OF THE WIRING IN A LOCATION PER THE DIRECTION OF LANDSCAPE ARCHITECT. CONDUIT, WIRING AND CONNECTIONS BY ELECTRICAL CONTRACTOR PER NEC ARTICLE 680. VERIFY LOCATION OF J-BOX WITH LANDSCAPE ARCHITECT. JUNCTION BOX SHALL BE FILLED WITH AN APPROVED RE-ENTERABLE ENCAPSULANT POTTING COMPOUND TO PREVENT MOISTURE FROM ENTERING OR PASSING THROUGH THE BOX. SENSOR COMES INTEGRAL WITH A 30 FOOT LONG CABLE. INTERMEDIATE JUNCTION BOX SHALL BE PLACED TO ACCOMMODATE THIS DISTANCE.
+	WIND SPEED SENSOR	1	(2) P-507	CRYSTAL FOUNTAINS #FCW-A20 REMARKS: WIND SPEED SENSOR COMES WITH AN INTEGRAL 300 FOOT CABLE. LOCATE IN AN AREA THAT EXPERIENCES THE SAME WIND CONDITIONS AS THE WATER FEATURE. VERIFY WITH LANDSCAPE ARCHITECT FOR LOCATION. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL CONDUIT AND WIRING TO INTERMEDIATE JUNCTION BOX AND TO EQUIPMENT ROOM FOR INTERLOCKING WITH THE FOUNTAIN CONTROL PANEL. SEE FOUNTAIN CONTROLLER REMARKS ON SHEET WF400.
□	WIND SPEED SENSOR INTERMEDIATE JUNCTION BOX		(P-507)	CRYSTAL FOUNTAINS #EBN-208 REMARKS: PROVIDE JUNCTION BOX WITH CONDUIT ENTRY FOR WIND SENSOR SENSOR WIRING. INSTALL PER NEC ARTICLE 680. VERIFY LOCATION OF J-BOX WITH ARCHITECT. JUNCTION BOX SHALL BE FILLED WITH AN APPROVED RE-ENTERABLE POTTING COMPOUND.



J-U-B ENGINEERS, INC.

Water Design Inc
6740 S. 1300 E. Suite 10
Salt Lake City, UT 84121
Phone: (801) 261-4009
Fax: (801) 261-4089



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NO.	REVISION	DESCRIPTION	DATE

KIWANIS FALLS ENTRY MONUMENT/FOUNTAIN
UMATILLA, OREGON
FOUNTAIN PLAN

FILE: UMATILLA - SP200
WDI PROJ. #: 22-705FS
DRAWN BY: BH
DESIGN BY: BA
CHECKED BY: BA



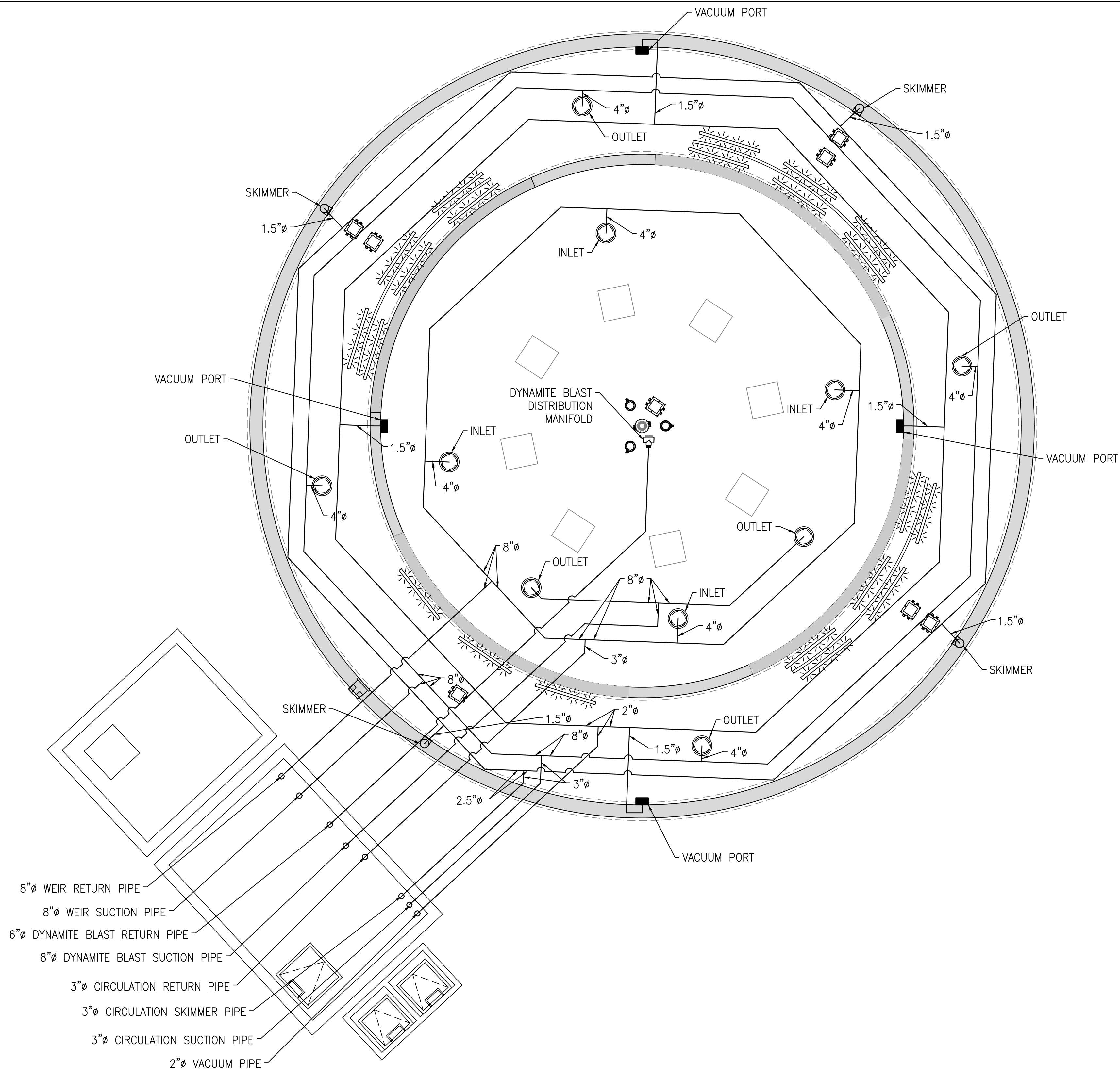
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- 8"Ø WEIR RETURN PIPE
- 8"Ø WEIR SUCTION PIPE
- 6"Ø DYNAMITE BLAST RETURN PIPE
- 8"Ø DYNAMITE BLAST SUCTION PIPE
- 3"Ø CIRCULATION RETURN PIPE
- 3"Ø CIRCULATION SKIMMER PIPE
- 3"Ø CIRCULATION SUCTION PIPE
- 2"Ø VACUUM PIPE

FEATURE PIPING PLAN
SCALE: 1/4"=1'-0"

FITTING SCHEDULE				
MARK	DESCRIPTION	QUANTITY	DETAIL	REQUIREMENT
○	SUCTION OUTLET FITTING ASSEMBLY	2 UPPER BASIN 4 LOWER BASIN 6 TOTAL	4 P-307	CRYSTAL FOUNTAIN DSS130150
REMARKS: STAINLESS STEEL SUMP WITH 4" DIA N.P.T. 13" DIA. DIVERTER PLATE AND FASTENERS TO BE STAINLESS STEEL. THICKEN FLOOR AT INLET SUMP AS NECESSARY. BOND FITTING PER N.E.C. ARTICLE 680.				
○	RETURN INLET SUMP AND PLATE	4 UPPER BASIN	3 P-307	CRYSTAL FOUNTAIN DSS130150
REMARKS: STAINLESS STEEL SUMP WITH 4" DIA N.P.T. 13" DIA. DIVERTER PLATE AND FASTENERS TO BE STAINLESS STEEL. THICKEN FLOOR AT INLET SUMP AS NECESSARY. BOND FITTING PER N.E.C. ARTICLE 680.				
□	FRONT ACCESS SKIMMER	4	5 P-307	CRYSTAL FOUNTAINS AWS151 PROVIDE BLACK BODY
REMARKS: EXTRUDED PLASTIC BODY WITH 1.5"Ø N.P.T. CONNECTION. PROVIDE WATER STOP ON PIPE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.				
■	VACUUM FITTING	4	3 P-307	CRYSTAL FOUNTAINS #AWC150
REMARKS: 1 1/2"Ø WALL FITTING WITH BRONZE PLUG.				
⊙	DYNAMITE BLAST FEATURE	1	1 P-307	CRYSTAL FOUNTAINS DYNAMITE BLAST STAND MOUNTED #NXC103
REMARKS: NOZZLE PROVIDED COMPLETE WITH STAINLESS STEEL LEGS, AND INLET MANIFOLD. PROGRAM PUMP FOR DISPLAY MODE WITH A FLOW NOT EXCEEDING 230 GPM. INSTALL FEATURE PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE BONDING AS REQUIRED PER NEC 680.				

- FOUNTAIN PIPING NOTES:**
- ALL PIPING SHALL BE NSF APPROVED (ANSI/NSF 14), SCHEDULE 40 PVC (UNLESS OTHERWISE NOTED). FLEX PIPING AND HEAT BENDING RIGID PIPING IS NOT ALLOWED AS PART OF THIS DESIGN.
 - ALL PIPING SHALL BE IN ACCORDANCE WITH THE OREGON STATE PLUMBING CODE, THE A.S.T.M. DESIGNATION NUMBER D-1785, AND THE NSF SEAL FOR POTABLE WATER.
 - ALL BURIED PIPING SHALL BE PROPERLY SUPPORTED, PROTECTED AND INSTALLED IN ACCORDANCE WITH THE 2018 INTERNATIONAL PLUMBING CODE (IPC) SECTION 306 (TRENCHING, EXCAVATION AND BACKFILL), ASTM D2774-12 (UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPING), AND ASTM F1668-16 (CONSTRUCTION PROCEDURES FOR BURIED PLASTIC PIPE). ALSO SEE PROJECT SPECIFICATIONS FOR ADDITIONAL PIPE TRENCHING, EXCAVATION AND BACKFILL REQUIREMENTS.
 - FOUNTAIN CONTRACTOR SHALL MAKE EVERY EFFORT TO CURTAIL THE USE OF FITTINGS TO REDUCE HEAD.
 - PIPING SHALL BE INSTALLED WITHOUT AIR ENTRAPPING HIGH POINTS OR REVERSE SLOPES, I.E. ON DISCHARGE LINES, NO DESCENDING RUNS BEYOND HORIZONTAL OR ASCENDING RUNS; ON SUCTION LINES, NO DESCENDING RUNS BEYOND ASCENDING RUNS.
 - ALL UNDERGROUND PRESSURE AND SUCTION PIPING SHALL SLOPE A MINIMUM OF 1%.
 - THE TEE FEEDING FROM THE COMMON LINE BETWEEN THE SUCTION OUTLETS, TO THE PUMP(S) SHALL BE LOCATED APPROXIMATELY MIDWAY BETWEEN THE OUTLETS (ANSI/APSP-7).
 - PIPING SHALL BE INSTALLED TO PREVENT FREEZING. WINTERIZE PIPING DURING WINTER MONTHS WHEN WATER FEATURE IS NOT IN OPERATION.
 - ALL PIPING SHALL BE TESTED WITH AN INDUCED STATIC HYDRAULIC PRESSURE TEST AT: SYSTEM OPERATING PRESSURE (PER LOCAL CODES) OR MINIMUM 25 PSI FOR 24 HOURS, OR PER WRITTEN SPECIFICATIONS IF PROVIDED.
 - ALL DRAIN FITTINGS FLOW SHALL NOT EXCEED MANUFACTURER'S SPECIFIED CAPACITY (WITH REGARD TO ORIENTATION I.E. WALL OR FLOOR) WHEN 100% OF CIRCULATION AND/OR FEATURE FLOW RATE OF ASSOCIATED PIPING IS DIRECTED THROUGH SINGLE DRAIN FITTING.
 - MAIN DRAIN PIPING SHALL CARRY 100% OF ASSOCIATED FLOW RATE AT A VELOCITY NOT TO EXCEED 6' PER SECOND.
 - ALL PIPING DESIGNED FOR 6' PER SECOND MAXIMUM SUCTION, 10' PER SECOND MAXIMUM PRESSURE, AND 3' PER SECOND MAXIMUM GRAVITY.
 - VERIFY PIPE SIZES WITH THE EQUIPMENT ROOM PLAN AND SCHEMATIC. IF THERE ARE ANY DISCREPANCIES, REPORT THEM TO THE ARCHITECT/ENGINEER IMMEDIATELY.
 - FOUNTAIN CONTRACTOR SHALL COORDINATE ALL WORK WITH CIVIL, ELECTRICAL, AND STRUCTURAL DRAWINGS.
 - OVERALL PIPING IS SHOWN IN DIAGRAMMATIC FORM TO INDICATE WORK TO BE DONE RATHER THAN TO SHOW EXACT ROUTING & LOCATION. MAKE USE OF ALL DATA IN CONTRACT DOCUMENTS, VERIFY AGAINST DEVELOPED FIELD CONDITIONS, & INSTALL WORK IN AN ORDERLY ARRANGEMENT IN A MANNER TO OVERCOME STRUCTURAL, MECHANICAL & ELECTRICAL INTERFERENCE.

JUB
J-U-B ENGINEERS, INC.

Water Design Inc

6740 S. 1300 E. Suite 110
Salt Lake City, UT 84121
Phone: (801) 261-4009
Fax: (801) 261-4089

REGISTERED PROFESSIONAL ENGINEER
#8848PE
OREGON
DEC 31, 2015
CHARLES ROSS ANDERSON

FOR: HYDRAULIC, FILTRATION, & SANITIZING SYSTEMS ONLY.

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NO.	REVISION	DESCRIPTION	BY	DATE

KIWANIS FALLS ENTRY MONUMENT/FOUNTAIN
UMATILLA, OREGON

FOUNTAIN PIPING PLAN

FILE: UMATILLA - SP300
WDI PROJ. #: 22-705FS
DRAWN BY: BH
DESIGN BY: BA
CHECKED BY: BA

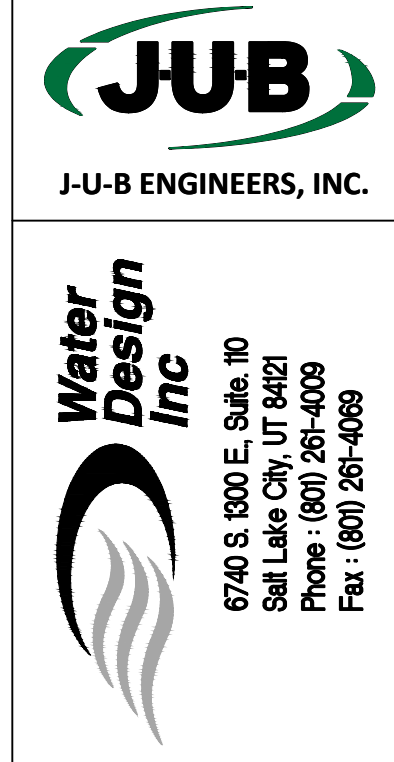
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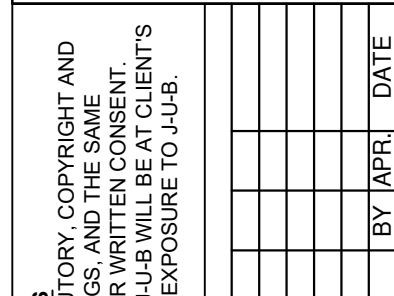
SHEET NUMBER:
P-103



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6740 S. 1300 E. Suite 10
Salt Lake City, UT 84121
Phone: (801) 261-4039
Fax: (801) 261-4089



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KIWANIS FALLS ENTRY MONUMENT/FOUNTAIN
UMATILLA, OREGON

FOUNTAIN EQUIPMENT ROOM PLAN

FILE: UMATILLA - SP400
WDI PROJ. #: 22-705FS
DRAWN BY: BH
DESIGN BY: BA
CHECKED BY: BA

ONE INCH = 10 FEET
AT FULL SIZE: IF NOT ONE INCH = 10 FEET, SCALE: AS INDICATED

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P-104

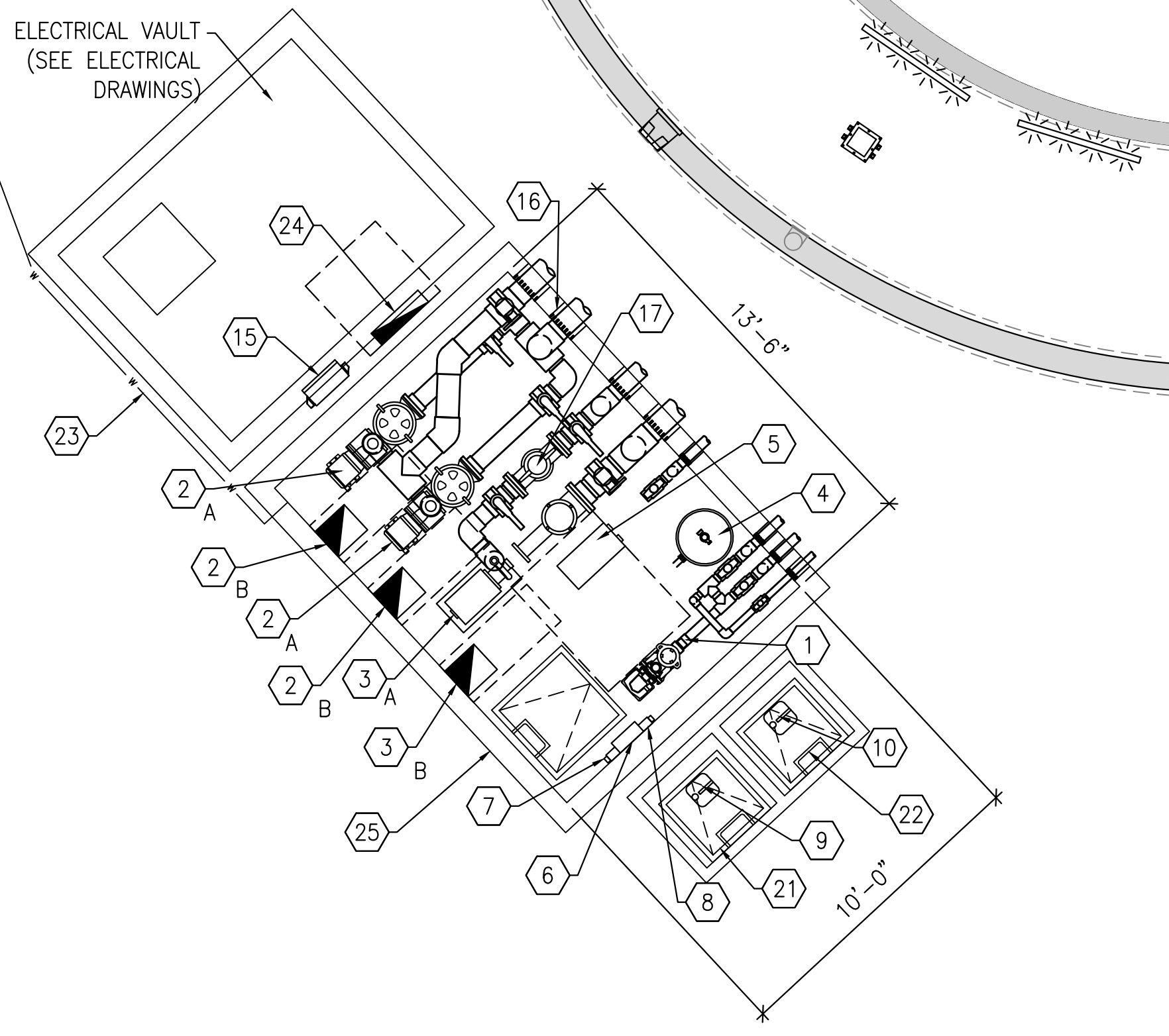
UTILITIES AND ITEMS PROVIDED BY OTHERS (ITEMS TO BE DESIGNED, ENGINEERED, AND SPECIFIED BY OTHER CONSULTANTS)				
MARK	DESCRIPTION	QUANTITY	DETAIL	REQUIREMENT
21	CHLORINE STORAGE VAULT	1	3 P-302	3' x 3' PRECAST
REMARKS: CHEMICAL VAULTS SHALL BE CONSTRUCTED OF CORROSIVE RESISTANT MATERIALS. PROVIDE A 30" x 30" ALUMINUM ACCESS HATCHES WITH STAINLESS STEEL HARDWARE. THE VAULT SHALL NOT HAVE A FLOOR DRAIN. PROVIDE IDENTIFICATION PLACARDS ON THE ENTRY DOOR TO THE STORAGE AREA AS REQUIRED BY THE NFPA 704.				
22	ACID STORAGE VAULT	1	3 P-302	3' x 3' PRECAST
REMARKS: CHEMICAL VAULTS SHALL BE CONSTRUCTED OF CORROSIVE RESISTANT MATERIALS. PROVIDE A 30" x 30" ALUMINUM ACCESS HATCH WITH STAINLESS STEEL HARDWARE. THE VAULT SHALL NOT HAVE A FLOOR DRAIN. PROVIDE IDENTIFICATION PLACARDS ON THE ENTRY DOOR TO THE STORAGE AREA AS REQUIRED BY THE NFPA 704.				
23	POTABLE WATER PIPING AND VALVES TO EQUIPMENT ROOM		SEE CIRC. EQUIP. SCHEMATIC P-501	POTABLE WATER LINE (SEE CIVIL DRAWINGS)
REMARKS: POTABLE WATER LINE NOT SHOWN ON PLANS. POTABLE WATER LINE, APPROVED BACKFLOW PREVENTION DEVICE, AND SHUT OFF VALVE TO EQUIPMENT ROOM BY PLUMBING CONTRACTOR. PROVIDE 20 GPM AT MAXIMUM 40 TO 50 PSI. PLUMBING CONTRACTOR TO PROVIDE STUB-IN TO POOL EQUIPMENT ROOM. POOL CONTRACTOR TO PROVIDE SOLENOID VALVE, MANUAL FILL VALVE AND EXTEND PIPING TO SUCTION SIDE OF CIRCULATION PUMP. SEE WATER LEVEL CONTROLLER REMARKS ABOVE.				
24	ELECTRICAL PANEL		BY OTHERS	SEE ELECTRICAL DRAWINGS
REMARKS: PANEL AND STARTERS TO BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR AND SHALL INCLUDE WIRING AND CONDUIT. ELECTRICAL CONTRACTOR SHALL MAKE ALL CONNECTIONS TO EQUIPMENT. PROVIDE CONTROL WIRING AS DIRECTED BY POOL CONTRACTOR. SEE ELECTRICAL INTERLOCK NOTES. ELECTRICAL PANELS INSTALLED IN THE POOL EQUIPMENT ROOM, SHALL MEET CORROSION RESISTANCE REQUIREMENTS OF NEC 2020 ARTICLE 680.14, I.E. BE NEMA-4X RATED.				
25	EQUIPMENT VAULT & HATCH	1	1 P-302 2 P-302	10' x 13'-6" x 8' MINIMUM INSIDE DIMENSIONS PRECAST VAULT DURACRETE, AMCOR OR EQUAL, OR CIP
REMARKS: SEE EQUIPMENT VAULT PLAN, SECTIONS, AND SPECIFICATION FOR EQUIPMENT VAULT SIZE. PROVIDE WITH FLOOR DRAIN. STRUCTURAL DESIGN BY TANK MANUFACTURER. PROVIDE VAULT COMPLETE WITH A 36" SQUARE LOCKING ALUMINUM ACCESS HATCH WITH STAINLESS STEEL HARDWARE AND GALVANIZED LADDER WITH TOP-SIDE EXTENSIONS FOR ACCESS. PROVIDE A KEYPAD LOCKING MECHANISM. PROVIDE VENTILATION AT A MINIMUM OF 100 CFM. SEAL ALL AROUND ALL PIPE PENETRATIONS.				
26	FLOOR DRAIN		BY OTHERS	WITH GRATING AND DRAIN TO SANITARY SEWER

- ### EQUIPMENT ROOM NOTES:
- FILTRATION AND CHEMICAL EQUIPMENT SHALL BE NATIONAL SANITATION FOUNDATION (NSF) APPROVED.
 - EQUIPMENT SHALL BE INSTALLED ON SLABS WITH MINIMUM 4" THICKNESS AND AS REQUIRED TO WITHSTAND THE LOADS ASSOCIATED WITH THE POOL EQUIPMENT AND PIPING.
 - COORDINATE WITH ALL OTHER TRADES & VERIFY EXACT LOCATION OF POOL EQUIPMENT.
 - SEE OVERALL PIPING PLAN TO VERIFY PIPE SIZES AND FOR CONTINUATION OF PIPING. IF THERE ARE ANY DISCREPANCIES, REPORT THEM IMMEDIATELY TO THE ARCHITECT/ENGINEER.
 - FOUNTAIN CONTRACTOR SHALL IDENTIFY ALL PIPING AND VALVES BY COLOR CODING OR LABELS AND DIRECTION OF FLOW ARROWS IN ACCORDANCE WITH LOCAL HEALTH CODE.
 - REDUCER FITTINGS SHALL BE USED WHERE PIPE SIZES CHANGE.
 - NO COMMON PIPING OR FITTING ON THE SUCTION SIDE OF THE PUMP IS TO BE SMALLER THAN THE LARGEST SINGLE ELEMENT CONNECTED. DOWNSIZING AND UPSIZING IS TO BE DONE AT THE THROATS OF THE PUMP PORTS.
 - ALL VALVES SHALL HAVE A MINIMUM PRESSURE RATING OF 125 PSI.
 - ALL TRADES SHALL KEEP SPACE ABOVE THE FILTRATION AND CHEMICAL EQUIPMENT CLEAR FOR SERVING.
 - HAIR AND LINT STRAINER OPENINGS SHALL BE NO MORE THAN 1/8". THE HAIR AND LINT STRAINER MUST PROVIDE A FREE FLOW CAPACITY OF AT LEAST FOUR TIMES THE AREA OF THE PUMP SUCTION LINE.
 - FILTER SHALL BE PROVIDED WITH THE FOLLOWING APPROPRIATELY LOCATED ACCESSORIES: PRESSURE GAUGES, AIR RELIEF VALVE AT THE HIGH POINT OF THE FILTER SYSTEM, AND A VALVED TANK DRAIN.
 - FLOWMETER SHALL BE PROVIDED IN THE INLET RETURN LINE AFTER FILTER AND BEFORE CHEMICAL INJECTION. INSTALL ON A STRAIGHT LENGTH OF PIPE AT A DISTANCE OF AT LEAST 10 PIPE DIAMETERS DOWNSTREAM AND 5 PIPE DIAMETERS UPSTREAM FROM ANY VALVE, ELBOW OR OTHER SOURCE OF TURBULENCE OR PER MANUFACTURER'S SPECIFICATIONS.
 - PROVIDE AT LEAST THE MIN. REQUIRED SPACE AROUND THE HEATER PER MFG. SPECS AND LOCAL CODES.
 - PROVIDE HEAT SINK OR CPVC PIPING IF RECOMMENDED BY HEATER MANUFACTURER. INSTALL PER MANUFACTURER RECOMMENDATIONS.
 - FOUNTAIN CONTRACTOR SHALL PROVIDE HEATER BYPASS PIPING AND VALVE.
 - INSTALL A THERMOMETER ON HEATER INFLUENT AND EFFLUENT PIPES AND IN THE RETURN LINE A MINIMUM OF 5'-0" AFTER HEATER BYPASS (WHEN A BYPASS VALVE IS PROVIDED).
 - PROVIDE A COMBINATION VACUUM/PRESSURE GAUGE ON THE SUCTION SIDE ALL PUMPS.
 - PROVIDE A PRESSURE GAUGE ON THE DISCHARGE SIDE OF ALL PUMPS.
 - OWNER TO PROVIDE EYE WASH PER OSHA AND ANSI STANDARDS.

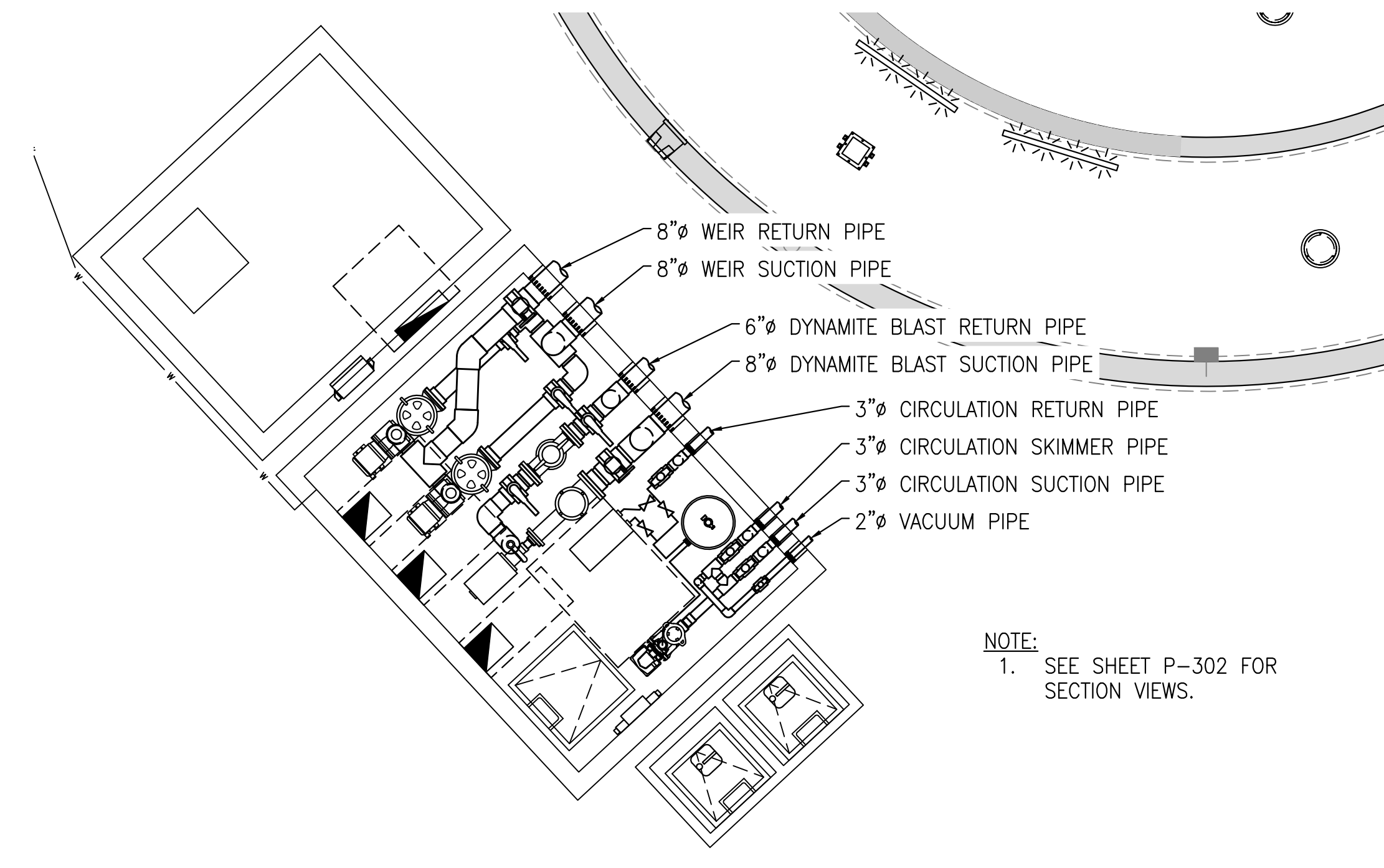
- ### FREEZE PROTECTION NOTES:
- WHEN PIPING IS LOCATED IN (OR ROUTED THROUGH) UN-HEATED SPACES, CONTRACTOR SHALL PROVIDE FREEZE PROTECTION SUCH AS INSULATION, HEAT TRACING, HEATED CHASES, OR OTHER METHOD TO PREVENT PIPES FROM FREEZING.
 - IF THE FOUNTAIN WILL NOT BE HEATED FOR A PERIOD OF TIME (OR WHENEVER THERE MAY BE A RISK OF FREEZING) FOUNTAIN PIPING SHALL BE PLUGGED, DRAINED, BLOW-OUT, AND OTHERWISE WINTERIZED.
 - ADD DRAIN VALVE TO LOWEST POINT IN ALL PIPING SYSTEMS.
 - CONTRACTOR SHALL INSTRUCT AND TRAIN OWNER IN FREEZE PROTECTION.

WATER FEATURE CIRCULATION EQUIPMENT SCHEDULE (VERIFY ALL ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONSULTANT/CONTRACTOR)				
MARK	DESCRIPTION	QUANTITY	DETAIL	REQUIREMENT
1	PUMP FOR CIRCULATION WITH HAIR AND LINT STRAINER	1	SEE CIRC. EQUIP. SCHEMATIC P-501	PENTAIR INTELLIFLO VSF (UP TO 3 HP)
REMARKS: PUMP COMES WITH INTEGRAL VARIABLE FREQUENCY DRIVE. AT 92 GPM, 83 FEET TDH AVAILABLE. ELECTRICAL REQUIREMENTS: 230 V, 60 HZ, SINGLE PHASE. SEE ELECTRICAL INTERLOCK NOTES. VERIFY WITH ELECTRICAL CONTRACTOR/ENGINEER FOR EXACT ELECTRICAL REQUIREMENTS. CONTRACTOR MUST PROVIDE AN EASILY READABLE PERMANENT SIGN AT THE PUMP. FLOW RANGE FOR PUMP IS 92 GPM TO 122 GPM. OWNER/OPERATOR IS RESPONSIBLE FOR NOT EXCEEDING THE MAXIMUM FLOW OF 122 GPM.				
2	PUMP FOR WEIR FLOW WITH STRAINER	2	N/A	PENTAIR EQ SERIES EQWK-500 (5 HP)
REMARKS: AT 500 GPM, 25 FEET TDH AVAILABLE. PUMP SPEED TO BE CONTROLLED BY VFD (SEE ITEM 2B BELOW). ELECTRICAL REQUIREMENTS: 208-230 V, 60 HZ, THREE PHASE (SEE VFD REQUIREMENTS BELOW). SEE ELECTRICAL INTERLOCK NOTES. VERIFY WITH ELECTRICAL CONTRACTOR/ENGINEER FOR EXACT ELECTRICAL REQUIREMENTS.				
2	VFD FOR WEIR PUMP	2	N/A	PENTAIR ACU DRIVE XS A200-2301-N12 WITH FUSED BY-PASS KIT
REMARKS: FOUNTAIN CONTRACTOR SHALL PROVIDE PAIRED VFD'S TO CONVERT SINGLE PHASE TO 3 PHASE FOR OPERATION OF THE 5 HP FEATURE PUMPS. PROVIDE FUSED BYPASS. ELECTRICAL CONTRACTOR SHALL PROVIDE THE POWER AND MAKE ALL CONNECTIONS TO EQUIPMENT. CONTROL WIRING BY FOUNTAIN CONTRACTOR.				
3	PUMP FOR DYNAMITE BLAST FEATURE	1	N/A	PACO LC SERIES LC-20709 (20 HP)
REMARKS: NSF LISTED, PREMIUM EFFICIENCY, INVERTER-READY, END SUCTION, CLOSE COUPLED, TFC, EPOXY COATED, TYPE LC PUMP. IMPELLER SIZE: 6.32 INCH (VERIFY). MINIMUM DESIGN FLOW: 280 GPM AT 150 FEET TDH. ELECTRICAL REQUIREMENTS: VFD TO CONVERT 240 V SINGLE PHASE TO 230 V, 60 HZ, THREE PHASE AT PUMP. SEE ELECTRICAL INTERLOCK NOTES. VERIFY WITH ELECTRICAL CONTRACTOR/ENGINEER FOR EXACT ELECTRICAL REQUIREMENTS.				
3	VFD FOR DYNAMITE BLAST PUMP	1	N/A	PENTAIR ACU DRIVE XS A200-2301-N12 WITH FUSED BY-PASS KIT
REMARKS: FOUNTAIN CONTRACTOR SHALL PROVIDE A PAIRED VFD TO CONVERT SINGLE PHASE TO 3 PHASE FOR OPERATION OF THE 20 HP FEATURE PUMP. PROVIDE FUSED BYPASS. ELECTRICAL CONTRACTOR SHALL PROVIDE THE POWER AND MAKE ALL CONNECTIONS TO EQUIPMENT. CONTROL WIRING BY FOUNTAIN CONTRACTOR.				
3	HAIR AND LINT STRAINER	1		MERMADE FO SERIES ECCENTRIC REDUCING STRAINER (8" x 3")
REMARKS: ECCENTRIC REDUCING BASKET. FIBERGLASS REINFORCED PLASTIC WITH TRANSPARENT LID AND STAINLESS STEEL BASKET. VERIFY SIZE WITH PIPE SUCTION SIZE AND PUMP INLET SIZE.				
4	CARTRIDGE FILTER	1	SEE CIRC. EQUIP. SCHEMATIC P-501	PENTAIR CLEAN & CLEAR PLUS #CCP-520
REMARKS: 21.5" FILTER. 520 SF FILTER AREA.				
5	HEATER	1	SEE CIRC. EQUIP. SCHEMATIC P-501	COATES PHS SERIES 57 KW
REMARKS: ELECTRICAL REQUIREMENTS: 240 V, 238 AMPS, SINGLE PHASE. ELECTRICAL CONNECTIONS BY ELECTRICAL CONTRACTOR. HEATER PIPING CPVC SCHEDULE 80. INSTALL AND BOND PER NEC 680. USE WHEN RISK OF FREEZING. SET POINT TO 40F.				
6	CHEMICAL CONTROLLER	1	SEE CIRC. EQUIP. SCHEMATIC P-501	PENTAIR INTELLICHEM, IPS, PROMINENT, BECS OR EQUAL
REMARKS: CONTROLS ORP/PH. 110-120 VAC, <1 AMP. ELECTRICAL INTERLOCKING BY ELECTRICAL CONTRACTOR. SEE ELECTRICAL INTERLOCKING NOTES. PROVIDE POWER FOR THE CONTROLLER ON A SEPARATE CIRCUIT FROM THE POWER FOR THE CHEMICAL FEEDER RELAYS.				
7	FEEDER FOR LIQUID CHLORINE	1	SEE CIRC. EQUIP. SCHEMATIC P-501	STENNER #45-MS
REMARKS: 120 VAC, 60 HZ, 1.7 AMP, 1/30 FRACTIONAL HP.				
8	FEEDER FOR ACID	1	SEE CIRC. EQUIP. SCHEMATIC P-501	STENNER #45-MS
REMARKS: 120 VAC, 60 HZ, 1.7 AMP, 1/30 FRACTIONAL HP.				
9	STORAGE CONTAINER FOR LIQUID CHLORINE	1	SEE CIRC. EQUIP. SCHEMATIC P-501	5 GALLON CARBOY
REMARKS: START UP CHEMICALS PROVIDED BY FOUNTAIN CONTRACTOR. VERIFY STORAGE CAPACITY REQUIRED. PROVIDE VAPOR SHIELD BARREL ASSEMBLY (VAPOR CHECK VALVE) AS MFG BY AQUATIC COMMERCIAL INDUSTRIES OR EQUAL. PROVIDE CONTAINER RESTRAINTS. WATER FEATURE CONTRACTOR SHALL PROVIDE START UP CHEMICALS. STORAGE DRUMS SHALL BE MARKED WITH THE APPROPRIATE HAZARD IDENTIFICATION SIGNS PER REQUIREMENTS OF THE NFPA 704. CONTAINERS ARE TO BE 'REPLACEABLE' COMMODITY-TYPE POOL-CHEMICAL CONTAINERS. FOUNTAIN OWNER'S CHEMICAL SUPPLY SYSTEM SHOULD REMOVE 'EMPTIES' AND REPLACE WITH FULL CONTAINERS. THESE SHALL NOT BE PERMANENT CONTAINERS THAT WOULD REQUIRE THE FOUNTAIN OPERATOR TO POUR CHEMICALS FROM CONTAINERS. CHEMICAL FEEDERS SHALL NOT BE MOUNTED ON CONTAINERS.				
10	STORAGE CONTAINER FOR ACID	1	SEE CIRC. EQUIP. SCHEMATIC P-501	5 GALLON CARBOY
REMARKS: START UP CHEMICALS PROVIDED BY FOUNTAIN CONTRACTOR. VERIFY STORAGE CAPACITY REQUIRED. PROVIDE VAPOR SHIELD BARREL ASSEMBLY (VAPOR CHECK VALVE) AS MFG BY AQUATIC COMMERCIAL INDUSTRIES OR EQUAL. PROVIDE CONTAINER RESTRAINTS. WATER FEATURE CONTRACTOR SHALL PROVIDE START UP CHEMICALS. STORAGE DRUMS SHALL BE MARKED WITH THE APPROPRIATE HAZARD IDENTIFICATION SIGNS PER REQUIREMENTS OF THE NFPA 704. CONTAINERS ARE TO BE 'REPLACEABLE' COMMODITY-TYPE POOL-CHEMICAL CONTAINERS. FOUNTAIN OWNER'S CHEMICAL SUPPLY SYSTEM SHOULD REMOVE 'EMPTIES' AND REPLACE WITH FULL CONTAINERS. THESE SHALL NOT BE PERMANENT CONTAINERS THAT WOULD REQUIRE THE FOUNTAIN OPERATOR TO POUR CHEMICALS FROM CONTAINERS. CHEMICAL FEEDERS SHALL NOT BE MOUNTED ON CONTAINERS.				
11	CIRCULATION EQUIPMENT INTERCONNECTING PIPING		IN EQUIPMENT ROOM	SEE PLAN AND CIRC. EQUIP. SCHEMATIC PVC SCHEDULE 40
REMARKS: 3" PIPE.				
12	FLOWMETER	1	SEE CIRC. EQUIP. SCHEMATIC P-501	BLUE WHITE #F-30300P
REMARKS: METER RANGE: 45-240 GPM. MOUNT FLOWMETER IN EASILY READABLE LOCATION. FLOWMETER SHALL BE INSTALLED WITH PROPER RUN OF PIPE UPSTREAM AND DOWNSTREAM OF FLOWMETER PER MANUFACTURER'S RECOMMENDATIONS.				
13	PRESSURE GAUGES AND VACUUM GAUGE	2	SEE CIRC. EQUIP. SCHEMATIC P-501	0-60 PSI 0-30 Hg
REMARKS: NOT SHOWN ON PLAN. INTEGRATE TO SHOW FILTER INFLUENT AND EFFLUENT PRESSURES. PROVIDE A COMBINATION PRESSURE/VACUUM GAUGE ON SUCTION SIDE OF EACH PUMP AND A PRESSURE GAUGE ON THE DISCHARGE SIDE OF EACH PUMP.				
14	THERMOMETER	3	SEE CIRC. EQUIP. SCHEMATIC P-501	LETRO
REMARKS: 30' TO 130'. NOT SHOWN ON PLANS. SEE EQUIPMENT SCHEMATIC. PROVIDE THERMOMETERS ON INFLUENT AND EFFLUENT LINES OF HEATER. INSTALL ONE THERMOMETER IN AN EASILY READABLE LOCATION MINIMUM 10 PIPE DIAMETERS DOWN STREAM FROM THE BYPASS VALVE.				
15	CONTROL PANEL AND POWER SUPPLY FOR UNDERWATER LIGHTS	1		CRYSTAL FOUNTAINS CUSTOM CONTROLLER
REMARKS: ELECTRICAL CONTRACTOR SHALL PROVIDE ALL ELECTRICAL CONNECTIONS, WIRING, AND HOOK-UPS. SUBMIT DESIGN BUILD SHOP DRAWINGS.				
	WATER LEVEL CONTROLLER			INTEGRAL WITH CONTROL PANEL
REMARKS: PROVIDE AOV 24VAC SOLENOID VALVE ON POTABLE WATER LINE. EXTEND PIPE TO SUCTION SIDE OF PUMP. SENSORS LOCATED IN HOUSING AT WATER FEATURE. PROVIDE ONE SENSOR FOR FILL AND ONE SENSOR FOR LOW WATER CUT-OFF. SEE POTABLE WATER PIPING REMARKS BELOW.				
	WIND CONTROL			INTEGRAL WITH CONTROL PANEL
REMARKS: PROVIDE ECWA20 ANEMOMETER WITH UP TO 300' CABLE. LOCATION OF WIND SENSOR TO BE COORDINATED WITH LANDSCAPE ARCHITECT. PLACE WIND SENSOR IN A LOCATION THAT EXPERIENCES SAME WIND CONDITIONS AS THE WATER FEATURE. EXTEND CABLE IN CONDUIT TO CONTROL PANEL.				
16	PIPE WALL CORE WITH MODULAR SEAL		PIPE PENETRATIONS	THUNDERSEAL LINK-SEAL MODEL "S-316"
REMARKS: PROVIDE CORES AT ALL EQUIPMENT VAULT PENETRATIONS PER MANUFACTURER'S REQUIREMENTS. FOUNTAIN CONTRACTOR SHALL PROVIDE SLEEVES. GENERAL CONTRACTOR SHALL COORDINATE LOCATION OF SLEEVES WITH FOUNTAIN CONTRACTOR AND SHALL INSTALL. PROVIDE SEALS WITH STAINLESS STEEL FASTENERS.				
17	BASKET STRAINER FOR DYNAMITE BLAST FEATURE	1 WITH ADDITIONAL STRAINER BASKET	N/A	HAYWARD SB SERIES SIMPLEX STRAINER: 8" PVC
REMARKS: PROVIDE 20 MESH STAINLESS STEEL BASKET. PROVIDE SPARE 20 MESH STAINLESS STEEL BASKET FOR SWITCH OUT TO FACILITATE CLEANING PROCEDURE. PROVIDE WITH ISOLATION VALVES ON BOTH SIDES OF STRAINER. PROVIDE CONCRETE HOUSEKEEPING PAD SUPPORT TO HEIGHT AS REQUIRED ON VAULT FLOOR.				

- ### PIPE HANGER AND SUPPORT NOTES:
- PIPE HANGERS: THE PIPE HANGERS SHALL BE ADJUSTABLE B-LINE FIGURE B3105 STAINLESS STEEL OR EQUAL.
 - SUPPORT SADDLES: PIPE SUPPORTS SHALL BE ADJUSTABLE B-LINE FIGURE B3092 STAINLESS STEEL SADDLE SUPPORT WITH FIGURE B3087 STAINLESS STEEL STAND OR APPROVED EQUAL.
 - UNI-STRUT: PIPES SHALL BE MOUNTED TO VERTICAL WALLS USING UNISTRUT AND PIPE CLAMPS.
 - PROVIDE FLEXIBLE GASKETS BETWEEN PIPE SUPPORTS/CLAMPS AND PIPES AS NEEDED FOR VIBRATION ISOLATION AND/OR SOUND ISOLATION.
 - PIPE HANGERS AND SUPPORTS SHALL BE CONSTRUCTED OF STAINLESS STEEL AND SHALL BE LOCATED AS NEEDED TO ADEQUATELY SUPPORT ALL PIPING AND COMPONENTS.
 - PVC PIPING SHALL NOT BE UNSUPPORTED FOR LENGTHS IN EXCESS OF SIX FEET. PROVIDE ADEQUATE SUPPORTS AND SPACING AS TO AVOID PIPE SAGGING BETWEEN SUPPORTS AND TO SUPPORT AGAINST THE EFFECTS OF WATER HAMMER.
- DEFERRED SUBMITTAL:
- ALL POOL PIPING LARGER THAN 3" MUST BE SUPPORTED FOR SEISMIC LOADS IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE. THE INSTALLING CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL SEISMIC BRACING.
 - IF NEEDED, PROVIDE THE DETAILS AND ENGINEERING CALCULATIONS (WET STAMPED AND SIGNED) FOR ALL NON-STRUCTURAL COMPONENTS PERMANENTLY ATTACHED TO STRUCTURES AND THEIR SUPPORTS & ATTACHMENTS. DESIGNED TO RESIST THE EFFECTS OF EARTHQUAKE MOTIONS IN ACCORDANCE WITH ASCE 7-05. SUBMIT TO THE BUILDING DEPARTMENT AS A DEFERRED SUBMITTAL (IF REQUIRED BY BUILDING INSPECTOR).



EQUIPMENT ROOM LAYOUT
SCALE: 1/4"=1'-0"



EQUIPMENT ROOM PIPING PLAN
SCALE: 1/4"=1'-0"

- ### PIPE VALVE NOTES:
- ALL VALVES FOR PIPING 3" AND SMALLER SHALL BE PVC BALL VALVES, ASAHI/ AMERICAN OMNI OR EQUAL.
 - ALL VALVES 4" AND LARGER SHALL BE BUTTERFLY VALVES ASAHI/ AMERICAN FOUNTAIN COMPATIBLE VALVES ("POOL PRO" OR EQUAL). BUTTERFLY VALVES ARE TO BE MANUFACTURED OF PVC WITH REINFORCED DISKS BUBBLE-TITE WITH STAINLESS STEEL SHAFTS.
 - VALVES 4" AND 6" SHALL BE LEVER OPERATED. VALVES 8" AND ABOVE SHALL BE GEAR OPERATED.
 - ALL CHECK VALVES SHALL BE THERMOPLASTIC (PVC OR CPVC), BUTTERFLY- OR FULL PORT SWING-TYPE, FLANGED ENDS OR WAFER STYLE CHECK VALVES, WITH PARTS INTENDED FOR TREATED, SWIMMING-POOL WATER. SIZE AS REQUIRED.

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UMATILLA, OREGON

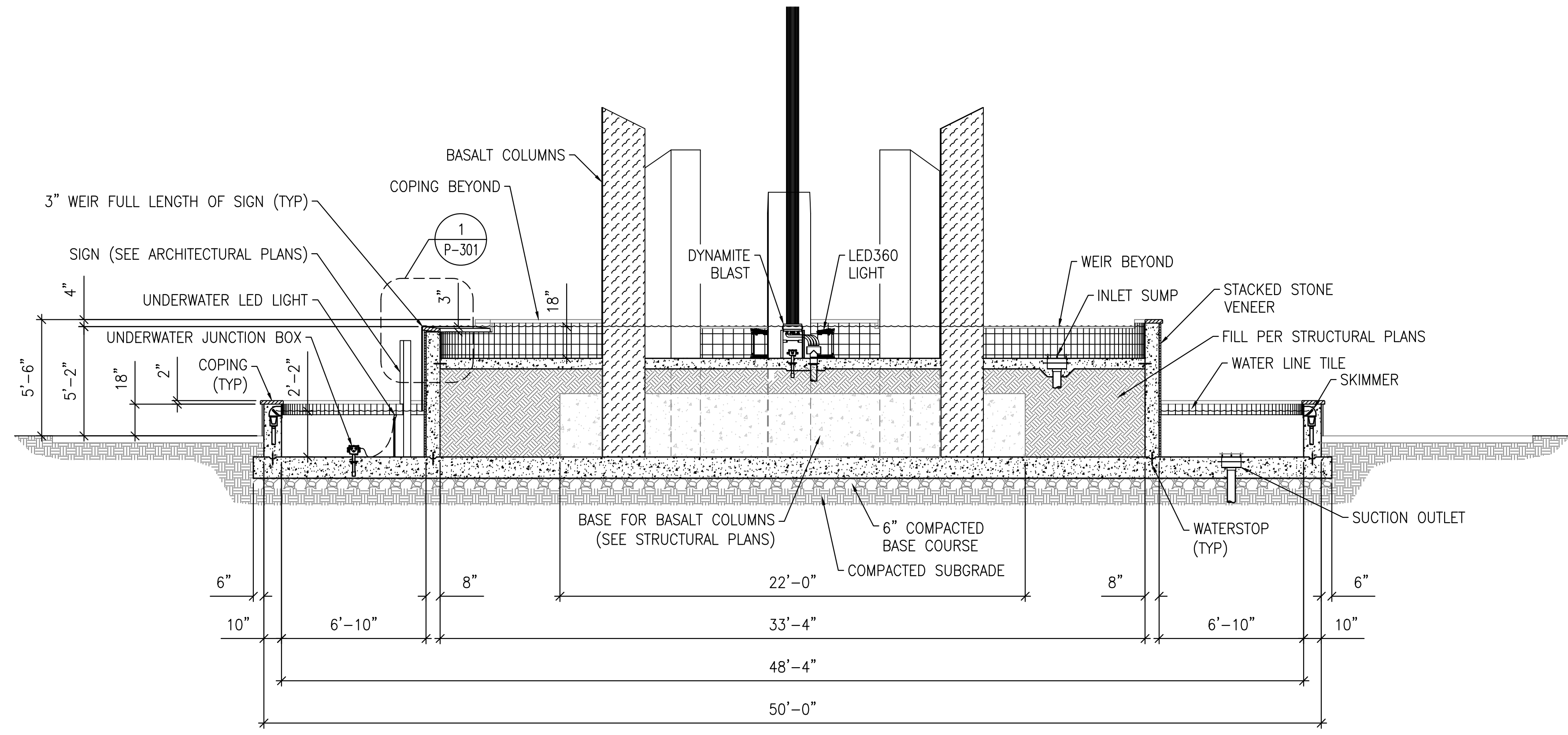
FOUNTAIN SECTIONS

FILE: UMATILLA - SP500
WDI PROJ. #: 22-705FS
DRAWN BY: BH
DESIGN BY: BA
CHECKED BY: BA

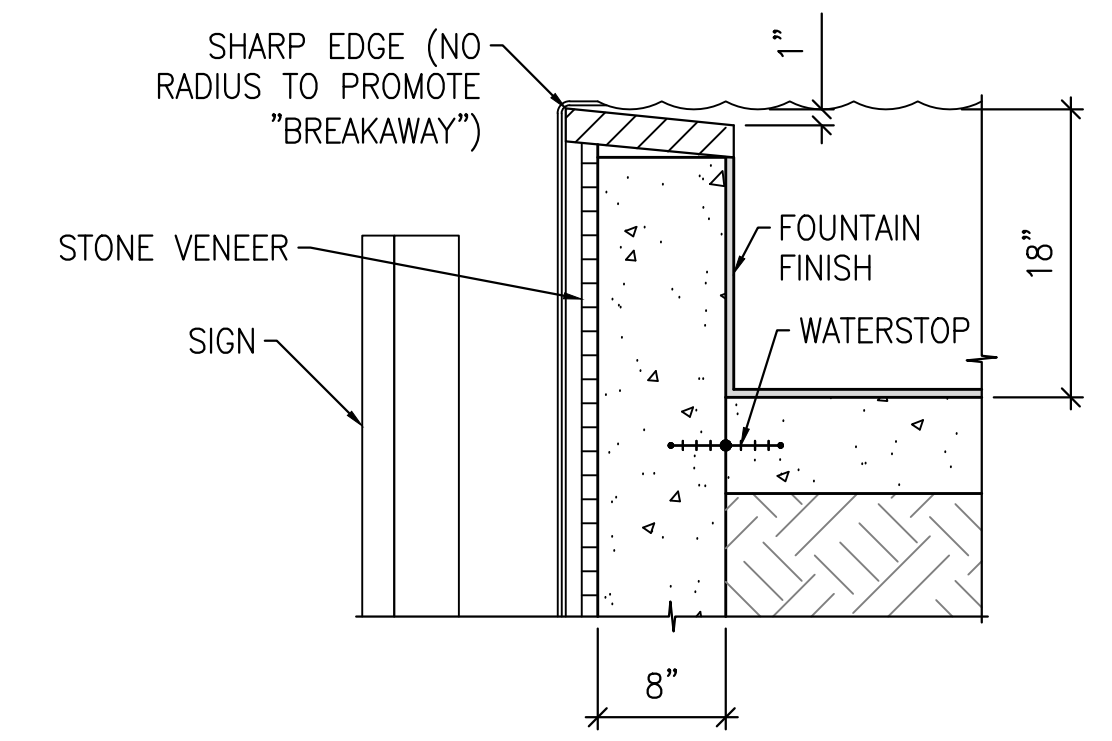
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SHEET NUMBER:

P-301



A WATER FEATURE SECTION
SCALE: 1/4"=1'-0"



1 WEIR DETAIL
SCALE: 1"=1'-0"



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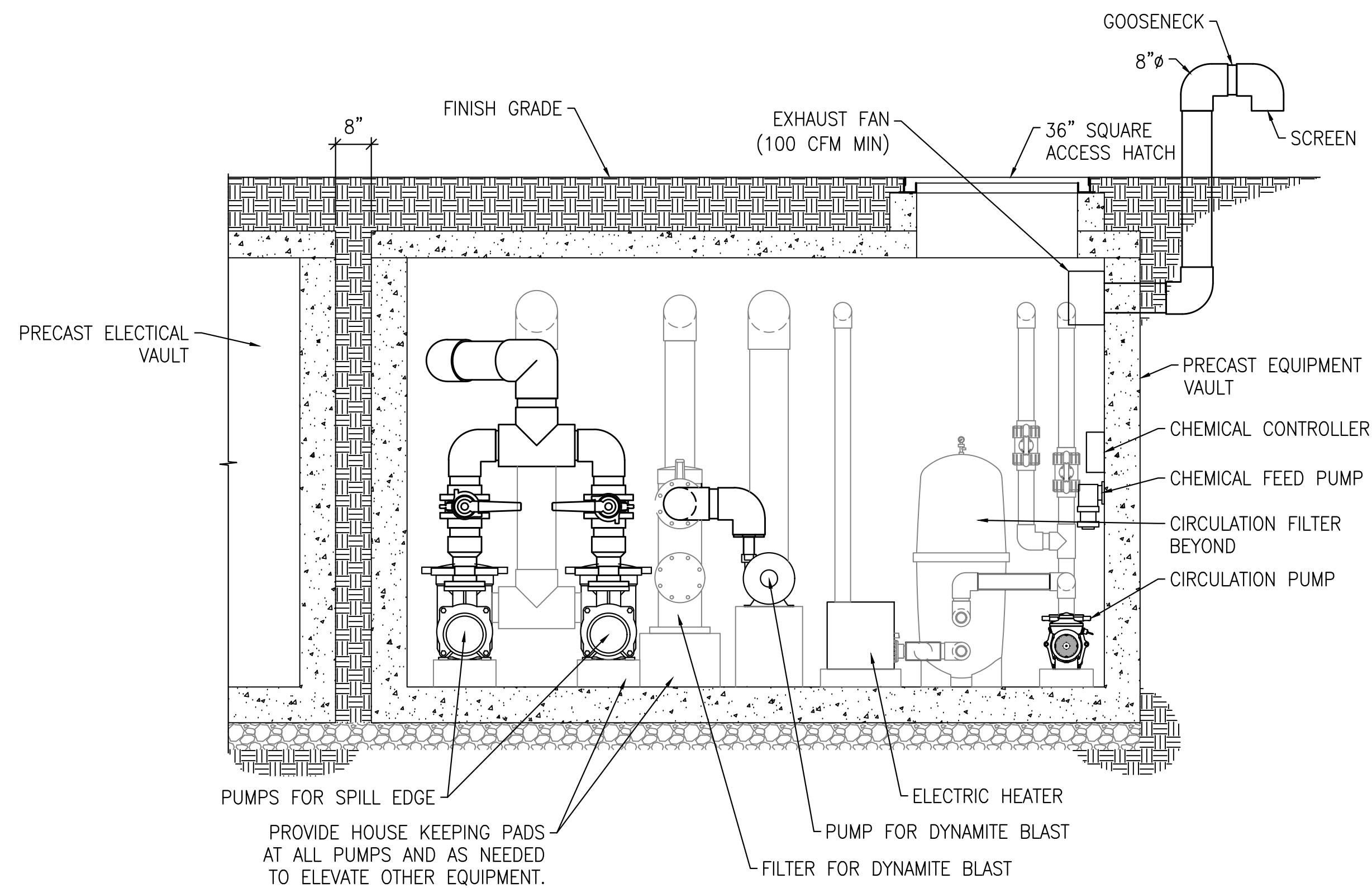
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KIWANIS FALLS ENTRY MONUMENT/FOUNTAIN
UMATILLA, OREGON
 FOUNTAIN
 EQUIPMENT ROOM SECTIONS

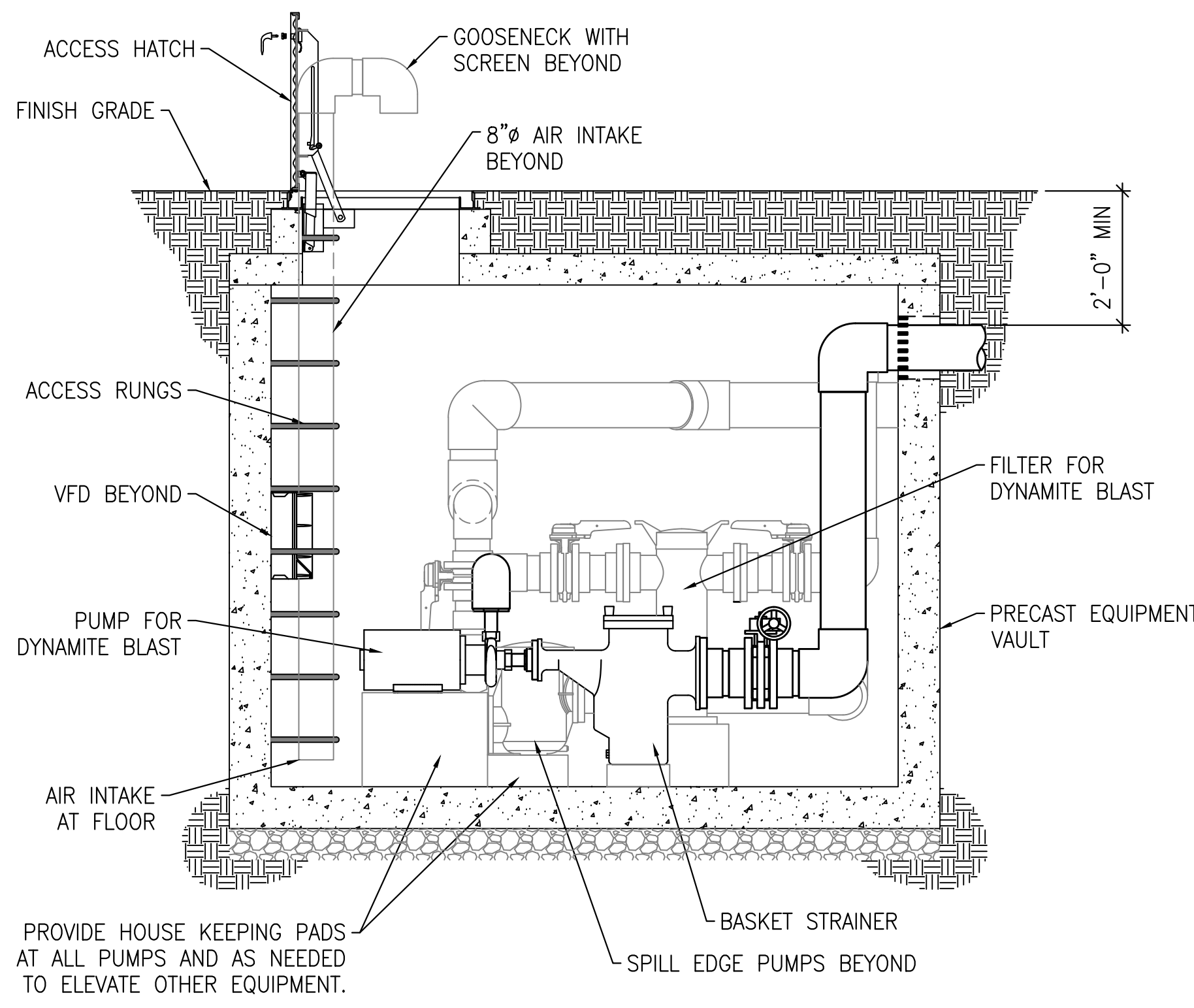
FILE: UMATILLA - SP410
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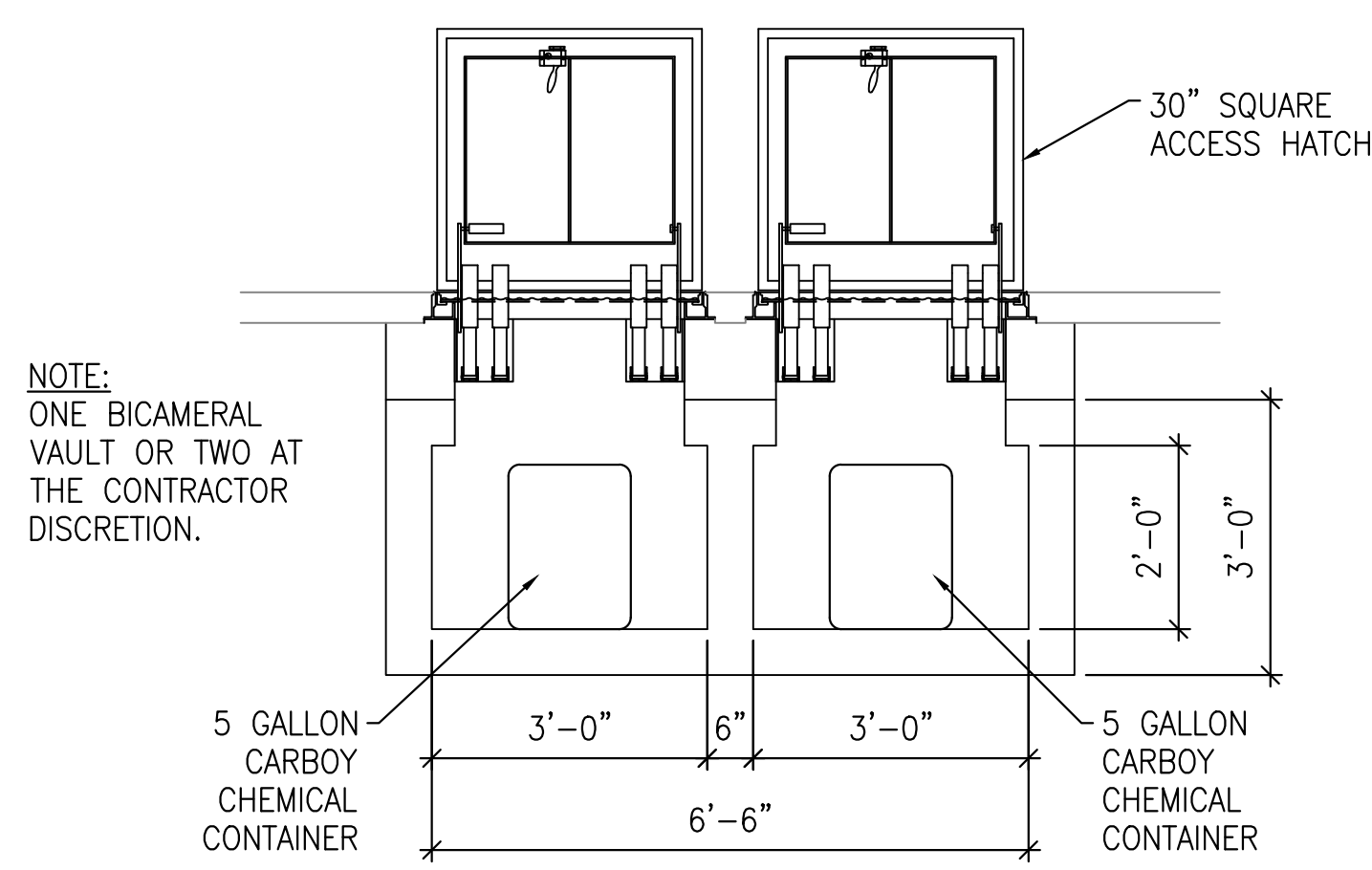
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P-302



1 EQUIPMENT VAULT LONGITUDINAL SECTION
 SCALE: 1/2"=1'-0"



2 EQUIPMENT VAULT CROSS SECTION
 SCALE: 1/2"=1'-0"



3 CHEMICAL VAULTS SECTION
 SCALE: 1/2"=1'-0"



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UMATILLA, OREGON

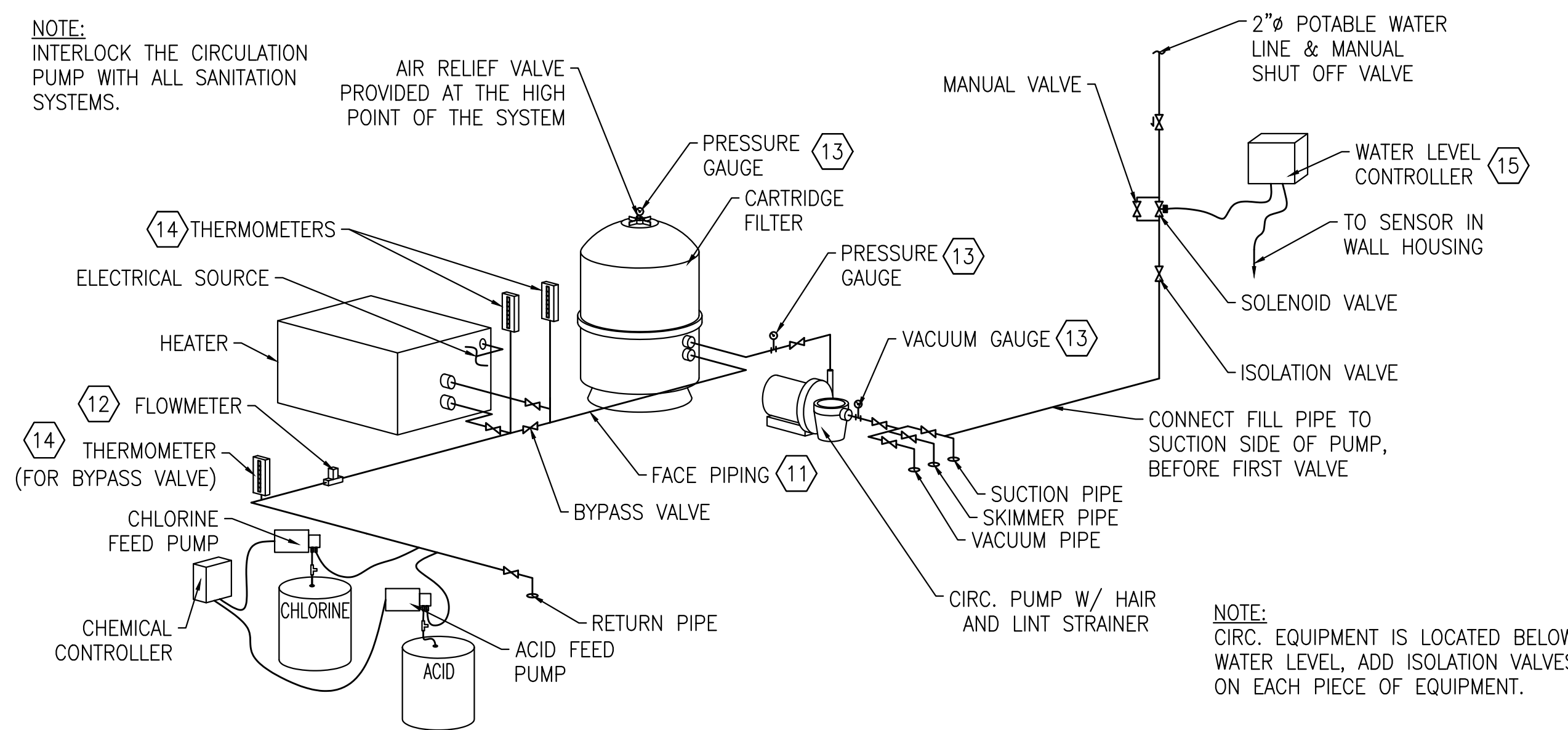
FOUNTAIN EQUIPMENT ROOM SCHEMATICS

FILE: UMATILLA - SP401
WDI PROJ. #: 22-705FS
DRAWN BY: BH
DESIGN BY: BA
CHECKED BY: BA

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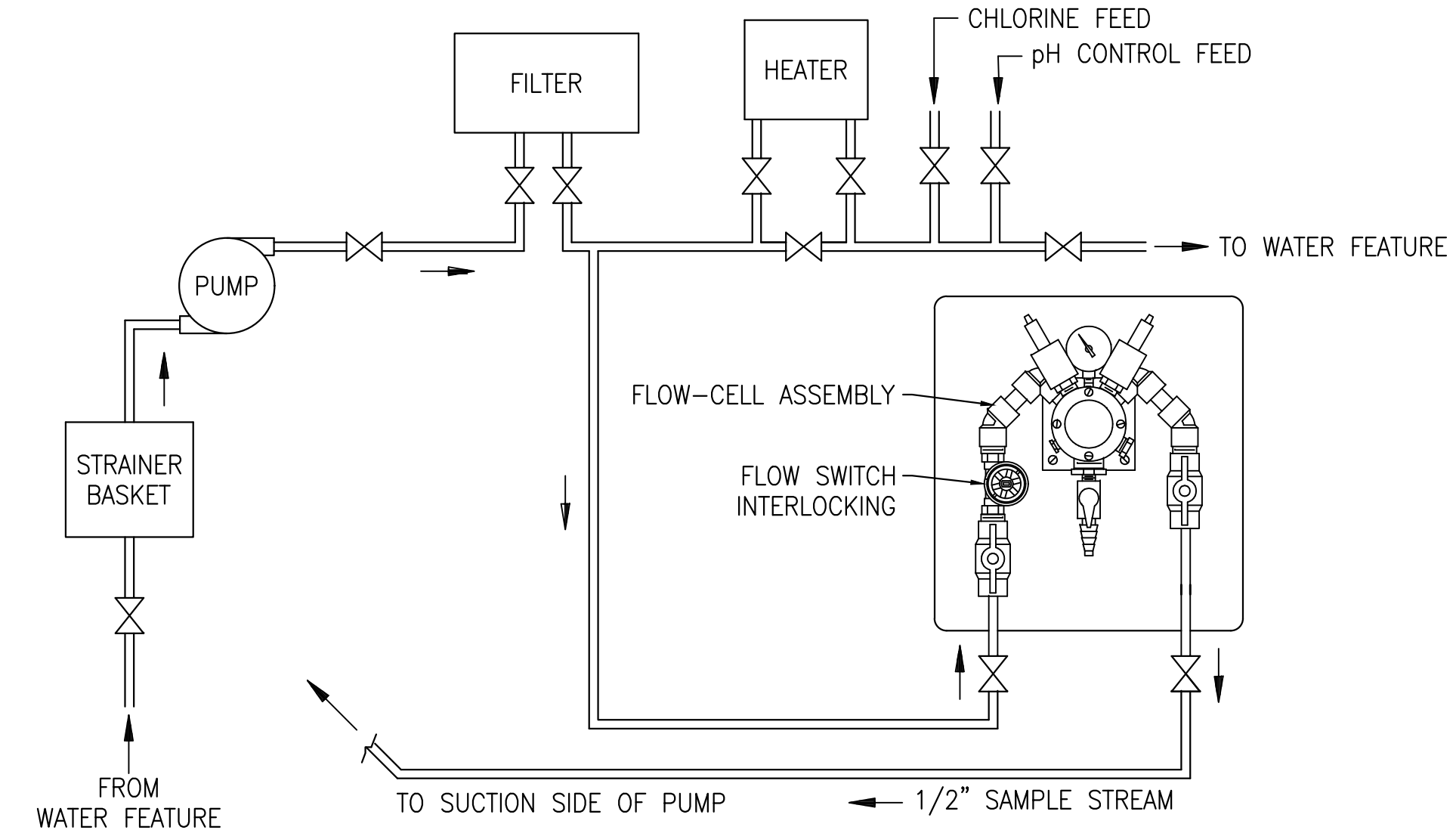
NOTE: INTERLOCK THE CIRCULATION PUMP WITH ALL SANITATION SYSTEMS.

NOTE: FEED LINE(S) INSERTED IN THE CHEMICAL STORAGE DRUM(S) SHALL UTILIZE A VAPOR SHIELD/CHECK VALVE TEE ASSEMBLY TO PROVIDE AIR TO THE TANK. DRUM PLUGS LEFT OFF FOR AIR SUPPLY NOT ACCEPTABLE.

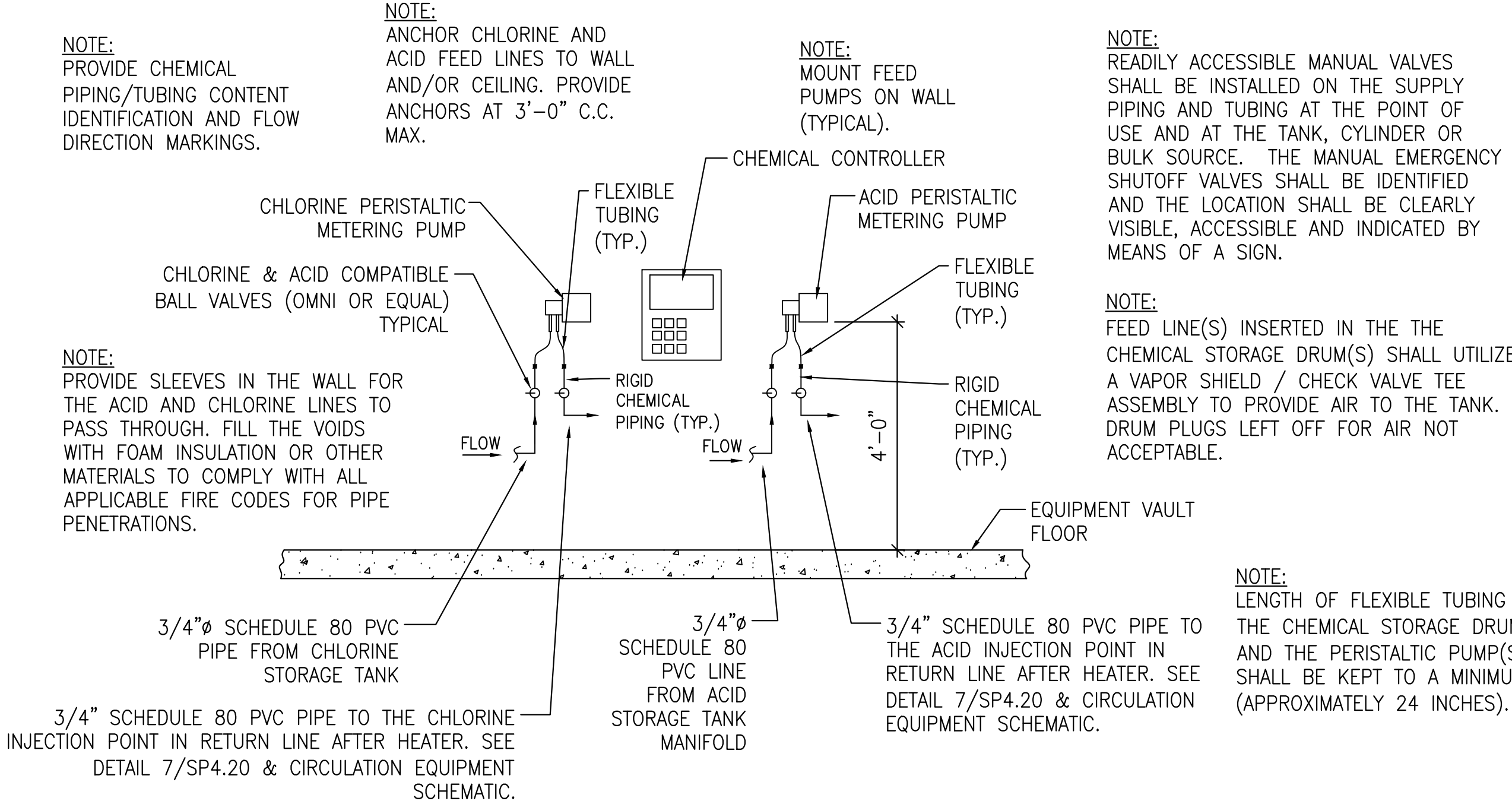
NOTE: INSTALL FLOWMETER WITH 10 X PIPE DIAMETERS OF STRAIGHT PIPE UPSTREAM AND 5 X PIPE DIAMETERS OF STRAIGHT PIPE DOWNSTREAM. (OR PER MANUFACTURER'S RECOMMENDATIONS)

NOTE: ALL PLUMBING MUST BE IDENTIFIED BY A COLOR CODE OR LABELS ON ALL PIPING AND VALVES. INCLUDE FLOW DIRECTION ARROWS.

1 CIRC EQUIPMENT SCHEMATIC
SCALE: NONE



2 FLOW CELL SCHEMATIC
SCALE: NONE



3 CHEMICAL FEEDER DETAIL
SCALE: NONE

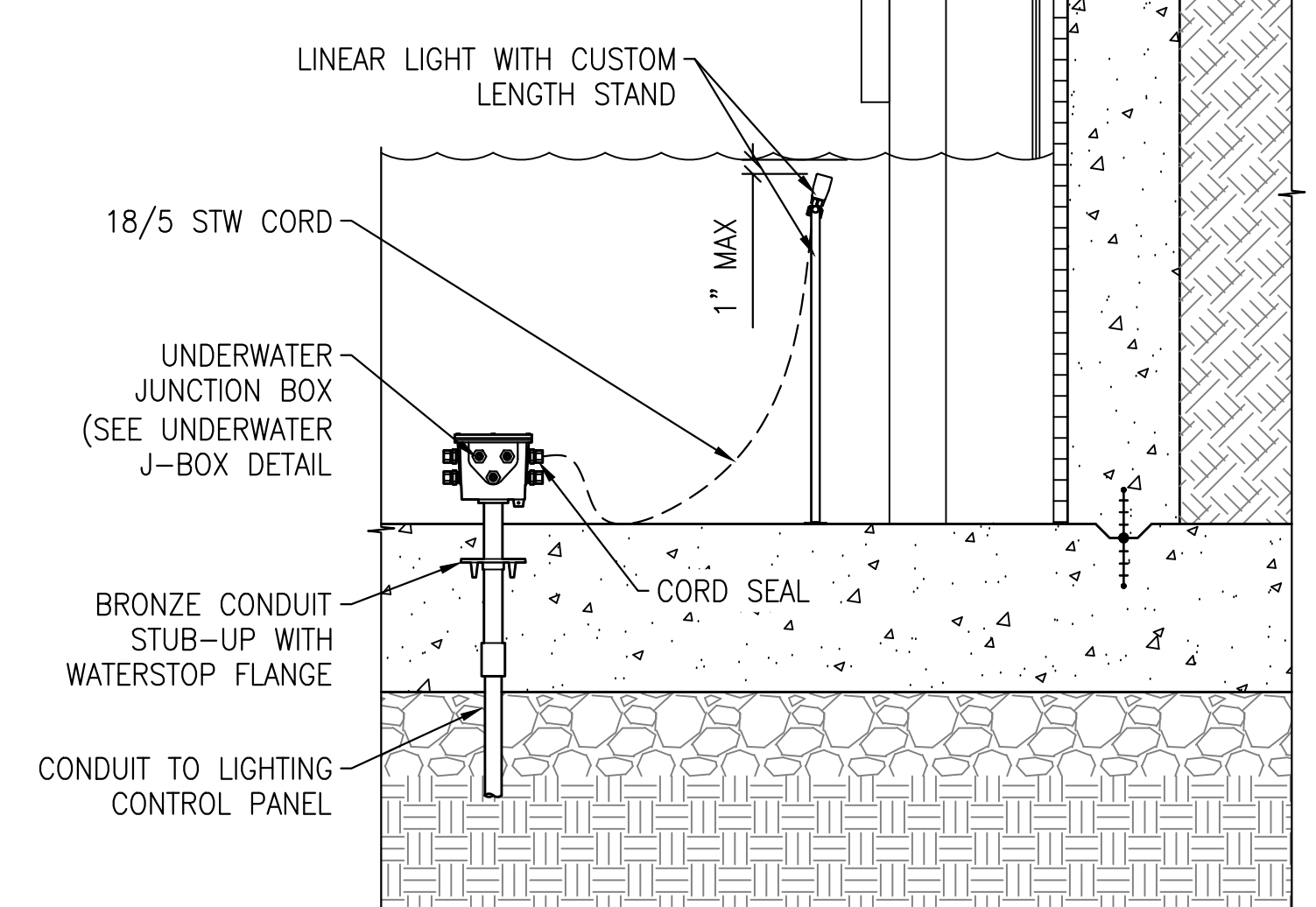
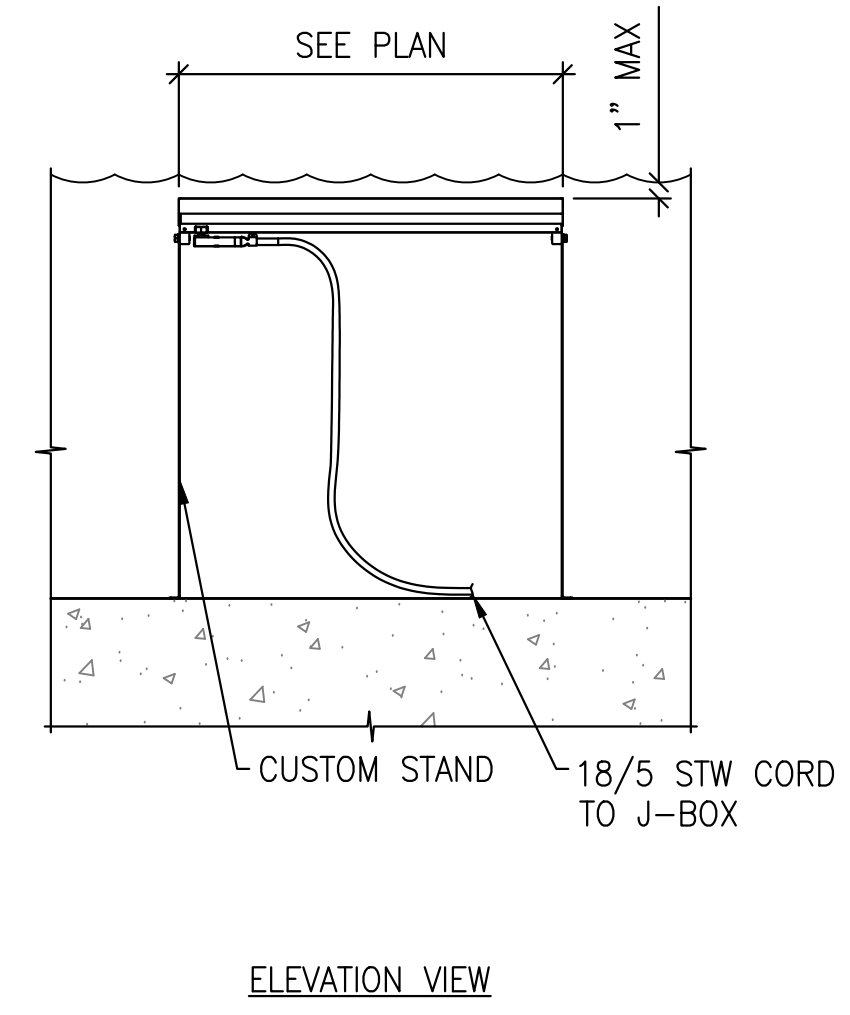


Know what's below.
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NO.	DESCRIPTION	DATE

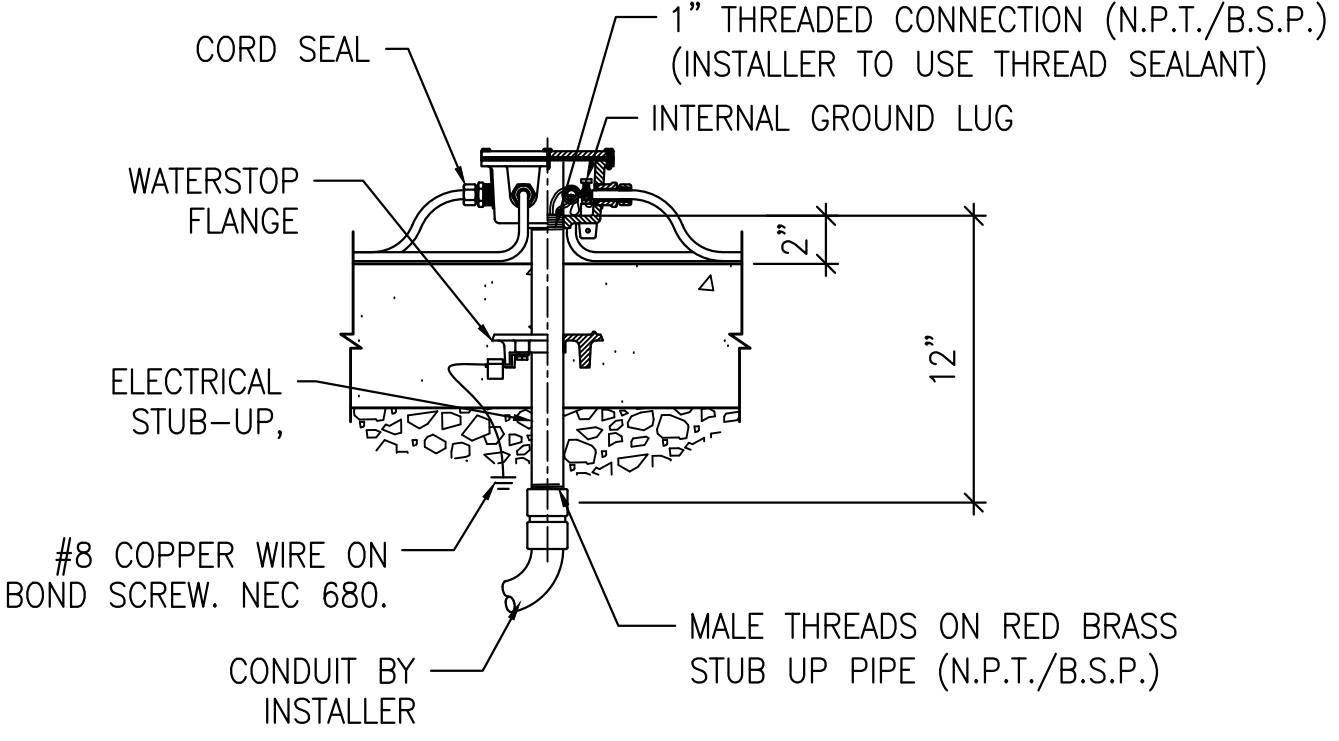
REUSE OF DRAWINGS
J-U-B SHALL RETAIN ALL COMMON LAW, STATUTORY, COPYRIGHT AND PATENT RIGHTS IN THIS DOCUMENT. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF J-U-B ENGINEERS, INC. ANY REUSE WITHOUT WRITTEN CONSENT BY J-U-B WILL BE AT CLIENTS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO J-U-B.

NOTE:
BOND ALL METAL COMPONENTS PER 2017 NEC - ARTICLE 680 OR CURRENT ADOPTED ELECTRICAL CODE.



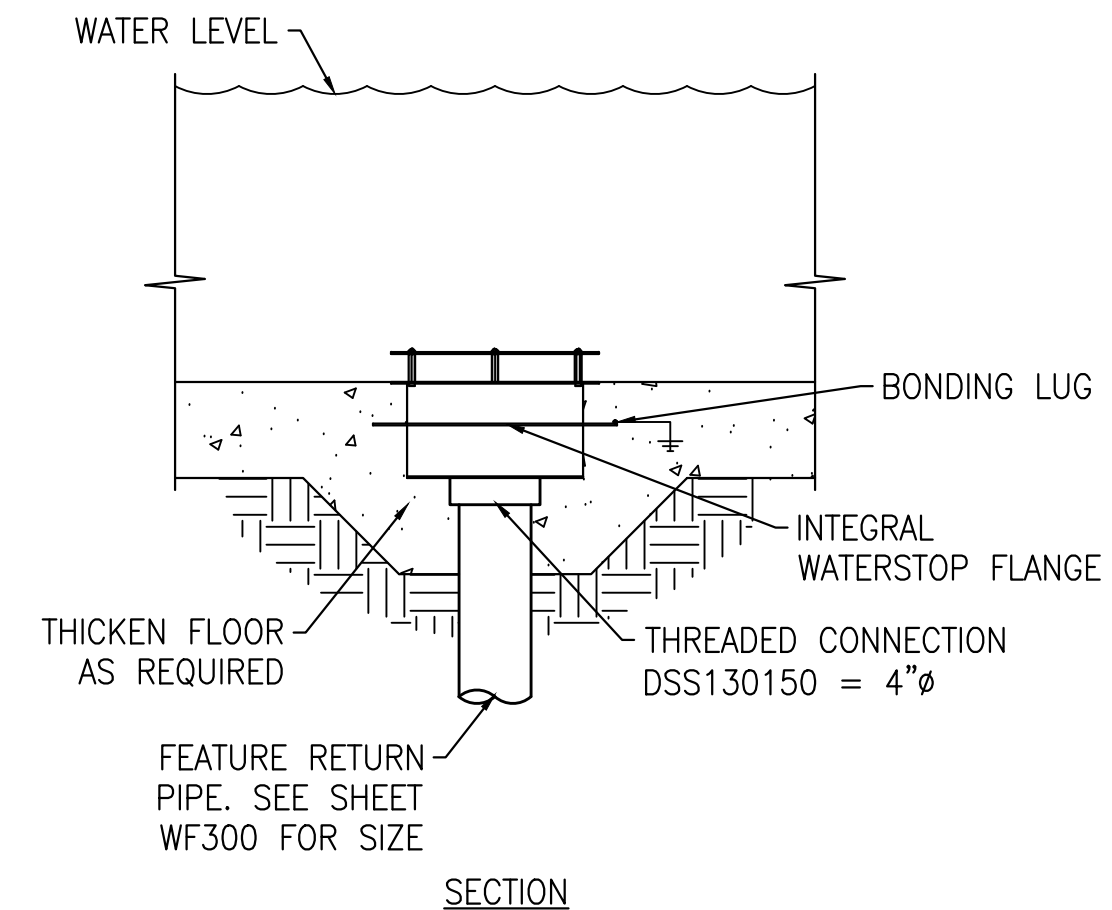
1 UNDERWATER LIGHT DETAIL
SCALE: 1"-1'-0"

NOTES:
- REFER TO INSTALLATION INSTRUCTIONS SHIPPED WITH PRODUCT.
- REFER TO CORD SEAL FOR INSTALLATION/REPLACEMENT INFORMATION.
- JUNCTION BOX IS UL AND CSA CERTIFIED.
- FOR PROPER AND EVEN GASKET SEALING, STAGGER THE FASTENER TIGHTENING PROCESS.
- PREVENT THREADED HOLES FROM BEING FILLED WITH DEBRIS.
- MATERIALS: BRASS, BRONZE, COPPER, S.S. FASTENERS, NEOPRENE COVER GASKET.
- NO. OF CORD SEALS: 4
- INSTALLER TO POT BOX WITH APPROVED ENCAPSULANT TYPE 3M-4441 OR EQUIVALENT POTTING COMPOUND TO PREVENT WATER FROM ENTERING J-BOX.
- DO NOT SCALE DRAWING.



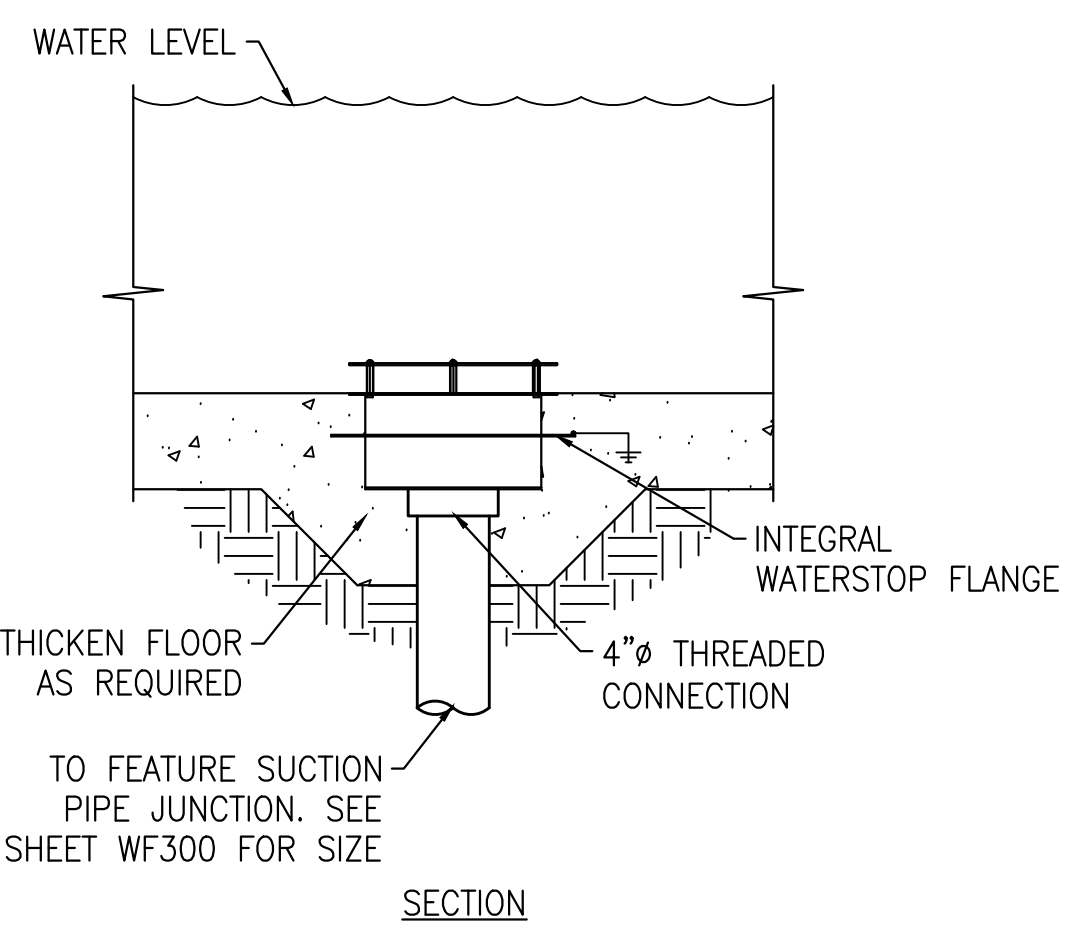
2 UNDERWATER JUNCTION BOX DETAIL
SCALE: 1-1/2"-1'-0"

NOTE:
BOND ALL METAL COMPONENTS PER 2020 NEC - ARTICLE 680 OR CURRENT ADOPTED ELECTRICAL CODE.

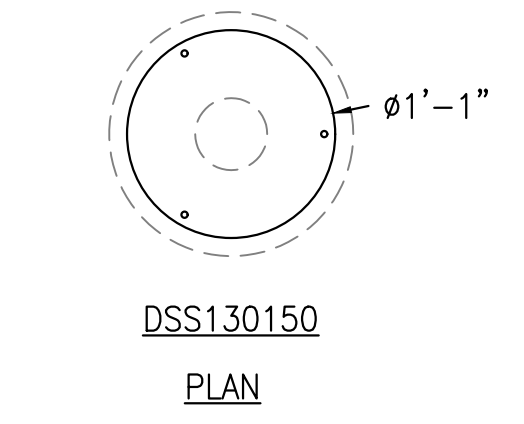


3 INLET SUMP WITH DIVERTER PLATE DETAIL
SCALE: 1"-1'-0"

- STAINLESS STEEL PLATE
- DEEP DRAWN STAINLESS STEEL SUMP WITH INTEGRAL WATERSTOP AND GROUNDING SCREW
- STAINLESS STEEL FASTENERS

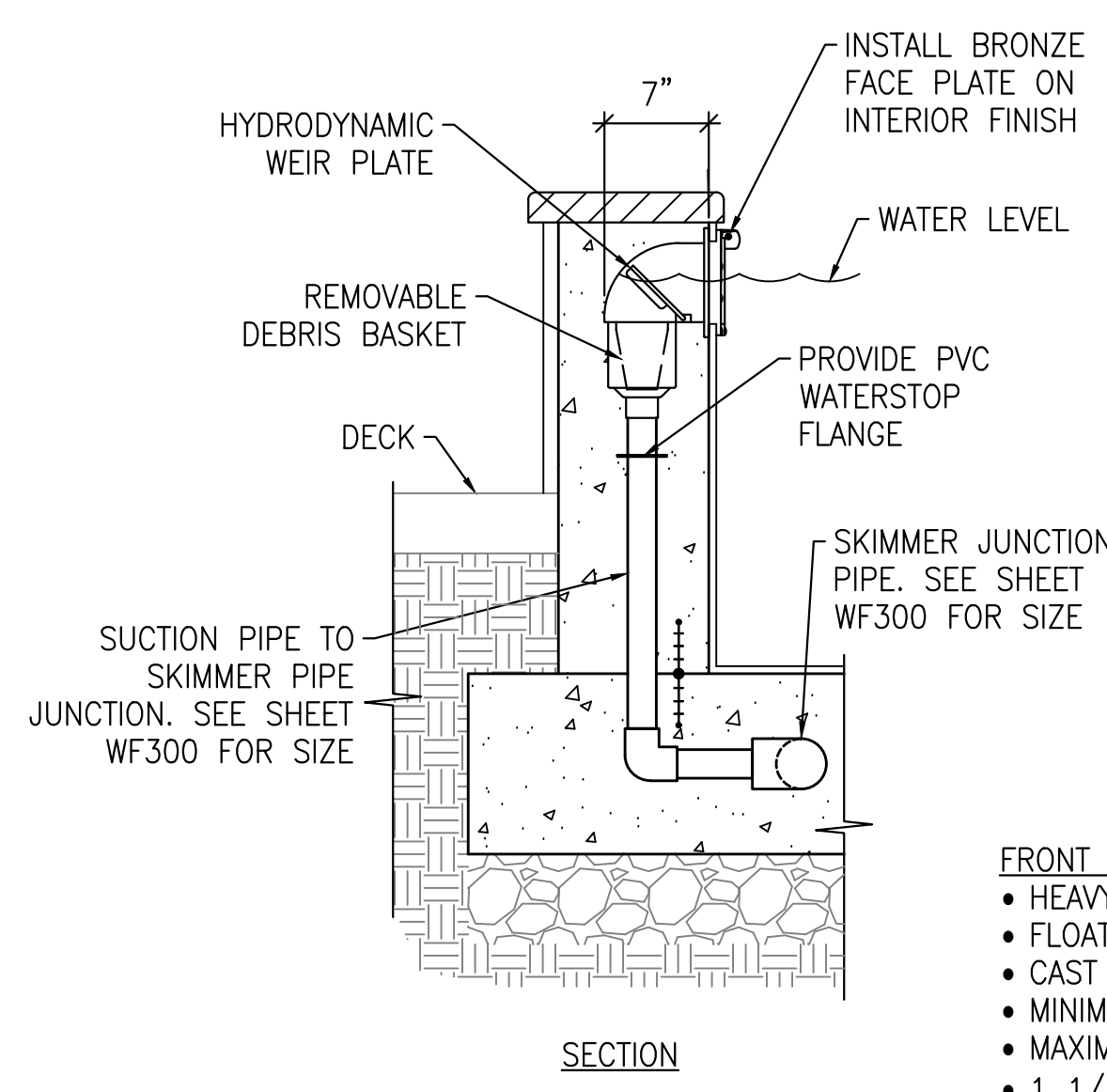


4 SUCTION OUTLET FITTING ASSEMBLY DETAIL
SCALE: 1"-1'-0"



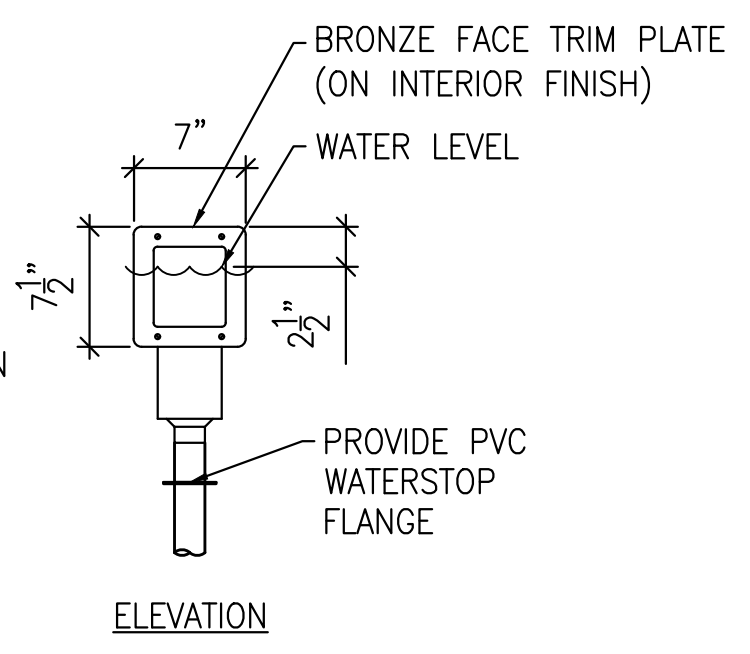
- STAINLESS STEEL PLATE
- DEEP DRAWN STAINLESS STEEL SUMP WITH INTEGRAL WATERSTOP AND GROUNDING SCREW
- STAINLESS STEEL FASTENERS

NOTE:
BOND ALL METAL COMPONENTS PER 2020 NEC - ARTICLE 680 OR CURRENT ADOPTED ELECTRICAL CODE.



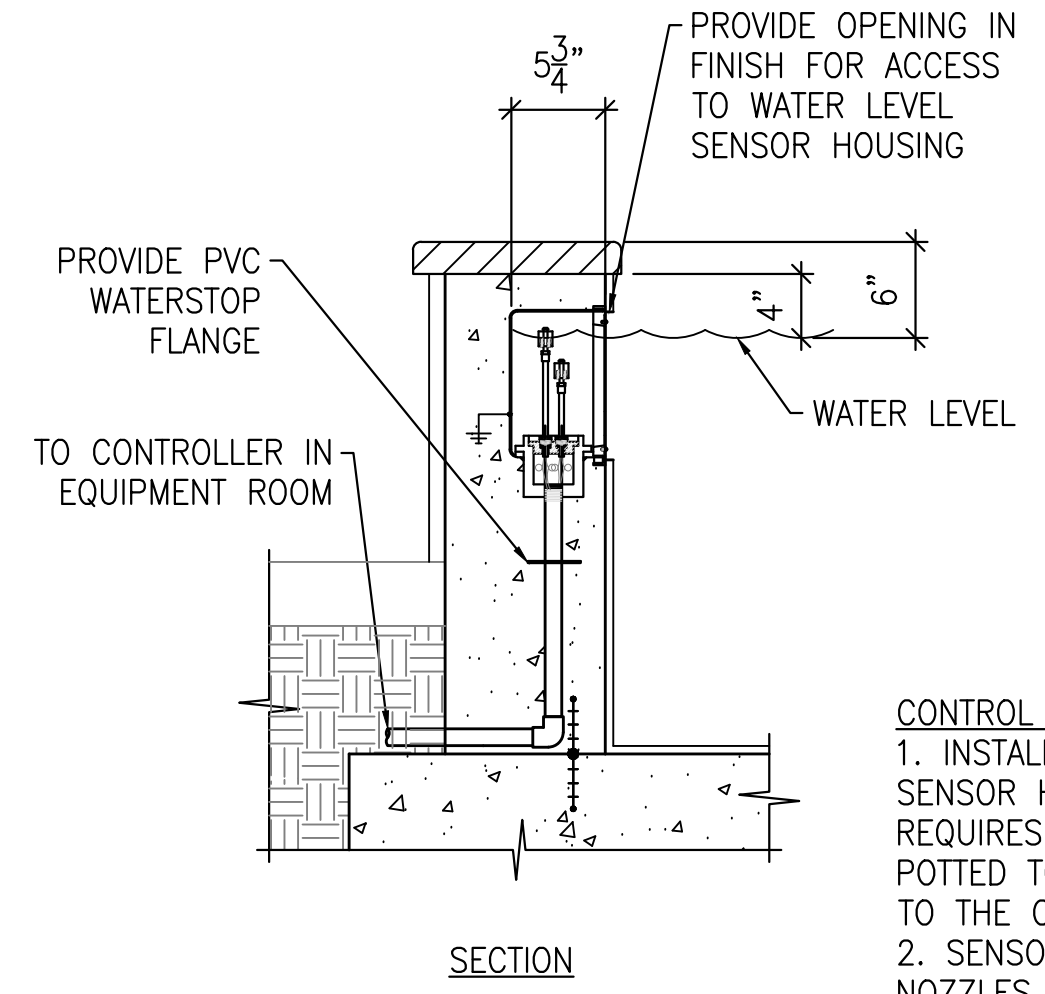
5 SKIMMER FITTING DETAIL
SCALE: 1"-1'-0"

NOTE:
BOND ALL METAL COMPONENTS PER 2020 NEC - ARTICLE 680 OR CURRENT ADOPTED ELECTRICAL CODE.



- FRONT ACCESS SKIMMER
- HEAVY-DUTY ABS CONSTRUCTION
 - FLOATING WEIR AND REMOVABLE TRASH BASKET
 - CAST BRONZE FACE PLATE WITH NATURAL FINISH
 - MINIMUM RECOMMENDED FLOW RATE: 10 GPM
 - MAXIMUM RECOMMENDED FLOW RATE: 30 GPM
 - 1 1/2" SLIP FIT CONNECTION

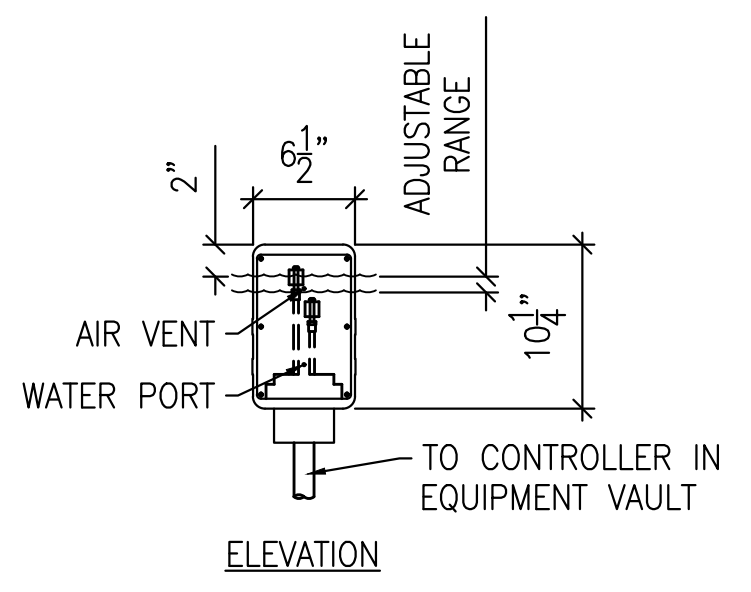
NOTE:
BOND ALL METAL COMPONENTS PER 2020 NEC - ARTICLE 680 OR CURRENT ADOPTED ELECTRICAL CODE.



6 WATER LEVEL SENSOR HOUSING DETAIL
SCALE: 1"-1'-0"

- WALL MOUNTED SENSOR HOUSING:
- CAST BRONZE HOUSING WITH CONDUIT CONNECTION
 - SENSOR ADJUSTMENT FOR SINGLE FUNCTION PROBES.

CONTROL NOTES:
1. INSTALL AN INTERMEDIATE JUNCTION BOX BETWEEN THE SENSOR HOUSING AND THE CONTROL PANEL IF DISTANCE REQUIRES. THE JUNCTION BOX SHOULD BE SEALED AND POTTED TO PREVENT MOISTURE MIGRATION FROM THE POOL TO THE CONTROL PANEL.
2. SENSOR HOUSINGS SHOULD BE SITUATED AWAY FROM NOZZLES AND WATERFALLS. EXCESSIVE WATER SURFACE TURBULENCE AND WAVE ACTION MAY IMPAIR THE OPERATION OF THE PROBES.



KIWANIS FALLS ENTRY MONUMENT/FOUNTAIN
UMATILLA, OREGON

FOUNTAIN DETAILS

FILE:	UMATILLA - SP600
WDI PROJ. #:	22-705FS
DRAWN BY:	BH
DESIGN BY:	BA
CHECKED BY:	BA



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PRINTED 2022-09-06

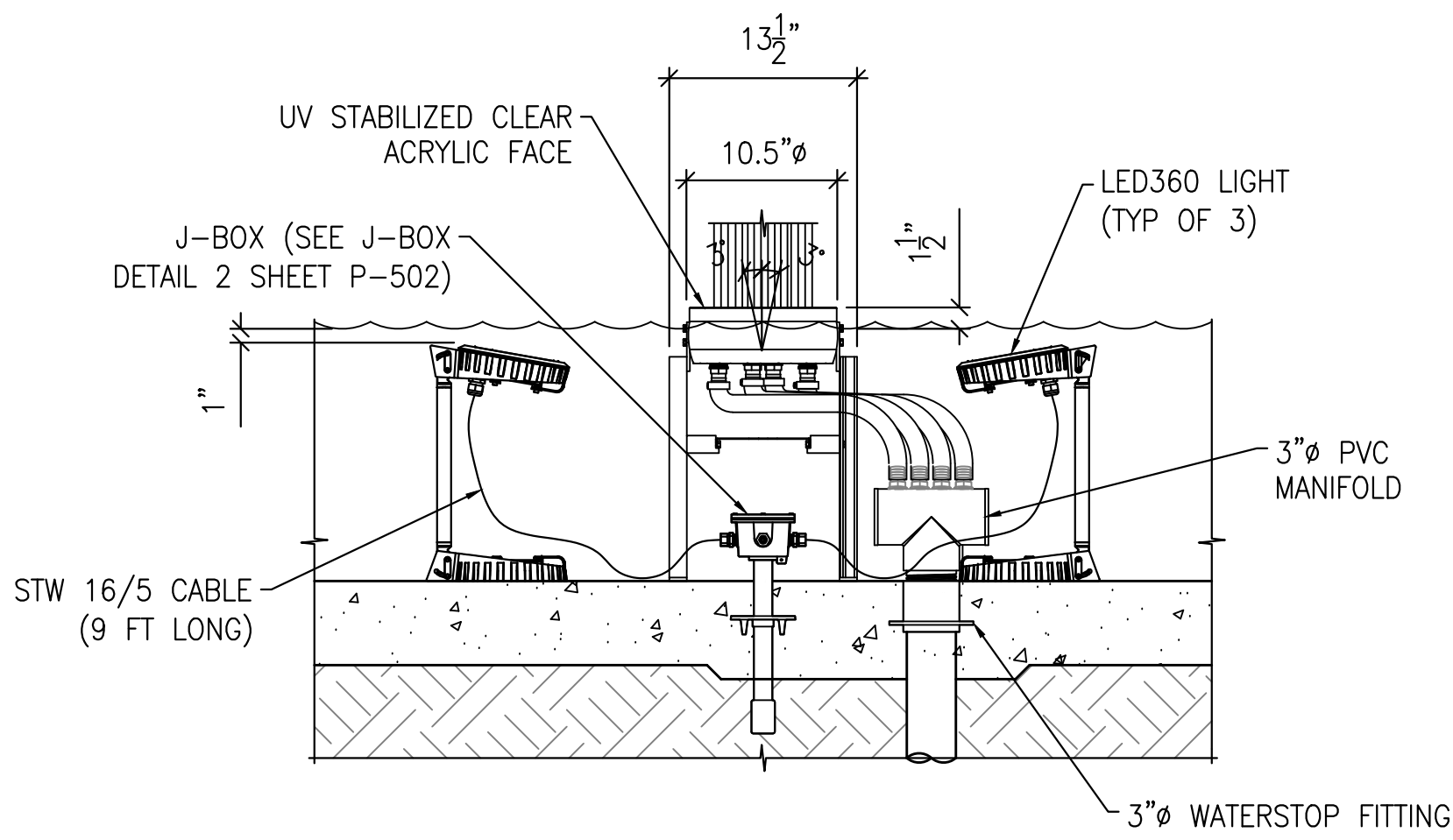
SHEET NUMBER:

P-502

REUSE OF DRAWINGS

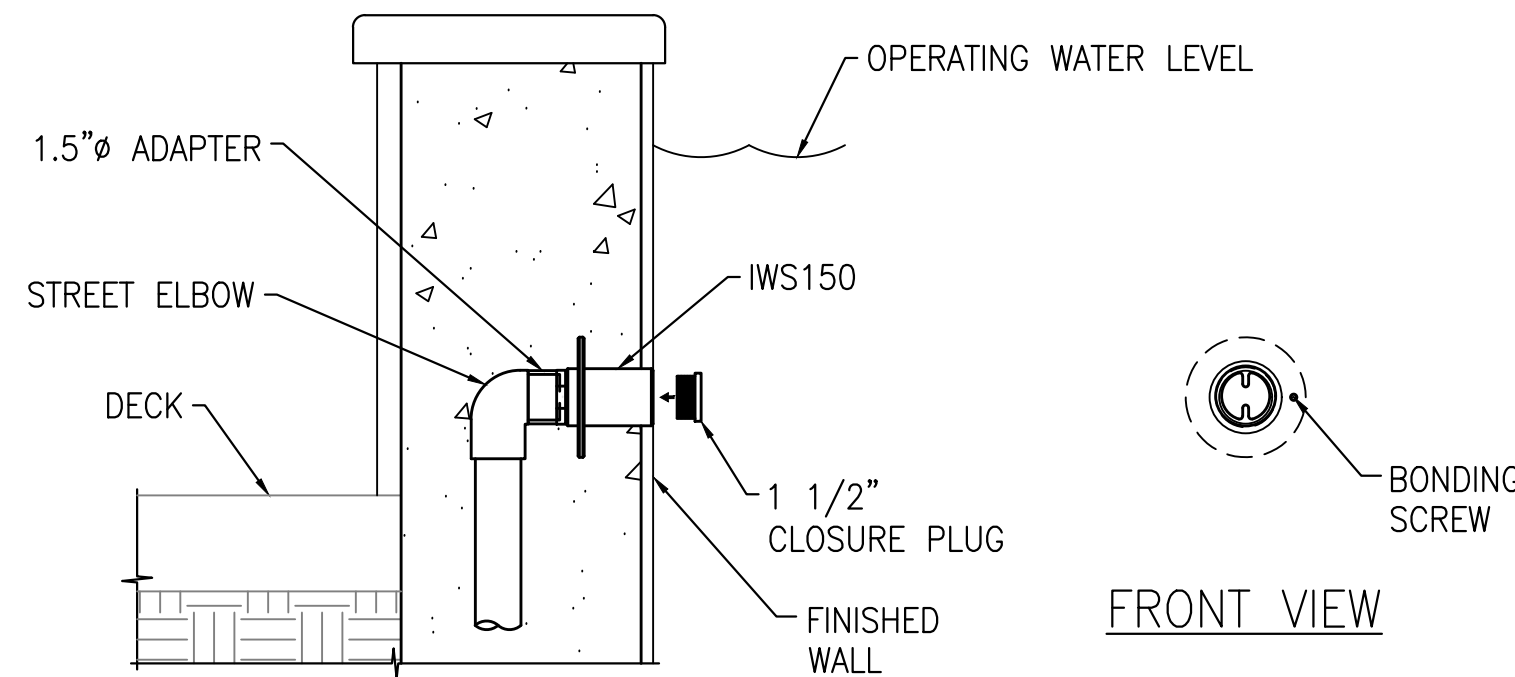
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NO.	REVISION	DESCRIPTION	DATE	BY	DATE



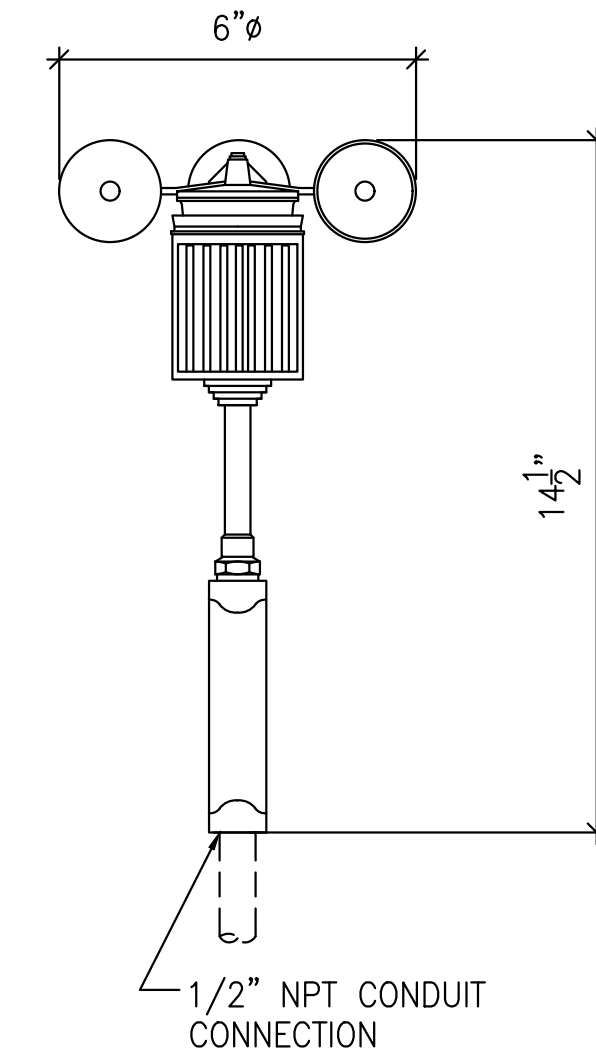
- NOTES:
1. FILTERED WATER SUPPLY (500 MICRON) REQUIRED.
 2. CORE HOLE DIAMETER 15.5".
 3. NOZZLE IS PEDESTRIAN WALK OVER ONLY.
 5. CONTACT CRYSTAL FOUNTAINS FOR DETAILED SPECIFICATIONS, AND OPERATION DETAILS.
 6. DO NOT SCALE DRAWING.
 7. VANDAL RESISTANT FASTENERS.
 8. 3 DEGREE ADJUSTABLE NOZZLE TO ENSURE A VERTICAL PLUME OF WATER.

1 DYNAMITE BLAST DETAIL
SCALE: 1"-1'-0"



- FLOOR DRAIN WITH PLUG:
- STAINLESS STEEL BODY WITH GROUNDING LUG
 - REMOVABLE THREADED PLUG
 - THREADED PIPE CONNECTION

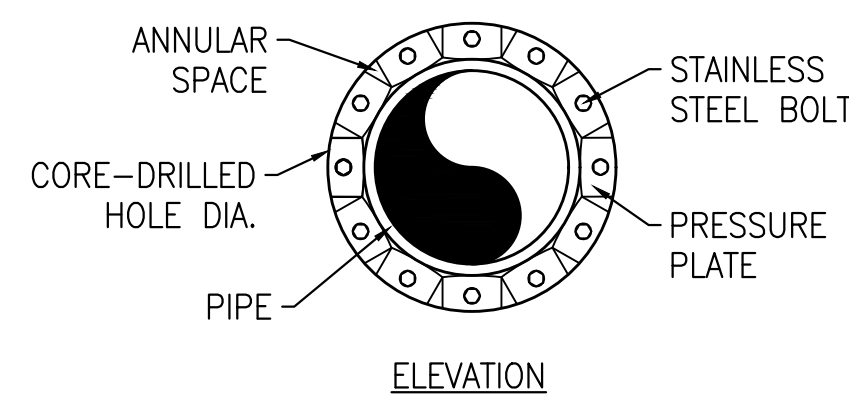
2 VACUUM FITTING DETAIL
SCALE: 1-1/2"-1'-0"



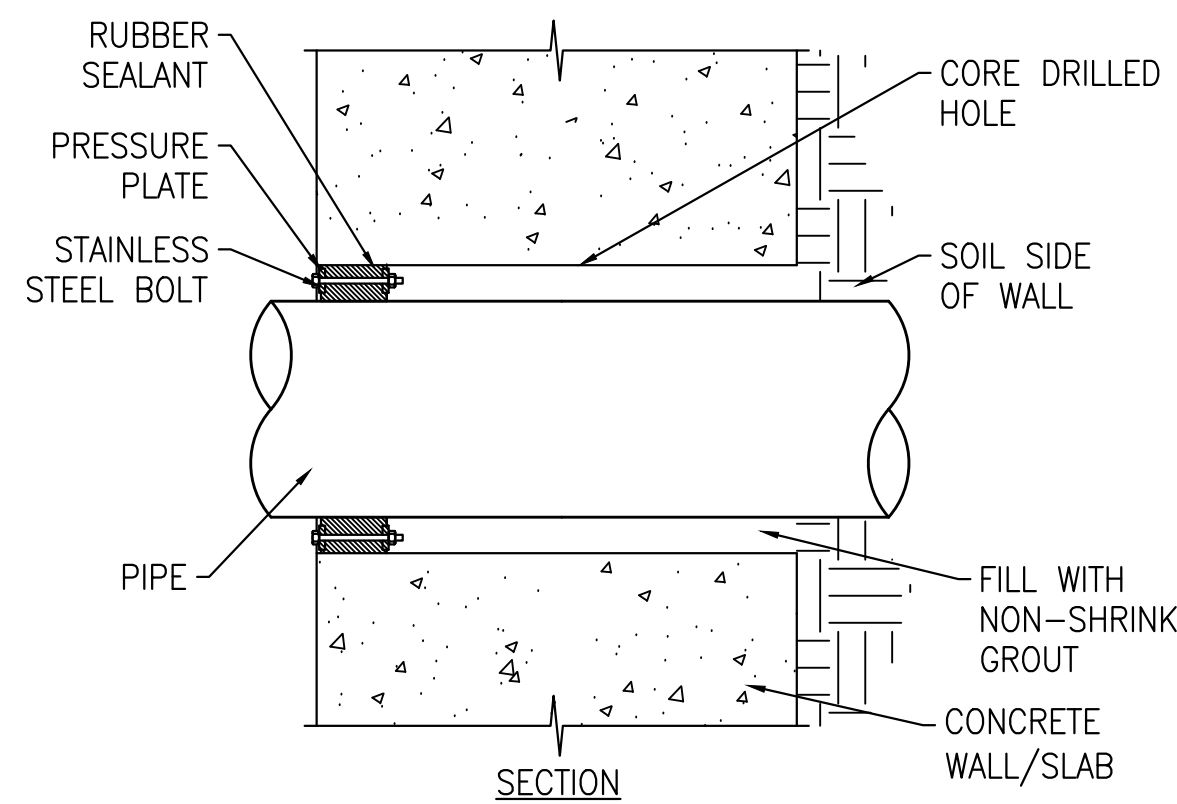
- WIND SPEED SENSOR:
- ROTATING CUP TYPE ANEMOMETER
 - ALUMINUM AND COPPER CONSTRUCTION WITH AN INTEGRAL 300 FOOT CABLE
 - ADAPTS TO 1/2" CONDUIT

- CONTROL NOTES:
1. ALL ELECTRICAL EQUIPMENT IN A FOUNTAIN MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND ANY APPLICABLE LOCAL CODES.
 2. PROVIDE INTERMEDIATE JUNCTION BOX(ES) AS NEEDED TO EXTEND THE 300 FOOT INTEGRAL SENSOR CABLE TO CONTROLLER LOCATION.

3 WIND SENSOR DETAIL
SCALE: 3"-1'-0"



PIPE SIZE (IN.)	HOLE I.D. (IN.)
1.5	4
2	4
2.5	4
3	5
4	6
6	10
8	12



4 PIPE MODULAR SEAL DETAIL
SCALE: 3"-1'-0"



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EXPIRATION DATE: 6-30-24
 9-6-2022

REUSE OF DRAWINGS
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NO.	DESCRIPTION	BY	DATE

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
 UMATILLA, OREGON
 STRUCTURAL PLANS

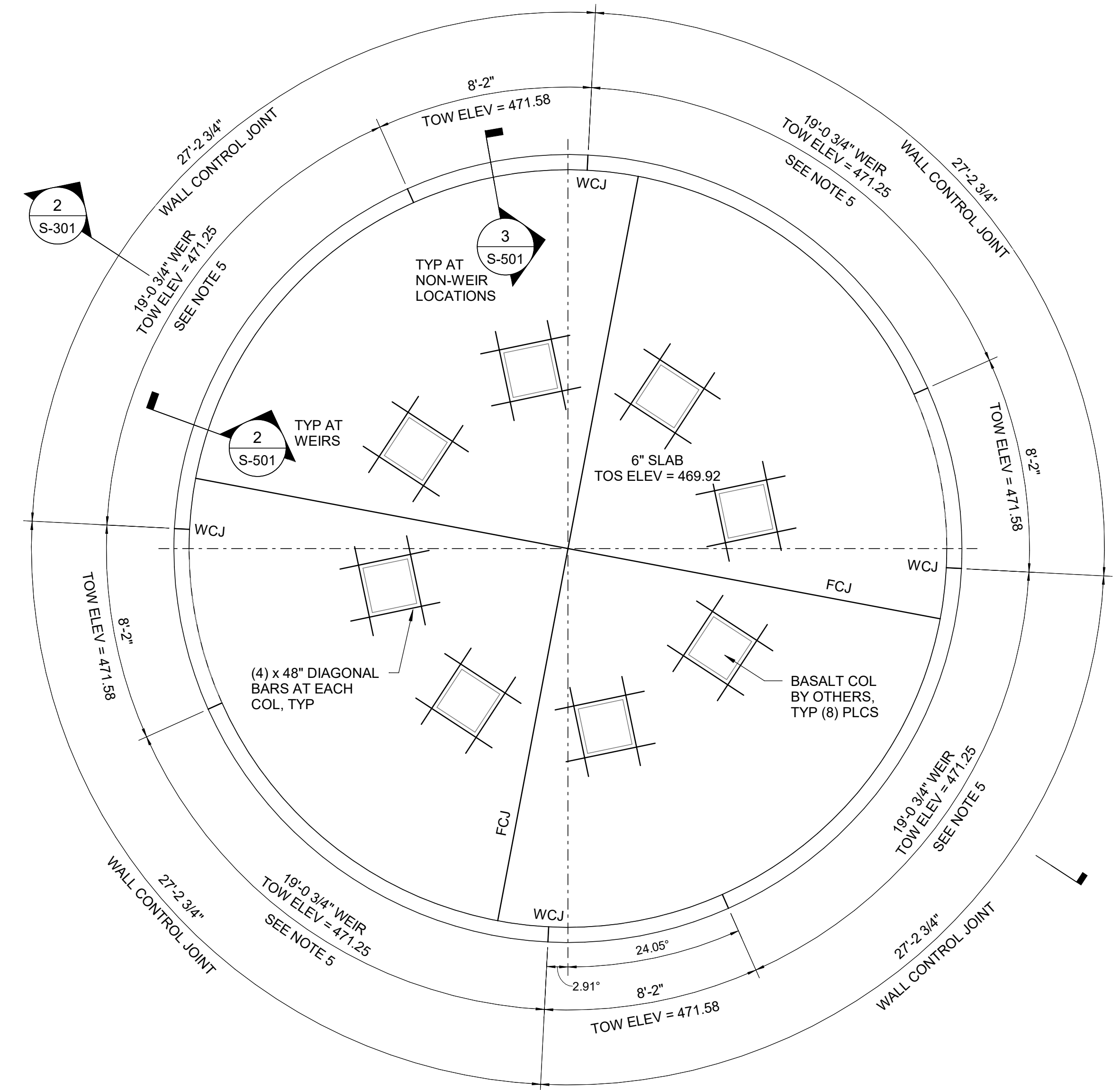
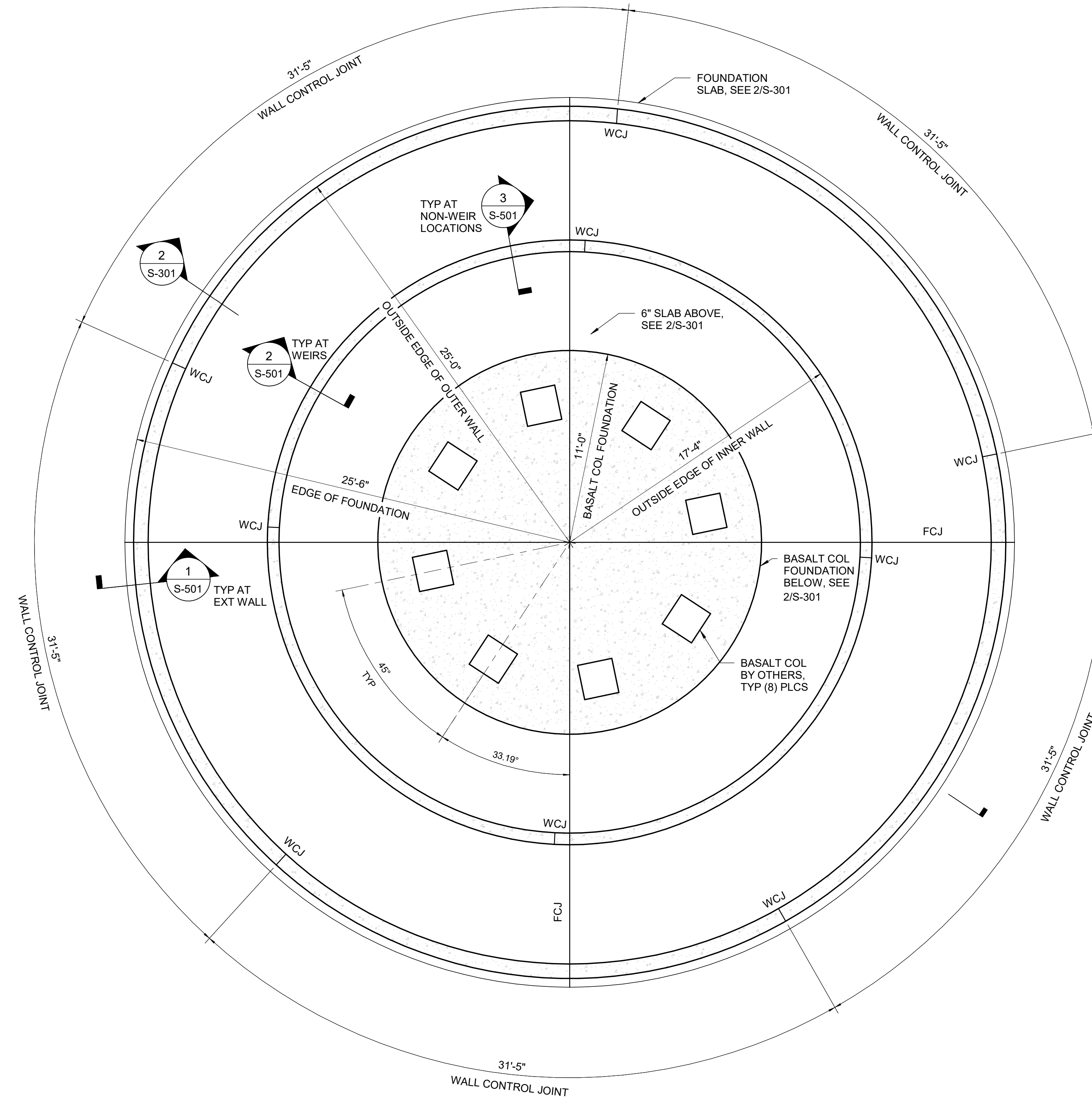
FILE:
 JUB PROJ. #: 33-21-003
 DRAWN BY: RAC
 DESIGN BY: RAC
 CHECKED BY: RSM
 AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY
 LAST UPDATED: 9/6/22

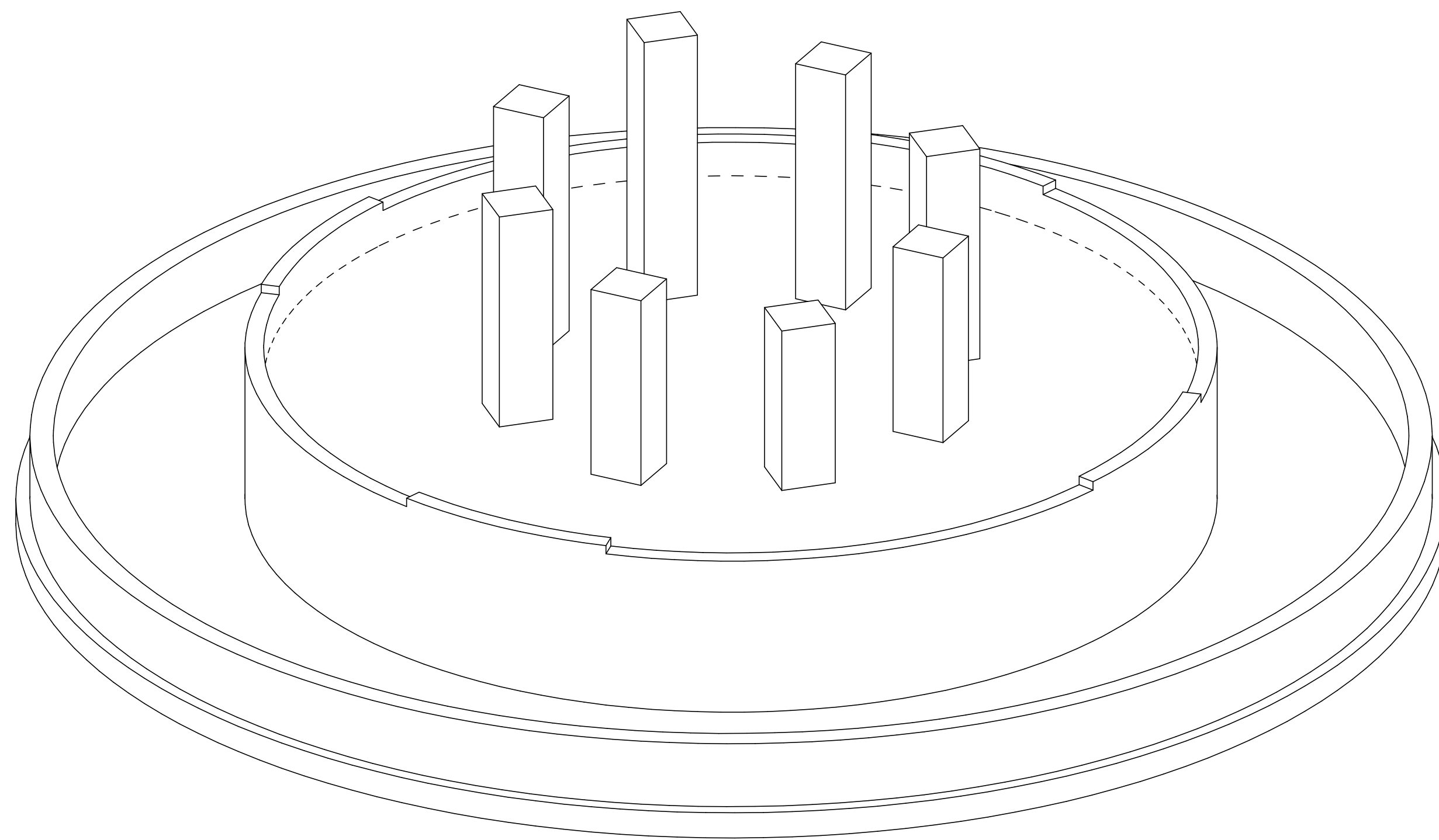
SHEET NUMBER:

S-101

SHEET NOTES

- SEE SHEET S-001 FOR GENERAL STRUCTURAL NOTES
- SEE SHEET S-501 AND S-502 FOR CONCRETE DETAILS.
- PROVIDE WATERSTOP AT ALL CONCRETE JOINTS. SEE SHEET S-503 FOR TYPICAL WATERSTOP DETAILS.
- SEE LANDSCAPE ARCH DRAWINGS FOR FOUNTAIN SIGNAGE LOCATIONS AND INFORMATION. FOR SIGNAGE ANCHORAGE, SEE DETAIL 5/S-501.
- CENTER WEIRS ON SIGN LOCATIONS. CONFIRM SIGN AND WEIR LOCATIONS WITH FOUNTAIN DRAWINGS BEFORE PLACING CONCRETE.
- ALL ARC LENGTH DIMENSIONS SHOWN ARE MEASURED ALONG OUTSIDE EDGE OF WALL.
- FCJ = FLOOR CONTROL JOINT
 WCJ = WALL CONTROL JOINT





1 3D ISOMETRIC
SCALE:

SHEET NOTES

1. SEE SHEET S-001 FOR GENERAL STRUCTURAL NOTES
2. SEE SHEET S-501 AND S-502 FOR CONCRETE DETAILS.
3. PROVIDE WATERSTOP AT ALL CONCRETE JOINTS. SEE SHEET S-503 FOR TYPICAL WATERSTOP DETAILS.
4. SEE LANDSCAPE ARCH DRAWINGS FOR FOUNTAIN SIGNAGE LOCATIONS AND INFORMATION. FOR SIGNAGE ANCHORAGE, SEE DETAIL 5/S-501.
5. CENTER WEIRS ON SIGN LOCATIONS. CONFIRM SIGN AND WEIR LOCATIONS WITH FOUNTAIN DRAWINGS BEFORE PLACING CONCRETE.



J-U-B ENGINEERS, INC.

J-U-B ENGINEERS, INC.
3611 S. Zintel Way
Kennewick, WA 99337
Phone: 509.783.2144
www.jub.com



EXPIRATION DATE: 9-6-2022

NO.	REVISION	DESCRIPTION	BY	APPR.	DATE

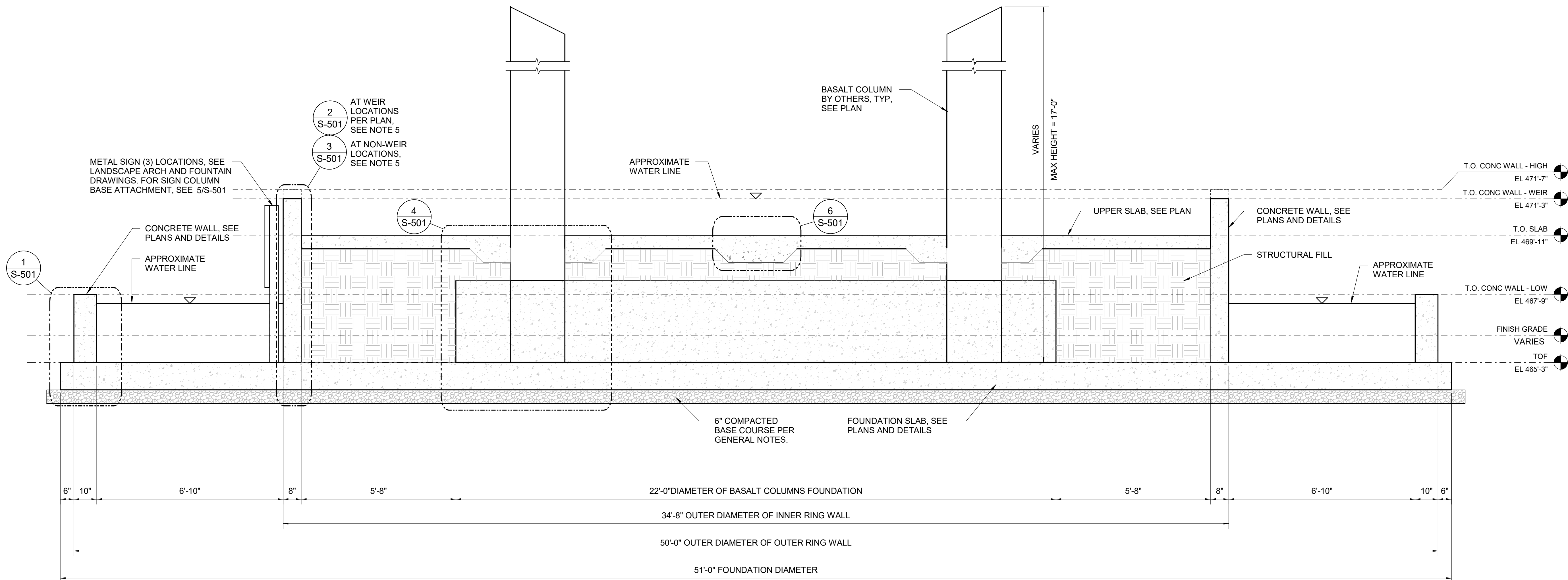
UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
UMATILLA, OREGON

ISOMETRIC AND STRUCTURAL SECTIONS

FILE:
JUB PROJ. #: 33-21-003
DRAWN BY: RAC
DESIGN BY: RAC
CHECKED BY: RSM
ONE INCH
AT FULL SIZE, IF NOT ONE
INCH SCALE ACCORDINGLY
LAST UPDATED: 9/6/22

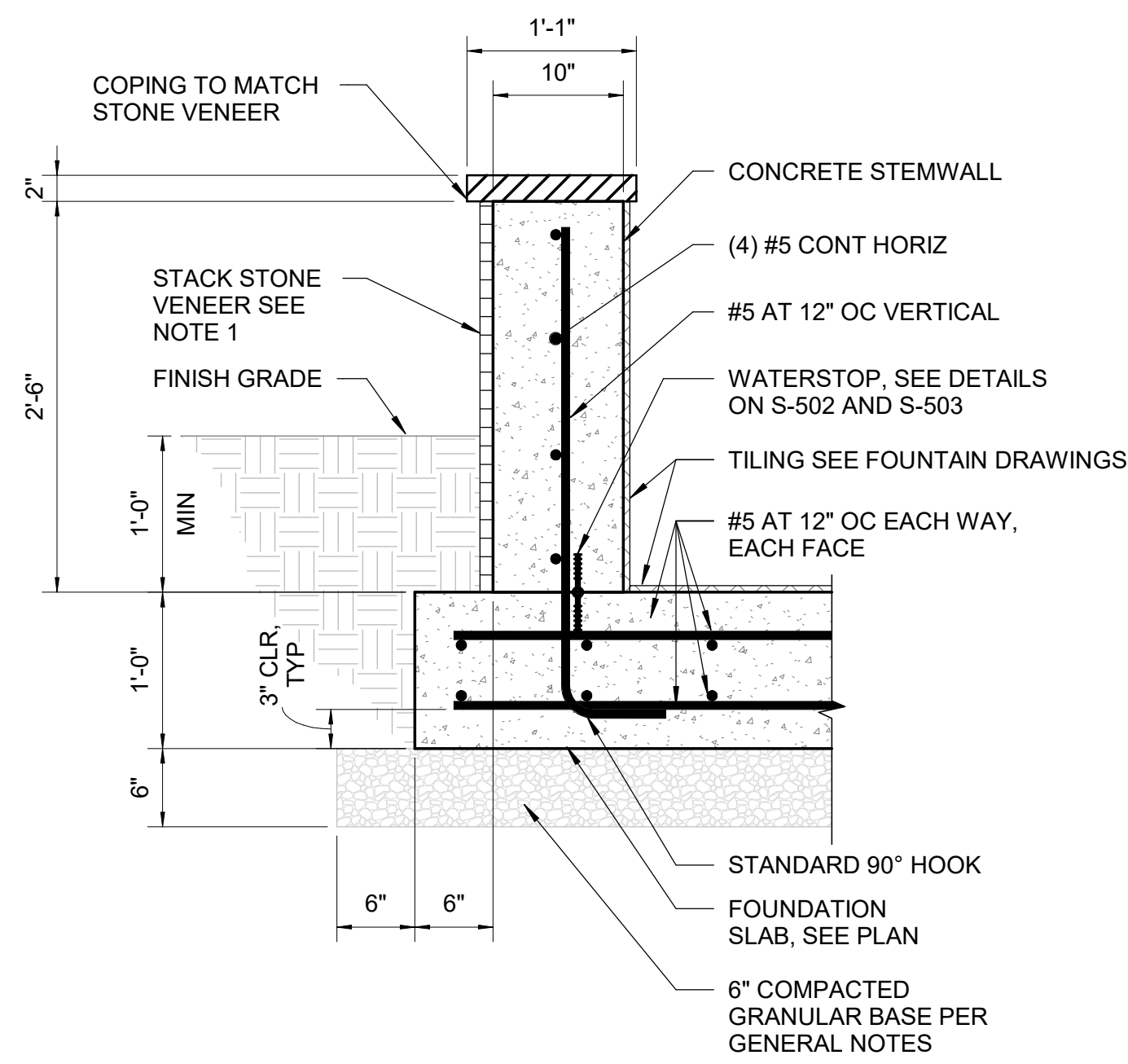
SHEET NUMBER:

S-301



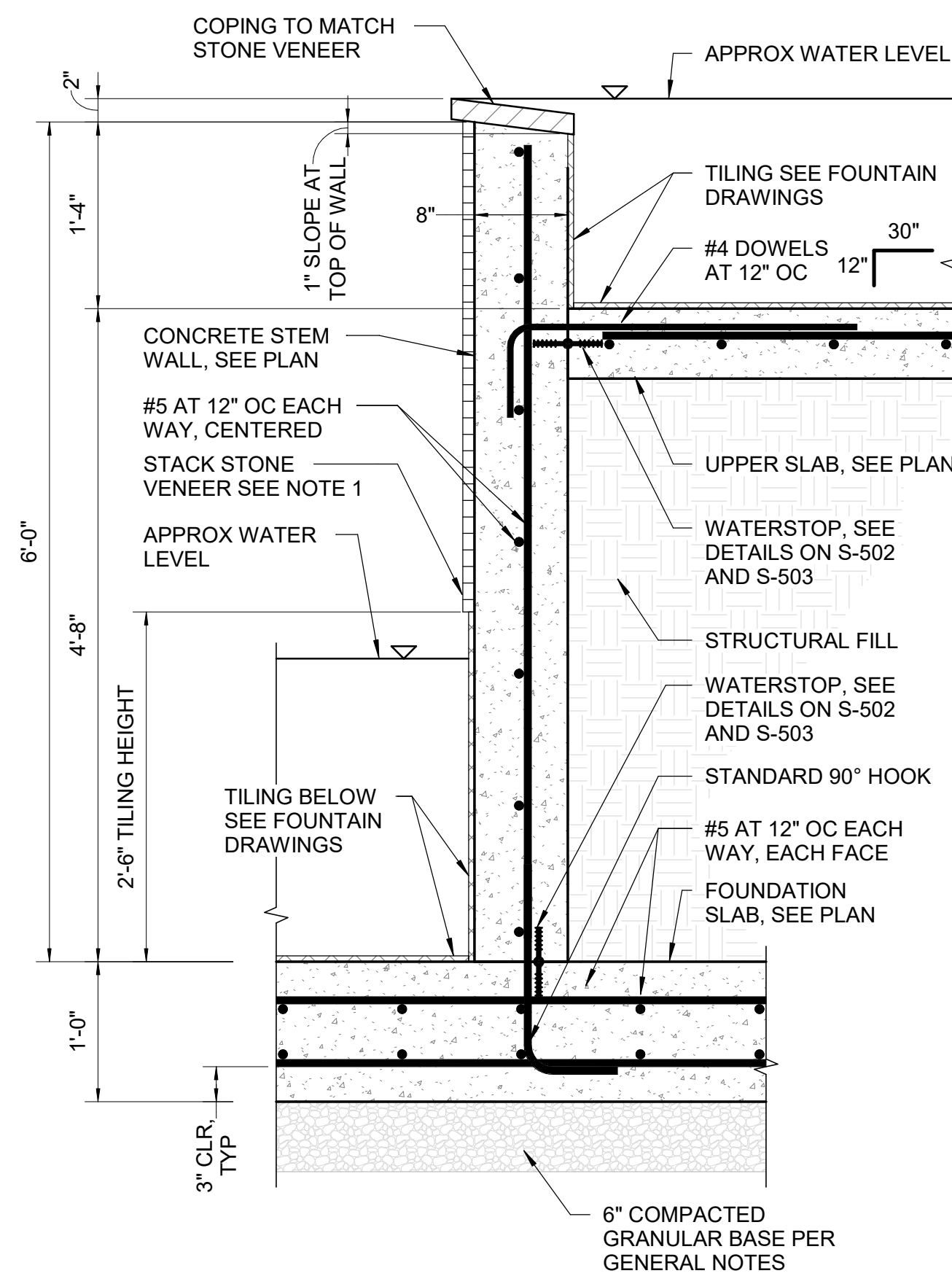
2 STRUCTURAL SECTION
SCALE: 1/2" = 1'-0"

NO.	DESCRIPTION	BY	DATE



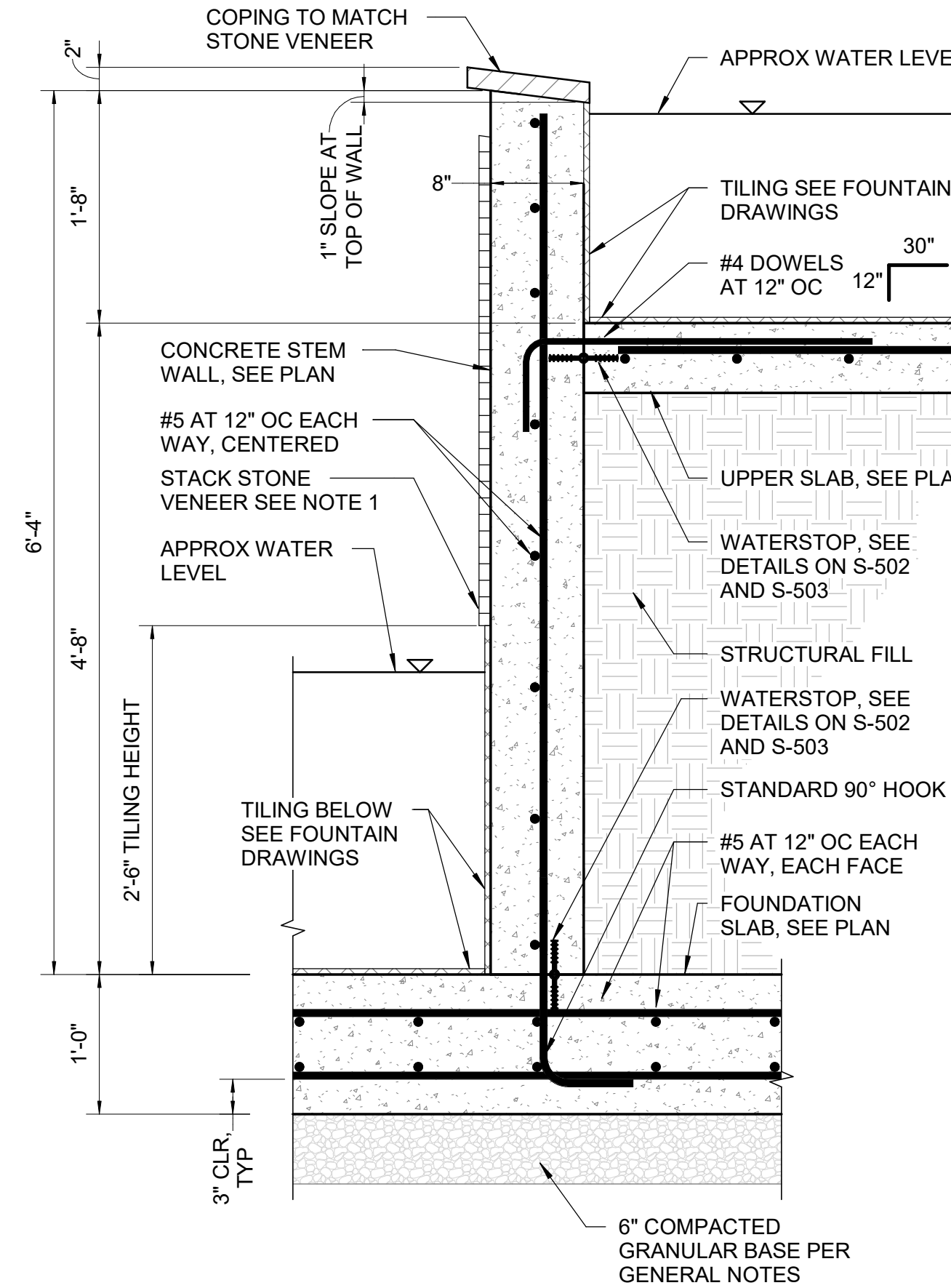
- NOTES:
 1. STACKED STONE TO BE MUTUAL MATERIALS - PRO-FIT ALPINE LEDGESTONE (PHEASANT COLOR). INSTALL PER MFR INSTRUCTIONS.
 2. LOCATE SKIMMERS IN WALL SUCH THAT REINFORCING IS NOT INTERRUPTED. IF REQUIRED, BEND HORIZONTAL REINFORCING AROUND SKIMMERS.

1 OUTER FOUNTAIN WALL
 S-101 SCALE: 1" = 1'-0"



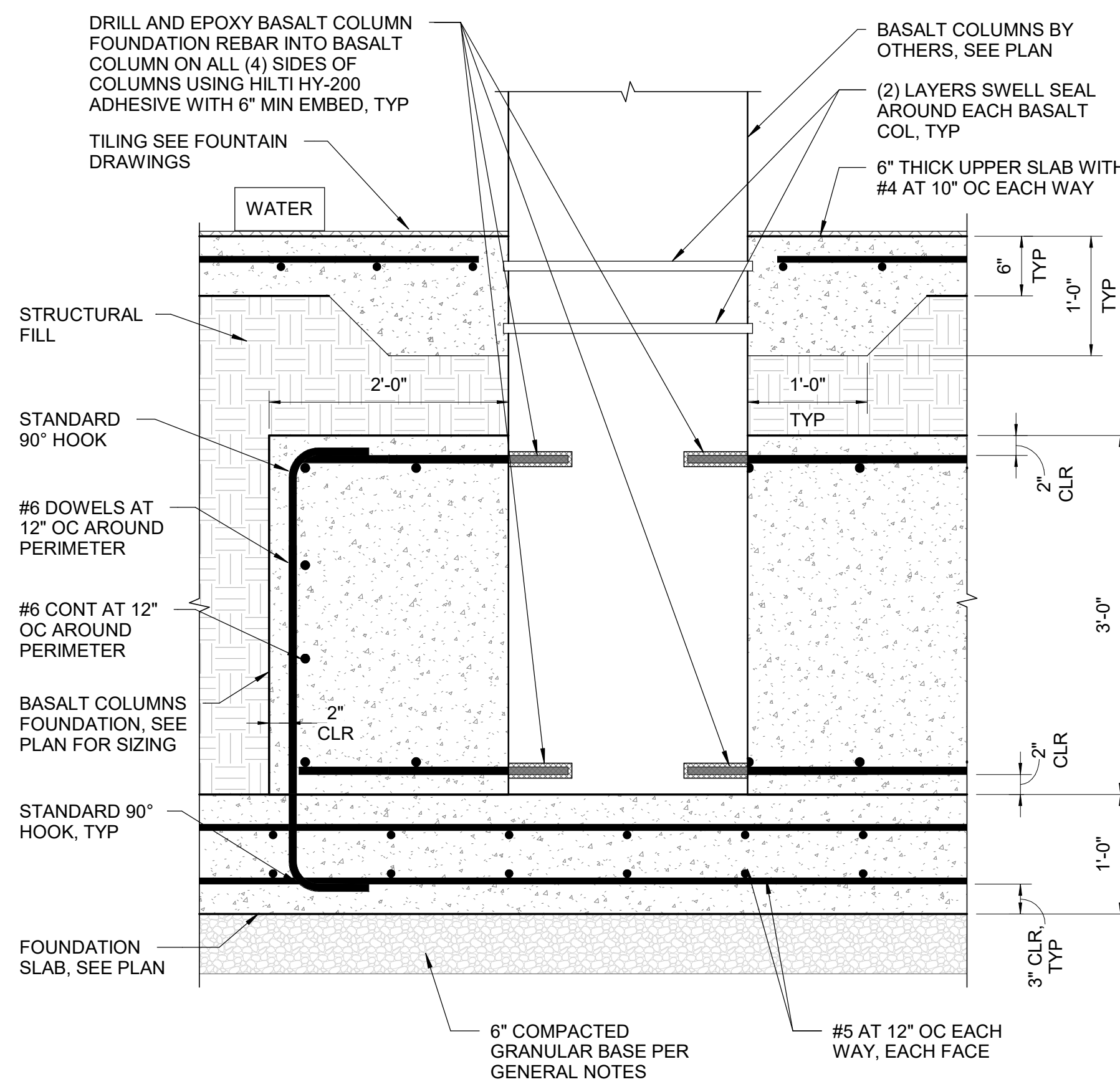
- NOTES:
 1. STACKED STONE TO BE MUTUAL MATERIALS - PRO-FIT ALPINE LEDGESTONE (PHEASANT COLOR). INSTALL PER MFR INSTRUCTIONS.

2 INNER FOUNTAIN WALL - WEIR
 S-101 SCALE: 1" = 1'-0"

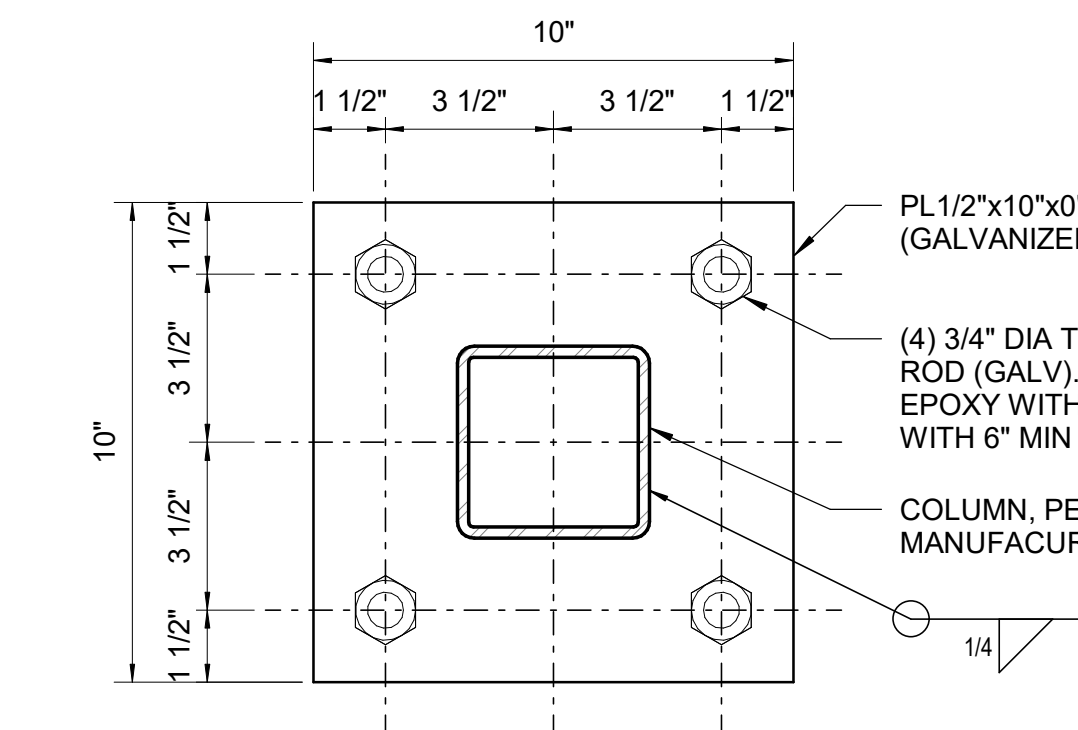


- NOTES:
 1. STACKED STONE TO BE MUTUAL MATERIALS - PRO-FIT ALPINE LEDGESTONE (PHEASANT COLOR). INSTALL PER MFR INSTRUCTIONS.

3 INNER FOUNTAIN WALL - NO WEIR
 S-101 SCALE: 1" = 1'-0"

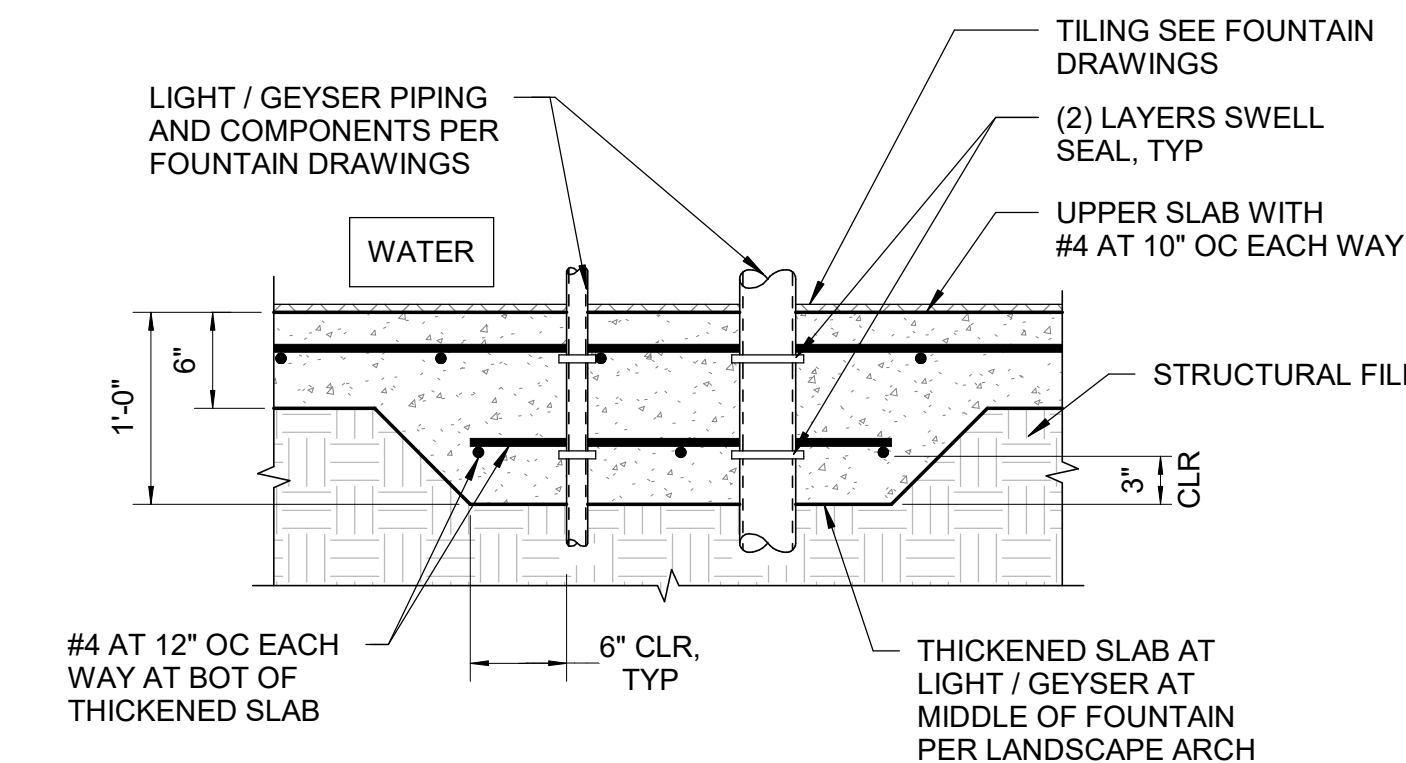


4 BASALT COLUMN ANCHORAGE
 S-301 SCALE: 1" = 1'-0"

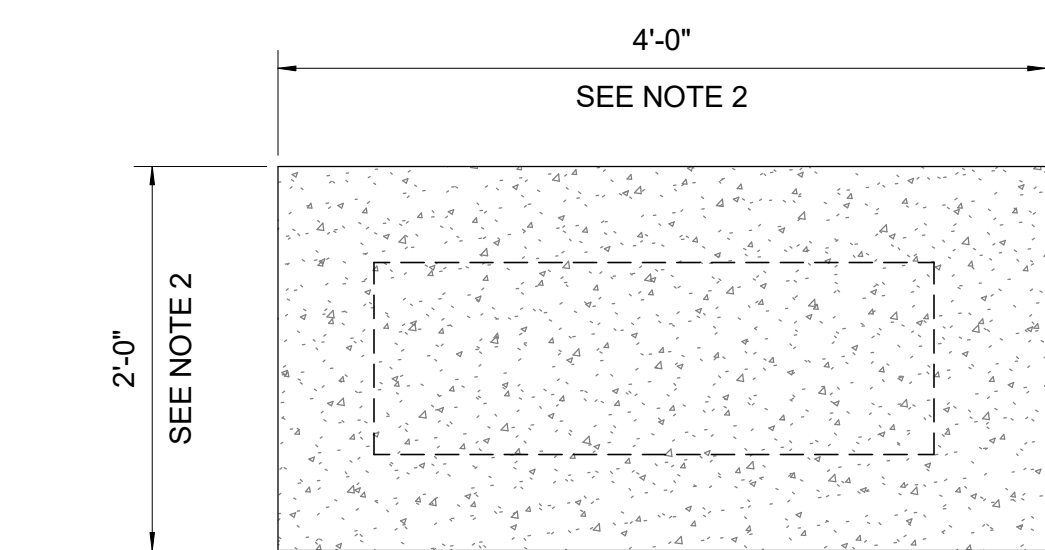


- NOTES:
 1. INSTALL SIGN BASEPLATES BEFORE TILE IS INSTALLED.

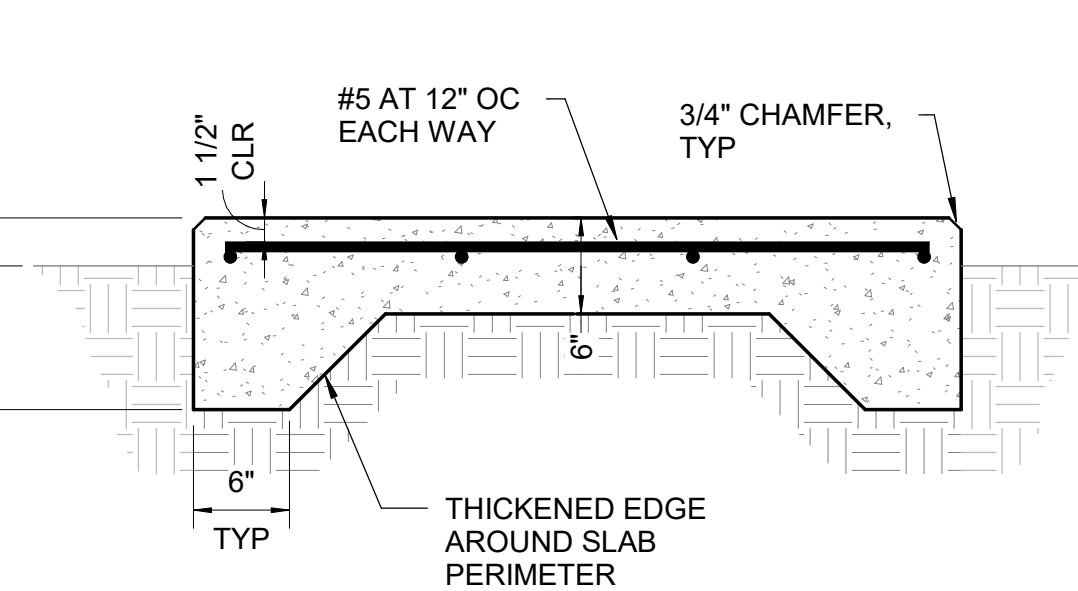
5 SIGN COLUMN BASE
 SCALE: 3" = 1'-0"



6 SLAB AT CENTER LIGHT / GEYSER
 S-301 SCALE: 1" = 1'-0"



- NOTES:
 1. REFER TO ELECTRICAL DRAWINGS FOR PAD LOCATION. CONFIRM SIZE OF PAD WITH ELECTRICAL CONTRACTOR AND ELECTRICAL ENGINEER BEFORE PLACING EQUIPMENT PAD. PAD SHALL BE A MINIMUM OF 6" LARGER THAN EQUIPMENT ON ALL SIDES.
 2. EQUIPMENT PADS SHALL BE INSTALLED LEVEL UNLESS INDICATED OTHERWISE.
 3. THE SIZE, NUMBER, TYPE, LOCATION, AND THREAD PROJECTION OF THE ANCHOR BOLTS SHALL BE DETERMINED BY THE EQUIPMENT MANUFACTURER. ANCHOR BOLTS SHALL BE HELD IN POSITION WITH A TEMPLATE OR OTHER ACCEPTABLE MEANS.
 4. AT CONTRACTOR'S OPTION, POST INSTALLED ANCHORS MAY BE USED IN LIEU OF CAST-IN-PLACE ANCHORS WHEN DIAMETER IS LESS THAN 3/4" DIAMETER AND WHEN APPROVED BY THE EQUIPMENT MANUFACTURER AND CONTRACTOR'S REPRESENTATIVE.
 5. PROVIDE BITUMASTIC, EPDM ROOFING MATERIAL OR ASPHALTIC FELT BETWEEN ELECTRICAL PANELS AND THE CONCRETE SLAB.



7 CT CABINET PAD
 SCALE: 1" = 1'-0"

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NO.	REVISION	DESCRIPTION	BY	DATE

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
 UMATILLA, OREGON

TYPICAL STRUCTURAL DETAILS

FILE:
 JUB PROJ. #: 33-21-003
 DRAWN BY: RAC
 DESIGN BY: RAC
 CHECKED BY: RSM

ONE INCH
 AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY
 LAST UPDATED: 9/6/22

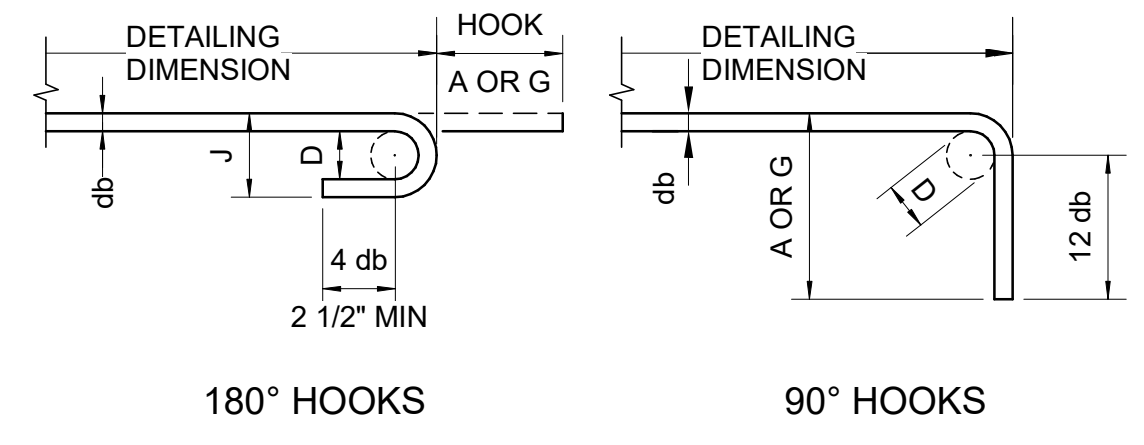
SHEET NUMBER:

S-502

TYPICAL LAP SPLICE LENGTHS IN INCHES, PER ACI 318

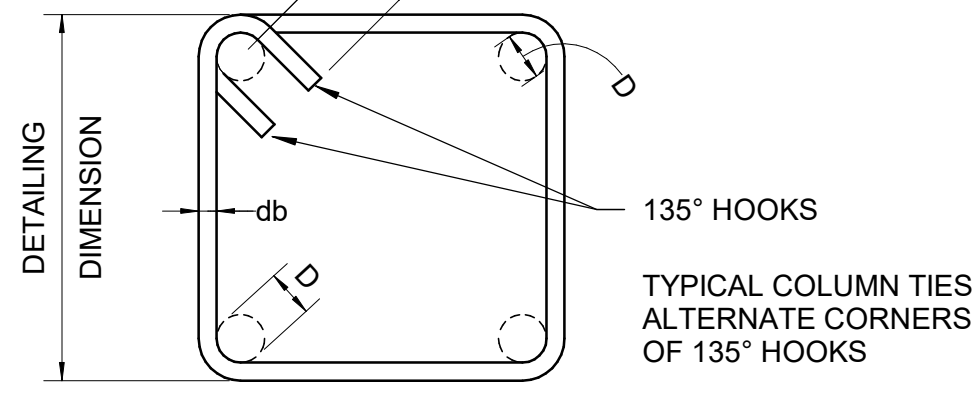
BAR SIZE	LAP CLASS	f _c =3,000 psi		f _c =4,000 psi		f _c =4,500 psi		f _c =5,000 psi	
		CAT.1	CAT.2	CAT.1	CAT.2	CAT.1	CAT.2	CAT.1	CAT.2
#3	A	16	25	14	21	14	20	13	19
	B	21	32	19	28	18	27	17	25
#4	A	22	33	19	28	18	27	17	25
	B	28	43	25	37	24	35	22	33
#5	A	27	41	24	36	23	34	21	32
	B	36	53	31	46	30	44	28	41
#6	A	33	49	28	43	27	41	25	38
	B	43	64	37	55	36	53	33	50
#7	A	48	72	42	62	40	59	37	56
	B	62	93	54	81	51	77	48	72
#8	A	55	82	47	71	45	68	42	64
	B	71	106	61	92	58	88	55	83
#9	A	62	92	53	80	51	76	48	72
	B	80	120	69	104	66	99	62	93

- NOTES:
- FOR GRADE 60 REINFORCING STEEL BARS.
 - ALL LAP SPLICES SHALL BE CLASS B, UNLESS NOTED OTHERWISE.
 - CATEGORY 1: CLEAR COVER ≥ db AND CLR SPACING ≥ db AND STIRRUPS OR TIES THROUGHOUT Ld ARE PROVIDED.
 CATEGORY 1: CLEAR COVER ≥ db AND CLR SPACING ≥ 2db
 CATEGORY 2: CLEAR COVER < db OR CLR SPACING < 2db
 - FOR TOP BARS, MULTIPLY LAP LENGTH LISTED BY 1.30. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BARS.



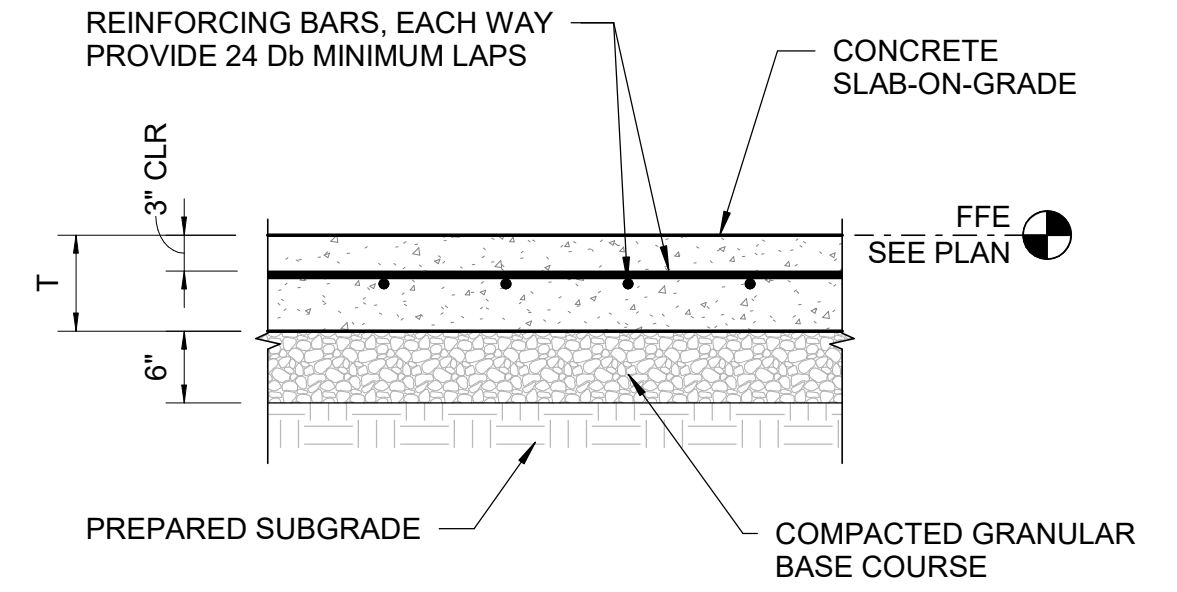
BAR SIZE	D	180° HOOKS		90° HOOKS
		A or G	J	A or G
#3	2-1/4"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3-3/4"	7"	5"	10"
#6	4-1/2"	8"	6"	1'-0"
#7	5-1/4"	10"	7"	1'-2"
#8	6"	11"	8"	1'-4"

- NOTES:
- db = NOMINAL BAR DIAMETER
 - D = FINISHED INSIDE BEND DIAMETER
 - MINIMUM D = 6 x db FOR #3 TO #8 BARS
 - MINIMUM D = 8 x db FOR #9 TO #11 BARS
 - MINIMUM D = 10 x db FOR #14 AND #18 BARS
 - TYPICAL MINIMUM END HOOKS, ALL GRADES OF STEEL



BAR SIZE	D	135° HOOKS	
		A or G	H **
#3	1-1/2"	4-1/4"	3"
#4	2"	4-1/2"	3"

- NOTES:
- db = NOMINAL BAR DIAMETER
 - D = FINISHED INSIDE BEND DIAMETER
 - TYPICAL MINIMUM END HOOKS, ALL GRADES OF STEEL



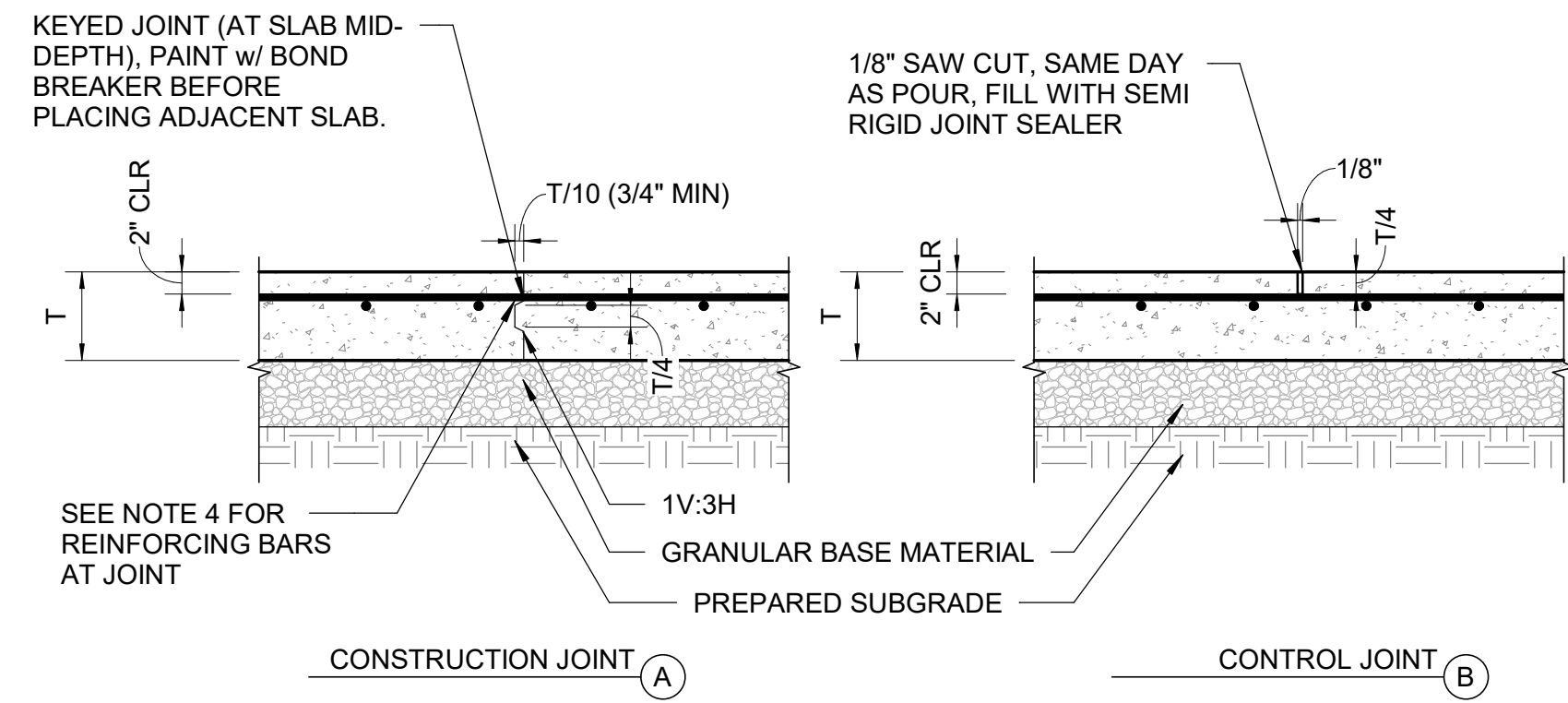
- NOTES:
- SEE GENERAL NOTES FOR SUBGRADE AND COMPACTED GRANULAR FILL FOR REQUIREMENTS.
 - REFER TO FOUNDATION PLANS AND DETAILS FOR SLAB THICKNESS "T".

1 TYPICAL CONCRETE REBAR LAP SPLICE SCH
 NO SCALE

2 TYPICAL REBAR HOOKS DETAIL
 NO SCALE

3 TYPICAL REBAR TIES DETAIL
 NO SCALE

4 TYPICAL CONCRETE SLAB ON GRADE DETAIL
 NO SCALE

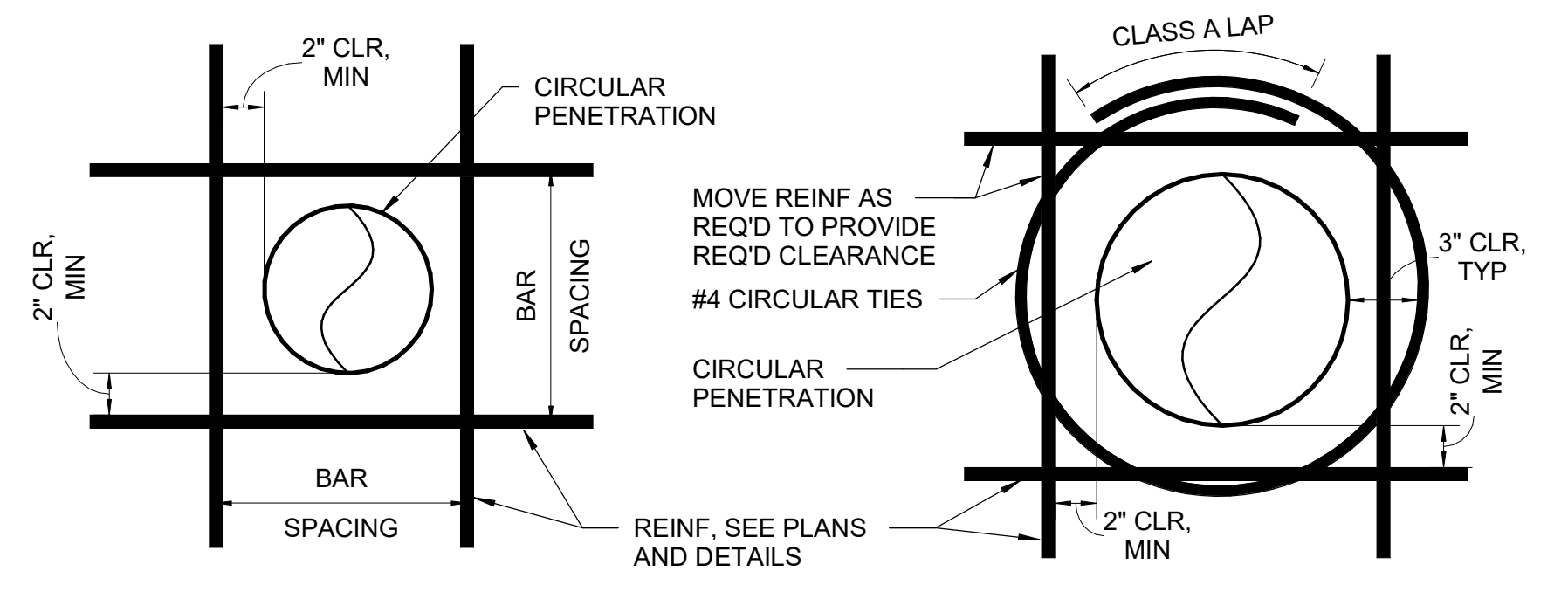


- NOTES:
- FOR INFORMATION NOT SHOWN, SEE 4/S-502.
 - CONTROL JOINTS TO BE 20'-0" ON CENTER, MAXIMUM, UNLESS NOTED OTHERWISE.
 - JOINT TYPE USED IS OPTIONAL, UNLESS NOTED OTHERWISE.
 - CUT EVERY OTHER BAR CROSSING CONTROL JOINTS.
 - CONTROL JOINT, SAW CUT 1/8" WIDE x 1/4 SLAB THICKNESS DEEP MIN SAWING MUST OCCUR AS SOON AS CONCRETE SURFACE IS FIRM ENOUGH SO CONCRETE WILL NOT BE DAMAGED, BUT NO LATER THAN 12 HOURS AFTER CONCRETE HAS BEEN PLACED.

5 TYPICAL CONCRETE SLAB ON GRADE CONTROL JOINT DETAIL
 NO SCALE

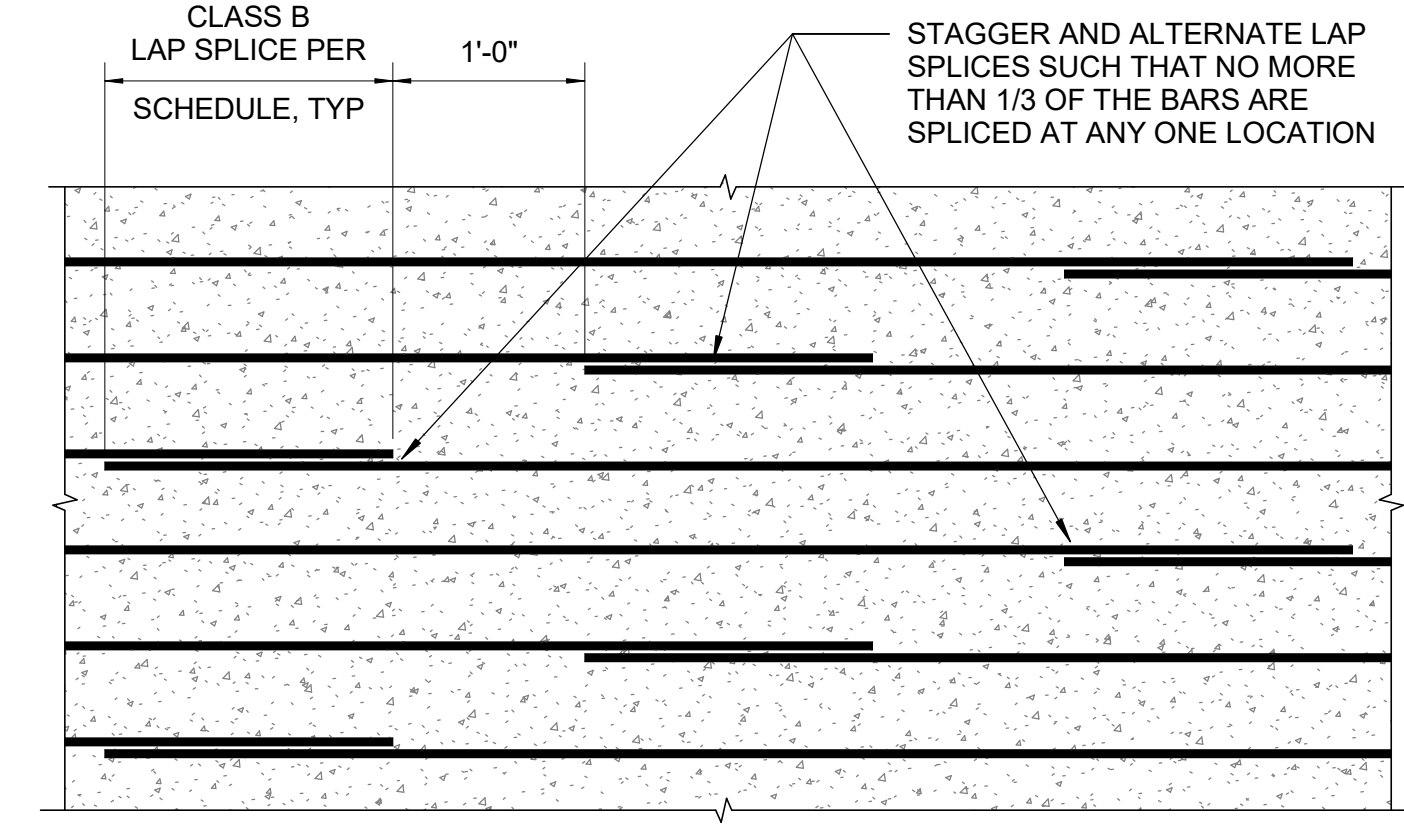
6 TYPICAL CONCRETE WALL CONTROL JOINT DETAIL - PLAN VIEW
 NO SCALE

7 TYPICAL CONCRETE SLAB CONTROL JOINT DETAIL
 NO SCALE



- NOTE: NO SPECIAL REIN IS REQ'D AROUND THE PENETRATION.
- NOTE: PROVIDE (1) CIRCULAR TIE FOR WALLS OR SLABS WITH ONE MAT OF REIN AND (2) TIES FOR WALLS WITH TWO MATS OF REIN.
- NOTE:
- REFER TO GENERAL NOTES FOR REBAR CLEARANCE REQUIREMENTS.
 - REFER TO OTHER DETAILS FOR WALL/SLAB REIN SIZE AND SPACING.
 - BAR SPACING REFERS TO THE LESSER OF THE VERT OR HORIZ BAR SPACING.
 - DETAILS IS SIMILAR FOR EITHER VERTICAL WALL OR HORIZONTAL SLAB LOCATIONS.

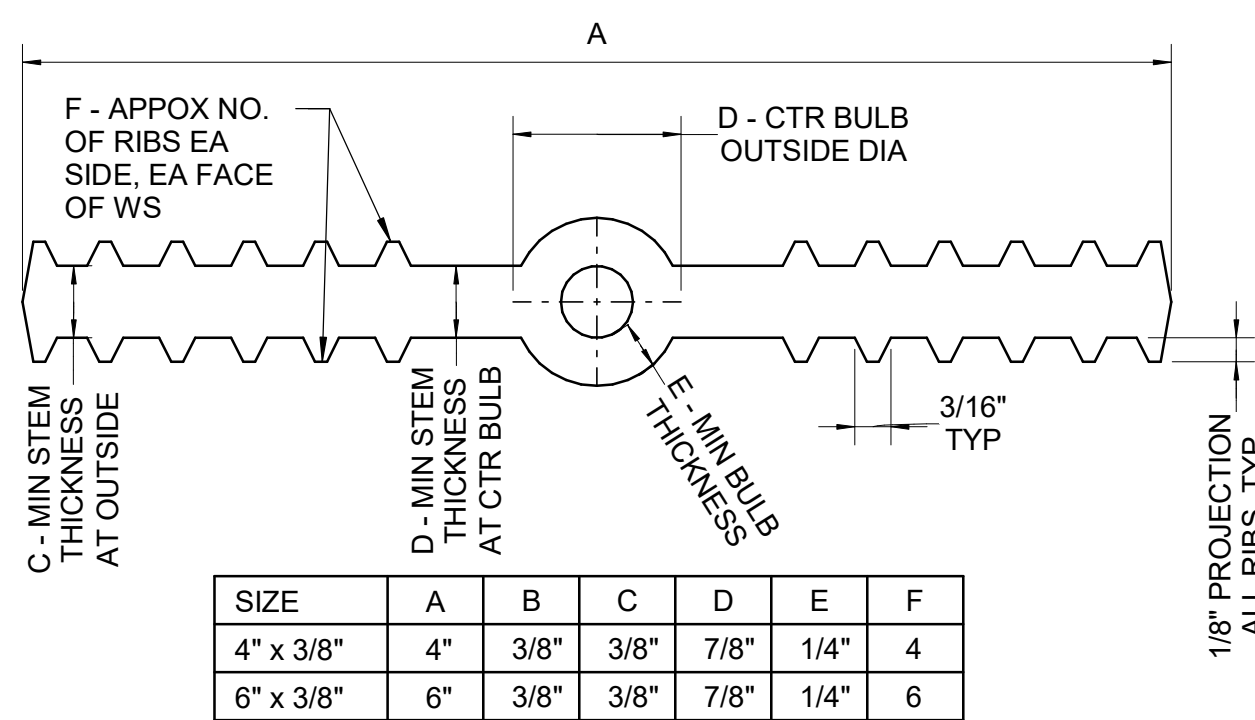
8 TYPICAL CIRCULAR HOLE IN CONCRETE SLAB ON GRADE OR WALL
 NO SCALE



- NOTES:
- VERTICAL WALL REINFORCEMENT NOT SHOWN FOR CLARITY.
 - DO NOT PLACE LAP SPLICES ACROSS A VERTICAL WALL JOINT.
 - REFER TO OTHER VIEWS AND SECTIONS FOR BAR SIZE AND SPACING.
 - REFER TO TYPICAL LAP SPLICE SCHEDULE FOR LAP LENGTHS.

9 TYPICAL CONCRETE WALL HORIZONTAL REBAR LAP SPLICE
 NO SCALE

C:\Users\rcadwin\Documents\33-21-003_Kwanis Fountain (Template)_rebar.dwg, 2/28/22

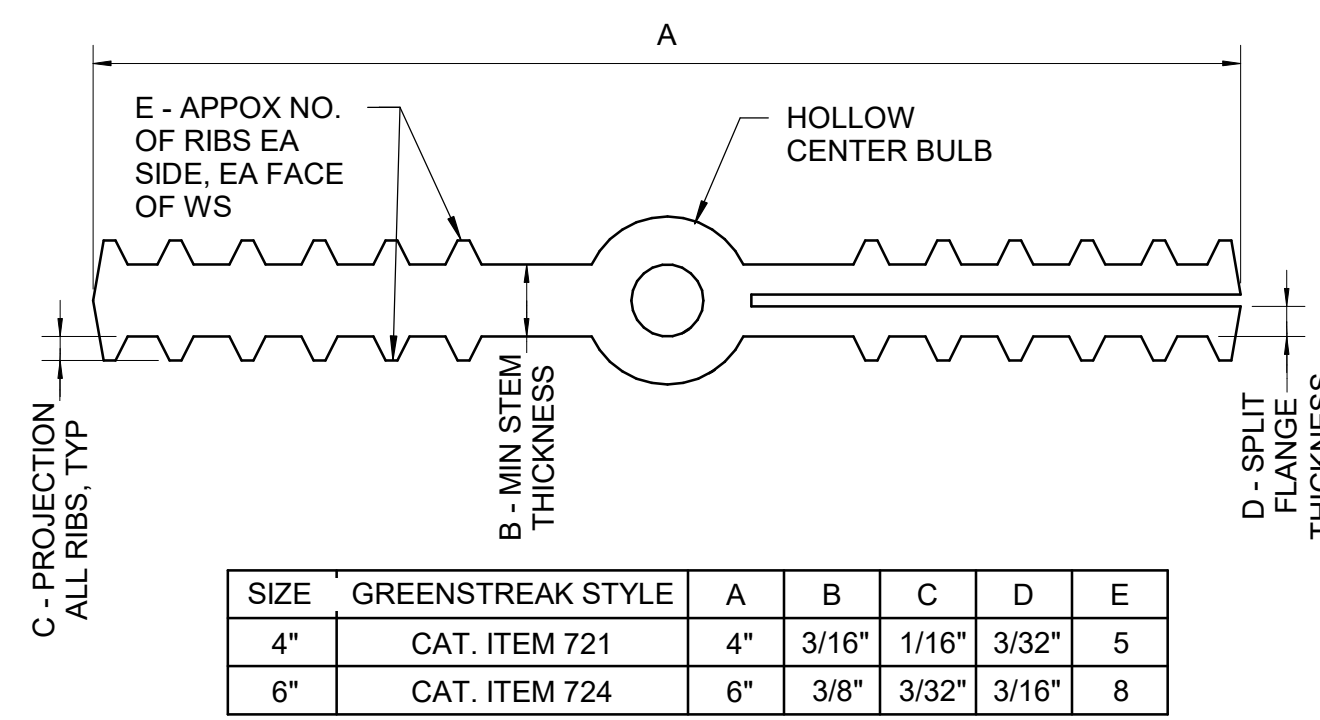


SIZE	A	B	C	D	E	F
4" x 3/8"	4"	3/8"	3/8"	7/8"	1/4"	4
6" x 3/8"	6"	3/8"	3/8"	7/8"	1/4"	6

- NOTES:
1. WATERSTOP SHALL BE PVC AND SHALL CONFORM TO ASTM D570, ASTM D746, ASTM D1149, AND CRD-C572.
 2. WHEN AVAILABLE, PROVIDE PRE-FABRICATED INTERSECTION SECTIONS AT ALL WATER STOP INTERSECTIONS.

1 TYPICAL WATERSTOP TYPE

NO SCALE

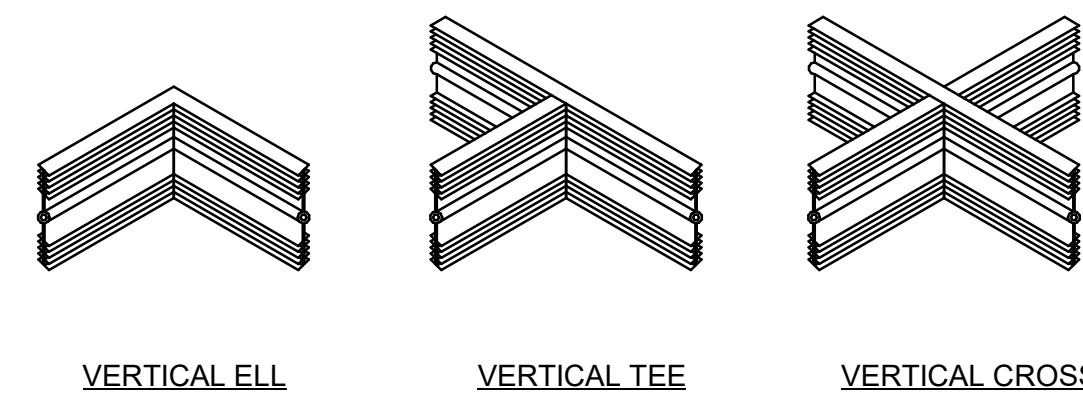


SIZE	GREENSTREAK STYLE	A	B	C	D	E
4"	CAT. ITEM 721	4"	3/16"	1/16"	3/32"	5
6"	CAT. ITEM 724	6"	3/8"	3/32"	3/16"	8

- NOTES:
1. WATERSTOP SHALL BE PVC AND SHALL CONFORM TO ASTM D570, ASTM D746, ASTM D1149, AND CRD-C572.
 2. WHEN AVAILABLE, PROVIDE PRE-FABRICATED INTERSECTION SECTIONS AT ALL WATER STOP INTERSECTIONS.

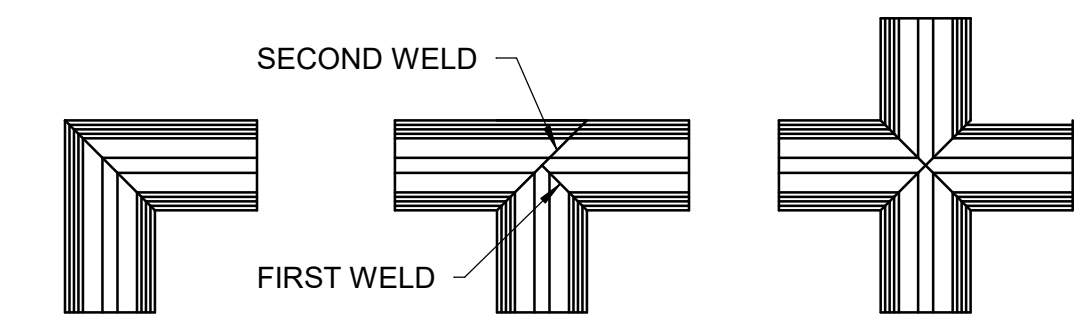
2 TYPICAL SPLIT WATERSTOP TYPE

NO SCALE



VERTICAL ELL VERTICAL TEE VERTICAL CROSS

- NOTES:
1. PROVIDE FACTORY MADE WATERSTOP FABRICATIONS FOR ALL VERTICAL INTERSECTIONS AND CORNERS.
 2. INSTALL AND SEAL FABRICATIONS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
 3. FABRICATIONS SHALL BE MADE FROM THE SAME MATERIAL AS THE WATERSTOP CONNECTED.

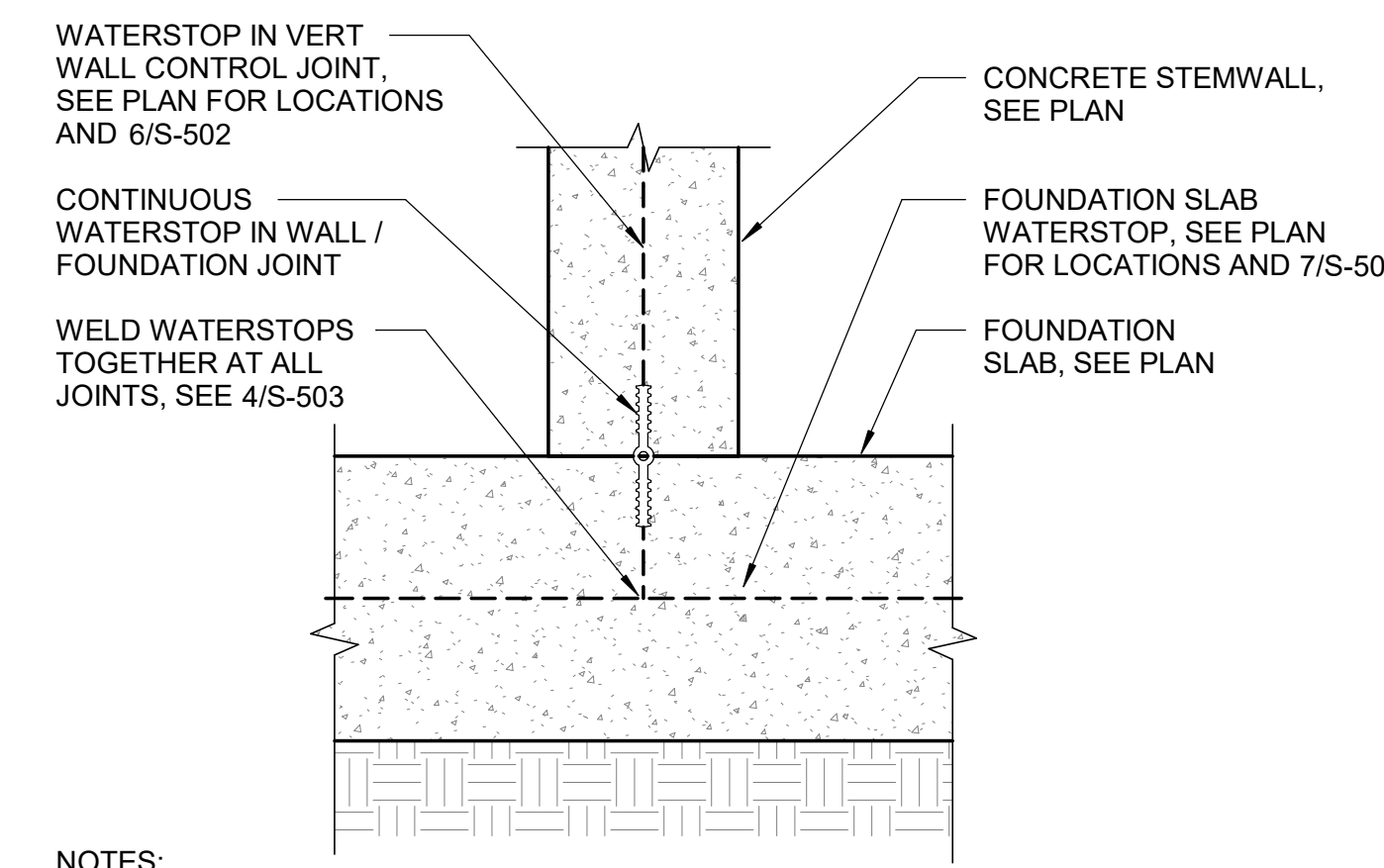


FLAT ELL FLAT TEE FLAT CROSS

- NOTES:
1. PROVIDE TEFLON COATED THERMOSTATICALLY CONTROLLED WATERSTOP SPLICING IRONS FOR ALL FIELD BUTT SPLICED.
 2. FIELD BUTT SPLICES SHALL BE FULLY HEAT FUSED FOLLOWING THE MANUFACTURER'S RECOMMENDATIONS.
 3. LAPPING OF WATERSTOP, USE OF ADHESIVES, OR SOLVENTS SHALL NOT BE ALLOWED.

4 TYPICAL WELDED WATERSTOP INTERSECTIONS

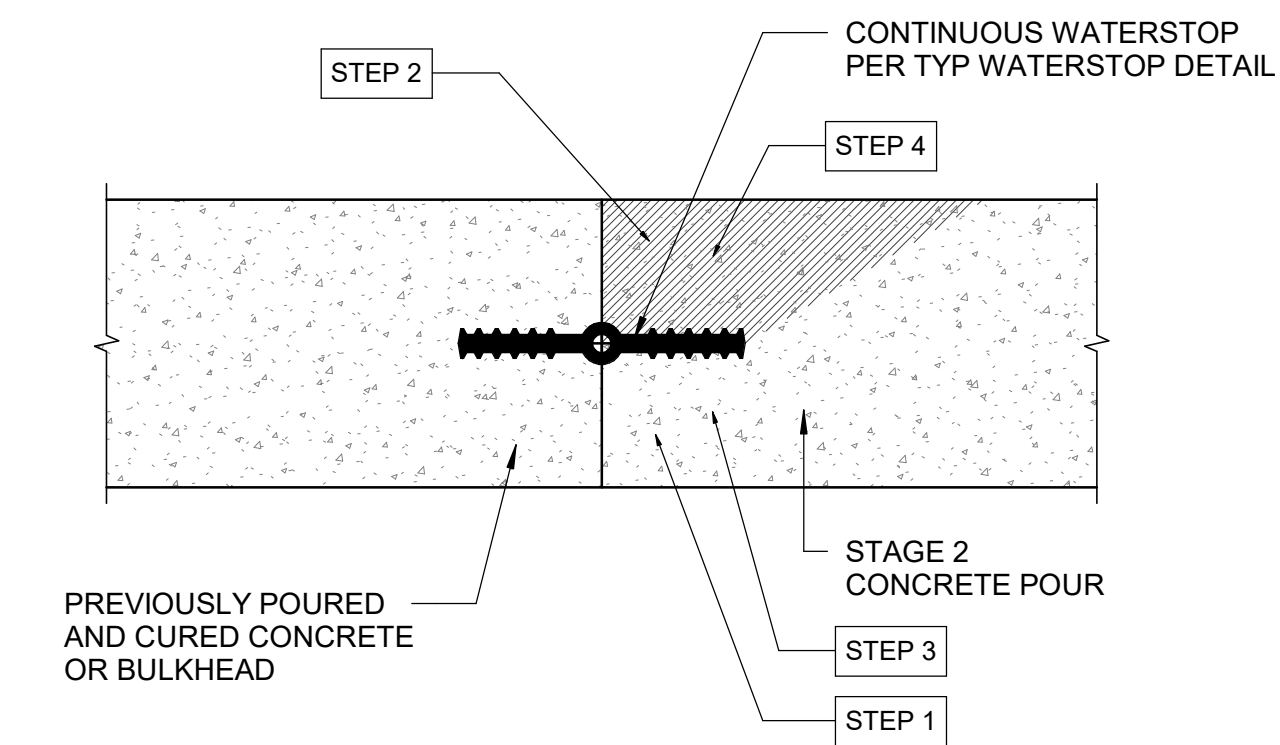
NO SCALE



- NOTES:
1. SLAB AND WALL REINFORCING NOT SHOWN FOR CLARITY. FOR CONCRETE FOR REINFORCING INFORMATION, SEE 1/S-501 AND 2/S-501.

8 TYPICAL WATERSTOP INTERSECTION DETAIL

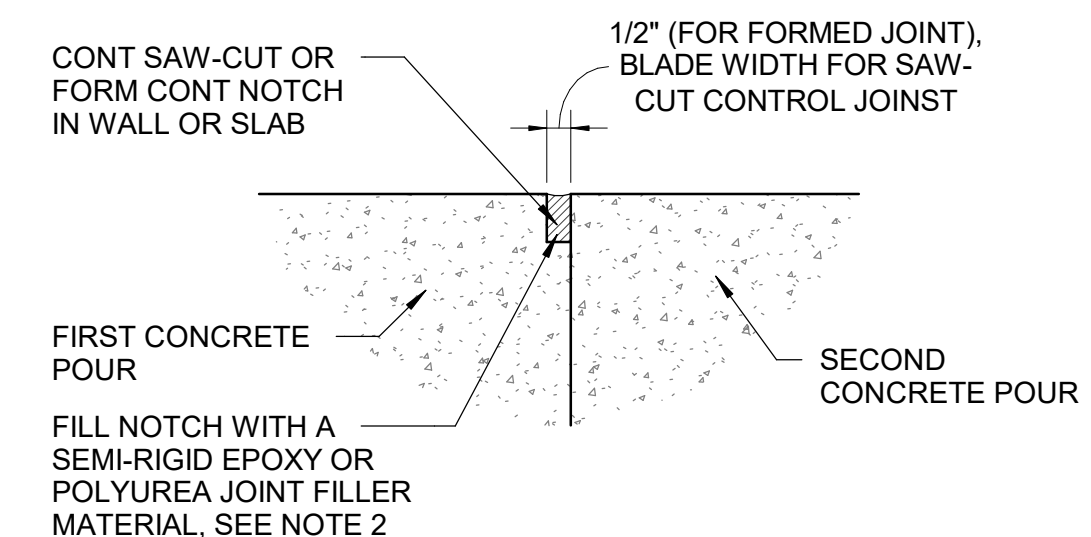
NO SCALE



- STEP 1 PLACE CONCRETE BELOW WATERSTOP FIRST. REMOVE ALL AIR VOIDS BY VIBRATING THOROUGHLY.
- STEP 2 TO CONFIRM THERE ARE NO AIR VOIDS, LIFT WATERSTOP. A CONTINUOUS IMPRESSION OF THE WATERSTOP, INCLUDING THE EDGE OF THE BULB, SHOULD BE VISIBLE IN THE FRESH CONCRETE. CONTINUE THIS PROCEDURE ALONG THE ENTIRE POURED JOINT, END TO END. IF CONTINUOUS IMPRESSION IS CONFIRMED, PROCEED WITH STEP 4. IF VOID LARGER THAN 1/4" IN DIAMETER IS PRESENT ANYWHERE IN THE WATERSTOP IMPRESSION, PROCEED WITH STEP 3.
- STEP 3 IF A VOID LARGER THAN 1/4" IN DIAMETER IS PRESENT IN THE WATERSTOP IMPRESSION, ADDITIONAL CONCRETE SHALL BE PLACED UNDER THE WATERSTOP, VIBRATED, AND STEP 2 REPEATED.
- STEP 4 FINISH PLACING CONCRETE ABOVE THE WATERSTOP TO TOP OF SLAB.

5 TYPICAL SLAB WATERSTOP INSTALLATION

NO SCALE



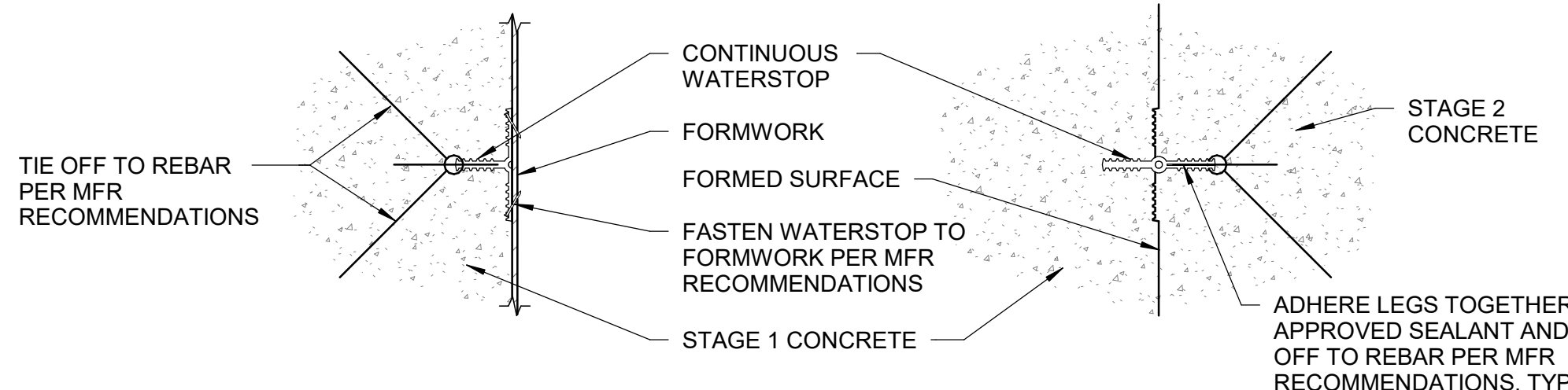
- NOTES:
1. SEE OTHER DETAILS FOR SLAB / WALL REINFORCING REQUIREMENTS.
 2. PROVIDE METZGER / McQUIRE MM-80 SEMI-RIGID EPOXY JOINT FILLER OR REZI-WELD FLEX, SEMI-RIGID EPOXY JOINT FILLER.

9 TYPICAL SEALED NOTCH DETAIL

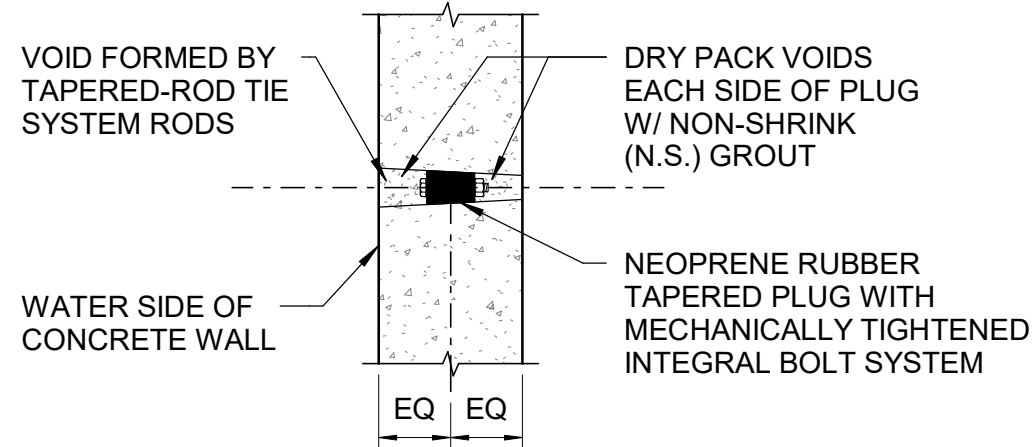
NO SCALE

3 TYPICAL SPLIT WATERSTOP INSTALLATION

NO SCALE



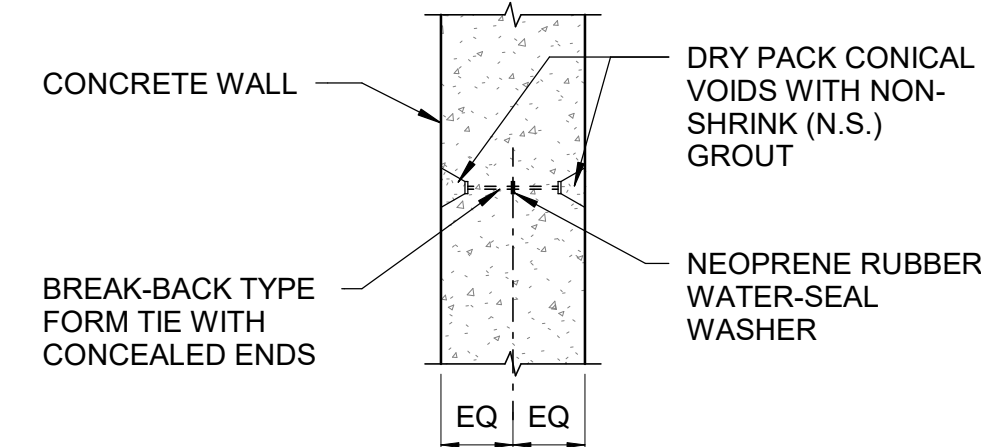
- NOTES:
1. SECURE WATERSTOP FIRMLY IN PLACE BEFORE PLACING CONCRETE.
 2. THOROUGHLY CONSOLIDATE CONCRETE AROUND ALL WATERSTOP.
 3. FOLLOW ALL MANUFACTURER RECOMMENDATIONS FOR WATERSTOP INSTALLATION.
 4. SPLICE WATERSTOP ONLY AS PROVIDED IN THE MANUFACTURER'S WRITTEN INSTRUCTIONS.



- NOTES:
1. CLEAN VOIDS WITH WIRE BRUSH PRIOR TO PLACING PLUG AND N.S. GROUT.
 2. STRIK OFF N.S. GROUT WITH STEEL TOOLS FOR SMOOTH UNIFORM FINISH.
 3. FORM TIES SHALL BE UNIFORMLY SPACED IN BOTH DIRECTIONS.
 4. INSTALL PLUG AND TIGHTEN BOLT PER MFG'S WRITTEN INSTRUCTIONS.
 5. PROVIDE X-PLUG MECHANICAL PLUG BY GREENSTREAK OR APPROVED EQUAL.

6 TYPICAL WATER-TIGHT FORM TIE DETAIL

NO SCALE



- NOTES:
1. CLEAN CONICAL VOIDS PRIOR TO PLACING N.S. GROUT.
 2. STRIP OFF N.S. GROUT WITH STEEL TOOLS FOR SMOOTH UNIFORM FINISH.
 3. FORM TIES SHALL BE UNIFORMLY SPACED IN BOTH DIRECTIONS.
 4. INSTALL TIES PER MFG'S WRITTEN INSTRUCTIONS.

7 TYPICAL WATER-TIGHT FORM TIE DETAIL

NO SCALE



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NO.	REVISION	DESCRIPTION	BY	DATE

GENERAL NOTES

- CONSULT ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF ALL LIGHTING FIXTURES.
- VERIFY ALL EQUIPMENT DIMENSIONS AND LOCATIONS BEFORE BEGINNING ROUGH IN. CONSULT ALL APPLICABLE CONTRACT DRAWINGS AND SHOP DRAWINGS TO INSURE NEC CODE CLEARANCES REQUIRED AROUND ALL ELECTRICAL EQUIPMENT.
- CONTRACTOR SHALL VERIFY ALL ELECTRICAL LOADS (VOLTAGE, PHASE, CONNECTION REQUIREMENTS, ETC.) OF ALL EQUIPMENT FURNISHED UNDER ALL DIVISIONS, INCLUDING ALL EXISTING EQUIPMENT TO BE RE-USED. REVIEW ALL SHOP DRAWINGS AND EXISTING EQUIPMENT BEFORE BEGINNING ROUGH IN.
- SEE SECTION 265100 (16510) OF THE SPECIFICATION REQUIRED COORDINATION MEETINGS WITH MECHANICAL AND CEILING CONTRACTORS.
- SEE APPLICABLE SHOP DRAWINGS FOR ROUGH IN LOCATION OF ALL EQUIPMENT, WIRING DEVICES, ETC. WHERE APPLICABLE MOUNT ALL WIRING DEVICES ABOVE BACK SPLASH EXCEPT THOSE SERVING UNDER COUNTER EQUIPMENT.
- SEE SPECIFICATION FOR ENERGY SAVING LAMP AND BALLAST REQUIREMENTS.
- FINISHES OF ALL LIGHT FIXTURES SHALL BE AS SELECTED BY ARCHITECT.
- THE ELECTRICAL CONTRACTOR SHALL NOTIFY AND COOPERATE WITH THE MECHANICAL CONTRACTOR SUCH THAT NO PIPING, DUCTS, OR EQUIPMENT FOREIGN TO THE OPERATION OF THE ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE INSTALLED IN, ENTER OR PASS THRU ELECTRICAL ROOMS OR SPACES, OR ABOVE OR BELOW ELECTRICAL EQUIPMENT IN OTHER AREAS.
- ELECTRICAL BOXES SHALL NOT BE LOCATED IN MASONRY COLUMNS IN BRICK WALLS OR IN GROUDED CELLS ADJACENT TO OPENINGS. COORDINATE LOCATION OF BOXES WITH MASONRY CONTRACTOR.
- ALL PENETRATIONS OF FIRE RATED FLOORS, WALLS, AND CEILINGS SHALL BE SEALED WITH APPROVED MATERIAL TO MAINTAIN FIRE RATING OF SURFACE PENETRATED.
- CONTRACTOR SHALL VERIFY FURNITURE LAYOUT PRIOR TO ANY FLOORBOX OR POKE-THRU INSTALLATION. COORDINATE EXACT LOCATION OF FLOOR BOX OR POKE-THRU WITH OWNER AND FURNITURE PROVIDER PRIOR TO ROUGH-IN.
- CIRCUITS EXTENDING OVER 70' FOR 120 VOLT AND 115' FOR 277 VOLT 20 AMP CIRCUITS SHALL BE RUN WITH CONDUCTORS PER TABLE BELOW.

20 AMP MINIMUM BRANCH CIRCUIT CONDUCTOR SIZING		
MAXIMUM LENGTH	BRANCH CIRCUIT VOLTAGE	
CONDUCTOR LENGTH (FT)	120 VOLT	277 VOLT
<70	MIN. #12 AWG	MIN. #12 AWG
70 - 115	MIN. #10 AWG	MIN. #12 AWG
115 - 170	MIN. #8 AWG	MIN. #10 AWG
170 - 270	MIN. #6 AWG	MIN. #8 AWG
271 - 380	NOTE B	MIN. #8 AWG
>380	NOTE B	NOTE B

- THESE ARE BASED ON MAXIMUM LENGTH OF CIRCUIT.
- PERFORM VOLTAGE DROP CALCULATIONS AND PROVIDE CONDUCTOR SIZE TO KEEP BRANCH CIRCUIT VOLTAGE DROP LESS THAN 3% WITH A 15 AMP LOAD.
- CONTRACTOR SHALL ENSURE THAT THE INSTALLATION OF EACH BRANCH CIRCUIT STAYS WITHIN 3% VOLTAGE DROP FOR A 15 AMP LOAD. IF NECESSARY, CONTRACTOR SHALL INCREASE WIRE AND CONDUIT SIZE TO MEET THE STANDARD AT NO ADDITIONAL COST TO OWNER.

INDEX OF ELECTRICAL DRAWINGS

- E-001 SYMBOL SCHEDULE
- E-002 SCHEDULE AND NOTES
- E-003 SPECIFICATIONS
- E-101 ELECTRICAL SITE PLAN
- E-601 ELECTRICAL DIAGRAMS

SYMBOL SCHEDULE

NOTES:

- SEE FIXTURE SCHEDULE FOR TYPE, MOUNTING AND WATTAGE.
- HEIGHT MEASURED TO CENTER LINE OF THE BOX FROM THE FINISHED FLOOR.
- REFER TO DRAWINGS FOR DIRECTIONAL ARROWS.
- SUBSCRIPT INDICATES FIXTURES TO BE CONTROLLED.
- NEMA TYPE 'ND' NON-FUSED UNLESS NOTED 'F' (FUSED). USE 'HD' 480V.
- HEIGHT MEASURED TO TOP OF THE BOX FROM FINISHED FLOOR.
- PROVIDE H.O.A. AND S.S. PUSHBUTTONS AS REQUIRED.
- DOUBLE ARROWS INDICATE A DOUBLE FACE UNIT.
- DEVICES NOTED WITH AN 'A' ADJACENT TO IT INDICATES TO COORDINATE WITH MILLWORK SHOP DRAWINGS AND ELEVATIONS FOR HEIGHT.
- SUBSCRIPT INDICATES NEMA CONFIGURATION.
- SOLID BOX AROUND DEVICE INDICATES INSTALLED IN FLOOR, DASHED BOX AROUND DEVICE INDICATES INSTALLED IN CEILING.
- COORDINATE WITH DOOR HARDWARE SUPPLIER.
- FOR WATER COOLER LOCATION, SEE DIAGRAM R002. FOR ALL OTHER LOCATIONS MOUNT AT +16" TO BOTTOM OF THE BOX FROM FINISHED FLOOR, OR AS NOTED.
- ARROWS SHOWN ON DEVICE INDICATE THE SENSOR AIMING LOCATION.
- CAMERA NUMBERS ARE SHOWN INSIDE THE CAMERA SYMBOL. CAMERA TYPES ARE SHOWN IN CAMERA TAGS.
- MOUNT ON TRACK OF OVERHEAD DOOR 6" FROM TOP OF DOOR UNLESS OVERHEAD DOOR IS ROLL UP DOOR, THEN MOUNT PER MANUFACTURER'S INSTRUCTIONS.
- INSTALL DEVICES PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- DASHED LINE INDICATES EQUIPMENT CLEARANCES, ARROW DENOTES FRONT OF RANK.
- SPEAKER TO BE MOUNTED IN HORIZONTAL POSITION.
- MOUNTING HEIGHTS IS TO BOTTOM OF DISPLAY.
- * TYPICAL SYMBOL SCHEDULE. SOME SYMBOLS MAY NOT BE USED IN THIS SET OF DRAWINGS.

STANDARD MOUNTING HEIGHT UNLESS OTHERWISE NOTED ON PLANS

GENERAL							
SYMBOL	DESCRIPTION	MOUNTING HEIGHT	NOTES	SYMBOL	DESCRIPTION	MOUNTING HEIGHT	NOTES
	ONE CIRCUIT, HOME RUN TO PANEL				CONDUIT RUN CONCEALED IN FLOOR OR GROUND		
	TWO CIRCUIT, HOME RUN TO PANEL				CONDUIT UP		
	THREE CIRCUIT, HOME RUN TO PANEL				CONDUIT DOWN		
	CONDUIT RUN CONCEALED IN WALL OR CEILING				CONDUIT STUB LOCATION	CAP CONDUIT	
					CONDUIT/CIRCUIT CONTINUATION		
LIGHTING							
	LIGHT FIXTURE	AS NOTED	1.		SINGLE POLE SWITCH	+46"	2. 4.
	EGRESS LIGHT FIXTURE	AS NOTED	1.				
POWER							
	DUPLEX RECEPTACLE	+18" OR AS NOTED	2. 9. 11.		MAGNETIC STARTER / DISCONNECT COMBINATION	+60"	6. 7.
	DUPLEX RECEPTACLE		9.		VARIABLE FREQUENCY DRIVE	+66"	6.
	5mA GFCI CIRCUIT BREAKER PROTECTED RECEPTACLE		13.		PANEL BOARD	+72"	6.
	WEATHERPROOF RECEPTACLE	+24" OR AS NOTED	2. 9.		MAIN DISTRIBUTION PANEL		
	FOURPLEX RECEPTACLE	+18" OR AS NOTED	2. 9. 11.		UTILITY METER	+72"	6.
	GROUND FAULT INTERRUPTER FOURPLEX RECEPTACLE	+18" OR AS NOTED	2. 9.				

LIGHT FIXTURE SCHEDULE NOTES

LIGHT FIXTURE ABBREVIATION SCHEDULE

A.F.F.	ABOVE FINISH FLOOR	SCBA	STANDARD PAINTED COLOR AS SELECTED BY THE ARCHITECT
WALL@CLG	WALL MOUNT AT CORNER OF WALL AND CEILING	CFBA	CUSTOM FINISH AS SELECTED BY THE ARCHITECT
CCBA	CUSTOM PAINTED COLOR AS SELECTED BY THE ARCHITECT	SFBA	STANDARD FINISH AS SELECTED BY THE ARCHITECT

LIGHT FIXTURE GENERAL NOTES

- REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS FOR LOCATIONS OF LIGHT FIXTURES. BRING ALL DISCREPANCIES OF LOCATIONS AND QUANTITIES TO THE ATTENTION OF THE ARCHITECT AND ELECTRICAL ENGINEER PRIOR TO BIDDING.
- REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHTS AND LOCATIONS OF LIGHT FIXTURES. BRING ALL DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT PRIOR TO BIDDING.
- REFER TO THE SPECIFICATIONS FOR OTHER LIGHT FIXTURE, FUSING, BALLAST, AND LAMP REQUIREMENTS AND ACCEPTABLE MANUFACTURERS.
- CONFIRM AVAILABLE MOUNTING DEPTHS OF ALL LIGHT FIXTURES AND COMPARE WITH DEPTHS SHOWN ON SHOP DRAWINGS. BRING ALL POTENTIAL CONFLICT AREAS TO THE ATTENTION OF THE ARCHITECT AND ELECTRICAL ENGINEER PRIOR TO RELEASE.
- REFER TO LIGHTING PLANS FOR ALL LINEAR FIXTURE LENGTHS. THE CATALOG NUMBER IS BASED ON THE FIXTURE SPECIFIED AND MAY NOT REFLECT THE QUANTITY OR OVERALL LENGTH OF LINEAR FIXTURES REQUIRED. CONTRACTOR TO NOTE THAT VARIOUS FIXTURE LENGTHS MAY BE REQUIRED TO ACHIEVE THE OVERALL RUN LENGTH.
- REFER TO LIGHTING PLANS FOR ALL UNDERCABINET FIXTURE LENGTHS. THE CATALOG NUMBER IS BASED ON THE FIXTURE SPECIFIED AND MAY NOT REFLECT THE QUANTITY OR OVERALL LENGTH OF UNDERCABINET FIXTURES REQUIRED. CONTRACTOR TO NOTE THAT VARIOUS FIXTURE LENGTHS MAY BE REQUIRED TO ACHIEVE THE OVERALL RUN LENGTH OR TO FIT WITHIN THE MILLWORK. COORDINATE FIXTURE LAYOUT WITH MILLWORK SHOP DRAWINGS PRIOR TO LIGHTING SUBMITTALS.
- WHEN A CONTRADICTION EXISTS BETWEEN A SPECIFIC MODEL NUMBER AND THE DESCRIPTION, THE DESCRIPTION SHALL GOVERN.
- PRIOR APPROVALS SHALL BE SUBMITTED TO THE ELECTRICAL ENGINEER'S OFFICE AT LEAST (8) EIGHT WORKING DAYS BEFORE THE BID. PRIOR APPROVALS RECEIVED AFTER THIS TIME PERIOD SHALL BE REJECTED.
- REFER TO SPECIFICATIONS 265050, 265100 & 265600 (16001, 16510 & 16551).
- VALUE ENGINEERING CONDUCTED WITHOUT THE DESIGN TEAM IE: ARCHITECT, OWNER, ENGINEER & LIGHTING CONSULTANT/DESIGNER WILL NOT BE ALLOWED, REVIEWED OR APPROVED.

FIXTURE SCHEDULE

Project Manager: Rich Bradley						
TYPE	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	VOLTS	TOTAL WATTS	LAMPS
S1E	4' ENCLOSED & GASKETED NARROW BODY VAPOR TIGHT FIXTURE WITH STAINLESS STEEL LATCHES. PROVIDE EM 10 WATT FACTORY INSTALLED BATTERY BACKUP. WET LOCATION RATED. CEILING MOUNTED	ILP	VVT4-4L-U-40-FRL-EM10	120V	32W	4000K,4524LUMENS,80CR

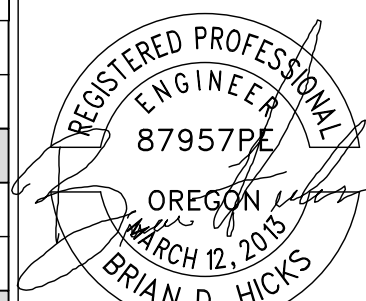


J-U-B ENGINEERS, INC.

J-U-B ENGINEERS, INC.

3611 S. Zintel Way
Kennewick, WA 99337

Phone: 509.783.2144
www.jub.com



EXPIRES: 06/30/2023

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NO.	REVISION	DESCRIPTION	BY	DATE

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
UMATILLA, OREGON

SYMBOL SCHEDULE

FILE : 22015 E-001
JUB PROJ. # : 30-21-003
DRAWN BY: BNA
DESIGN BY: JUAN ORTIZ
CHECKED BY: BRIAN HICKS

ONE INCH
AT FULL SIZE. IF NOT ONE
INCH, SCALE ACCORDINGLY
LAST UPDATED: 09/08/2022

SHEET NUMBER:

E-001

BNA
CONSULTING

4225 Lake Park Blvd Ste 275
West Valley City, Utah 84120

P:801.532.2196

www.bnacconsulting.com

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SHEET KEYNOTES

- S1 CONTRACTOR TO VERIFY IF FUSED DISCONNECTS ARE REQUIRED. THE VFD'S COULD BE USED AS THE DISCONNECTING MEANS IF THEY ARE LOCKABLE. COORDINATE WITH POOL CONTRACTOR BEFORE PURCHASING DISCONNECTS. PROVIDE CREDIT TO OWNER IF THESE ARE NOT NEEDED.
- S1 COORDINATE ALL FOUNTAIN CONTROL POWER CIRCUITS WITH THE POOL SUPPLIER. CONTRACTOR TO PROVIDE CONDUIT, WIRE, JUNCTION BOXES AS NEEDED. REFER TO POOL SUPPLIER WIRING SCHEMATIC PLAN.

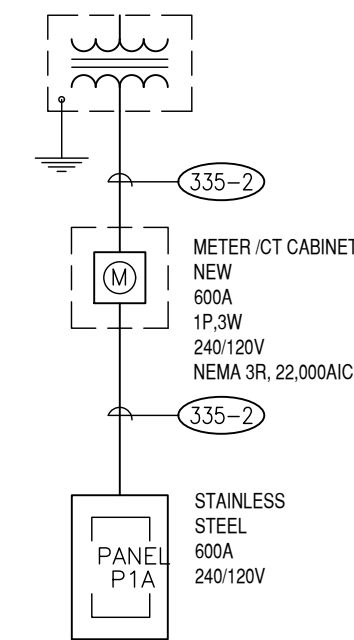
GENERAL NOTES

- 1. ALL INSTALLATION OF CONDUIT, WIRE, BORING, TRANSFORMER AND CONCRETE PAD FOR THE NEW UTILITY TRANSFORMER UPSTREAM OF THE CT/METER CABINET WILL BE PROVIDED AND INSTALLED BY UMATILLA UTILITY POWER.

EQUIPMENT SCHEDULE

UNIT #	FUNCTION	LOAD	VOLT	PHASE	FULL LOAD AMPS	CONDUIT SIZE	WIRES		OCPD		STARTER/DCVFD (SEE NOTES)	REMARKS		
							NO. SETS	NO.	SIZE	TYPE			AMPS	
P-1	CIRCULATION PUMP	3 HP	240	1	17.00	3/4"	1	2	12	12	CB	35	9C	CONTRACTOR TO PROVIDE BUCK BOOST TRANSFORMER. CONTRACTOR TO PROVIDE FUSED DISCONNECT.
P-2A	WEIR FLOW PUMP	5 HP	240	1	28.00	3/4"	1	2	8	10	CB	50	9C	CONTRACTOR TO PROVIDE FUSED DISCONNECT.
P-2B	WEIR FLOW PUMP	5 HP	240	1	28.00	3/4"	1	2	8	10	CB	50	9C	CONTRACTOR TO PROVIDE FUSED DISCONNECT.
P-4	WATER FEATURE PUMP	20 HP	240	3	54.00	1-1/4"	1	3	4	8	CB	90	9C	POOL CONTRACTOR WILL PROVIDE CONTROL PANEL. CONTRACTOR TO PROVIDE FUSED DISCONNECT.
P-6	WATER FALL HEATER	57000 VA	240	1	237.50	2-1/2"	1	2	350	4	CB	300	2A	CONTRACTOR TO PROVIDE FUSED DISCONNECT.

- NOTES:**
- NON-FUSED DISCONNECT SWITCH
 - FUSED DISCONNECT SWITCH
 - BREAKER IN ENCLOSURE
 - MANUAL STARTER WITH THERMAL OVERLOAD
 - MAGNETIC STARTER
 - MAGNETIC STARTER/ NON-FUSED DISCONNECT COMBINATION
 - MAGNETIC STARTER/ FUSED DISCONNECT COMBINATION
 - MAGNETIC STARTER/ BREAKER COMBINATION
 - VARIABLE FREQUENCY DRIVE
 - REDUCED VOLTAGE STARTER
 - DIRECT CONNECTION
 - RECEPTACLE/SPECIAL PURPOSE OUTLET/ETC.
 - TWO-SPEED STARTER, COORDINATE WITH MOTOR TYPE
 - SOLID STATE SOFT STARTER
- A. FURNISHED, INSTALLED, AND CONNECTED UNDER DIVISION 26
 B. FURNISHED AND INSTALLED UNDER ANOTHER DIVISION REQUIRING CONNECTION UNDER DIVISION 26.
 C. FURNISHED UNDER ANOTHER DIVISION BUT INSTALLED AND CONNECTED UNDER DIVISION 26.
 D. FURNISHED, INSTALLED AND CONNECTED UNDER ANOTHER DIVISION.
- CB = CIRCUIT BREAKER - THERMAL MAGNETIC
- NOTE 1: PER 250.122(A), EQUIPMENT GROUND IS NOT REQUIRED TO BE LARGER THAN PHASE CONDUCTOR.
 NOTE 2: OVERCURRENT PROTECTION DEVICE (OCPD) SHOWN IS LOCATED AT POWER PANEL. ALL FUSING TO BE SIZED IN ACCORDANCE WITH FUSE MFR RECOMMENDATION FOR MOTOR NAME PLATE RATING. SEE SECTION 26 2815.
 NOTE 3: ALL EQUIPMENT TO BE RATED FOR THE ENVIRONMENT FOR WHICH IT IS INSTALLED.



PANELBOARD SCHEDULE

PANEL P1A TYPE STAINLESS STEEL 240/120V VOLTS 1 PH 3 W LUGS

MOUNTING FLUSH SURFACE DIMENSIONS 40 W, 10 D (in), 60 H LOCATION FOUNTAIN VAULT MAINS X BREAKER SUBFEED LUGS ISO GROUND 200% NEUTRAL SPD

ITEM	AMP	POL	WIRE SIZE	L. PHASE LOAD		R. PHASE LOAD		NO.	AMP	POL	WIRE SIZE	ITEM	
				A	B	A	B						
P-1	35	2	10	2040	1500	2	20	1	12			ELECTRICAL VAULT LIGHTING	
P-2A	50	2	8	3360	1500	6	20	1	12			ELECTRICAL VAULT OUTLETS	
P-2B	50	2	8	3360	1500	8	20	1	12			PUMP CONTROL PANEL POWER	
			11	3360	1500	10	20	1	12			FOUNTAIN CONTROL PANEL	
			13		1500	14	20	1	12			PUMP VAULT LIGHTING	
			15		1500	16	20	1	12			PUMP VAULT OUTLETS	
			17		1500	18	20	1	12			HOT BOX	
			19		1500	20	20	1	12			IRRIGATION CONTROL PANEL	
P-4	90	2	4	7482	1500	22	20	1	12			FOUNTAIN CONTROL POWER	
			23	7482	1500	24	20	1	12			FOUNTAIN CONTROL POWER	
			25		1500	26	20	1	12			FOUNTAIN CONTROL POWER	
			27			28						SPACE ONLY	
P-1	300	2	350	28500		30						SPACE ONLY	
			31	28500		32						SPACE ONLY	
CHEMICAL CONTROLLER	20	1	12	1500		34						SPACE ONLY	
CHLORINE FEEDER	20	1	12	1500	1500	36						SPACE ONLY	
AOD FEEDER	20	1	12	1500		38						SPACE ONLY	
SPACE ONLY			39			40						SPACE ONLY	
SPACE ONLY			41			42						SPACE ONLY	
				47742	46242	10500	9000						
				58242	55242	TOTAL		CONNECTED LOAD TOTAL					
				485	460	AMPS/PHASE		113484 W					
				EQUIP RATING		22,000	AMPS RMS SYM.						

* Provide 5 mA GFCI Circuit Breaker

1 ONE-LINE DIAGRAM NO SCALE

COPPER CONDUCTOR & CONDUIT SCHEDULE

TYPE	AMP.	COND. SIZE	CONDUCTOR		INSULATION	EQ. GND. COND.
			QUAN.	SIZE		
20	30	3/4"	2	10	THHN THWN	10
30	30	3/4"	3	10	THHN THWN	10
40	30	3/4"	4	10	THHN THWN	10
28	40	1"	2	8	THHN THWN	10
38	40	1"	3	8	THHN THWN	10
48	40	1"	4	8	THHN THWN	10
26	55	1"	2	6	THHN THWN	8
36	55	1"	3	6	THHN THWN	8
46	55	1"	4	6	THHN THWN	8
24	70	1"	2	4	THHN THWN	8
34	70	1-1/4"	3	4	THHN THWN	8
44	70	1-1/4"	4	4	THHN THWN	8
23	85	1-1/4"	2	3	THHN THWN	8
33	85	1-1/4"	3	3	THHN THWN	8
43	85	1-1/2"	4	3	THHN THWN	8
32	95	1-1/2"	3	2	THHN THWN	6
42	95	1-1/2"	4	2	THHN THWN	6
31	110	1-1/2"	3	1	THHN THWN	6
41	110	2"	4	1	THHN THWN	6
51	88	2"	5*	1	THHN THWN	6
31X	150	2"	3	1/0	THHN THWN	6
41X	150	2"	4	1/0	THHN THWN	6
51X	120	2"	5*	1/0	THHN THWN	6
32X	175	2"	3	2/0	THHN THWN	6
42X	175	2"	4	2/0	THHN THWN	6
52X	140	2"	5*	2/0	THHN THWN	6
33X	200	2"	3	3/0	THHN THWN	6
43X	200	2"	4	3/0	THHN THWN	6
53X	160	2-1/2"	5*	3/0	THHN THWN	6
34X	230	2-1/2"	3	4/0	THHN THWN	4
44X	230	2-1/2"	4	4/0	THHN THWN	4
54X	184	2-1/2"	5*	4/0	THHN THWN	4
325	255	3"	3	250	THHN THWN	4
425	255	3"	4	250	THHN THWN	4
525	204	3"	5*	250	THHN THWN	4
335	310	3"	3	350	THHN THWN	3
435	310	3"	4	350	THHN THWN	3
535	248	3"	5*	350	THHN THWN	3
350	380	4"	3	500	XHHW	3
450	380	4"	4	500	XHHW	3
550	304	4"	5*	500	XHHW	3

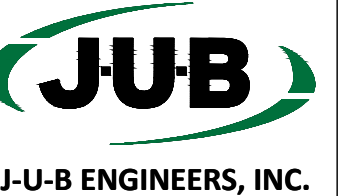
COPPER CONDUCTOR & CONDUIT SCHEDULE FOR PARALLEL RUNS

TYPE	MAX. O.C. PROT.	COND. AMPS	SETS	CONDUCTOR		EQ. GND. COND.	
				QUAN.	SIZE		
44X-2	400	460	2	4	4/0	2-1/2"	3
54X-2	400	368	2	5*	4/0	3"	3
335-2	600	620	2	3	350	3"	1
435-2	600	620	2	4	350	3"	1
550-2	600	608	2	5*	500	3"	1
350-2	800	760	2	3	500	4"	1/0
450-2	800	760	2	4	500	4"	1/0
535-3	800	744	3	5*	350	4"	1/0
350-3	1000	1140	3	3	500	4"	2/0
450-3	1000	1140	3	4	500	4"	2/0
550-4	1000	1216	4	5*	500	4"	2/0
335-4	1200	1240	4	3	350	3"	3/0
435-4	1200	1240	4	4	350	3"	3/0
550-4	1200	1216	4	5*	350	3"	3/0
340-5	1600	1675	5	3	400	3"	4/0
440-5	1600	1675	5	4	400	3"	4/0
540-6	1600	1675	6	5*	400	4"	4/0
440-6	2000	2010	6	4	400	4"	250
450-7	2500	2665	7	4	500	4"	350
450-8	3000	3040	8	4	500	4"	400
450-11	4000	4180	11	4	500	4"	500

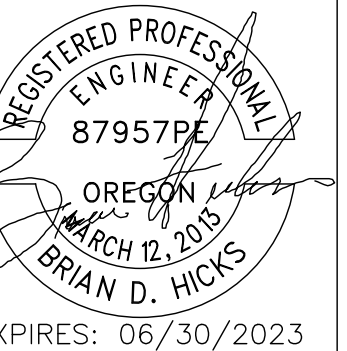
- NOTES:**
 IN PARALLEL RUNS SIZE GND. COND. IN ACCORDANCE WITH NEC PARA. 250-122.
 GND. CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS
 * 200% NEUTRAL, DERATED TO 80% BASED ON NEC 310.15(B)(5)(C)



4225 Lake Park Blvd Ste 275
 West Valley City, Utah 84120
 P: 801.532.2196
 www.bnacconsulting.com
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JUB ENGINEERS, INC.
 3611 S. Zintel Way
 Kennewick, WA 99337
 Phone: 509.783.2144
 www.jub.com



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NO.	REVISION	DESCRIPTION	DATE

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
 UMATILLA, OREGON
 SCHEDULE AND NOTES

FILE: 22015 E-002
 JUB PROJ. #: 30-21-003
 DRAWN BY: BNA
 DESIGN BY: JUAN ORTIZ
 CHECKED BY: BRIAN HICKS

ONE INCH AT FULL SIZE. IF NOT ONE INCH SCALE ACCORDINGLY
 LAST UPDATED: 09/08/2022

SHEET NUMBER:

F-002

ELECTRICAL SPECIFICATIONS

ELECTRICAL GENERAL PROVISIONS

- DESCRIPTION OF WORK : EXTENT OF ELECTRICAL WORK IS INDICATED ON DRAWINGS. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, SUPERVISION AND SERVICE NECESSARY FOR A COMPLETE ELECTRICAL SYSTEM. WORK INCLUDES, BUT IS NOT NECESSARILY LIMITED TO THE FOLLOWING ITEMS:
 - ELECTRICAL CONNECTIONS FOR EQUIPMENT
 - GROUNDING
 - CONDUIT RACEWAY
 - CONDUCTORS AND CABLES
 - ELECTRICAL BOXES AND FITTINGS
 - SUPPORTING DEVICES
 - WIRING DEVICES
 - PANELBOARDS AND SWITCHBOARDS
 - OVERCURRENT PROTECTIVE DEVICES
 - MOTOR STARTERS
 - MOTOR AND CIRCUIT DISCONNECTS
 - LIGHT FIXTURES
 - ELECTRICAL IDENTIFICATION
- VISIT THE SITE DURING THE BIDDING PERIOD TO DETERMINE EXISTING CONDITIONS AFFECTING ELECTRICAL AND OTHER WORK. ALL COSTS ARISING FROM SITE CONDITIONS AND/OR PREPARATION SHALL BE INCLUDED IN THE BASE BID. NO ADDITIONAL CHARGES WILL BE ALLOWED DUE TO INADEQUATE SITE INSPECTION.
- QUALITY ASSURANCE: PERFORM WORK IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC). COMPLY WITH REQUIREMENTS OF STATE AND LOCAL ORDINANCES. OBTAIN ALL PERMITS, INSPECTIONS, ETC. FROM AUTHORITY HAVING JURISDICTION (AHJ). EMPLOY ONLY QUALIFIED CRAFTSMEN WITH AT LEAST THREE YEARS OF EXPERIENCE. WORKMANSHIP SHALL BE NEAT, HAVE A GOOD MECHANICAL APPEARANCE AND CONFORM TO BEST ELECTRICAL STATE CONTRACTING LICENSE. PROVIDE EQUIPMENT AND MATERIAL THAT ARE UNDERWRITERS LABORATORIES INC. (UL) LISTED AND LABELED.
- SUBMITTALS : AFTER THE CONTRACT IS AWARDED BUT PRIOR TO MANUFACTURE OR INSTALLATION OF ANY EQUIPMENT, PREPARE COMPLETE SHOP DRAWINGS.
 - PROVIDE SUBMITTALS IN PORTABLE DOCUMENT FORMAT (PDF).
 - DOCUMENTS MUST BE ELECTRONICALLY BOOKMARKED AND KEYWORD SEARCHABLE USING ADOBE ACROBAT (HTTP://WWW.ADOBE.COM/ACROBAT) OR BLUEBEAM REVU (HTTP://WWW.BLUEBEAM.COM) FOR EACH RELEVANT SECTION. (I.E. INCLUDE ELECTRONIC BOOKMARKS SEPARATING "LIGHT FIXTURES" FROM "PANELBOARDS")
 - ELECTRONICALLY HIGHLIGHT ALL OPTIONS FOR LIGHT FIXTURES, ELECTRICAL EQUIPMENT, ETC. MANUAL HIGHLIGHTING AND SCANNING OF THE DOCUMENTS IS NOT ACCEPTABLE AND WILL NOT BE REVIEWED.
 - PROVIDE ONLY COMPLETED CUTSHEETS FOR ALL FIXTURE AND EQUIPMENT TYPES. BLANK CUTSHEETS SUBMITTED WITH A SCHEDULE ARE NOT ACCEPTABLE AND WILL NOT BE REVIEWED.
 - A MAXIMUM OF ONE SUBMITTAL PER SPECIFICATION SECTION IS ALLOWED. IT IS NOT ACCEPTABLE TO PROVIDE A PRODUCT BY PRODUCT SUBMITTAL. SINGLE PRODUCT BY PRODUCT SUBMITTALS WILL NOT BE REVIEWED.
 - WIRING DEVICES
 - PANELBOARDS AND SWITCHBOARDS
 - OVERCURRENT PROTECTIVE DEVICES
 - MOTOR STARTERS
 - MOTOR AND CIRCUIT DISCONNECTS
 - ELECTRICAL IDENTIFICATION
- RECORD DRAWINGS: MAINTAIN ON A DAILY BASIS, A COMPLETE SET OF RECORD DRAWINGS, REFLECTING AN ACCURATE DIMENSIONAL RECORD OF ALL BURIED OR CONCEALED WORK. MARK RECORD DRAWINGS TO SHOW THE PRECISE LOCATION OF CONCEALED WORK AND EQUIPMENT, INCLUDING CONCEALED OR EMBEDDED CONDUIT AND JUNCTION BOXES AND ALL CHANGES AND DEVIATIONS IN THE WORK FROM THAT SHOWN ON THE CONTRACT DOCUMENTS.
- OPERATION AND MAINTENANCE MANUALS: PROVIDE OPERATING INSTRUCTION AND MAINTENANCE DATA BOOKS FOR ALL EQUIPMENT AND MATERIALS FURNISHED UNDER THIS DIVISION.
- GUARANTEE: ENSURE THAT ELECTRICAL SYSTEMS INSTALLED UNDER THIS CONTRACT IS IN PROPER WIRING ORDER AND IN COMPLIANCE WITH DRAWINGS, SPECIFICATIONS, AND/OR AUTHORIZED CHANGES. WITHOUT ADDITIONAL CHARGE, REPLACE ANY WORK OR MATERIALS WHICH DEVELOP DEFECTS, EXCEPT FROM ORDINARY WEAR AND TEAR, WITHIN ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.
- FIRE PROTECTION SEALS: SEAL ALL PENETRATIONS FOR WORK OF THIS SECTION THROUGH FIRE RATED FLOORS, WALLS, AND CEILINGS TO PREVENT THE SPREAD OF SMOKE, FIRE, TOXIC GAS, OR WATER THROUGH THE PENETRATION EITHER BEFORE, DURING AND AFTER FIRE.
- POWER OUTAGES: ALL POWER OUTAGES REQUIRED FOR EXECUTION OF THIS WORK SHALL OCCUR DURING THE NON-STANDARD WORKING HOURS AND AT THE CONVENIENCE OF THE OWNER. INCLUDE ALL COSTS FOR OVERTIME WORK IN BID.

ELECTRICAL CONNECTION FOR EQUIPMENT

- VERIFY EXACT LOAD AND LOCATION OF ALL EQUIPMENT BEFORE ROUGH-IN FOR EACH ELECTRICAL CONNECTION. PROVIDE COMPLETE ASSEMBLY OF MATERIAL, INCLUDING BUT NOT NECESSARILY LIMITED TO, RACEWAYS, CONDUCTORS, CORDS, CORD CAPS, PLUGS, WIRING DEVICES, PRESSURE CONNECTORS, TERMINALS (LUGS), ELECTRICAL INSULATING TAPE, HEAT-SHRINKABLE INSULATING TUBING, CABLE TIES, SOLDERLESS WIRE NUTS, AND OTHER ITEMS AND ACCESSORIES AS NEEDED TO COMPLETE SPLICES, TERMINATIONS, AND CONNECTIONS AS REQUIRED. FOR PERMANENTLY INSTALLED FIXED EQUIPMENT, PROVIDE FLEXIBLE SEAL-TITE CONNECTION. FOR MOVABLE AND/OR PORTABLE EQUIPMENT, PROVIDE WIRING DEVICE, CORD CAP, AND MULTI-CONDUCTOR CORD.

GROUNDING

- PROVIDE GROUNDING AND BONDING OF ALL ELECTRICAL AND COMMUNICATION APPARATUS, MACHINERY, APPLIANCES, BUILDING COMPONENTS, AND ITEMS REQUIRED BY THE NEC TO PROVIDE A PERMANENT, CONTINUOUS LOW IMPEDANCE, GROUNDING SYSTEM. PROVIDE AN NEC BONDING/GROUNDING CONDUCTOR IN ALL RACEWAYS USED FOR POWER DISTRIBUTION.

CONDUIT RACEWAYS

- PROVIDE METAL CONDUIT, TUBING, AND FITTINGS OF TYPES, GRADES, SIZES, AND WEIGHTS (WALL THICKNESS) AS REQUIRED; WITH MINIMUM TRADE SIZE OF 3/4". INSTALL ELECTRICAL RACEWAY SYSTEMS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND APPLICABLE REQUIREMENTS OF NEC AND NECA "STANDARD OF INSTALLATION" IN ACCORDANCE WITH THE FOLLOWING:
 - FEEDERS: INSTALL FEEDERS RATED 100 AMPS AND GREATER, IN ELECTRICAL METALLIC CONDUIT (EMT); WHERE BURIED BELOW GRADE, INSTALL IN CONCRETE ENCASED NON-METALLIC CONDUIT OR DUCT (SCHEDULE 40 PVC). BRANCH CIRCUITS, AND INDIVIDUAL EQUIPMENT CIRCUITS RATED LESS THAN 100 AMPS; INSTALL IN ELECTRICAL METALLIC TUBING (EMT), WHERE LOCATED IN POURED WALLS, BELOW CONCRETE SLAB-ON-GRADE, OR IN EARTH FILL, INSTALL IN NON-METALLIC PLASTIC DUCT (SCHEDULE 40 PVC), ENCASE NON-METALLIC/PLASTIC DUCT 1-1/4" AND LARGER IN CONCRETE.
 - PROVIDE RIGID METAL CONDUIT (RMC) FOR ALL BENDS IN BURIED CONDUIT GREATER THAN 30 DEGREES. PROVIDE PROTECTIVE COATING FOR RIGID METAL CONDUIT BENDS. INSTALL FLEXIBLE CONDUIT FOR CONNECTIONS OF MOTORS, TRANSFORMERS, AND OTHER ELECTRICAL EQUIPMENT WHERE SUBJECT TO MOVEMENT AND VIBRATIONS. PROVIDE OZ. EXPANSION FITTINGS ON ALL CONDUITS CROSSING BUILDING EXPANSION JOINTS, BOTH IN SLAB AND SUSPENDED.
 - PROVIDE SURFACE RACEWAYS OF SIZES AND CHANNELS INDICATED. PROVIDE FITTINGS THAT MATCH AND MATE WITH RACEWAY.

CONDUCTORS AND CABLES

- PROVIDE FACTORY-FABRICATED CONDUCTORS FOR SIZED, RATINGS, MATERIAL, AND TYPES INDICATED FOR EACH SERVICE. PROVIDE COPPER CONDUCTORS, WITH THHN/THWN INSULATION. SIZE ALL CONDUCTORS IN ACCORDANCE WITH NEC; MINIMUM SIZE TO BE #12 AWG. PROVIDE STRANDED CONDUCTORS FOR #8 AWG AND LARGER.

ELECTRICAL BOXES AND FITTINGS

- PROVIDE ONE PIECE GALVANIZED FLAT ROLLED SHEET STEEL INTERIOR OUTLET WIRING BOXES, CORROSION-RESISTANT CAST-METAL WEATHERPROOF OUTLET WIRING BOXES, CODE-GAGE SHEET STEEL JUNCTIONS AND PULL BOXES, CAST-IRON WATERPROOF ADJUSTABLE FLOOR BOXES, GALVANIZED CAST-METAL CONDUIT BODIES, CORROSION-RESISTANT PUNCHED-STEEL BOX KNOCKOUT CLOSURES, CONDUIT LOCKOUTS AND MALLEABLE STEEL CONDUIT BUSHINGS AND OFFSET CONNECTORS, AND ALL ACCESSORIES AS REQUIRED TO SUIT EACH RESPECTIVE LOCATION AND INSTALLATION. FASTEN BOXES RIGIDLY TO SUBSTRATES OR STRUCTURAL SURFACES TO WHICH ATTACHED, OR SOLIDLY EMBED

ELECTRICAL BOXES IN CONCRETE OR MASONRY. USE BAR HANGERS FOR STUD CONSTRUCTION.

SUPPORTING DEVICES

- PROVIDE SUPPORTS, ANCHORS, SLEEVES AND SEALS AS REQUIRED FOR A COMPLETE RACEWAY SUPPORT SYSTEM, INCLUDING BUT NOT LIMITED TO: CLEVIS HANGERS, RISER CLAMPS, C-CLAMPS, BEAM CLAMPS, ONE AND TWO HOLE CONDUIT STRAPS, OFFSET CONDUIT CLAMPS, EXPANSION ANCHORS, TOGGLE BOLTS, THREADED RODS, U-CHANNEL STRUT SYSTEM, AND ALL ASSOCIATED ACCESSORIES. INSTALL IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND WITH RECOGNIZED INDUSTRY PRACTICES TO INSURE SUPPORTING DEVICES COMPLY WITH REQUIREMENTS. PROVIDE RIGID ATTACHMENT OF ALL FLOOR MOUNTED EQUIPMENT TO THE FLOOR SLAB OR STRUCTURAL SYSTEM.

WIRING DEVICES

- PROVIDE GRADE FACTORY-FABRICATED WIRING DEVICES, IN TYPES, AND ELECTRICAL RATINGS FOR APPLICATIONS INDICATED AND COMPLYING WITH NEMA STDS PUB NO. WD-1. PROVIDE HEAVY DUTY SPECIFICATION GRADE, 20-AMPERES RATED, GROUNDING TYPE CONVENIENCE OUTLETS. PROVIDE 20-AMPERES RATED TOGGLE SWITCHES. CONSTRUCT WIRING DEVICE OF HEAVY DUTY HIGH IMPACT NYLON AND PROVIDE COVER PLATES TO MATCH. PROVIDE DEVICES IN COLORS SELECTED BY ARCHITECT.

PANELBOARD AND SWITCHBOARDS

- PROVIDE GALVANIZED SHEET STEEL CABINET TYPE ENCLOSURES, IN SIZES AND NEMA TYPES AS INDICATED, CODE-GAGE MINIMUM 16-GAUGE THICKNESS. PROVIDE DEAD FRONT SAFETY TYPE PANELBOARDS WITH DOOR-IN-DOOR HINGED FRONTS. EQUIP WITH COPPER BUS BARS, FULL-SIZED NEUTRAL AND GROUND BUS. PROVIDE ENCLOSURES FABRICATED BY SAME MANUFACTURER AS OVERCURRENT DEVICES. BOLT ENGRAVED PLASTIC LAMINATE LABELS INDICATING PANEL NAME AND VOLTAGE ON THE INTERIOR AND EXTERIOR OF PANELBOARD OR SWITCHBOARD.

OVERCURRENT PROTECTIVE DEVICES

- PROVIDE OVERCURRENT PROTECTIVE DEVICES OF THE SAME MANUFACTURER AS THE SWITCHBOARD AND/OR PANELBOARD MANUFACTURER. PROVIDE FACTORY-ASSEMBLED DEVICES OF AMPERAGE, VOLTAGE, AND RMS INTERRUPTING RATING SHOWN. PROVIDE DEVICES AS FOLLOWS:
 - MOLDED CASE THERMAL TRIP CIRCUIT BREAKERS:
 - PROVIDE FACTORY-ASSEMBLED BOLT-ON MOLDED CASE CIRCUIT BREAKERS WITH PERMANENT THERMAL TRIP AND ADJUSTABLE INSTANTANEOUS MAGNETIC TRIP IN EACH POLE. SERIES RATING IS NOT ACCEPTABLE. CONSTRUCT BREAKERS FOR MOUNTING AND OPERATING IN ANY PHYSICAL POSITION AND IN AN AMBIENT TEMPERATURE OF 40 DEGREES C.
 - CIRCUIT BREAKERS 15 AMPS THROUGH 599 AMPS SHALL BE MOLDED CASE SOLID-STATE CIRCUIT BREAKERS
 - MOLDED CASE SOLID-STATE CIRCUIT BREAKERS
 - PROVIDE FACTORY ASSEMBLED BOLT-ON MOLDED CASE CIRCUIT BREAKERS UL LISTED FOR APPLICATION AT 100% OF THEIR CONTINUOUS AMPERE RATING.
 - CIRCUIT BREAKERS 600 AMPS THROUGH 1200 AMPS SHALL BE MOLDED CASE SOLID-STATE CIRCUIT BREAKERS.
 - SOLID-STATE TRIP MECHANISMS SHALL HAVE THE FOLLOWING FUNCTIONS: ADJUSTABLE LONG TIME AMPERE RATING; ADJUSTABLE LONG TIME DELAY; SHORT TIME PICK UP; ADJUSTABLE SHORT TIME DELAY; ADJUSTABLE INSTANTANEOUS PICK UP.
 - INSULATED CASE CIRCUIT BREAKERS
 - PROVIDE FACTORY ASSEMBLED BOLT-ON INSULATED CASE CIRCUIT BREAKERS WITH SOLID-STATE TRIP MECHANISMS AND MANUAL SPRING CHARGING MECHANISM. BREAKERS SHALL BE UL LISTED FOR APPLICATION AT 100% OF THEIR CONTINUOUS AMPERE RATING.
 - CIRCUIT BREAKERS 1201 AMPERES AND LARGER SHALL BE INSULATED CASE CIRCUIT BREAKERS.
 - ON SERVICE DISCONNECT BREAKERS WHERE PHASE TO GROUND VOLTAGE EXCEEDS 150-VOLTS, THE SOLID STATE TRIP MECHANISM SHALL INCLUDE ADJUSTABLE GROUND FAULT PICK UP AND ADJUSTABLE GROUND FAULT TIME DELAY WITH GROUND FAULT TEST BUTTON;
 - FOR ALL CIRCUIT BREAKERS 1200 AMPERES OR HIGHER, PROVIDE AN ENERGY-REDUCING MAINTENANCE SWITCH WITH LOCAL, LIT STATUS INDICATOR TO ALLOW FOR A REDUCTION FO THE INSTANTANEOUS PICKUP AND INSTANTANEOUS DELAY SETTINGS. DEVICE SHALL MOUNT IN FACE OF DEAD-FRONT.

MOTOR STARTERS

- PROVIDE FACTORY ASSEMBLED, AC-NON-REVERSING MAGNETIC STARTERS RATED AT 600V WITH THERMAL OVERLOAD PROTECTION IN ALL PHASES. MOUNT HAND-OFF-AUTO SWITCH, RED PILOT LIGHT, AND RESET BUTTON IN FACE OF ENCLOSURE. PROVIDE NEMA ENCLOSURE RATINGS BASED ON LOCATION OF INSTALLATION.

MOTOR AND CIRCUIT DISCONNECTS

- PROVIDE HEAVY-DUTY TYPE SAFETY SWITCHES; FUSIBLE OR NON-FUSIBLE AS INDICATED. PROVIDE SWITCHES RATED AT 600 VOLTS, 60 HZ; INCORPORATING QUICK-MAKE, QUICK-BREAK TYPE MECHANISMS. EQUIP WITH OPERATING HANDLE THAT IS CAPABLE OF BEING PADLOCKED IN THE OFF POSITION. PROVIDE NEMA ENCLOSURE RATINGS BASED ON LOCATION OF INSTALLATION.

LIGHTING FIXTURES

- PROVIDE LIGHTING FIXTURES COMPLETE WITH ALL COMPONENTS FOR EACH SIZE, TYPE, AND RATING INDICATED. THIS INCLUDES, BUT NOT LIMITED TO HOUSING, DRIVER, REFLECTORS, AND WIRING. SIZE FUSES PER BALLAST MANUFACTURER'S RECOMMENDATION. PROVIDE ALL NECESSARY SUPPORTS, BRACKETS, AND MISCELLANEOUS EQUIPMENT FOR MOUNTING OF FIXTURES. SUPPORT ALL GRID MOUNTED FIXTURES FROM THE BUILDING STRUCTURE WITH #12 GA. STEEL WIRE ATTACHED TO EACH CORNER; INDEPENDENT OF THE CEILING SYSTEM. PROVIDE BACKING SUPPORTS. PROVIDE GYPSUM BOARD PROTECTION AS REQUIRED TO MAINTAIN FIRE RATING OF EACH CEILING IN WHICH FIXTURES ARE INSTALLED. PROVIDE ALL EXTERIOR FIXTURES WITH DAMP OR WET LOCATION LABEL AS REQUIRED BY APPLICATION. PROVIDE CLASS 2 WIRING FOR ALL FIXTURES INDICATED TO HAVE 0-10V DIMMING.

ELECTRICAL IDENTIFICATION

- PROVIDE ELECTRICAL IDENTIFICATION PRODUCTS FOR BURIED ELECTRICAL LINES, ARC-FLASH HAZARD LABELS (ANSI Z535.4), SOURCE OF SUPPLY LABELS, AVAILABLE FAULT CURRENT LABELS AND EMERGENCY OPERATING SIGNS TO EQUIPMENT INSTALLED AS PART OF THIS PROJECT.
- PROVIDE NYLON TYPE COVERPLATES THAT MATCH DEVICES. PROVIDE METAL COVERS FOR ALL DEVICES IN UNFINISHED SPACES
- PROVIDE LABELS ON COVERPLATES INDICATING SOURCE OF POWER (I.E. PANEL - CIRCUIT #).



J-U-B ENGINEERS, INC.

J-U-B ENGINEERS, INC.
3611 S. Zintel Way
Kennewick, WA 99337
Phone: 509.783.2144
www.jub.com



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NO.	DESCRIPTION	BY	APPR.	DATE
	REVISION			

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
UMATILLA, OREGON

SPECIFICATIONS

FILE : 22015 E-003

JUB PROJ. # : 30-21-003

DRAWN BY: BNA

DESIGN BY: JUAN ORTIZ

CHECKED BY: BRIAN HICKS

ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 09/08/2022

SHEET NUMBER:

E-003

Plot Date: 07/20/22, 1:08 PM. Plotted By: Kody Schwaneveldt. Date Created: 06/20/22. C:\USERS\KODY\APPDATA\LOCAL\TEMP\2012\KJW\JUB FALLS ELEC_VT\CAD\DWG\PROJECT FILES\DRAWING\22015 E-003.DWG



4225 Lake Park Blvd Ste 275
West Valley City, Utah 84120
P: 801.532.2196

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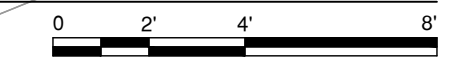
DATE PLOTTED: 07/20/22

SHEET KEYNOTES

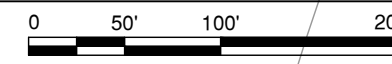
- S1 COORDINATE ALL PUMP DISCONNECTS AND VFD LOCATIONS WITH FOUNTAIN POOL SUPPLIER
- S2 COORDINATE EXACT PANEL LOCATIONS WITH FOUNTAIN POOL SUPPLIER
- S3 MOUNT FIXTURES TO THE VAULT CEILING.
- S4 PROVIDE RIGID CONDUIT STUB AND MOUNT WEATHER RESISTANT BOX AND OUTLET PROVIDE BUBBLE COVER.
- S5 VFD'S PROVIDED BY POOL FOUNTAIN CONTRACTOR
- S6 ELECTRICAL CONTRACTOR TO PROVIDE FUSED DISCONNECTS FOR 4 PUMPS COORDINATE WITH POOL FOUNTAIN SUPPLIER TO VERIFY THESE ARE NEEDED OR IF THE VFD'S WILL BE LOCKABLE AND SERVE AS A MEANS OF DISCONNECTS.
- S7 CONTRACTOR TO COORDINATE WITH UMATILLA POWER TO DEMO EXISTING 200A METER/PANELBOARD. DEMOLISH PANELBOARD CONDUIT AND WIRE AS NEEDED CONTRACTOR TO PROVIDE A 4' BY 2' 6" DEEP CONCRETE PAD FOR THE NEW 600A CT METER CABINET AT THE NEW LOCATION. REFER TO STRUCTURAL DETAIL.
- S8 CONTRACTOR WILL PROVIDE TRENCHING AND BACKFILL FOR THE UTILITY POWER SERVICE. THIS WILL BE 285' PROVIDE 4' DEEP BY 2' WIDE TRENCH. UMATILLA POWER WILL PROVIDE CONDUIT WIRE. UTILITY TRANSFORMER AND CONCRETE PAD FOR UTILITY TRANSFORMER, UMATILLA POWER WILL ALSO PROVIDE BORING.
- S9 COORDINATE WATER HEATER EXACT LOCATION WITH THE POOL SUPPLIER, REFER TO THE ELECTRICAL PANEL SCHEDULE AND EQUIPMENT SCHEDULE FOR ELECTRICAL REQUIREMENTS.
- S10 POOL SUPPLIER SHALL PROVIDE ALL LOW VOLTAGE WIRING. THIS WILL ALSO INCLUDE ALL 120V REQUIREMENTS FOR THE FOUNTAIN POOL LIGHTING, POWER, TRENCHING AND BACK FILL.
- S11 COORDINATE ALL FOUNTAIN CONTROL POWER 120V CIRCUITS WITH THE POOL SUPPLIER. CONTRACTOR TO PROVIDE CONDUIT, WIRE, JUNCTION BOXES AS NEEDED, REFER TO POOL SUPPLIER WIRING SCHEMATIC PLAN.



PLAN NORTH
 1/4" = 1'-0"



PLAN NORTH
 1" = 30'-0"



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NO.	REVISION	DESCRIPTION	BY	APPR.	DATE

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
 UMATILLA, OREGON
 ELECTRICAL SITE PLAN

FILE : 22015 E-101
 JUB PROJ. # : 30-21-003
 DRAWN BY : BNA
 DESIGN BY : JUAN ORTIZ
 CHECKED BY : BRIAN HICKS

ONE INCH
 AT FULL SIZE. IF NOT ONE
 INCH, SCALE ACCORDINGLY
 LAST UPDATED: 09/08/2022

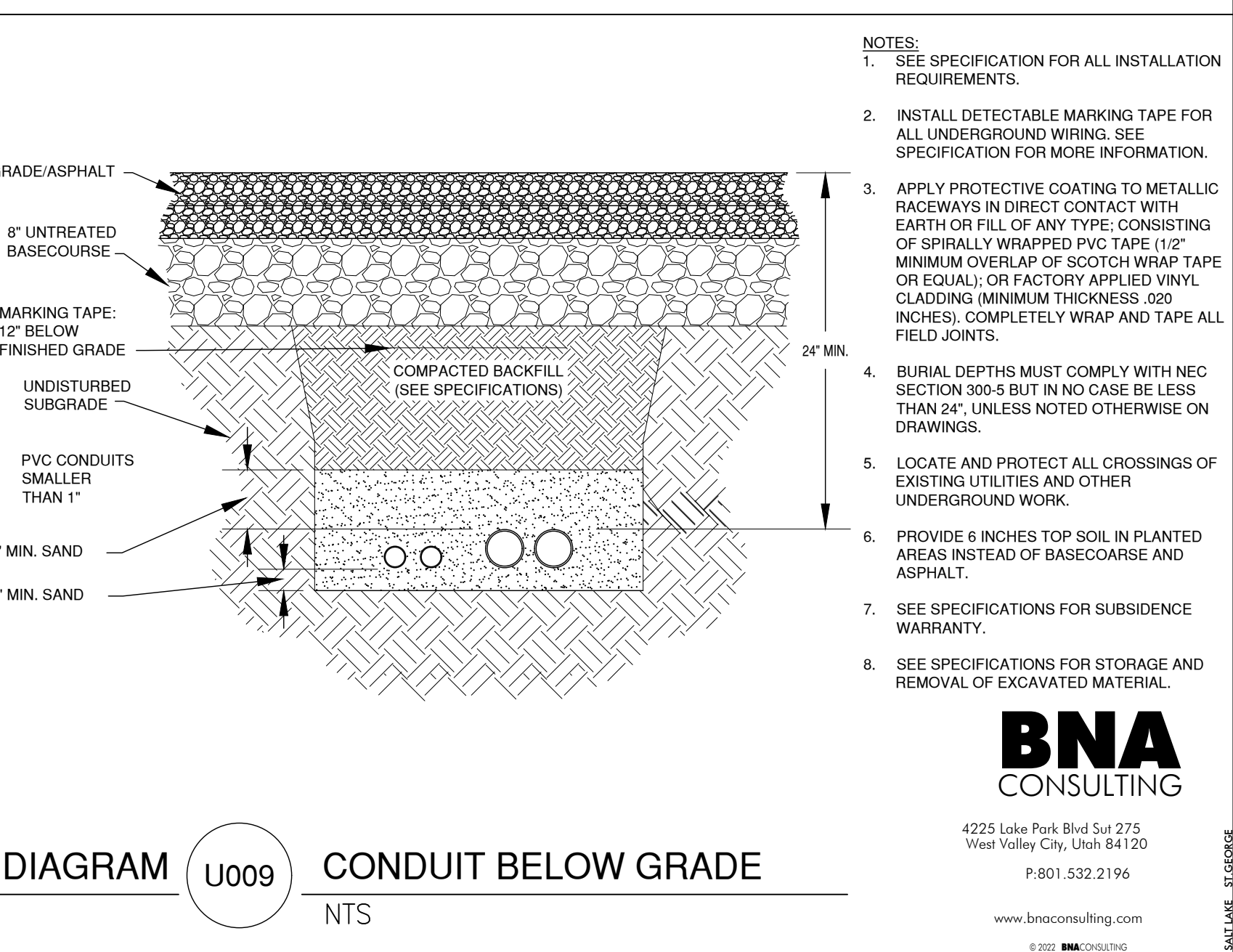
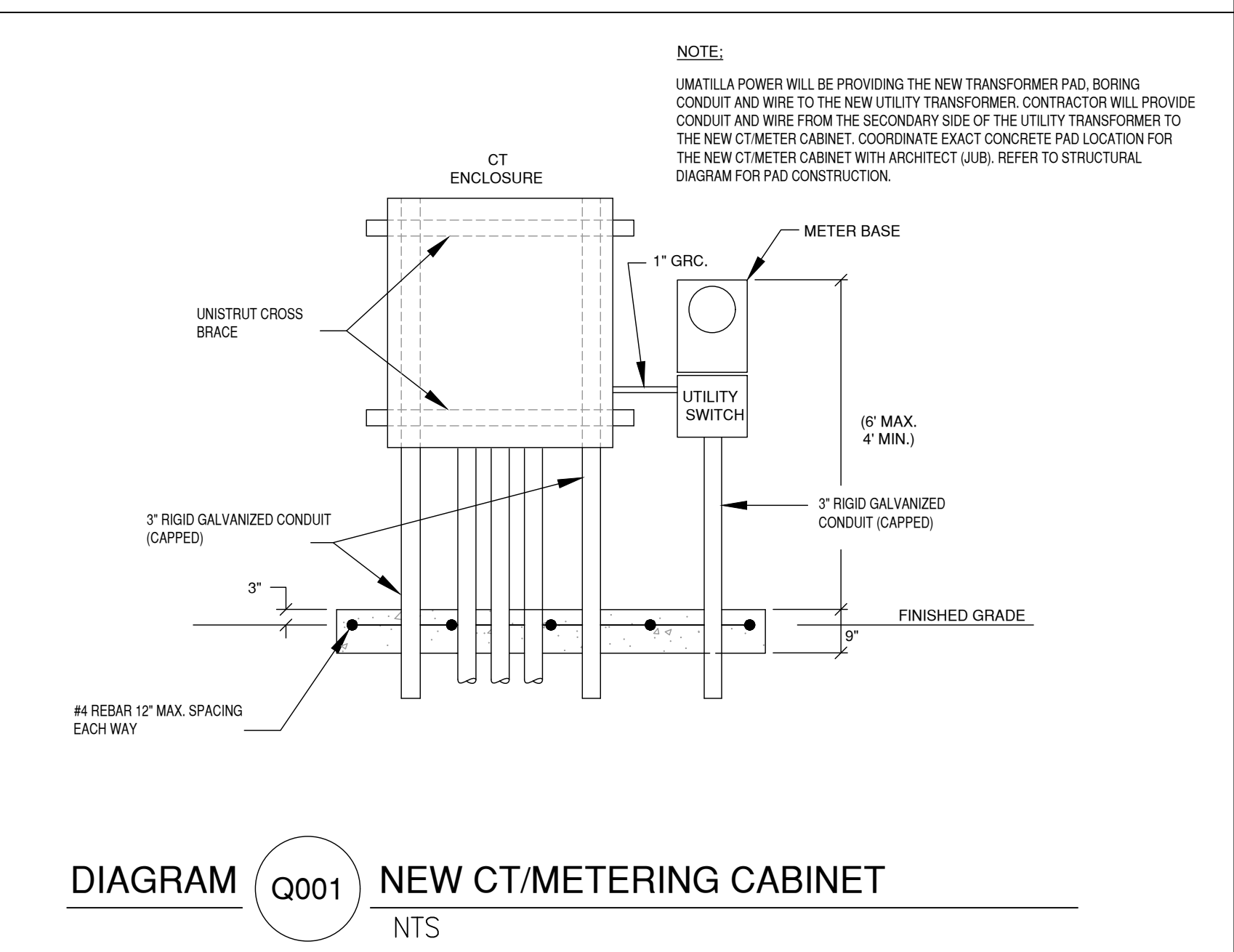
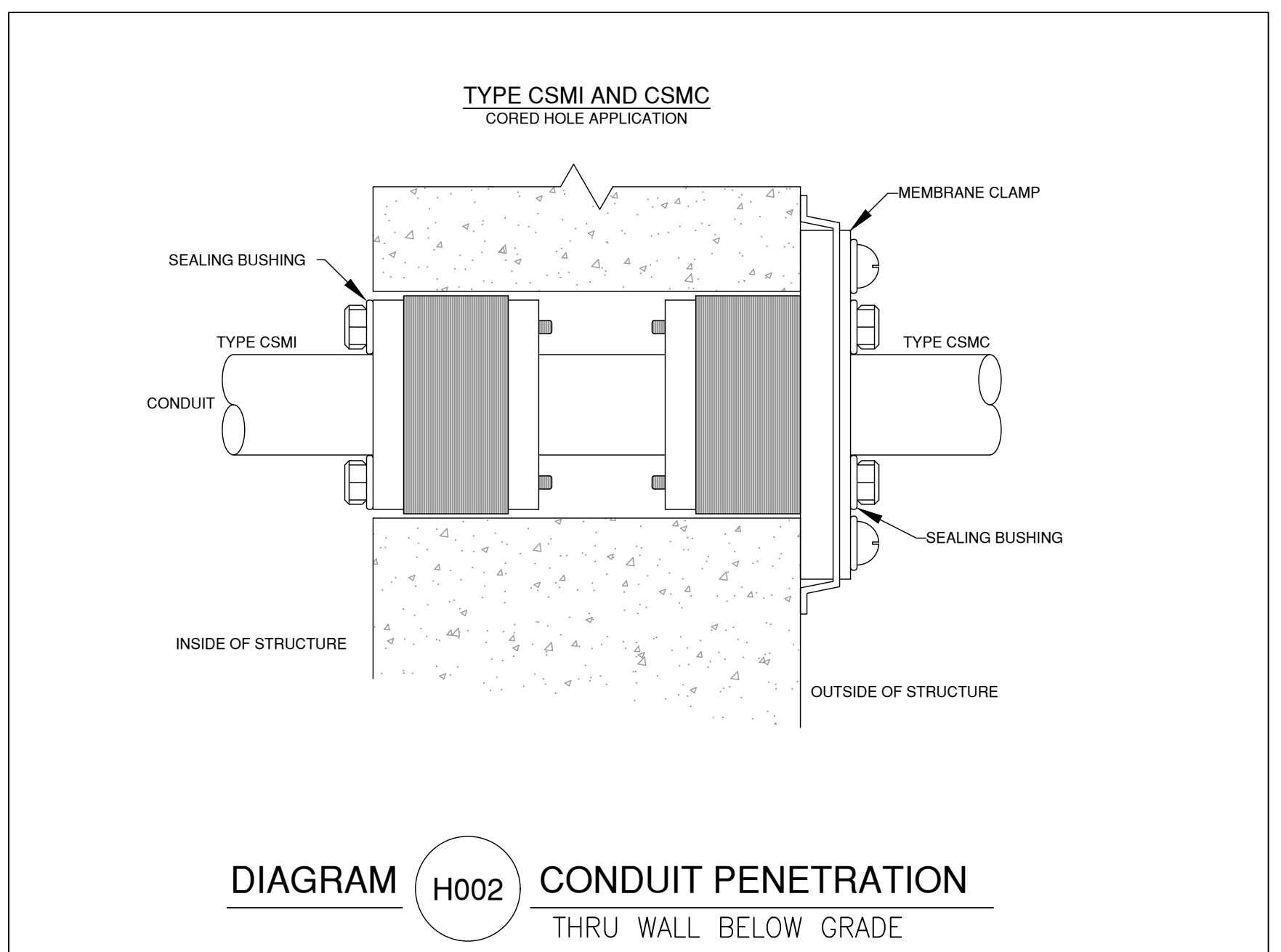
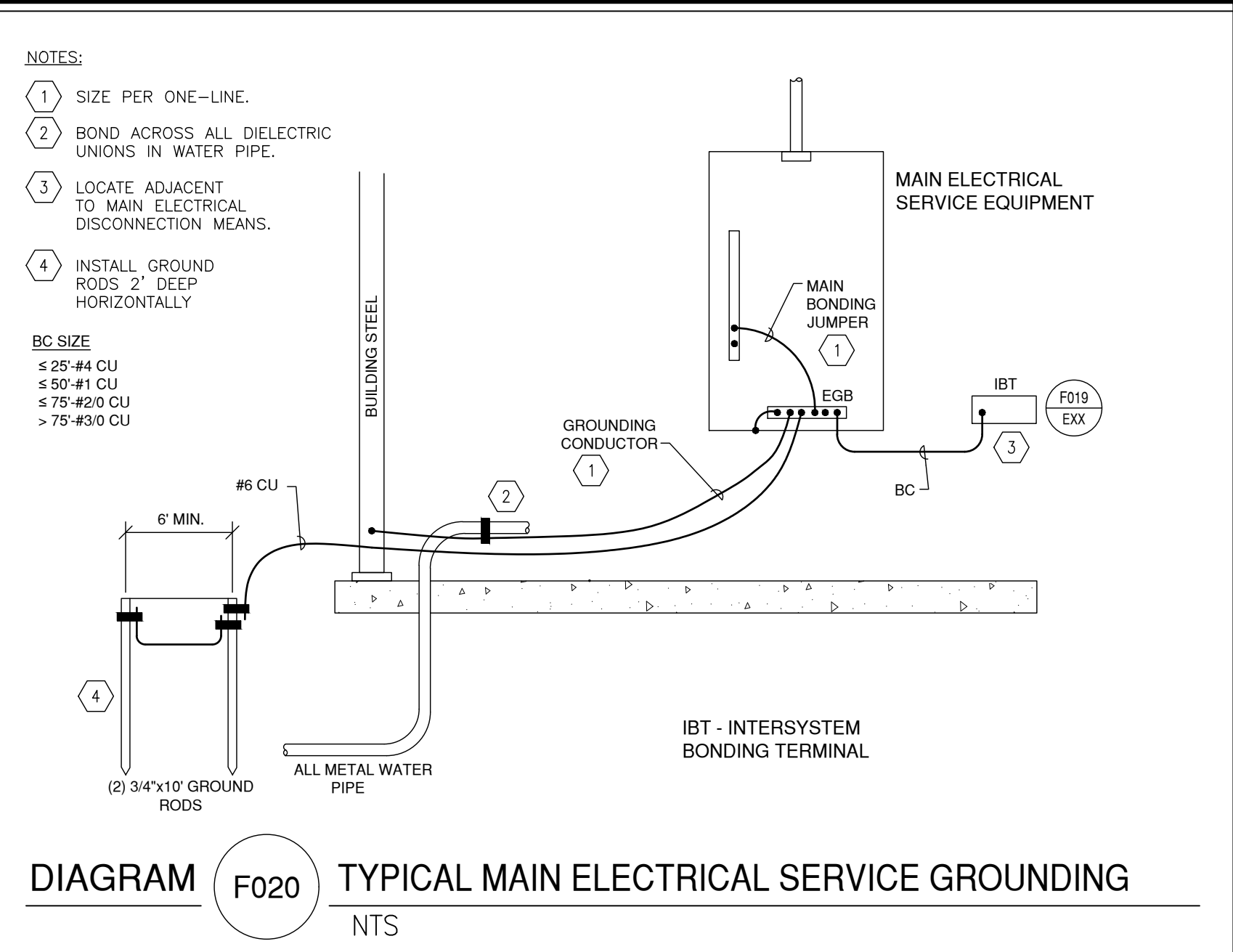
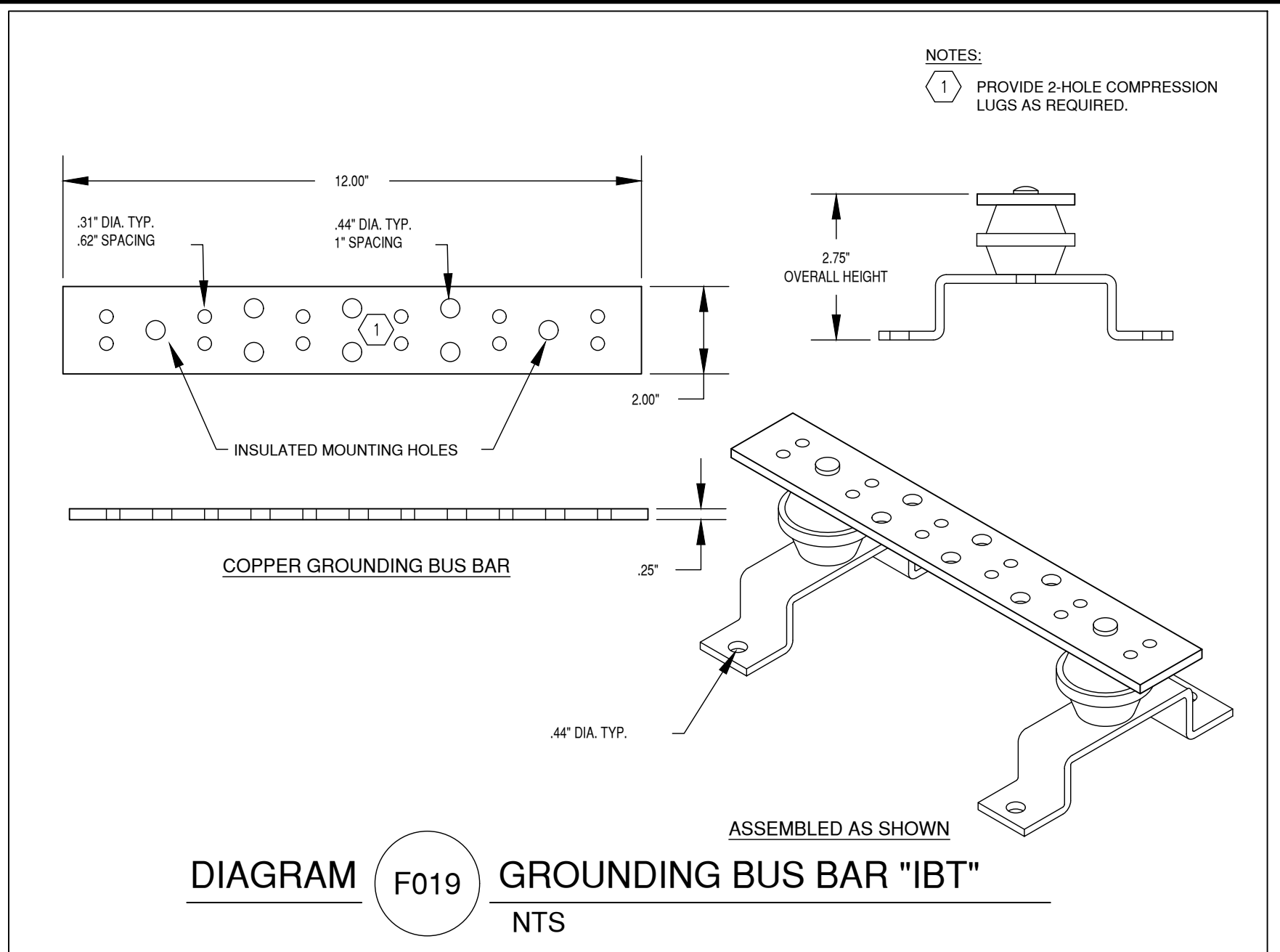
SHEET NUMBER:

E-101

BNA
 CONSULTING

4225 Lake Park Blvd Ste 275
 West Valley City, Utah 84120
 P: 801.532.2196

www.bnacconsulting.com



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NO.	DESCRIPTION	BY	APPR.	DATE

IRRIGATION NOTES

1. The Contractor shall be familiar with the irrigation technical specifications for this project. Failure to do so shall not relieve him of meeting all of the requirements contained therein.
2. The irrigation plan is diagrammatic in nature, and some drafting liberties have been taken to maintain the graphic clarity of the drawings. All irrigation equipment shall be located in planting areas only, unless noted otherwise. The Contractor shall install piping to minimize changes in direction, avoid placement under large trees or large shrubs, and avoid placement under hardscape features. Refer to the irrigation equipment schedule, installation details, and specifications for equipment and its proper installation.
3. The Contractor shall use only the equipment and products specified in the construction drawings. No substitution of materials will be allowed on the irrigation system without prior authorization from the Landscape Architect and the Owner.
4. The Contractor shall visit and inspect the project site. He shall take into consideration known and reasonably inferable conditions affecting the proposed work. Failure to visit the site shall not relieve the Contractor of furnishing materials and performing the work required. Any discrepancies between existing site conditions and those indicated on the plans shall be called to the attention of the Landscape Architect prior to continuance of the project.
5. If the water point of connection is located other than as shown on the drawings, or if the water pressure is different than indicated on the plans, or appears to be unusually high or low, the Contractor shall immediately notify the Landscape Architect prior to proceeding with any irrigation work.
6. Design spacing for each sprinkler head and/or dripline is listed in the Irrigation Equipment Schedule. Contractor shall lay out the heads as shown in the plans. While doing so, Contractor shall note that the spacing matches both the plans and the intended design spacing as listed. If any discrepancies are discovered, the Contractor shall immediately contact the Landscape Architect to resolve the spacing prior to proceeding with the installation.
7. The Contractor shall keep the premises clean and free of excess equipment, materials, and rubbish incidental to work of this project. Work areas shall be swept clean and trash and debris picked up daily. Open trenches or hazards shall be protected with yellow caution tape. The Contractor is responsible for removal and legal disposal (offsite) of trash and debris generated by his work on this project.
8. Pipe fittings shall conform to the following standards unless otherwise noted:
 - A. All main line fittings four (4) inches or larger shall be either M.J. or deep bell push-on, gasketed, and constructed of ductile iron material.
 - B. All main line fittings three (3) inches and smaller shall be solvent weld Schedule 80 PVC.
 - C. M.J. tees, Schedule 80 tees with SxT Schedule 80 bushings, or Harco ductile iron service tees are approved on PVC main lines for automatic control valve installation. M.J. fittings shall be greased and wrapped.
 - D. All lateral line fittings shall be solvent weld Schedule 40 PVC.
 - E. All risers and exposed fittings shall be solvent weld Schedule 80 PVC, including conversions to metal pipe and fixtures, unless otherwise noted on the plans.
 - F. All main line fittings four (4) inches and larger, whether ductile iron or solvent weld, shall be thrust blocked.
8. Backflow prevention devices shall be a reduced pressure principle backflow preventer. Installation shall comply with local, state, and national codes and regulations, and per manufacturer's recommendations (whichever is most restrictive). Included in the installation shall be the specified enclosure.
9. Irrigation wire shall conform to the following:
 - A. All irrigation control wire shall bear approval as U.L. listed type of underground feeder (direct burial) and each conductor shall be of electrical conductivity grade solid copper in accordance with ASTM 30.
 - B. No aluminum wire shall be used on this project.
 - C. Wire size shall be #14 gauge minimum.
 - D. Two spare wires shall be run from each controller to the farthest valve under its control in all directions and any valve which is on a dead-end line.
 - E. All wire crossing water, attached to bridges, going under paving, or where conditions require protection, shall be housed in conduit or sleeves. All out-of-ground conduits shall be rigid metal. All buried conduit may be PVC.
 - F. All splices shall be water-tight. All connections made inside the box to connect wires to the valve shall be made using a 3M DBR/Y dry-splice connector or pre-approved equal. Each connector shall be completely sealed and water-proofed.
 - G. All other splices in control wire shall be housed in a separate valve box.
 - H. The pigment or color of the wires shall be integrated into the covering, rather than painted on. All common or ground wires shall be white in color. Where more than one controller is required, a different colored hot wire shall be used for each controller. A separate color shall be used for all spare wires.
10. Run a single fourteen (14) gauge wire along the top of the main line to be used for tracking the location of the main line. The color of the tracing wire shall be different than any other wire color used.
11. All pressure main lines shall have between twenty-four (24) and thirty (30) inches of cover, while all lateral lines shall have between twelve (12) and fourteen (14) inches of cover. Trench bedding and backfill material shall consist of existing site soil free of rocks larger than one (1) inch in diameter and any other debris. Wasted pipe and other excess project materials or rubbish (tape, wire, trash, wrappers, boxes, plastic or glass bottles, etc.) shall not be backfilled into the trenches. All trenches shall be backfilled, and then watered sufficiently to insure no settling of the surface. In the event of any backfill settlement prior to the end of the guarantee period, the Contractor shall perform all required repairs at his own expense.

12. Manual drain valves shall be required at all low points in the main lines. All trenches shall be sloped so the pipes will gravity-drain back to the main connection point or to the nearest manual drain.
13. Check valves shall be used where indicated and where necessary to prevent water flow from lower elevation heads when the irrigation system is turned off.
14. All control valves shall be located within shrub areas where possible and installed per the details shown on the plans. Each control valve shall have its own separate shut-off valve, and only one (1) control valve and gate valve per valve box. No valve manifolds shall be allowed. The bottom of the remote control valve shall be a minimum of four (4) inches above the gravel. Isolation gate valves on the main line shall be located in separate valve boxes.
15. All main lines and lateral lines shall be sleeved where they pass under any paved areas. The size of the sleeve shall be twice the size of the pipe being sleeved, unless otherwise specified on the drawings.
16. The automatic controller shall be of the type and manufacturer specified, and located as shown on the plans. The Contractor shall be responsible for providing 120 volt electrical service to the controller. Coordinate this work with other trades on this project.
17. Prior to backfilling any trenches or irrigation lines:
 - A. All main lines shall be capped and pressure tested at 120 psi for a period of 4 hours. Any leaks found shall be corrected by removing the leaking pipe or fittings and installing new material in its place. Repeat the pressure test to insure the absence of leaks.
 - B. The Contractor shall not allow nor cause any of his work to be covered until it has been inspected, tested, and approved by the Landscape Architect.
 - C. Where a main line has been allowed to sit in the trench uncovered for any length of time prior to testing, the line may be shaded with a thin layer of soil to minimize weather related expansion or contraction of the pipe.
18. The Contractor shall adjust all irrigation heads to provide a uniform coverage and to keep spray off of buildings, walkways, and paved surfaces.
19. When the sprinkler system has been completed, the Contractor shall, in the presence of the Landscape Architect, conduct a coverage test of the water afforded to the planting areas to insure that it is consistent and uniform. The Contractor shall provide, at his own expense, all materials and labor necessary to correct any deficiencies or inadequacies discovered during the coverage test.
20. The Contractor shall keep on site a current and accurate as-built record of his work. It shall include exact dimensioned locations, grades, elevations, and the size of all exterior and interior underground piping, valves, and drains. Dimensions shall indicate distances from columns, buildings, curbs, and similar permanent features on the site. This information shall be recorded on a print as the work progresses, but shall be permanently recorded on a reproducible, two (2) mil Mylar or Tyvek original which shall be given to the Owner before the project is accepted.
21. The irrigation contractor shall maintain the system for the duration of the contract period, including the maintenance period.
22. Upon final acceptance of the sprinkler irrigation system as being operational and properly installed, the Contractor shall guarantee the workmanship, materials, fixtures, and equipment to be free from defects for a period of one (1) year after that date.
23. Inline Drippers
 - A. Inline drip tubing shall be spaced approximately equal to the inline emitter spacing. Inline drip tubing spacing may be adjusted to be slightly less than the emitter spacing in order to achieve uniform spacing. For slope applications, place drip tubing laterals parallel to the slope contour. When slopes exceed thirty (30) percent, increase the recommended lateral spacing by twenty five (25) percent on the lower one third (1/3) of the slope.
 - B. Weed barrier fabric shall be installed directly on top of finished grade soil, with inline dripper tubing on top of fabric. Inline dripper tubing shall be secured with soil staples and covered with three (3) inches of specified mulch. Supply and exhaust headers shall be installed at normal lateral line depths.
 - C. All drip tubing shall be held in place by soil staples and shall conform to the following:
 - I. Sandy Soil – One staple per every three (3) feet and two (2) staples on each change of direction (tee, elbow, or cross)
 - II. Loam Soil – One staple every four (4) feet and two (2) staples on each change of direction (tee, elbow, or cross)
 - III. Clay Soil – One staple every five (5) feet and two (2) staples on each change of direction (tee, elbow, or cross)
 - D. Installation of inline drip circuits shall generally conform to the following steps:
 - I. Assemble and install ball valve, filter, remote control valve, and inline pressure regulator assembly in accordance with installation details.
 - II. Assemble and install supply header(s) in accordance with installation details. Tape or plug all open connections to prevent debris contamination.
 - III. Install lateral drip lines in accordance with details and relevant specifications and manufacturer's recommendations. Tape or plug all open ends while installing to prevent debris contamination.
 - IV. Assemble and install exhaust header(s) in accordance with installation details. Tape or plug all open connections to prevent debris contamination.
 - V. Install air/vacuum relief valve(s) at the zone's highest point(s) in accordance with installation details.
 - VI. Thoroughly flush supply header(s) and connect drip lateral lines while flushing.
 - VII. Thoroughly flush drip lateral lines and connect to exhaust header(s) and any interconnecting lateral lines while flushing.
 - VIII. Thoroughly flush exhaust header(s) and install line flushing valves in accordance with details.



J-U-B ENGINEERS, INC.

J-U-B ENGINEERS, INC.
3611 S. Zintel Way
Kennewick, WA 99337
Phone: 509.783.2144
www.jub.com



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NO.	REVISION	DESCRIPTION	BY	DATE

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
UMATILLA, OREGON

LANDSCAPE IRRIGATION NOTES

FILE: 33-21-003_L1-001
JUB PROJ. #: 33-21-003
DRAWN BY: #
DESIGN BY: JD
CHECKED BY: LLS
ONE INCH
AT FULL SIZE. IF NOT ONE INCH SCALE ACCORDINGLY
LAST UPDATED: 9/9/2022
SHEET NUMBER:

L-001

Plt Date: 9/9/2022 3:28 PM. Plotted By: Jenna Meyers
Date Created: 9/12/2022. JUB.COM\CENTRAL\Clients\SR\UMATILLA\CAD\PROJECTS\33-21-003_KIWANSIS\LSCONCEPT\DESIGN\CAD\SHEET\33-21-003_L1-001.DWG

PLANTING NOTES

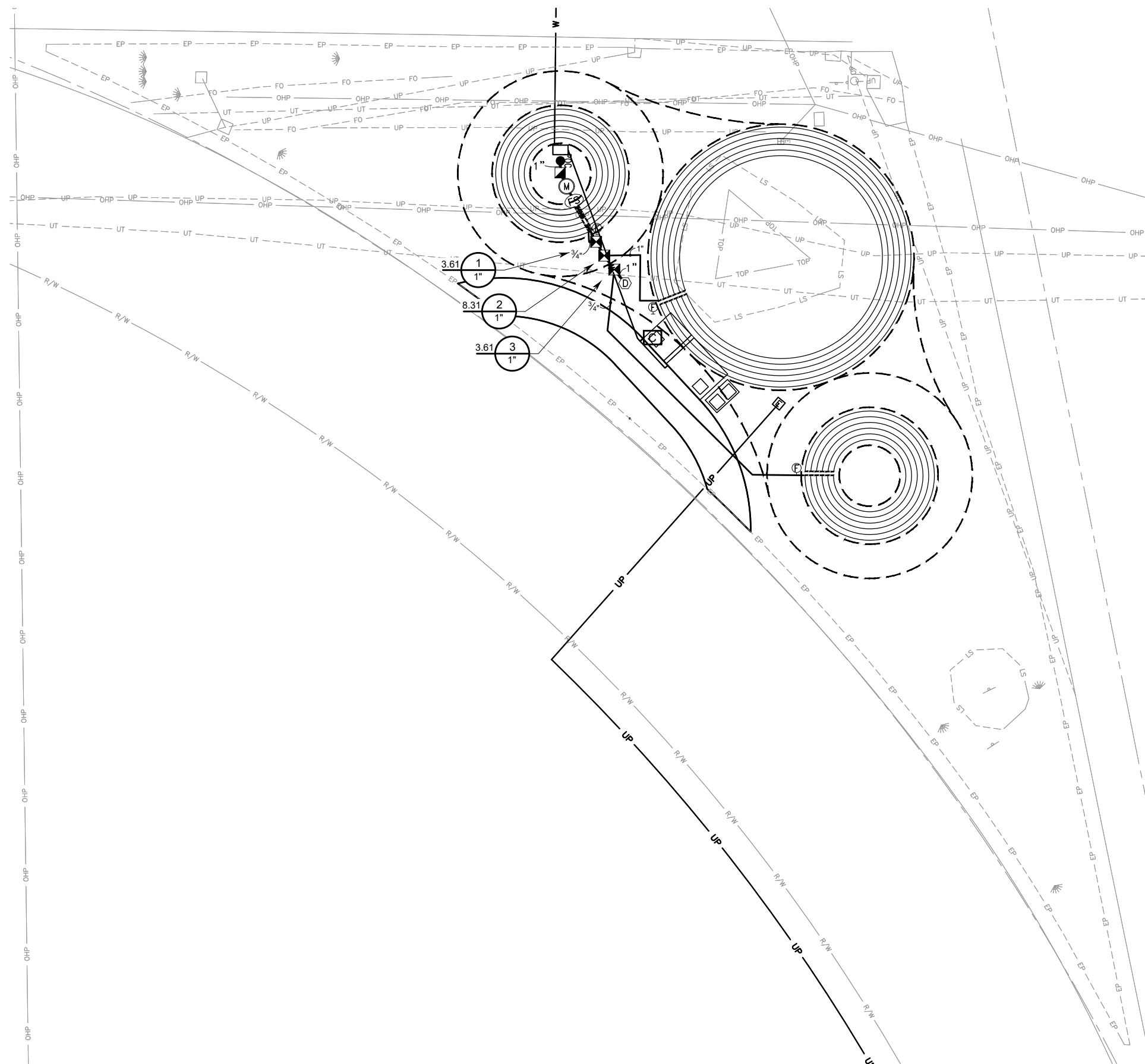
- 1. The Contractor shall be familiar with the planting and irrigation technical specifications -- Failure to do so will not relieve the contractor of his responsibility to fulfill all requirements in said specifications.
2. Prior to any planting operations, the irrigation system shall be fully operational and all planting areas shall be thoroughly moistened.
3. The planting plan is diagrammatic, and all plant locations are approximate. Plant symbols and mulch hatches on the plans take precedence over quantities shown in the Plant Material Schedule.
4. No substitution of size, grade, variety or any species shall be permitted except by written permission of the Landscape Architect.
5. Final Grade Preparation
A. The subgrade Material Shall be rough graded to plus or minus one tenth (+0.1) foot of the final rough grade, which will allow the Contractor to achieve final finished grade through the placement of the topsoil.
B. Protect existing trees, shrubs, lawns, existing structures, fences, roads, sidewalks, paving, curb and gutter and other features during Construction.
C. Protect above or below grade utilities. Contact utility companies to repair damage to utilities. Contractor shall pay all cost of repairs which he causes.
D. Maintain all benchmarks, control monuments and stakes, whether newly established by surveyor or previously existing. Protect from damage and dislocation.
E. Grading Intent: Spot elevations and contours indicated are based on the best available data. The intent is to maintain constant slopes between spot elevations.
F. Conduct work in an orderly manner. Do not create a nuisance. Do not permit soil accumulation on streets or sidewalks. Do not allow soil to be washed into sewers and storm drains.
G. Grade slopes to provide adequate drainage after compaction. Do not create water pockets or ridges. Use all means necessary to prevent erosion of freshly graded areas during construction until surfaces have been constructed and landscaping areas have taken hold.
H. Grades shall be smooth, even, and maintain a consistent uniform slope. Grades with undulating surfaces will be rejected and require re-grading.
I. The Contractor shall maintain a minimum of two (2) percent drainage away from all buildings, structures, and walls. Finished grades shall be smoothed to eliminate puddling or standing water.
J. All finished grades shall be approved by the Landscape Architect prior to installation of any plant materials.
6. All planting areas shall receive a minimum of four (4) inches of imported topsoil in turf areas and twelve (12) inches in planting beds. All topsoil used on this project shall meet the following criteria:
A. pH:.....5.5 - 8.0
B. EC (electrical conductivity):.....<2.0 mmhos per centimeter
C. SAR (sodium absorption ratio):.....<3.0
D. % OM (percent organic matter):.....2%
E. Texture (particle size per USDA classification):
I. Sand:.....<70%
II. Silt:.....<70%
III. Clay:.....<30%
IV. Stone Fragments (gravels or any soil particle Greater than two (2) mm in size):..... <5% (by volume)
V. Rocks > 1.5":..... None
In addition, the topsoil shall be fertile, friable, natural loam and shall be capable of sustaining vigorous plant growth. It shall be free of stones, lumps, clods of hard earth, plants or their roots, sticks, and other extraneous matter. The topsoil shall contain neither noxious weeds nor their seeds. It shall not be used for planting operations while in a frozen or muddy condition. An appropriate fertilizer may be used to provide needed nutrients for healthy and vigorous plant growth. Follow recommendation of topsoil report.
7. The following procedure shall be followed in placing all topsoil:
A. All areas to receive topsoil which have a slope of less than ten (10) percent shall be cross-rippled to a depth of four (4) to six (6) inches.
B. The surface of the subgrade shall be scarified to a depth of two (2) inches to provide a transition zone between the subgrade and the topsoil. Place the topsoil on the subgrade and fine grade to the final finished grade and topsoil depths as indicated on the drawings and in these notes.
C. Any required soil amendments (i.e. organic matter, fertilizer, gypsum, etc.) shall be thoroughly blended with imported or screened topsoil prior to placement. (Do not place amendments on top of topsoil and then blend.) Where only a dry, granular fertilizer is to be added, it may be applied to the surface and raked in during the fine grading process.
8. The Contractor shall obtain a soil analysis from any authorized soil testing agency of any existing stockpiled or imported topsoil to be used on the project to verify that it conforms to the topsoil specifications. Test results shall include horticultural nutrient recommendations. The soil samples shall be obtained per the testing agency directions. Allow ten (10) working days to obtain test results. The costs for such testing shall be the responsibility of the Contractor. Prior to delivery of the imported topsoil to the site, the Contractor shall provide to the Landscape Architect the name and location of the topsoil source, along with the certified soil analysis of the topsoil to be used. The analysis shall verify that the proposed topsoil meets the topsoil specifications, and is capable of supporting healthy plant growth.
9. After imported top soil has been delivered to the site, a second soils test may be required to verify that it is indeed the same soil as previously tested and designated for

- use in this project. No substitution of top soil shall be allowed without prior written authorization from the Landscape Architect.
10.All plants used for this project shall conform to the following:
A. Any inspection certificates required by law shall accompany each delivery of plants and such certificate shall be filed with the Landscape Architect. All plants shall be subject to inspection and approval at the place of growth or upon delivery to the site for their quality, size, species, and variety. Such approval shall not impair the right of inspection and rejection at the site or during progress of work for size and condition of the plants, latent defects, or injuries. Any and all rejected plants shall be removed immediately from the premises by the Contractor. The Contractor shall make all replacements at his expense should he fail to comply in full with any of the specifications. Necessary replacements will be made as soon as weather conditions permit and all such plants replaced shall conform to all specifications herein.
B. Plants shall be fresh and vigorous, of normal habit and growth, and free of disease, insects and insect eggs and insect larvae, weeds and weed seed. No heeled-in plants from cold storage shall be accepted except on approval by the Landscape Architect prior to installation.
11.All plants shall be installed using the following procedures:
A. Plants shall be generally located as indicated by the drawing. The Contractor shall stake out the location of all plants and planting areas, and no excavation or installation shall commence until such locations have been approved by the Landscape Architect.
B. All trees and shrubs shall be planted in pits as detailed in the planting details contained herein or as noted on the drawings. Tree and shrub pits shall be circular in outline, with 45° angled sides and the base diameter of the plant pit at least two (2) times the diameter of the rootball of each plant to be installed. They shall be one to two and one half (1 - 2 1/2) inches shallower than the rootball depth. When the plant is properly placed in the plant pit, the root collar shall be at or approximately one (1) inch above finished grade. The sides of the plant pit shall be roughened, and not smooth or sculpted.
C. All plant and tree pits shall be backfilled with imported topsoil mix and required amendments. See Notes 6 and 7.
D. For container grown plants, remove the container and place the plant vertically in the plant pit, directly on undisturbed soil. The root crown or collar shall be at or approximately one (1) inch above the finished grade. Perennial plants and ornamental grasses shall be planted with root collar at finished grade.
E. For balled and burlapped plants, place the plant vertically in the center of the pit, with the rootball resting on undisturbed soil. Cut and remove the wire basket and burlap or other wrapping material from the rootball. This may be done with the rootball in the pit. Any burlap or wire pieces underneath the rootball may be left in place if they cannot be removed. Do not fold the burlap over, but cut away as much as possible without disturbing the rootball. No burlap shall be pulled from under the rootball. Backfill the bottom one third (1/3) of the pit as the wire and burlap are removed. In all cases, maintain the integrity of the rootball.
F. Specified backfill material shall be carefully and firmly worked and tamped under and around the rootball to fill all voids. When backfilled and compacted to two thirds (2/3) the depth of the pit, thoroughly water with a hose to completely soak the roots and remove any air pockets.
G. The plant pit shall then be completely backfilled with the specified backfill mix and tamped well. A shallow watering basin or rain cup shall be formed around each plant. This basin will be equal in diameter to that of the original planting pit.
H. After planting, the following operations shall be performed:
I. Stake and mulch all trees per installation details.
II. Remove all nursery stakes ties, and tags from all plants. Prune and remove any dead, damaged, or broken branches. Maintain side growth on all trees.
12.All plants shall be thoroughly watered immediately after planting. This shall mean full and thorough saturation of all backfill in the pits and beds during the same day of planting. Water shall be applied only by open end hose at very low pressure to avoid air pockets, injury to the plant, or washing away of backfill. When installed, watered, and fully settled, the plants shall be vertical. Subsequent watering shall be provided by the site's irrigation system. The Contractor shall ensure that all plants, especially trees, receive sufficient water to maintain healthy growth and vigor. Over-watering shall be avoided, and prolonged saturation of the soil around the trees shall be eliminated by appropriately controlling the irrigation circuit which provides water to that area.
13.A weed barrier fabric shall be placed in all planting beds to receive stone mulch to prevent the growth and spread of unwanted vegetation. The fabric shall be Typar #3301B or approved equal. Do not install weed barrier fabric under bark mulch.
14.Mulch (see plant materials schedule and specifications for size requirements) shall be placed to a depth of three (3) inches on top of the topsoil in all planting beds and over tree planting pits. The finished grade of the mulch shall be as follows:
A. Two (2) inches below the surface or finished grade of any paving, mowstrips, or walks adjacent to the planting area.
B. One (1) inch below top of metal edging.
C. At adjacent finished grade of the turf surrounding tree planting pits.
D. In tree pits, the mulch shall be kept six (6) inches away from the base of the tree.
E. Just prior to placement of the mulch, the Contractor shall treat the mulched areas with a pre-emergent herbicide according to the manufacturer's recommendations.
15.Throughout the course of planting, excess and waste materials as well as excavated subsoil shall be continuously and promptly removed. All areas shall be kept clear and all reasonable precautions taken to avoid damage to existing structures, plants, and grass. When planting has been completed in an area, it shall be thoroughly cleaned of all debris, rubbish, subsoil, and waste materials. These shall be removed from the property and disposed of legally. All planting tools shall also be put away.
16.Substantial Completion shall be defined as the complete installation of all plant materials, staking, mulching, and other work on the project in its entirety. Substantial completion shall not be given on designated portions of a project.
A. At substantial completion of all planting work outlined in these plans, the Contractor shall contact the Landscape Architect to arrange for a walk through to verify that all aspects of the work have been completed. Work must be fully completed (except for final clean-up) according to all plans, notes, and specifications and exhibit professional

- workmanship.
B. Notice by the Contractor shall be given, in writing, at least three (3) days in advance to the Owner's Representative and Landscape Architect so that proper scheduling can be made for those who are to attend.
C. At the appointed time, an inspection of all plant materials, including staking and mulching, shall be made.
D. A list of uncompleted items (punch list) shall be generated by the Landscape Architect and distributed to the Contractor and other involved parties within three (3) days of the substantial completion inspection. Each item on the punch list shall be corrected before the project will be approved and accepted by the Owner's representative. The Contractor will be back charged for time spent by the Owner and any consultants who have been brought to the site for a final inspection when the project is not ready for said inspection.
17.The maintenance/establishment period shall begin one (1) day after the substantial completion inspection. The Contractor shall complete all punch list items during this period, as well as maintain and operate the entire irrigation system. The Contractor shall maintain all plantings until the turf is fully established. The turf shall be considered fully established when turf grass stands come in uniform and thick, with no bare or thin spots, and roots have begun to spread and knit together. No weeds shall be allowed in the grass areas. The maintenance and establishment shall be a minimum period of sixty (60) days (or greater if so identified in the technical specifications), and shall take place during the growing season defined as April 15th through October 15th. Should the maintenance and establishment period not be fully complete prior to October 15th, the balance of the time shall be carried over and start up again on April 15th. Should mild winter weather allow the continuance of work beyond October 15th, the contractor, owner, and landscape architect may mutually agree if these dates can be adjusted along with specific requirements to do so. The maintenance work required shall include but not be limited to the following:
A. Appropriate watering of all plant materials.
B. Weeding and removal of all weeds from groundcover and planting areas.
C. Replacement of any dead, dying, or damaged trees, shrubs, perennials, or groundcover.
D. Filling and replanting of any low areas which may cause standing water.
E. Adjusting of sprinkler head heights and watering patterns.
F. Filling and re-compaction of eroded areas, along with any required re-seeding and/or replanting.
G. The turf grass shall be mowed when the blades reach three (3) inches tall and maintained to a minimum height of two (2) inches. No more than one third (1/3) of the blade shall be removed per cutting. The cutting frequency shall be once every five (5) to seven (7) days depending upon turf grass height and growth rate.
H. Weekly removal of all trash, litter, clippings, and all foreign debris.
I. At thirty (30) days after planting, a balanced fertilizer (16-16-16) shall be applied to the turf grass areas at a rate of one half (1/2) pound of nitrogen per one thousand (1,000) square feet.
J. At intervals of thirty (30) days after the first application of fertilizer to the turf grass, apply a balanced fertilizer (16-16-16) at a rate of one half (1/2) pound of nitrogen per one thousand (1,000) square feet until the turf grass is established.
18.A final inspection shall be held prior to the end of the maintenance period to ensure that all punch list items have been completed and the entire project is ready for acceptance by the Owner. Upon satisfaction that the Contractor has completed all punch list items, the irrigation system is fully and completely functional, and the required As-Built drawings and maintenance manuals have been submitted, the Owner shall accept the project. An official letter of final acceptance shall be prepared and issued to the Contractor, Landscape Architect, and the Owner's representative. Upon final acceptance of the project by the Owner's representative, the Owner shall assume full responsibility for the project, and the guarantee period shall begin.
19.Upon final acceptance of the project as being properly installed, the Contractor shall guarantee the plant materials as follows:
A. All shrubs and groundcovers shall be guaranteed by the Contractor as to growth and health for a period of sixty (60) days after completion of the maintenance period and final acceptance.
B. All trees shall be guaranteed by the Contractor to live and grow in an acceptable upright position for a period of one (1) year after completion of the maintenance period and final acceptance.
C. Any tree with 30% dead or missing canopy, shall be replaced as part of this plant guarantee.
20.The Contractor shall, within fifteen (15) days after receiving written notification by Owner's representative, remove and replace all guaranteed plant materials which die or become unhealthy or appear to be in a badly impaired condition at any time during the guarantee period. Any plants that settle below or rise above the desired finished grade shall also be reset to the proper grade.
A. All replacements shall be plants of the same kind, size, and quality as originally specified in the "plant list" and they shall be furnished, planted, staked, and maintained as specified herein at no additional cost to the owner.
B. The Contractor will not be responsible for plants destroyed or lost due to occupancy of the project, vandalism on the part of others, or improper maintenance or lack thereof.

JUB ENGINEERS, INC. 3611 S. Zintel Way Kennewick, WA 99337 Phone: 509.783.2144 www.jub.com
REGISTERED LANDSCAPE ARCHITECT
UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN UMATILLA, OREGON
LANDSCAPE PLANTING NOTES
FILE: 33-21-003_LP-001
JUB PROJ. #: 33-21-003
DRAWN BY: #
DESIGN BY: JD
CHECKED BY: LLS
ONE INCH AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY
LAST UPDATED: 9/8/2022
SHEET NUMBER: L-002

Plot Date: 9/8/2022 3:28 PM. Plotted By: Jenna Meyers. Date Created: 9/12/2022. JUB.COM\CENTRAL\CLIENTS\DR\UMATILLA\LAYOUT\PROJECT\33-21-003_KIWANSIS\ALUSCONCEPT\DESIGN\DWG\SHEET\33-21-003_LP-001.DWG



IRRIGATION SCHEDULE

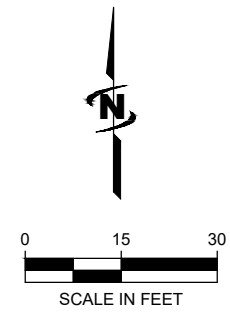
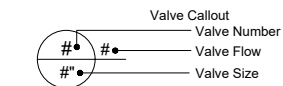
- | SYMBOL | MANUFACTURER/MODEL/DESCRIPTION |
|--------|--|
| ☒ | Drip Control Zone Kit
Hunter PCZ-101. Professional Drip Control Zone Kit 1" PGV globe valve w/1" HY100 filter system (150 mesh) with 25psi regulator. |
| ⊕ | Manual Drip Line Flush Valve
PVC Ball Valve 1 1/2" (Drain Valves plumbed to exhaust header and placed at low point of a zone as needed) |

- | | |
|--|---|
| | Area to Receive Dripline
Netafim Dripline
Netafim TLCV-04-12. Techline Pressure Compensating Landscape Dripline with Check Valve. 0.4 GPH emitters at 12" O.C. Dripline laterals spaced at 18" apart. 17mm. |
|--|---|

- | SYMBOL | MANUFACTURER/MODEL/DESCRIPTION |
|--------|---|
| ☑ | Quick Coupler Valve Assembly
Hunter HQ-44LRC quick coupler valve, yellow locking rubber cover, red brass and stainless steel, with 1" NPT inlet, 2-piece body. Also furnish an HK-44A key with a hose swivel (HS-1). |
| Ⓜ | Master Valve 1"
Hunter ICV-G 1", 1-1/2", 2", and 3" Plastic Electric Master Valve, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use. |
| ⊕ | Manual Drain Valve Assembly
Apollo Bronze ball valve with weld top (78-621-01) 3/4" or approved equal. |
| ⓐ | Hunter PC-400
Light Commercial & Residential Controller, 4-station base module controller, 120 VAC, Outdoor model |
| ⓕ | Flow Sensor
Hunter FLOW-CLIK-100. Flow Sensor SOV with Interface Panel, 1" Schedule 40 Sensor Body, 24 VAC, 2 amp, install Interface Panel as required. |
| ⓐ | Point of Connection 2"
Connect downline of Backflow Preventor. See Civil drawings for details on Backflow Prevention Device. |

— Irrigation Lateral Line: PVC Schedule 40

- - - Irrigation Mainline: PVC Schedule 40

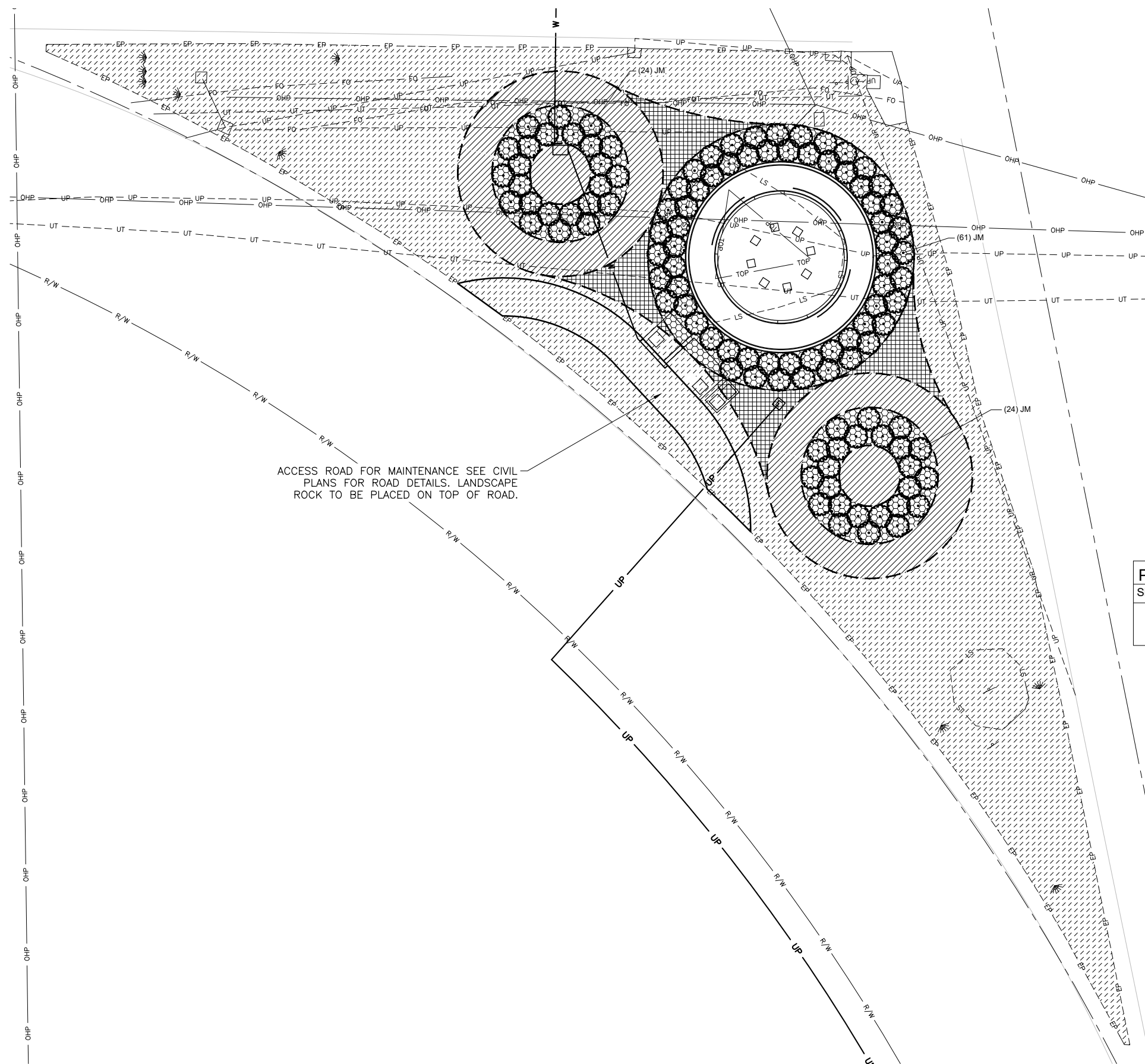


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NO.	REVISION	DESCRIPTION	BY	APPR.	DATE

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
 UMATILLA, OREGON
 LANDSCAPE IRRIGATION PLAN

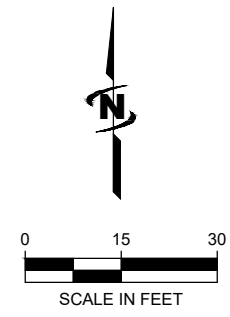
Plot Date: 09/20/22 3:28 PM Plotted By: Jenna Meyers
 Date Created: 07/22/22 JUB:COM:CENTRAL:CLIENTS:GR:UMATILLA:ACTIVITY:PROJECT:33-21-003_KIWANIS:AL:SCONCEPT:DESIGN:CAD:SHEET:03-21-003_LP-101.DWG



ACCESS ROAD FOR MAINTENANCE SEE CIVIL PLANS FOR ROAD DETAILS. LANDSCAPE ROCK TO BE PLACED ON TOP OF ROAD.

MATERIALS SCHEDULE		
SYMBOL	DESCRIPTION	QTY
	1 1/2" Rock Mulch - Black and Tan or Approved Equal Source: Clem Matylinski Eagle Rock Kennewick WA 509-627-6675	14 cy
	1 1/2" Rock Mulch - Desert Brown or Approved Equal Source: Clem Matylinski Eagle Rock Kennewick WA 509-627-6675	31 cy
	2"-4" Rock Mulch - Desert Brown or Approved Equal Source: Clem Matylinski Eagle Rock Kennewick WA 509-627-6675	36 cy
	Existing stockpiled rock mulch	
	Corten 8" Metal Edging - 11 Gauge or Approved Equal Source: www.corten.com 855-426-7836	1,100 lf

PLANT SCHEDULE					
SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	JM	109	Juniperus sabinum 'Monard' TM / Moor-Dense Juniper	5 gal	



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 Kennewick, WA 99337
 Phone: 509.783.2144
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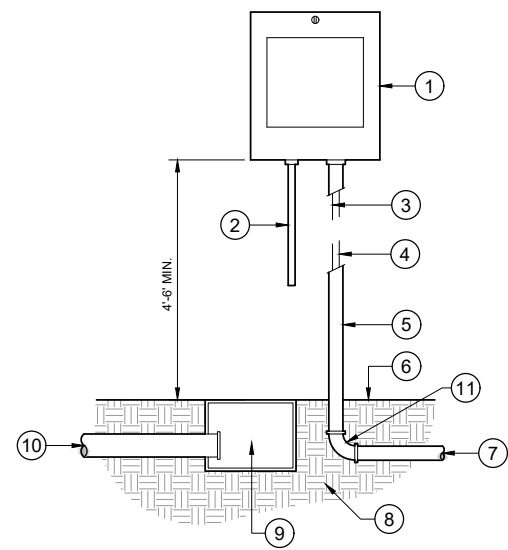
UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
 UMATILLA, OREGON
 LANDSCAPE PLANTING PLAN

FILE: 33-21-003_LP-101
 JUB PROJ. #: 33-21-003
 DRAWN BY: #
 DESIGN BY: JD
 CHECKED BY: LLS

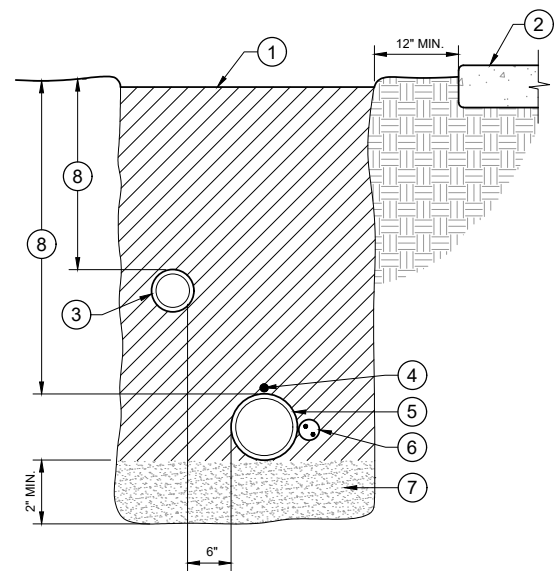
AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY
 LAST UPDATED: 09/20/22
 SHEET NUMBER:
L-102

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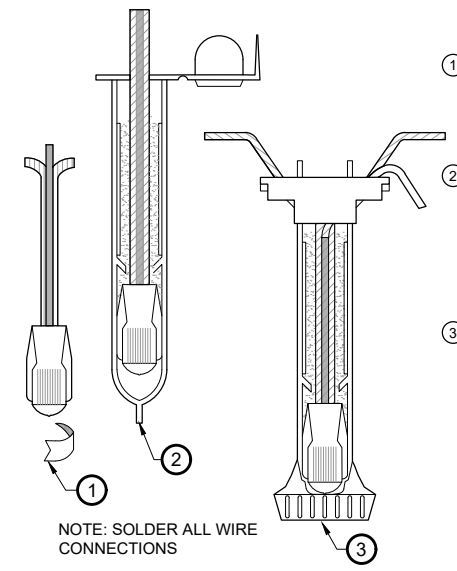


1 WALL-MOUNT CONTROLLER
 NTS



2 TRENCH DETAIL
 NTS

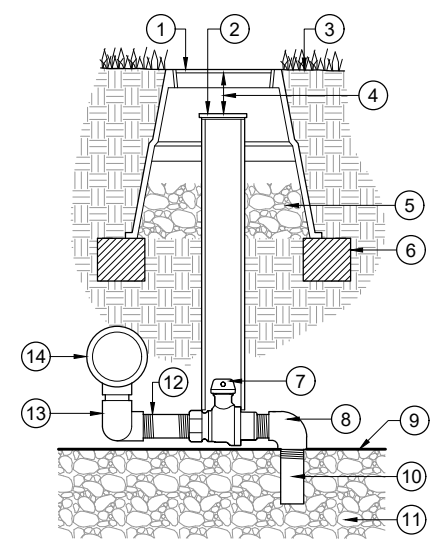
- 1 BACKFILL MATERIAL - SEE NOTES, COMPACT TO 90% MDD
 - 2 ADJACENT HARD SURFACE
 - 3 NON-PRESSURE LATERAL LINE
 - 4 MAIN LINE LOCATOR WIRE; BURIED WITH ALL MAIN LINES
 - 5 PVC MAIN LINE
 - 6 DIRECT BURIAL, LOW VOLTAGE CONTROL WIRES; TO BE BURIED AND TAPED AT 10' INCREMENTS. LOCATE DIRECTLY ADJACENT TO MAIN LINE.
 - 7 BEDDING MATERIAL - SEE NOTES
 - 8 PIPE DEPTHS - SEE NOTES
- NOTE: SEE SLEEVING DETAIL FOR TRENCHING IN PAVED AREAS.



3 3M DBR/Y DIRECT BURY SPLICE KIT
 NTS

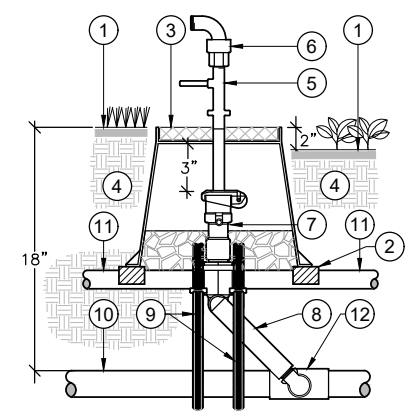
- 1 STRIP WIRE AND APPLY PERFORMANCE PLUS WIRE CONNECTOR R/Y ELECTRICAL CONNECTOR IN A CLOCKWISE DIRECTION.
- 2 INSERT SPLICE TO BOTTOM OF GEL FILLED TUBE. VISUALLY CHECK TO MAKE SURE CONNECTOR HAS BEEN PUSHED PAST THE LOCKING FINGERS AND IS SEATED ON THE BOTTOM OF THE TUBE.
- 3 POSITION WIRES IN WIRE CHANNELS AND CLOSE INSULATOR TUBE COVER.

NOTE: SOLDER ALL WIRE CONNECTIONS



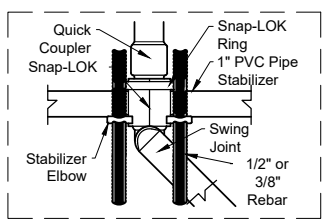
4 MANUAL DRAIN VALVE ASSEMBLY
 NTS

- 1 10" ROUND GREEN PLASTIC VALVE BOX WITH BOLT LOCK (CARSON OR APPROVED EQUAL)
 - 2 4" PVC SCHEDULE 40 PIPE SLEEVE (NOTCH TO FIT PIPE), CAPPED BY YELLOW CAM LOCK SNUG CAP
 - 3 FINISHED GRADE
 - 4 3" MIN. 6" MAX. CLEARANCE
 - 5 4" MIN. PEA GRAVEL
 - 6 4 X 4 PRESSURE TREATED WOOD TIMBER FRAME
 - 7 3/4" VALVE - SEE IRRIGATION EQUIPMENT SCHEDULE
 - 8 3/4" 90 DEGREE STREET ELL
 - 9 FILTER FABRIC COVERING SUMP
 - 10 3/4" X 6" PVC SCHEDULE 80 TOE NIPPLE
 - 11 3/4" GRAVEL SUMP - 6 C.F. MIN. SIZE
 - 12 3/4" X 12" PVC SCHEDULE 80 NIPPLE
 - 13 (2) FIPT X FIPT 90 DEGREE ELL, (2) 3/4" X CLOSE PVC NIPPLE
 - 14 PVC MAIN LINE AND SERVICE TEE
- NOTE: MAIN LINE SHALL GRAVITY DRAIN TO MANUAL DRAIN VALVE. MANUAL DRAIN VALVE SHALL BE PLACED IN ALL LOW SPOTS AND WHERE SHOWN ON THE PLAN.



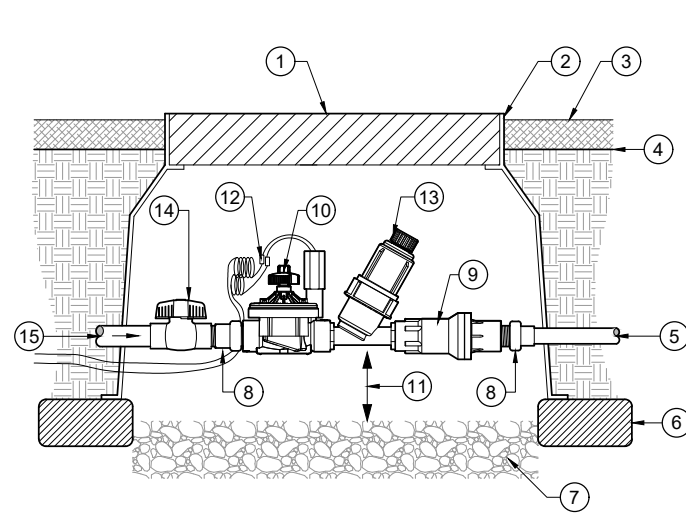
5 QUICK COUPLING VALVE ASSEMBLY

- 1 FINISH GRADE
- 2 4 X 4 PRESSURE TREATED WOOD TIMBER FRAME
- 3 10" ROUND GREEN PLASTIC VALVE BOX W/ BOLT LOCK (CARSON OR APPROVED EQUAL)
- 4 APPROVED BACKFILL
- 5 QUICK COUPLER KEY
- 6 QUICK COUPLER HOSE SWIVEL
- 7 QUICK COUPLER VALVE (SEE IRRIGATION EQUIPMENT SCHEDULE)
- 8 LASCO STANDARD UNITIZED SWING JOINT, WITH SNAP-LOK STABILIZER ELBOW OUTLET. NOTE: INLET IS MIPT, OUTLET IS BRASS MIPT W/SNAP LOK
- 9 3/8" OR 1/2" X 24" REBAR (2) REQUIRED
- 10 MAINLINE PIPE, PVC - SEE IRRIGATION PLAN
- 11 1" PVC PIPE STABILIZER (OPTIONAL)
- 12 SERVICE TEE OR ELBOW, SCH40. (SIZE PER PLAN), SIZE TEE/ELBOW FIPT OUTLET BASED ON MIPT INLET SIZE OF THE SWING JOINT



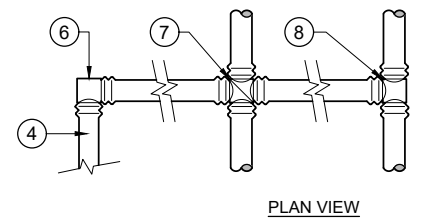
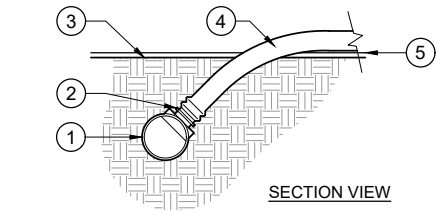
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NO.	REVISION	DESCRIPTION	BY	DATE



- ① 18" JUMBO GREEN PLASTIC VALVE BOX W/ BOLT LOCK (CARSON OR APPROVED EQUAL)
- ② 1" MAX. CLEARANCE
- ③ PLANTING BED MULCH - SEE PLANTING NOTES FOR DEPTH
- ④ FINISHED GRADE
- ⑤ PVC SUPPLY HEADER
- ⑥ CONCRETE PAVERS ONLY
- ⑦ 4" MIN. PEA GRAVEL
- ⑧ ACTION UNION - PART 18010-XX, PART 18011-XX, PART 18012

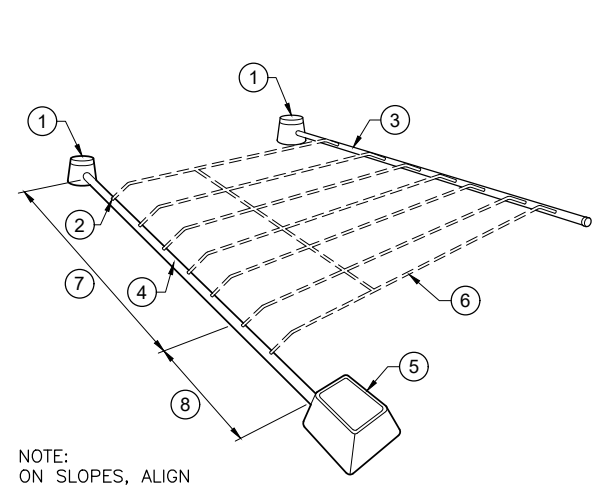
- ⑨ INLINE PRESSURE REGULATOR - SEE IRRIGATION EQUIPMENT SCHEDULE
- ⑩ ELECTRIC CONTROL VALVE - SEE IRRIGATION EQUIPMENT SCHEDULE
- ⑪ 2" MIN. CLEARANCE
- ⑫ (2) 3M DBR/Y WATER TIGHT WIRE CONNECTORS
- ⑬ INLINE FILTER - SEE IRRIGATION EQUIPMENT SCHEDULE
- ⑭ APOLLO FULL PORT BRASS VALVE
- ⑮ FLOW FROM PVC MAIN LINE



- ① 1 1/2" PVC HEADER
- ② NETAFIM TLIAPVC CONNECTION
- ③ PLANTING BED FINISHED GRADE
- ④ DRIPLINE / BLANK TUBING
- ⑤ WEED BARRIER FABRIC
- ⑥ ELBOW
- ⑦ CROSS
- ⑧ TEE

1 DRIP ZONE KIT REMOTE CONTROL VALVE ASSEMBLY
NTS

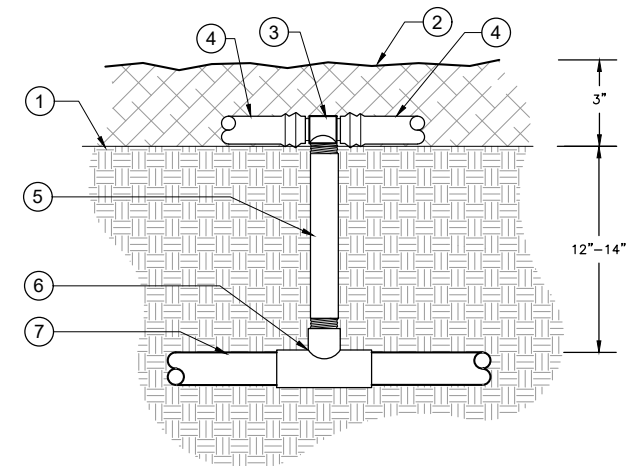
2 DRIPLINE CONNECTIONS
NTS



- ① MANUAL FLUSH VALVE PLUMBED TO PVC IN LOWEST POINT
- ② NETAFIM TLIAPVC CONNECTOR
- ③ 1 1/2" PVC EXHAUST HEADER (SEE NOTES FOR DEPTH)
- ④ 1 1/2" PVC SUPPLY HEADER (SEE NOTES FOR DEPTH)
- ⑤ REMOTE CONTROL VALVE ASSEMBLY
- ⑥ DRIPLINE TUBING LATERAL - INSTALL AT GRADE UNDER MULCH AND ON TOP OF FABRIC (IF FABRIC IS USED)
- ⑦ ON SLOPES, USE THE SPECIFIED DRIPLINE SPACING ON THE TOP 2/3 OF THE SLOPE
- ⑧ ON SLOPES, USE THE SPECIFIED DRIPLINE SPACING PLUS 25% ON THE BOTTOM 1/3 OF SLOPE

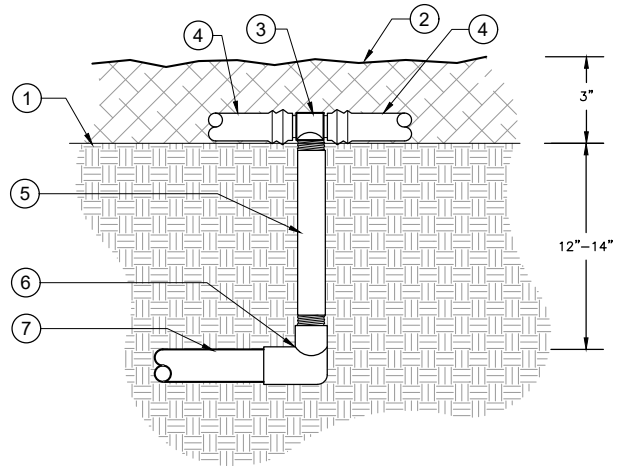
NOTE:
ON SLOPES, ALIGN DRIPLINE PARALLEL TO THE CONTOURS OF THE SLOPE.

3 DRIPLINE CIRCUIT LAYOUT
NTS



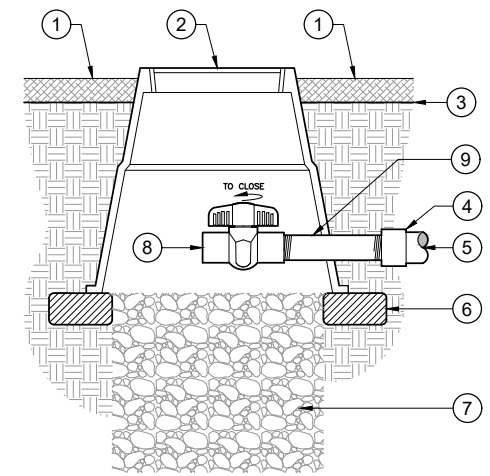
- ① FINISHED GRADE
- ② BARK MULCH 3" DEPTH
- ③ COMBINATION TEE INS X INS X 3/4" FPT MODEL: TL075FTEE
- ④ TECHLINE CV DRIPLINE (SEE PLANS FOR EMMITER SIZE AND SPACING)
- ⑤ 3/4" PVC MPT THREADED TOE NIPPLE RISER
- ⑥ PVC TEE (SXSXT) SIZED AS NEEDED
- ⑦ PVC LATERAL LINE (SEE PLANS FOR SIZE AND TYPE)

4 DRIP TEE CONNECTION TO PVC RISER AND INSERT TEE
NTS



- ① FINISHED GRADE
- ② BARK MULCH 3" DEPTH
- ③ COMBINATION TEE INS X INS X 3/4" FPT MODEL: TL075FTEE
- ④ TECHLINE CV DRIPLINE (SEE PLANS FOR EMMITER SIZE AND SPACING)
- ⑤ 3/4" PVC MPT THREADED TOE NIPPLE RISER
- ⑥ PVC TEE (SXSXT) SIZED AS NEEDED
- ⑦ PVC LATERAL LINE (SEE PLANS FOR SIZE AND TYPE)

5 DRIP ELL CONNECTION TO PVC RISER AND INSERT TEE
NTS



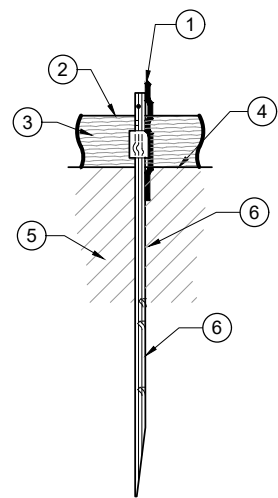
- ① PLANTING BED MULCH - SEE PLANTING NOTES FOR DEPTH
- ② 8" ROUND GREEN PLASTIC VALVE BOX (CARSON OR APPROVED EQUAL) FLUSH WITH MULCH GRADE
- ③ FINISHED GRADE
- ④ PVC REDUCER BUSHING (SP X 1/2") FIPT - SIZE AS REQUIRED
- ⑤ PVC EXHAUST HEADER
- ⑥ CONCRETE PAVERS ONLY
- ⑦ 1 C.F. WASHED PEA GRAVEL
- ⑧ 1/2" PLASTIC PVC BALL VALVE
- ⑨ 1/2" X 6" (SCH. 80 PVC) NIPPLE TBE

6 DRIP FLUSH VALVE (PLUMBED TO PVC EXHAUST HEADER)
NTS

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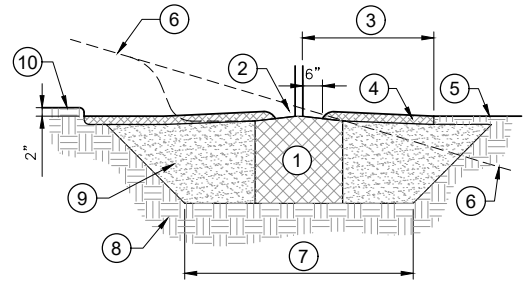
NO.	REVISION	DESCRIPTION	BY	DATE

UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
 UMATILLA, OREGON
 LANDSCAPE PLANTING AND SIGN DETAILS



- ① METAL EDGING - SEE MATERIALS SCHEDULE FOR TYPE AND SIZE
- ② FINISH GRADE OF ROCK MULCH 1" BELOW TOP OF EDGING
- ③ MULCH - SEE PLANT MATERIAL SCHEDULE FOR TYPE AND SIZE
- ④ COMPACT GRADES ADJACENT TO EDGING TO AVOID SETTLING
- ⑤ TOPSOIL - SEE NOTES AND SPECIFICATIONS FOR TYPE AND DEPTH
- ⑥ 12" STAKES @ 4' O.C. (TYP.)

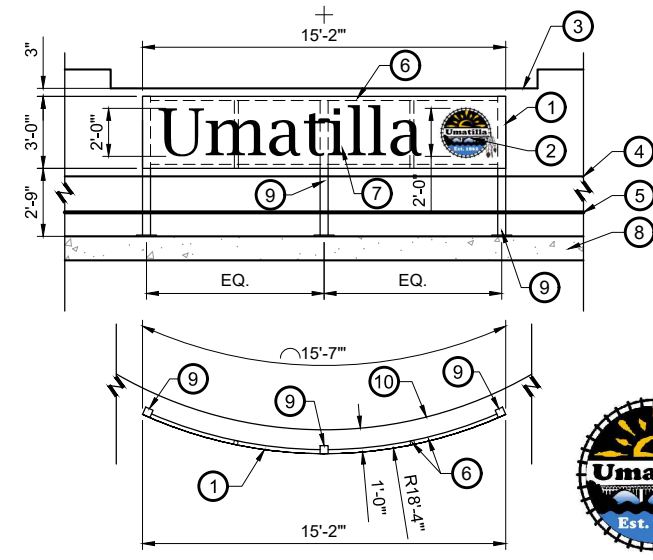
1. THIS DETAIL MAY NOT REFLECT EXACT MANUFACTURER'S INSTALLATION DETAILS DEPENDING ON SPECIFIED METAL EDGING.
2. CALLOUTS 2-5 APPLY REGARDLESS OF SPECIFIED METAL EDGING.
3. IF MANUFACTURER'S INSTALLATION DETAILS DIFFERS FROM THIS DETAIL, CONTRACTOR SHALL SUBMIT MANUFACTURER'S DETAILS FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLING METAL EDGING.



- ① ROOTBALL
- ② CROWN - APPROXIMATELY 1" ABOVE FINISH GRADE
- ③ 3' RADIUS CIRCLE OF SHREDDED BARK MULCH WHEN TREE IS LOCATED IN TURF
- ④ 3" LAYER OF MULCH
- ⑤ FINISHED GRADE
- ⑥ FINISHED GRADE AT SLOPE (WHERE SLOPE OCCURS)
- ⑦ 2X ROOTBALL DIA. MIN. W/ 45 DEGREE SIDES
- ⑧ UNDISTURBED SOIL
- ⑨ BACKFILL MIX (SEE PLANTING NOTES)
- ⑩ TOP OF PAVING (WHERE APPLICABLE)

1 LANDSCAPE METAL EDGING-ROCK MULCH
 NTS

2 TREE/SHRUB PLANTING
 NTS



- ① 1/4" THICK POWDER COATED STAINLESS STEEL SIGN - CORTEN COLOR - TO BE APPROVED BY OWNER AND LANDSCAPE ARCHITECT
- ② BRUSHED STAINLESS STEEL CITY OF UMATILLA LOGO SIGN - MOUNT FLUSH TO SIGN
- ③ TOP OF FOUNTAIN WEIR WALL
- ④ TOP OF FOUNTAIN WALL LOWER TIER
- ⑤ FINISHED GRADE
- ⑥ 2"x2" STEEL FRAME - MOUNT SIGN TO FRAME
- ⑦ BRUSHED STAINLESS STEEL LETTERING - MOUNT FLUSH TO SIGN - FONT LUCIDA BRIGHT
- ⑧ FOUNDATION SLAB - SEE STRUCTURAL PLANS AND DETAILS
- ⑨ 4"x4" POWDER COATED STAINLESS TUBE STEEL - MOUNT TO FOUNDATION SLAB - SEE STRUCTURAL SHEET S-501 DETAIL 5 FOR COLUMN BASE DETAILS
- ⑩ UPPER TIER FACE OF WALL

1. CONTRACTOR TO SUBMIT SHOP DRAWINGS TO ENGINEER AND LANDSCAPE ARCHITECT FOR FINAL APPROVAL PRIOR TO FABRICATION AND INSTALLATION
2. CITY OF UMATILLA LOGO ON LEFT IS FOR THE CONTRACTOR'S USE TO DEVELOP STAINLESS STEEL CITY LOGO SIGN

3 ENTRY MONUMENT SIGN DETAILS
 NTS

MUN-KI-08

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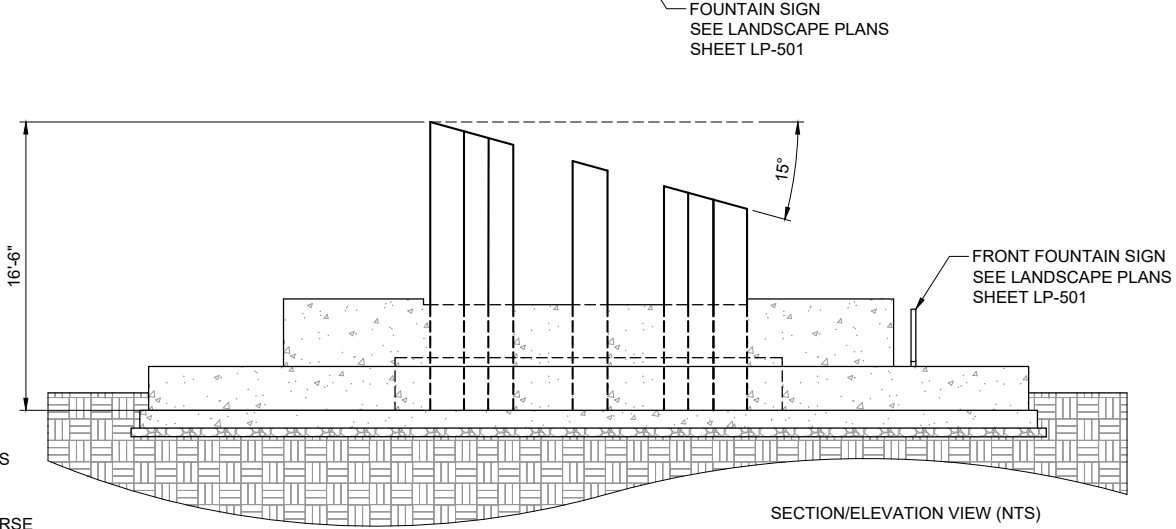
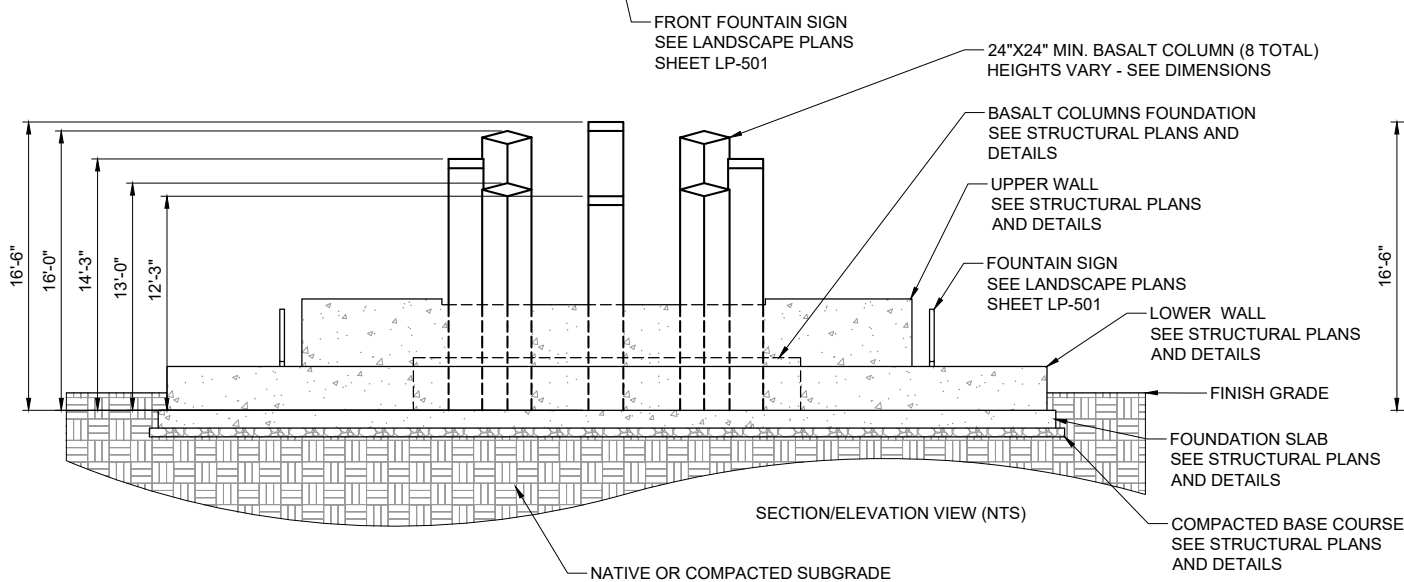
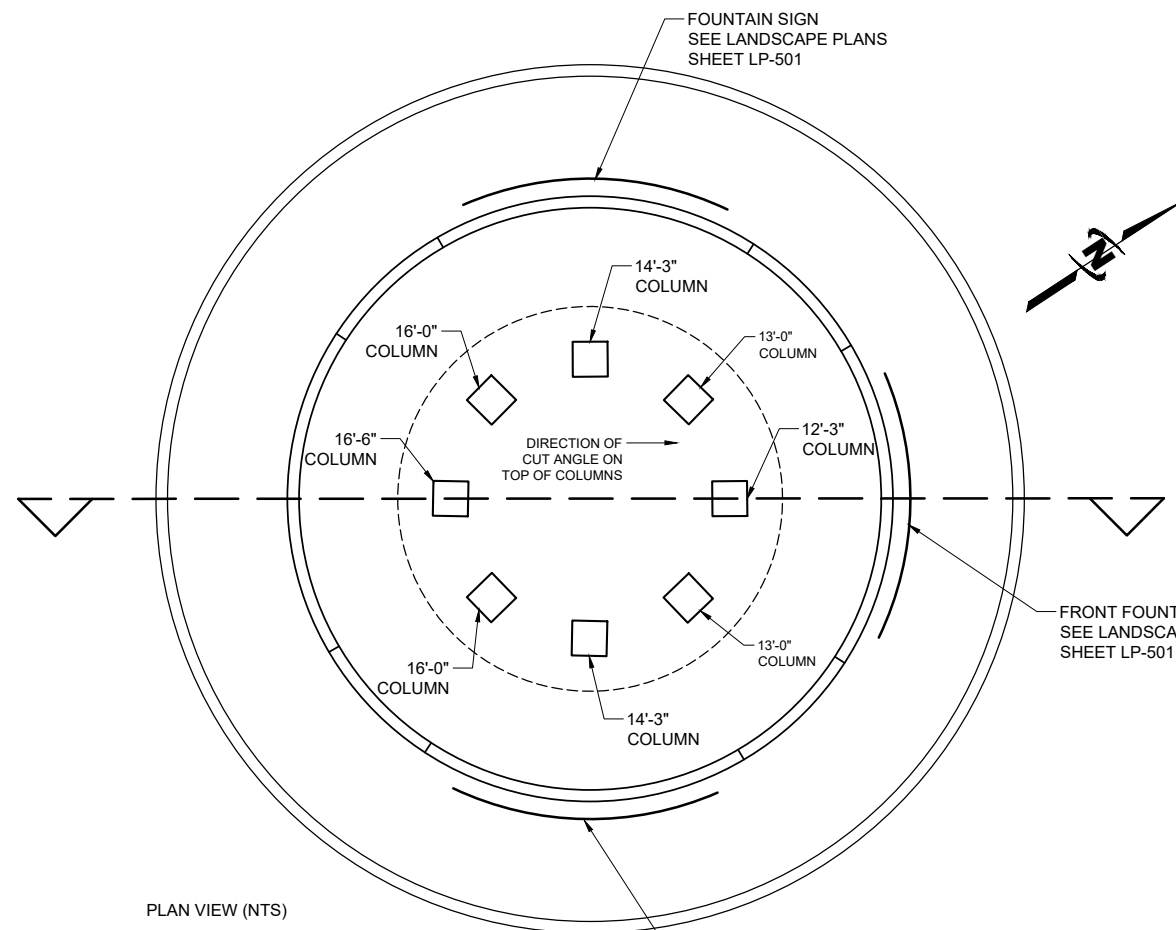
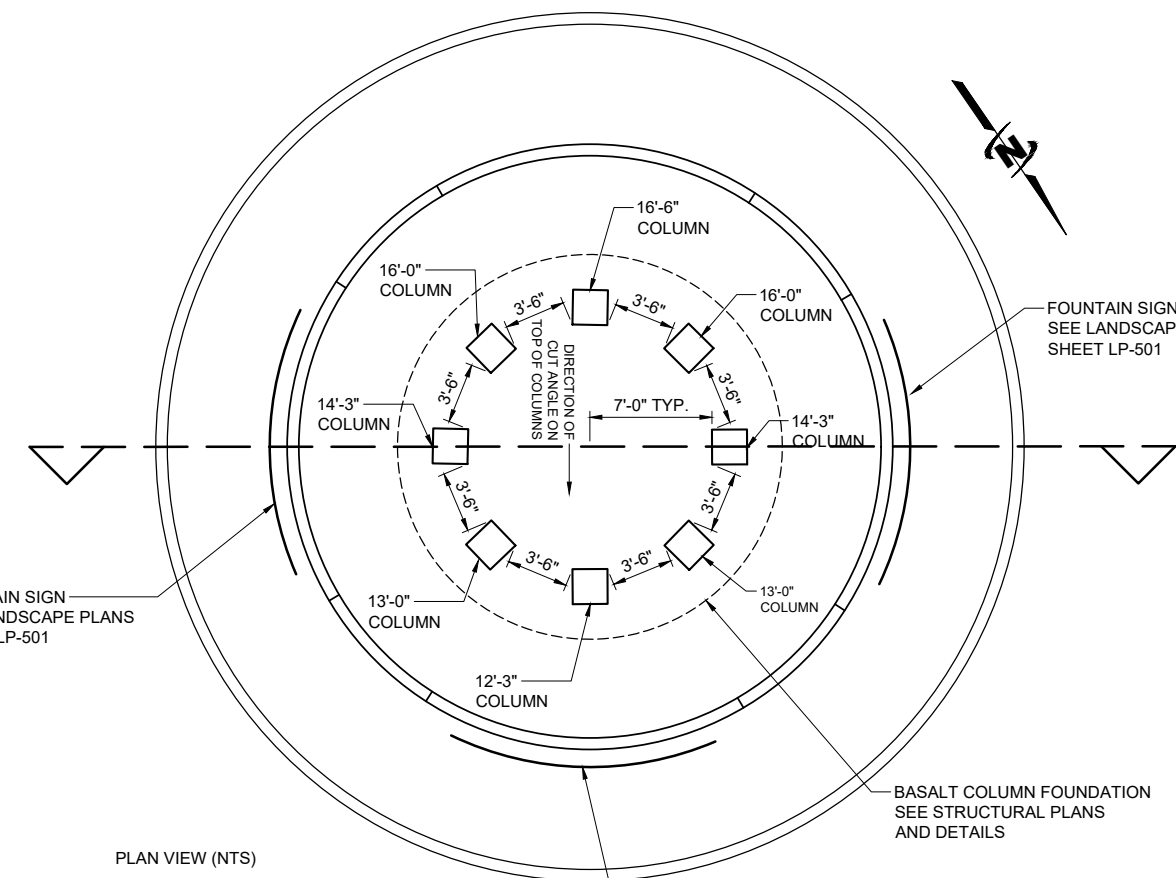
UMATILLA FALLS ENTRY MONUMENT/FOUNTAIN
 UMATILLA, OREGON
 BASALT COLUMN DETAILS

FILE: 33-21-003_LP-502
 JUB PROJ. #: 33-21-003
 DRAWN BY: #
 DESIGN BY: JD
 CHECKED BY: LLS

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

LAST UPDATED: 9/9/2022

SHEET NUMBER:
L-504



- SHEET NOTES
1. TOPS OF BASALT COLUMNS SHALL BE SAW CUT AT A 15° ANGLE PER THE DETAILS ON THIS SHEET. THE TOP SHALL HAVE A FLAME TEXTURE TREATMENT AND SEALED.
 2. COORDINATE SELECTION AND FINAL APPROVAL OF ALL BASALT COLUMNS WITH OWNER, ENGINEER, AND LANDSCAPE ARCHITECT.
 3. WIDTH OF BASALT COLUMNS ARE CALLED OUT AS 24"X24". COLUMN WIDTHS MAY INCREASE UP TO 30"X30", BUT ONLY IF ALL COLUMNS HAVE THE SAME DIMENSIONS. COLUMN WIDTHS SHOULD BE CONSISTENT.
 4. BASALT COLUMN DIMENSIONS ARE MEASURED FROM THE TALLEST POINT OF THE COLUMN TO THE TOP OF THE FOUNDATION SLAB.
 5. BASALT COLUMNS ARE DRAWN AS SQUARED IN THE DETAILS WITH THE UNDERSTANDING THAT THERE WILL BE SOME IRREGULARITIES ON THE FACE OF THE COLUMNS.

1 BASALT COLUMNS
 NTS

Plot Date: 9/9/2022 3:28 PM, Plotted By: Jenna Meyers, Date Created: 9/2/2022, JUB\CENTRAL\CLIENTS\GR\UMATILLA\LACTY\PROJECT\33-21-003_KIWANIS\AL\SCONCEPT\DESIGN\CAD\SHEET\33-21-003_LP-502.DWG