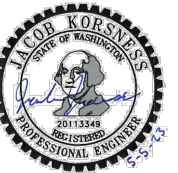


CITY OF STEVENSON

FAIRGROUNDS PUMP STATION IMPROVEMENTS

VOLUME IV - SCHEDULE A CONTRACT DRAWINGS

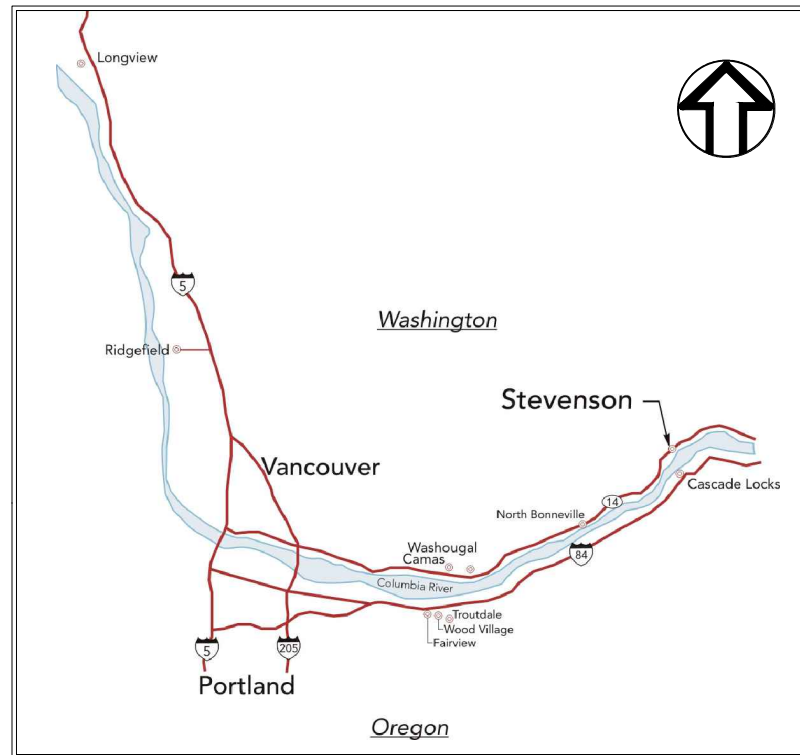
MAY 2023



NO.	REVISION	BY	DATE

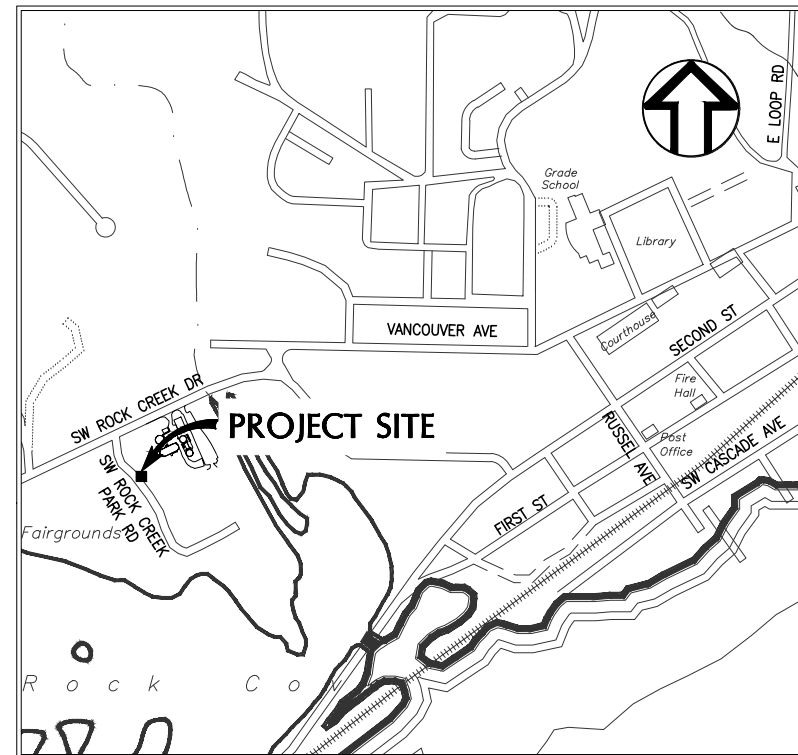
DESIGNED BY: JK/AP
DRAWN BY: CK
REVISION: JW

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LOCATION MAP

NOT TO SCALE



PROJECT SITE MAP

NOT TO SCALE

SHEET INDEX

1	G1	COVER
2	G2	GENERAL NOTES
3	G3	LEGEND & ABBREVIATIONS
4	G4	DESIGN CRITERIA
5	C1	EROSION CONTROL PLAN
6	C2	EROSION CONTROL DETAILS
7	C3	DEMOLITION & BYPASS PUMPING PLAN
8	C4	PUMP STATION CIVIL SITE PLAN
9	C5	PUMP STATION UTILITY PLAN
10	C6	PUMP STATION GRADING PLAN
11	M1	MECHANICAL PLAN
12	M2	MECHANICAL SECTION
13	S1	EQUIPMENT SHELTER PLAN
14	D1	DETAILS I
15	D2	DETAILS II
16	D3	DETAILS III
17	D4	DETAILS IV
18	D5	DETAILS V
19	D6	DETAILS VI
20	D7	DETAILS VII
21	E1	ELECTRICAL LEGEND, SYMBOLS, AND ABBREVIATIONS
22	E2	ONE-LINE DIAGRAM
23	E3	ELECTRICAL SITE PLAN
24	E4	CIRCUIT & LUMINAIRE SCHEDULES
25	E5	ELECTRICAL ELEVATION
26	E6	ELECTRICAL DETAILS
27	I1	CONTROL PANEL ENCLOSURE
28	I2	CONTROL PANEL LAYOUT
29	I3	CONTROL PANEL POWER DISTRIBUTION AND NETWORK DIAGRAM
30	I4	CONTROL PANEL PLC IO WIRING I
31	I5	CONTROL PANEL PLC IO WIRING II
32	I6	PUMP DISCONNECT PANEL LAYOUT ELEVATION

COVER



DATE: 5/2023
PROJECT NO: 1477B

CITY OF STEVENSON
FAIRGROUNDS PUMP
STATION IMPROVEMENTS



DRAWING NO:

G1

1 OF 32



Owner/Client: City of Stevenson
P.O. Box 371
7121 East Loop Road
Stevenson, Washington 98648
(509) 427-5970
Contact: Carolyn Sourek, Public Works Director

PUBLICWORKS DIRECTOR
[Signature] PWD/PE
CAROLYN SOUREK DATE: 05/11/23



Civil Engineer: Wallis Engineering
215 W. 4th St., Suite 200
Vancouver, Washington 98660
(360) 695-7041
Contact: Jacob Korsness, P.E.



Electrical Engineer: Industrial Systems Inc.
12119 NE 99th St #2090
Vancouver, Washington 98682
(360) 718-7267
Contact: Mike Wallis, P.E.

EDA Award # 07 79
07550

GENERAL CONSTRUCTION NOTES:

- ALL MATERIALS AND WORKMANSHIP FOR THE SANITARY SEWER SYSTEM SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- THE LOCATION AND DESCRIPTIONS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE COMPILED FROM AVAILABLE RECORDS. THE ENGINEER DOES NOT GUARANTEE THE ACCURACY NOR THE COMPLETENESS OF SUCH RECORDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES, INCLUDING THE INVERT AND TOP ELEVATIONS OF PIPE AT CROSSING LOCATIONS, PRIOR TO THE START OF CONSTRUCTION AND SHALL NOTIFY THE ENGINEER OF ANY POTENTIAL CONFLICTS. CONTRACTOR SHALL CONTACT THE NW UTILITY NOTIFICATION CENTER AT 1-800-424-5555 AT LEAST TWO (2) WORKING DAYS BEFORE BUT NOT MORE THAN (10) TEN WORKING DAYS BEFORE THE START OF CONSTRUCTION OF THE WORK AND SHALL COMPLY WITH STATE REQUIREMENTS FOR UTILITY LOCATING.
- THE CONTRACTOR SHALL MAINTAIN CONSTANT COMMUNICATION WITH THE PROPERTY OWNER – SKAMANIA COUNTY – AND ENSURE THAT THEIR OPERATIONS ARE NOT ADVERSELY IMPACTED BY CONSTRUCTION ACTIVITY.
- THE CONTRACTOR SHALL NOTIFY SKAMANIA COUNTY A MINIMUM OF 7 DAYS PRIOR TO ANY INTERRUPTION TO UTILITY SERVICES TO THEIR FACILITIES. THESE SERVICE INTERRUPTIONS SHALL BE LIMITED TO A MAXIMUM OF 4 HOURS UNLESS AGREED UPON OTHERWISE WITH THE COUNTY.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROCURE ALL APPLICABLE PERMITS, LICENSES, AND CERTIFICATES RELATIVE TO THE TRADES TO COMPLETE THE PROJECT AND FOR USE OF SUCH WORK WHEN COMPLETED. COMPLIANCE SHALL BE AT ALL LEVELS, FEDERAL, STATE, COUNTY, AND LOCAL, RELATING TO THE PERFORMANCE OF THIS WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKES AND MARKS TO ESTABLISH LINES, SLOPES AND GRADES AS SHOWN. THE CONTRACTOR SHALL ENSURE THAT REQUIRED FIELD MEASUREMENTS AND LOCATIONS MATCH AND FULFILL THE INTENDED PLAN DIMENSIONS.
- THE CONTRACTOR SHALL NOTIFY THE OWNER AND SKAMANIA COUNTY AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION.
- RECORDS INDICATE THAT THE EXISTING FORCE MAIN IS ASBESTOS CEMENT PIPE. ANY MODIFICATION OR REMOVAL OF ASBESTOS CEMENT PIPE SHALL BE COMPLETED BY A CERTIFIED ASBESTOS REMOVAL CONTRACTOR, AND IN ACCORDANCE WITH SWCAA STANDARDS, LOCAL, STATE, AND FEDERAL LAW.
- ALL TESTING AND CONNECTIONS TO EXISTING SEWERS SHALL BE COMPLETED IN THE PRESENCE OF A REPRESENTATIVE OF THE CITY AND IN ACCORDANCE WITH THE SPECIFICATIONS.
- ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER.
- ALL SURVEY MONUMENTATION SHALL BE PROTECTED FROM DAMAGE OR REPLACED IN ACCORDANCE WITH LOCAL AND STATE LAW.
- A PRECONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION OF THE PROJECT.
- RECORD DRAWINGS SHALL BE SUBMITTED TO THE OWNER PRIOR TO FINAL ACCEPTANCE.
- THIS PROJECT IS SUBJECT TO THE AMERICAN IRON AND STEEL REQUIREMENTS AS DEFINED IN THE CONTRACT DOCUMENTS.

GENERAL TRAFFIC CONTROL NOTES:

- THE CONTRACTOR SHALL PROVIDE TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC IN ACCORDANCE WITH THE MOST CURRENT VERSION OF THE MUTCD (WITH WASHINGTON STATE AMENDMENTS), WSDOT STANDARD PLANS/SPECIFICATIONS, AND THE CONTRACT SPECIFICATIONS.
- CONTRACTOR SHALL SUBMIT GENERAL TRAFFIC CONTROL AND STAGING PLANS TO THE CITY OF STEVENSON FOR APPROVAL PRIOR TO BEGINNING CONSTRUCTION. THE PLANS SHALL BE REVIEWED BY THE CITY OF STEVENSON PUBLIC WORKS DEPARTMENT AND APPROVAL SHALL BE OBTAINED SEVEN (7) BUSINESS DAYS PRIOR TO BEGINNING WORK.
- CONTRACTOR MUST MAINTAIN ACCESS TO ALL SKAMANIA COUNTY BUILDINGS AND PARKING SPACES. USE OF PARKING SPACES FOR CONSTRUCTION STAGING MUST BE NEGOTIATED DIRECTLY BETWEEN THE CONTRACTOR AND THE COUNTY.
- PROVIDE PEDESTRIAN DETOURS WHERE CROSSINGS ARE INTERRUPTED, WITH AN APPROVED TRAFFIC CONTROL PLAN.
- EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION SIGNING ARE TO BE COVERED OR REMOVED AND REINSTALLED AFTER CONSTRUCTION.
- CONTRACTOR SHALL MAINTAIN MINIMUM 10-FOOT WIDE TRAVEL LANES WITHIN PARKING LOT AT ALL TIMES. WHEN A SINGLE LANE IS PROVIDED, IN THE PRESENCE OF FLAGGERS, MINIMUM WIDTH SHALL BE 12 FEET. CONTRACTOR SHALL ADJUST CHANNELIZATION DEVICES AS NEEDED TO SUIT TRAFFIC AND VISIBILITY CONDITIONS.
- ACCESS TO EMERGENCY SERVICES SHALL BE MAINTAINED AT ALL TIMES. CONTRACTOR SHALL COORDINATE ACCESS FOR SERVICES INCLUDING, BUT NOT LIMITED TO: MAIL DELIVERY, TRASH PICKUP, TRANSIT, AND ANY SPECIAL TRANSPORTATION SERVICES THAT EXIST WITHIN THE PROJECT AREA. CONTRACTOR SHALL INFORM EMERGENCY SERVICES OF ALL TRAFFIC CONTROL MODIFICATIONS, PRIOR TO IMPLEMENTATION. PLATE WORK WHEN TRAFFIC QUEUES OR EMERGENCY ACCESS NECESSITATE TEMPORARY ACCESS.
- MAINTAIN ACCESS TO RESIDENCES, BUSINESSES, AND SKAMANIA COUNTY PROPERTY AT ALL TIMES. TEMPORARY INTERRUPTIONS AND ACCESS SHALL BE COORDINATED BY THE CONTRACTOR WITH THE PROPERTY OWNER/TENANT AND THE CITY A MINIMUM OF (2) TWO BUSINESS DAYS PRIOR TO IMPLEMENTING CLOSURE. TEMPORARY PEDESTRIAN ACCESS SHALL BE SAFE AND STABLE.

SURVEY NOTES

BASIS OF BEARINGS:

WASHINGTON SOUTH STATE PLANE COORDINATE SYSTEM NAD 83 (2011) (EPOCH 2010.0), UTILIZING THE NATIONAL GEODETIC SURVEY (NGS) ONLINE POSITIONING USER SERVICES (OPUS) SOFTWARE PROGRAM.

VERTICAL DATUM:

NAVD 88 ORTHOMETRIC HEIGHT, UTILIZING THE NATIONAL GEODETIC SURVEY (NGS) ONLINE POSITIONING USER SERVICES (OPUS) SOFTWARE PROGRAM.

EXISTING UTILITY CROSSING LEGEND

WITHIN THE PROFILES ON THE PLAN AND PROFILE SHEETS ARE TICK MARKS SHOWN ABOVE THE EXISTING GROUND LEVEL. THESE INDICATE THE CROSSING OF AN EXISTING UTILITY (SEE THE LEGEND BELOW FOR TYPES OF UTILITIES). IF THE SIZE OF THE UTILITY IS KNOWN AND LARGER THAN 4-INCH IN DIAMETER, THE SIZE WILL BE NOTED. IF IN ADDITION TO THE SIZE, THE APPROXIMATE DEPTH OF AN EXISTING UTILITY IS KNOWN, THE UTILITY WILL BE DISPLAYED IN THE PROFILE. NOTE THAT DISPLAYED UTILITY ELEVATIONS ARE APPROXIMATE AND DO NOT RELIEVE THE CONTRACTOR FROM PERFORMING POTHOLING.

EXISTING UTILITY CROSSING LEGEND

- G GAS
- SD STORM SEWER
- UGP UNDERGROUND POWER
- UGT UNDERGROUND TELECOMMUNICATIONS

UTILITY AND STAKEHOLDER CONTACTS

SKAMANIA COUNTY
 GERRY LARSEN
 509.859.5416
 larsen@co.skamania.wa.us

SKAMANIA COUNTY PUD
 MATT HOLLIS
 541.490.8358
 mhollis@skamaniapud.com

AVISTA (GAS)
 KELLY DUFF
 509.995.1072
 kelly.duff@avistacorp.com

CITY OF STEVENSON WATER
 GORDY ROSANDER
 509.637.6799
 gordy@ci.stevenson.wa.us



NO.	REVISION	BY	DATE

DESIGNED BY: JK/AP
 DRAWN BY: CK
 RE: JW

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GENERAL NOTES

wallis engineering

PROJECT NO: 1477B
 DATE: 5/2023

**CITY OF STEVENSON
 FAIRGROUNDS PUMP
 STATION IMPROVEMENTS**



DRAWING NO:
G2
 2 OF 32

F:\1\1477B_2021_Collection_Sys_Imp\500_DWG\501_Plan_Sheets\Fairgrounds PS\GENERAL NOTES & LEGEND.dwg, 5/5/2023 10:48:23 AM, Chad Keys

LEGEND

EXISTING	
	RIGHT OF WAY
	PROPERTY LINE
	EASEMENT
	EDGE OF ASPHALT
	CONCRETE/SIDEWALK
	BUILDING
	MAJOR CONTOUR
	MINOR CONTOUR
	SANITARY SEWER, SIZE NOTED IF KNOWN
	SANITARY SEWER FORCE MAIN, SIZE NOTED IF KNOWN
	WATER, SIZE NOTED IF KNOWN
	UNDERGROUND POWER
	ELECTRIC METER
	TRANSFORMER
	WATER METER
	HOSE BIB
	BOLLARD

PROPOSED	
	CONCRETE
	ASPHALT
	FENCE
	WATER LINE
	SANITARY SEWER, SIZE AS NOTED
	SANITARY SEWER CLEANOUT

PIPE FITTINGS

DOUBLE LINE	SINGLE LINE	ABBREV	DESCRIPTION
		FL	FLANGED JOINT
		MJ	MECHANICAL JOINT
		WYE	LATERAL/45° WYE
		WYE	LATERAL/45° WYE
		WYE	LATERAL/45° WYE
		ECC RDCR	ECCENTRIC REDUCER
		BEND	BEND, ANGLE AS NOTED
		BEND 90	90° BEND
		BEND DN	TURNED DOWN
		BEND UP	TURNED UP
		TEE	STRAIGHT
		TEE UP	OUTLET UP
		TEE DN	OUTLET DOWN

VALVES

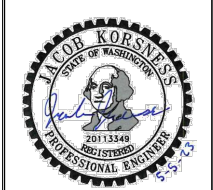
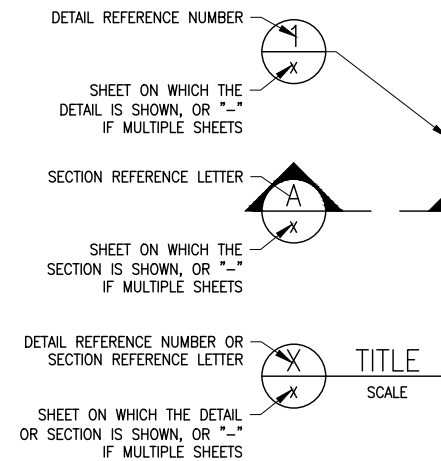
DOUBLE LINE	SINGLE LINE	ABBREV	DESCRIPTION
		SCV	SWING CHECK VALVE
		GV	GATE VALVE
		EPV	ECCENTRIC PLUG VALVE

NOTE:
PIPES 3" AND SMALLER DIAMETER ARE SHOWN AS A SINGLE LINE. 4" AND LARGER DIAMETER ARE SHOWN AS A DOUBLE LINE.

ABBREVIATIONS

AC	ASPHALT CONCRETE
ARV	AIR RELEASE VALVE
CARV	COMBINATION AIR RELEASE VALVE
CONC	CEMENT CONCRETE
CSBC	CRUSHED SURFACING BASE COURSE
CSTC	CRUSHED SURFACING TOP COURSE
DI	DUCTILE IRON
ES	EACH SIDE
EW	EACH WAY
FL	FLANGE
FM	FORCE MAIN
FPT	FEMALE PIPE THREAD
HMA	HOT MIX ASPHALT
ID	INSIDE DIAMETER
GA	GAUGE
GALV	GALVANIZED
GB	GRADE BREAK
IE	INVERT ELEVATION
MFR	MANUFACTURER
MH	MANHOLE
MJ	MECHANICAL JOINT
MPT	MALE PIPE THREAD
NPT	NATIONAL PIPE THREAD
OC	ON CENTER
PVC	POLYVINYL CHLORIDE
PL	PLATE
SAN	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
SST	STAINLESS STEEL
STM	STORM SEWER
TEMP	TEMPORARY

DETAIL AND SECTION DESIGNATIONS



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		JK/AP	
		CK	
		JW	

DESIGNED BY: JK/AP
DRAWN BY: CK
SCALE: ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY.

LEGEND & ABBREVIATIONS

wallis engineering
PROJECT NO: 1477B
DATE: 5/2023

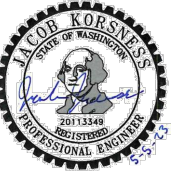
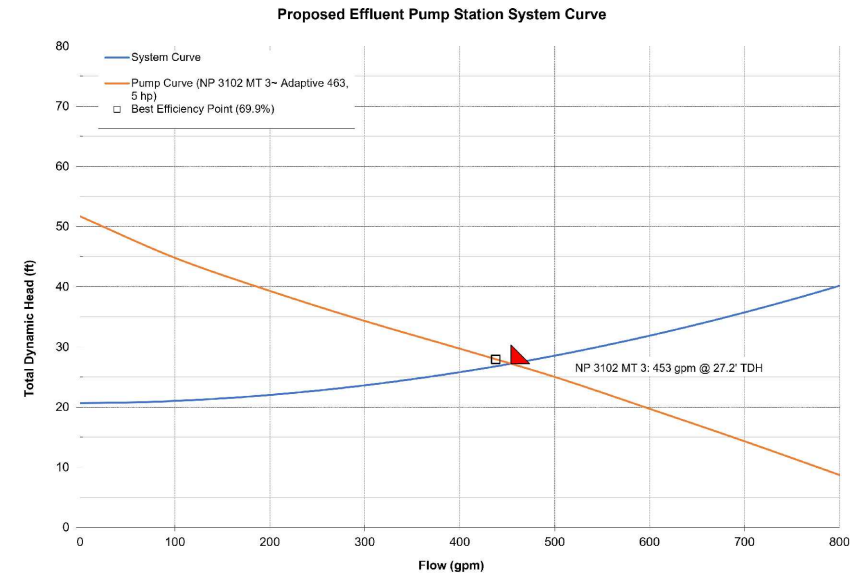
CITY OF STEVENSON
FAIRGROUNDS PUMP STATION IMPROVEMENTS

DRAWING NO:
G3
3 OF 32

PUMP STATION DESIGN CRITERIA

ITEM DESCRIPTION	DESIGN CRITERIA
PUMP STATION TYPE	DUPLEX SUBMERSIBLE
PUMP TYPE	SUBMERSIBLE PUMPS (FLYGT N-IMPELLER) WITH SOFT-STARTER
CAPACITY	453 GPM @ 27.2' TDH (20.7' STATIC HEAD)
PUMP HP	5 HP, 1750 RPM
ELECTRICAL SERVICE TYPE	480V, 3 PHASE, 100 AMP
LEVEL CONTROL TYPE	SUBMERGED PRESSURE TRANSDUCER W/ MULTITRODE BACKUP
OVERFLOW POINT, ELEVATION	TOP OF WETWELL, RIM ELEVATION 89.90'
OVERFLOW DISCHARGE	SKAMANIA COUNTY PARKING LOT
AVE. TIME TO OVERFLOW @ PROJECTED PHF	14 MIN.
AUXILIARY POWER TYPE	PERMANENT DIESEL GENERATOR @ WWTP
AUXILIARY POWER OUTPUT	100 kW
FUEL TANK CAPACITY	150 GAL
TRANSFER SWITCH	AUTOMATIC
ALARM TELEMETRY TYPE	FIBER OPTIC/CELLULAR
EPA RELIABILITY CLASS	CLASS 1

PUMP STATION SYSTEM CURVE



NO.	REVISION	BY	DATE

DESIGNED BY: JK/AP
 DRAWN BY: CK
 REVISION: JW

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 IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

DESIGN CRITERIA

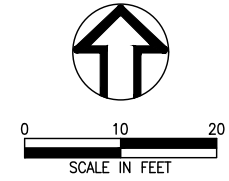
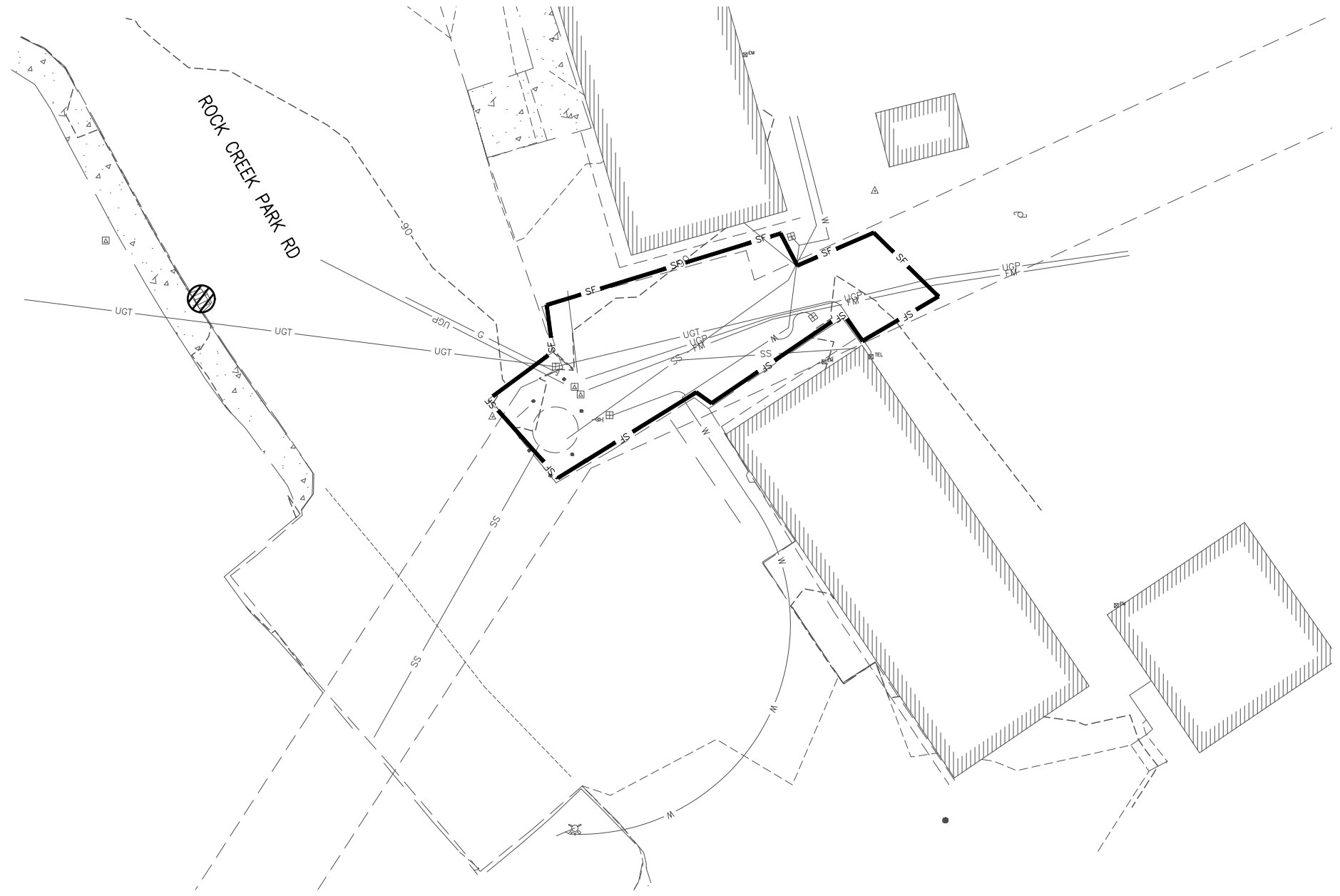


CITY OF STEVENSON
 FAIRGROUNDS PUMP
 STATION IMPROVEMENTS



DRAWING NO:

G4



EROSION CONTROL LEGEND

- SF SILT FENCE
- INLET PROTECTION



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DESIGNED BY: JK/AP
 DRAWN BY: CK
 CHECKED BY: JW

0" = 1" INCH AT FULL SCALE.
 1" = 1" INCH ADJUST SCALE ACCORDINGLY

EROSION CONTROL PLAN

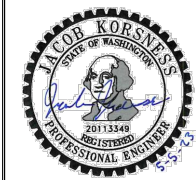
wallis engineering

PROJECT NO: 1477B
 DATE: 5/2023

**CITY OF STEVENSON
 FAIRGROUNDS PUMP
 STATION IMPROVEMENTS**

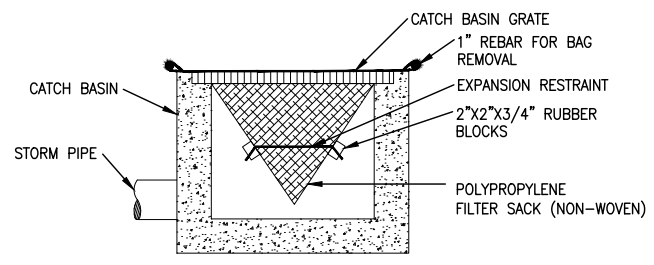


DRAWING NO:
C1
 5 OF 32

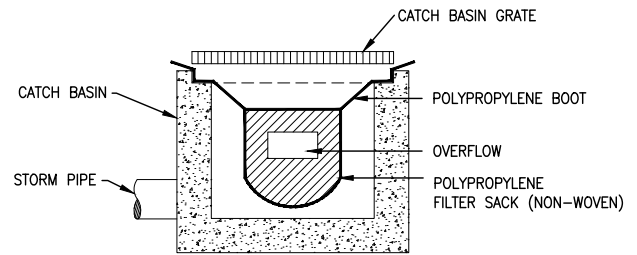


DATE	
BY	JK/AP
REVISION	CK
NO.	JW

DESIGNED BY: JK/AP
DRAWN BY: CK
SCALE: 1" = 10'-0" AT FULL SCALE. ADJUST IF NOT ONE INCH SCALE ACCORDINGLY.



WOVEN POLYPROPYLENE SACK

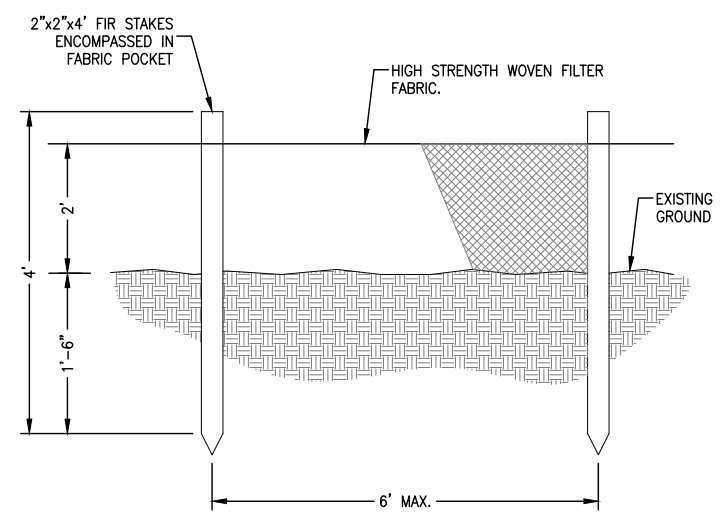


NON-WOVEN POLYPROPYLENE SACK

NOTES:

1. RECESSED CURB INLET CATCH BASINS MUST BE BLOCKED WHEN USING FILTER FABRIC INLET SACKS. SIZE OF FILTER INLET SACK TO BE DETERMINED BY MANUFACTURER.
2. THE CONTRACTOR SHALL INSPECT THE FILTER WEEKLY AND DAILY DURING PERIODS OF FREQUENT RAIN.
3. FILTER SHALL BE CLEANED IN A MANNER WHICH ENSURES THAT ALL SEDIMENT REMAINS ON SITE.
4. THE FILTER SHALL BE REPLACED OR CLEANED WHEN THE BAG BECOMES HALF FULL.

INLET PROTECTION CATCH BASIN/AREA INSERT DETAIL
NTS



SILT FENCE DETAIL
NTS

EROSION CONTROL
DETAILS

EROSION CONTROL NOTES:

- | | | |
|--|--|---|
| <ol style="list-style-type: none"> 1. DO NOT DISTURB MORE AREA THAN NEEDED FOR CONSTRUCTION REQUIREMENTS. 2. ALL EROSION, POLLUTION, AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO ANY DISTURBANCE CAUSED BY CLEARING OR GRADING AND SHALL CONFORM TO THE REQUIREMENTS OF THE STORMWATER MANAGEMENT MANUAL OF WESTERN WASHINGTON, VOLUME II - CONSTRUCTION STORMWATER POLLUTION PREVENTION, THE EROSION CONTROL PLAN, AND THE STANDARD DETAILS CONTAINED WITHIN THIS SET OF PLANS. NEWLY CONSTRUCTED OR MODIFIED INLETS AND CATCH BASINS ARE TO BE PROTECTED IMMEDIATELY UPON INSTALLATION. TEMPORARY SEEDING AND MULCHING OF EXPOSED SLOPES SHALL BE COMPLETED WITHIN ONE WEEK AFTER ROUGH GRADING. ALL EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY THE APPROPRIATE BMP. 3. IN THE EVENT OF ANY EROSION CONTROLS MEASURE FAILURE, IMMEDIATE ACTION SHALL BE TAKEN TO REPAIR, REPLACE, OR CONSTRUCT ADDITIONAL MEASURES AS REQUIRED TO ENSURE ADEQUATE EROSION CONTROL PROTECTION. 4. ALL EROSION AND POLLUTION CONTROL MEASURES SHALL BE INSPECTED AFTER EACH RAINFALL EVENT THAT PRODUCES RUNOFF AND AT LEAST ONE TIME PER MONTH, TO ASSURE ADEQUATE PERFORMANCE. SEE THE STANDARD EROSION CONTROL DETAILS FOR ADDITIONAL MAINTENANCE REQUIREMENTS. A MAINTENANCE LOG SHALL BE KEPT AND SHALL BE MADE AVAILABLE TO THE CITY OF STEVENSON. SHOULD SPECIFIED EROSION AND POLLUTION CONTROL BMP'S FAIL OR PROVE TO BE INADEQUATE, THE CITY MAY REQUIRE ADDITIONAL BMP'S TO BE INSTALLED, OR INSTALL THEM AND BACK CHARGE THE CONTRACTOR FOR TIME AND MATERIALS. 5. MAINTAIN AND REMOVE ALL EROSION CONTROLS AS SPECIFIED ON THE STANDARD EROSION CONTROL DETAIL SHEET AND PLAN. THE CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT FROM THE CATCH BASINS, DITCHES, MANHOLES, AND STORM PIPES PRIOR TO ACCEPTANCE. EROSION CONTROLS SHALL BE REMOVED WITHIN 30 DAYS FOLLOWING FINAL STABILIZATION. 6. WHERE POSSIBLE MAINTAIN NATURAL VEGETATION FOR EROSION AND SILTATION CONTROL. 7. AS CONSTRUCTION PROGRESSES AND SEASONAL CONDITIONS DICTATE, MORE SILTATION CONTROL FACILITIES MAY BE REQUIRED TO ENSURE COMPLETE SILTATION CONTROL. THEREFORE DURING THE COURSE OF CONSTRUCTION IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY CONSTRUCTION ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES OVER AND ABOVE THE MINIMUM REQUIREMENTS AS MAY BE NEEDED TO ACHIEVE THE PERFORMANCE STANDARDS REQUIRED BY THE STORMWATER MANAGEMENT MANUAL AND THE STANDARD SPECIFICATIONS. 8. PRIOR TO ANY SITE EXCAVATION, ALL CATCH BASINS IN THE VICINITY OF THE SITE SHALL BE PROTECTED FROM SILT INTRUSION BY COVERING THE OPEN AREA OF THE OUTLET TRAP WITH FILTER FABRIC SECURELY FASTENED TO TRAP. CLEAN THE FILTER FABRIC AS NECESSARY TO MAINTAIN DRAINAGE. REMOVE FILTER FABRIC AND CLEAN THE CATCH BASINS FOLLOWING COMPLETION OF SITWORK. | <ol style="list-style-type: none"> 9. PROTECTION OF SURFACES: <ol style="list-style-type: none"> A. INSTALL TRIANGULAR SILT DAMS OR STRAW WATTLES AT LOCAL DRAINAGEWAYS AS SHOWN TO PREVENT SILT INTRUSION UPON ADJACENT DRAINAGE COURSES. REMOVE FOLLOWING ESTABLISHMENT OF GRASS COVER AND SEED BARE AREAS. B. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY WITH VACUUM SWEEPER OR OTHER MEANS AS APPROVED BY THE ONSITE ENGINEER. C. INSTALL STORM DRAIN INLET PROTECTION AS SHOWN ON THE EROSION CONTROL PLAN AND STANDARD DETAILS TO PREVENT EROSION AND POLLUTION FROM ENTERING THE STORM DRAINAGE SYSTEM. CLEAN THE FILTER AS NECESSARY TO MAINTAIN DRAINAGE AND PROVIDE APPROVED TRAFFIC CONTROL DEVICES AS NECESSARY FOR THE PROTECTION DEVICES. REMOVE FILTER AND CLEAN CATCH BASINS FOLLOWING COMPLETION OF SITWORK. 10. IN AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST, WHERE ON-SITE OR OFF-SITE DAMAGE IS LIKELY TO OCCUR, ONE OR MORE OF THE FOLLOWING PREVENTIVE MEASURES SHALL BE TAKEN FOR DUST CONTROL: <ol style="list-style-type: none"> A. MINIMIZE THE PERIOD OF SOIL EXPOSURE THROUGH THE USE OF TEMPORARY GROUND COVER AND OTHER TEMPORARY STABILIZATION PRACTICES. B. THE SITE IS SPRINKLED WITH WATER UNTIL SURFACE IS WET. REPEAT AS NEEDED. TO PREVENT CARRY OUT OF MUD ONTO STREET, REFER TO PROTECTION OF SURFACES. C. SPRAY EXPOSED SOIL AREAS WITH DUST PALLIATIVE. NOTE: USED OIL IS PROHIBITED FOR USE AS A PALLIATIVE. 11. TEMPORARY SEEDING AND/OR MULCH SHALL BE PLACED ON EXPOSED SURFACES THAT WILL NOT BE BROUGHT TO FINAL GRADING OR PERMANENT COVER TREATMENT OR VEGETATION WITHIN 7 DAYS OF THE EXPOSURE TO REDUCE EROSION AND SEDIMENTATION BY STABILIZING EXPOSED SOILS. DURING THE TIME PERIOD OCTOBER 1 THROUGH APRIL 30, NO SOILS SHALL BE EXPOSED FOR MORE THAN 2 DAYS. SEEDED AREAS SHALL BE CHECKED REGULARLY TO ASSURE A GOOD STANDARD OF GRASS IS BEING MAINTAINED. AREAS THAT FAIL TO ESTABLISH VEGETATION COVER ADEQUATE TO PREVENT SLOPE EROSION WILL BE RESEEDING AS SOON AS SUCH AREAS ARE IDENTIFIED. <ol style="list-style-type: none"> A. APPLY THE FOLLOWING TEMPORARY SEEDING MIXTURE (GIVEN IN PROPORTIONS BY WEIGHT) TO THE PREPARED SEED BED AT A RATE OF 120 LBS/ACRE: <ul style="list-style-type: none"> -10% REDTOP AT 92% PURITY AND 90% GERMINATION -40% ANNUAL RYE AT 98% PURITY AND 90% GERMINATION -40% CHEWINGS FESCUE AT 97% PURITY AND 80% GERMINATION | <p>-10% WHITE DUTCH CLOVER AT 90% PURITY AND 90% GERMINATION</p> <p>NOTE: "HYDROSEEDING" APPLICATIONS WITH APPROVED SEED-MULCH-FERTILIZER MIXTURES MAY ALSO BE USED.</p> <ol style="list-style-type: none"> 12. EROSION CONTROL NETS AND BLANKETS SHALL BE INSTALLED ON EXPOSED SLOPES 2H:1V OR GREATER AND/OR ON EXPOSED SLOPES WITH MORE THAN 10 FEET OF VERTICAL RELIEF. 13. ALL INCOMPLETE MANHOLES AND OTHER DROP INLETS SHALL BE PROTECTED WITH A SILT-SAVER FRAME AND FILTER ASSEMBLY 14. DEWATERING DEVICES MUST DISCHARGE INTO A SEDIMENT TRAP, BAKER TANK, OR POND. THERE SHALL BE NO DISCHARGE TO A PAVED STREET OR STORMWATER COLLECTION SYSTEM WITHOUT FIRST REMOVING SEDIMENT. 15. ALL PESTICIDES, PETROLEUM PRODUCTS, CHEMICALS OR OTHER POTENTIAL POLLUTANTS SHALL BE ADMINISTERED RESPONSIBLY WITH DISPOSAL AND SPILLS HANDLED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS. 16. THE CONTRACTOR SHALL PROVIDE A SEPARATE AREA, A MINIMUM OF 200 SQUARE FEET IN SIZE FOR WASHING OF CONCRETE TRUCKS. THIS AREA SHALL ALSO BE ISOLATED SO THAT NO WATER ENTERS THE STORM DRAINAGE SYSTEM. 17. FAILURE TO COMPLY WITH THESE EROSION CONTROL REQUIREMENTS MAY RESULT IN A STOP WORK ORDER. 18. DOWNSTREAM MONITORING MAY BE REQUIRED TO VERIFY ADEQUATE EROSION CONTROL OF WORK AREA. |
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DATE: 5/2023

CITY OF STEVENSON
FAIRGROUNDS PUMP
STATION IMPROVEMENTS

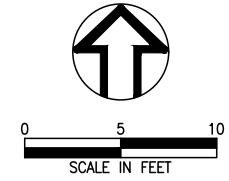
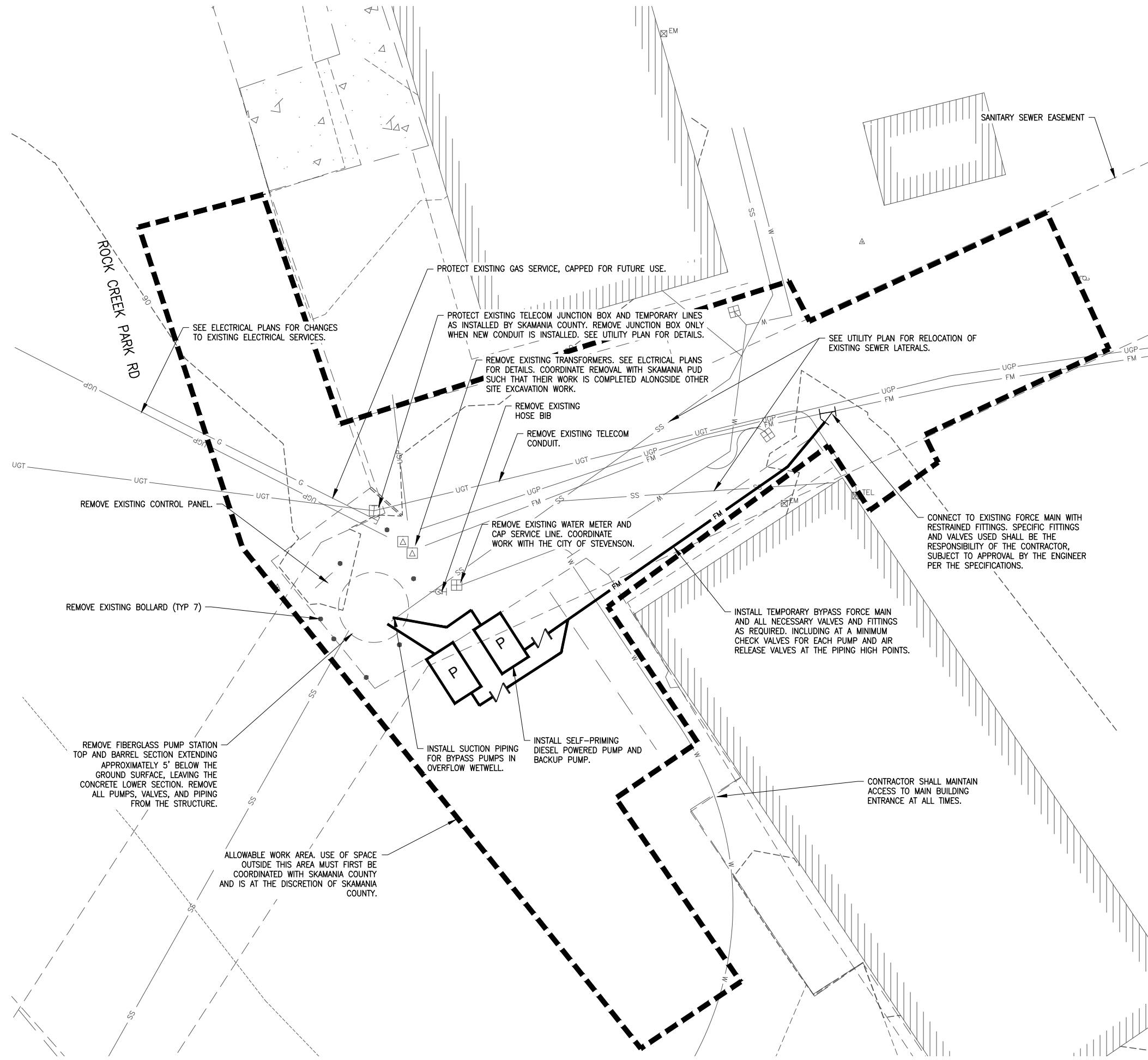


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STAGING NOTES

1. DURING PERIODS OF MORE THAN 3 WORKING DAYS WHERE NO ON-SITE WORK IS EXPECTED TO TAKE PLACE, THE CONTRACTOR SHALL DEMOBILIZE ALL EQUIPMENT AND MATERIALS STORED IN SKAMANIA COUNTY PARKING AREAS TO AN OFFSITE LOCATION UNLESS OTHERWISE NEGOTIATED WITH SKAMANIA COUNTY. THE CONTRACTOR IS RESPONSIBLE FOR SECURING OFFSITE STAGING SPACE.

DEMOLITION NOTES

1. DEMOLITION PLAN SHOWS MAJOR ITEMS TO BE REMOVED. COMPLETE ADDITIONAL DEMOLITION WORK AS REQUIRED FOR PROPOSED IMPROVEMENTS. COORDINATE WITH ENGINEER AND OWNER PRIOR TO ALL DEMOLITION WORK.
2. NO EXISTING ELECTRICAL EQUIPMENT OR CONDUIT SHALL BE DISTURBED WITHOUT SKAMANIA PUD PERSONNEL PRESENT. COORDINATE ELECTRICAL DEMOLITION WORK WITH SKAMANIA PUD A MINIMUM OF 3 DAYS IN ADVANCE.
3. NO EXISTING WATER SYSTEM COMPONENTS SHALL BE DISTURBED WITHOUT CITY OF STEVENSON PERSONNEL PRESENT. COORDINATE WATER SYSTEM DEMOLITION WORK WITH THE CITY OF STEVENSON A MINIMUM OF 3 DAYS IN ADVANCE.
4. EXISTING TELECOM LINES ON SITE ARE THE PROPERTY OF SKAMANIA COUNTY. NO EXISTING TELECOM CONDUIT OR JUNCTION BOXES SHALL BE DISTURBED WITHOUT SKAMANIA COUNTY PERSONNEL PRESENT. COORDINATE TELECOM SYSTEM DEMOLITION WORK WITH SKAMANIA COUNTY A MINIMUM OF 10 DAYS IN ADVANCE, TO ALLOW A TEMPORARY CONNECTION TO BE INSTALLED.

BYPASS PUMPING NOTES

1. THE BYPASS PUMPING PLAN SHOWN IS SCHEMATIC AND REPRESENTS ONE POSSIBLE VERSION OF THE BYPASS PUMPING SYSTEM. ALTERNATIVE BYPASS PUMPING PLANS PROPOSED BY THE CONTRACTOR MAY BE USED IF APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL SUBMIT DETAILED BYPASS PUMPING PLANS TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION. THE BYPASS PUMPING PLANS SHALL INCLUDE DETAILED INFORMATION ON PHASING, PUMPING EQUIPMENT, CAPACITY, AND PIPE ALIGNMENT. SEE SECTION 01 50 39 OF THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.



NO.	REVISION	BY	DATE
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		CK	
		JW	

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 DRAWN BY: CK
 CHECKED BY: JW

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DEMOLITION & BYPASS PUMPING PLAN

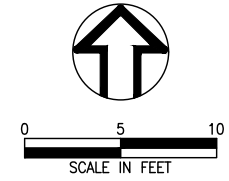
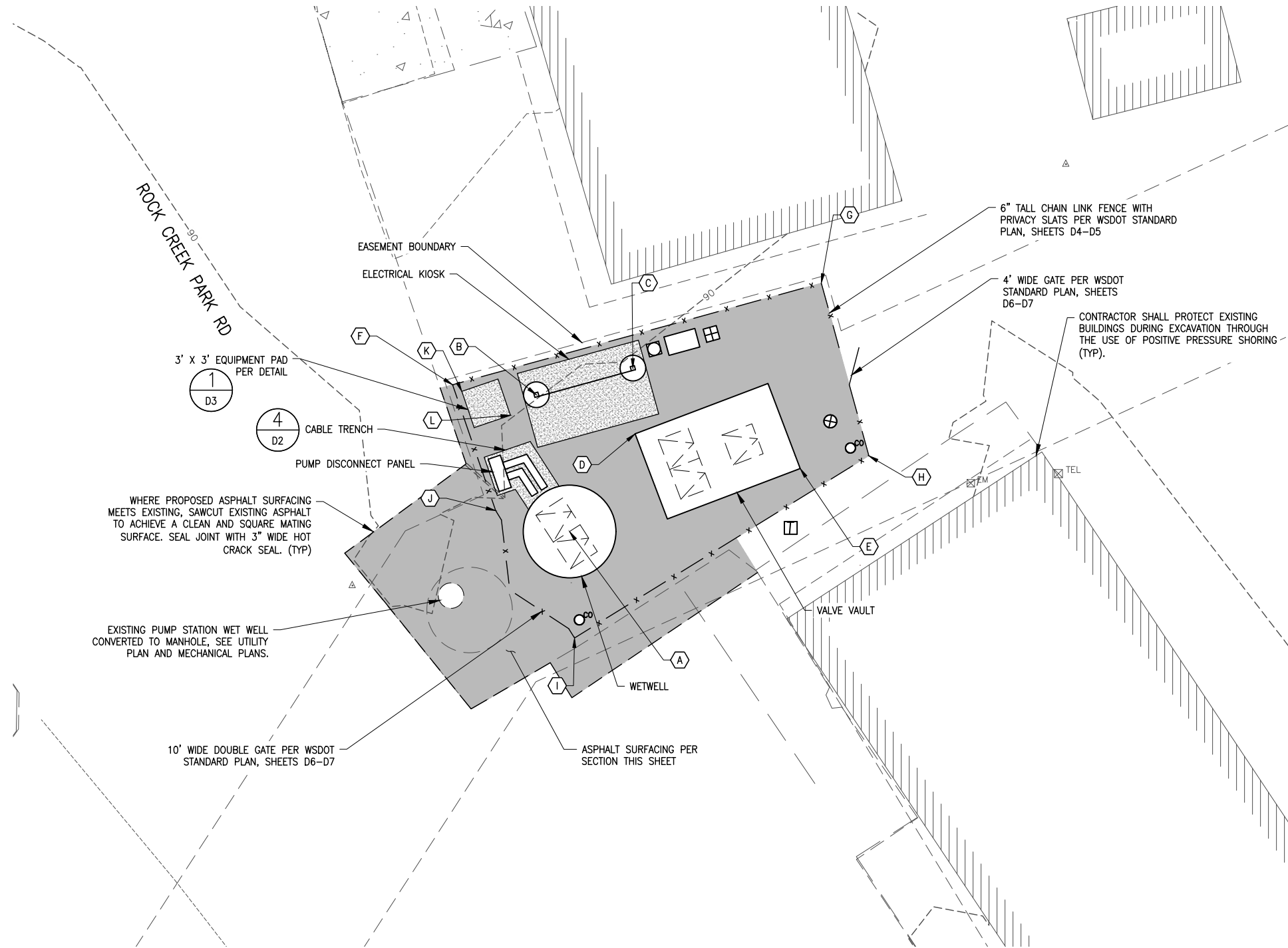
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**CITY OF STEVENSON
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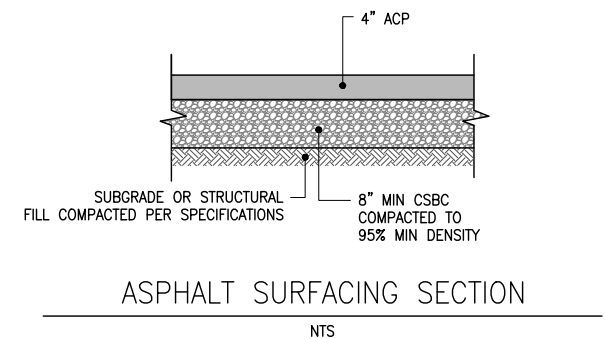


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SURVEY STAKING COORDINATES

PT	DESCRIPTION	NORTHING	EASTING
(A)	CENTER OF WETWELL	134073.5315	1284305.2837
(B)	WEST FOOTING OF CONTROL KIOSK	134084.2381	1284302.6885
(C)	EAST FOOTING OF CONTROL KIOSK	134086.3184	1284310.2405
(D)	NW CORNER OF VALVE VAULT	134081.1784	1284310.4156
(E)	SE CORNER OF VALVE VAULT	134078.4608	1284323.3441
(F)	NW CORNER OF FENCE	134085.0248	1284296.1307
(G)	NE CORNER OF FENCE	134092.9752	1284324.9929
(H)	SE CORNER OF FENCE	134079.4630	1284328.7150
(I)	SW CORNER OF FENCE	134065.1966	1284305.6757
(J)	CORNER OF FENCE	134075.1728	1284299.4982
(K)	WEST CORNER OF EQUIPMENT PAD	134084.5005	1284296.8505
(L)	EAST CORNER OF EQUIPMENT PAD	134082.6320	1284300.6595



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PUMP STATION CIVIL SITE PLAN

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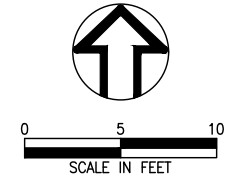
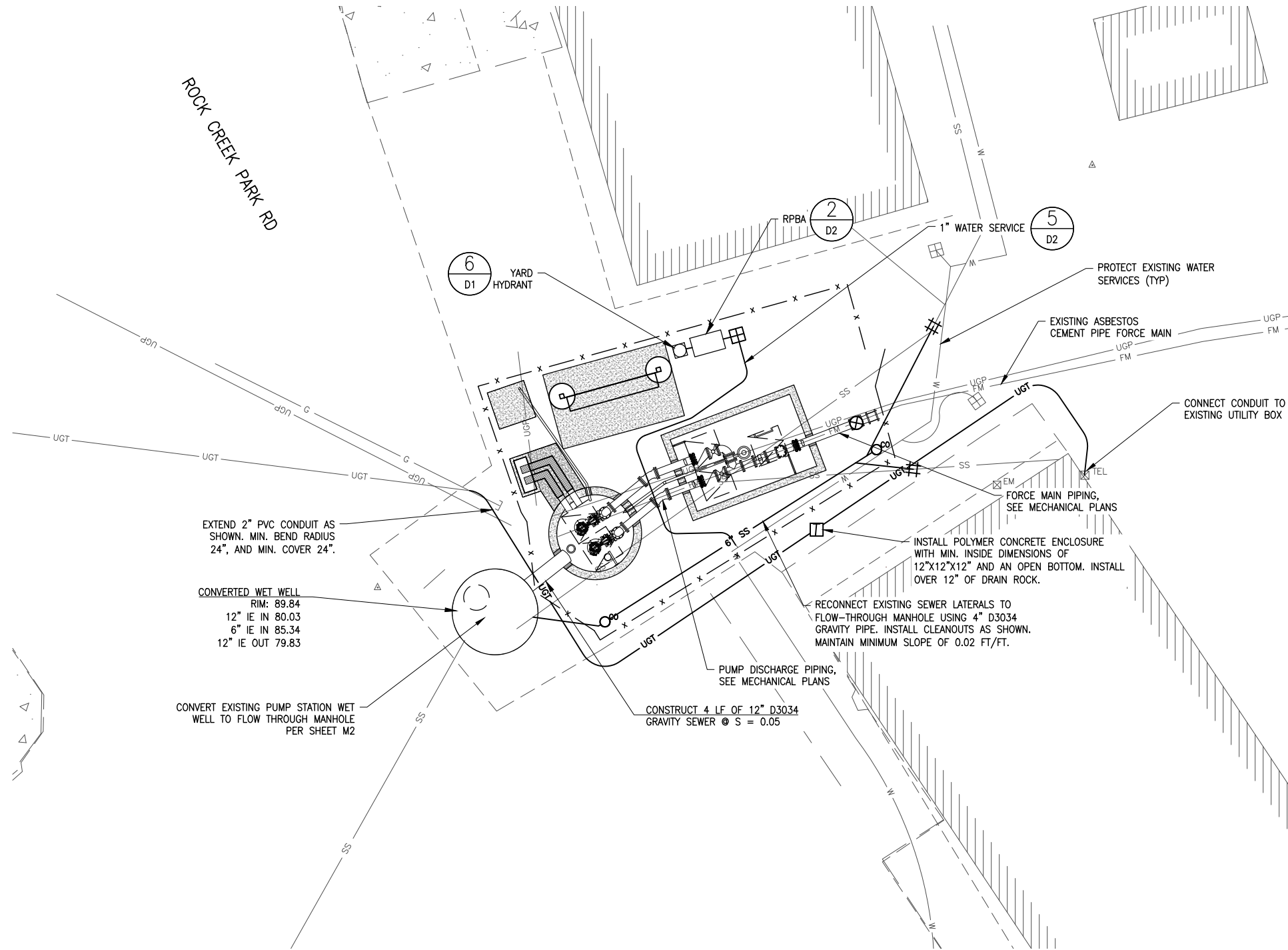
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CITY OF STEVENSON
 FAIRGROUNDS PUMP STATION IMPROVEMENTS



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 8 OF 32

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SCALE: ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY.

PUMP STATION UTILITY PLAN

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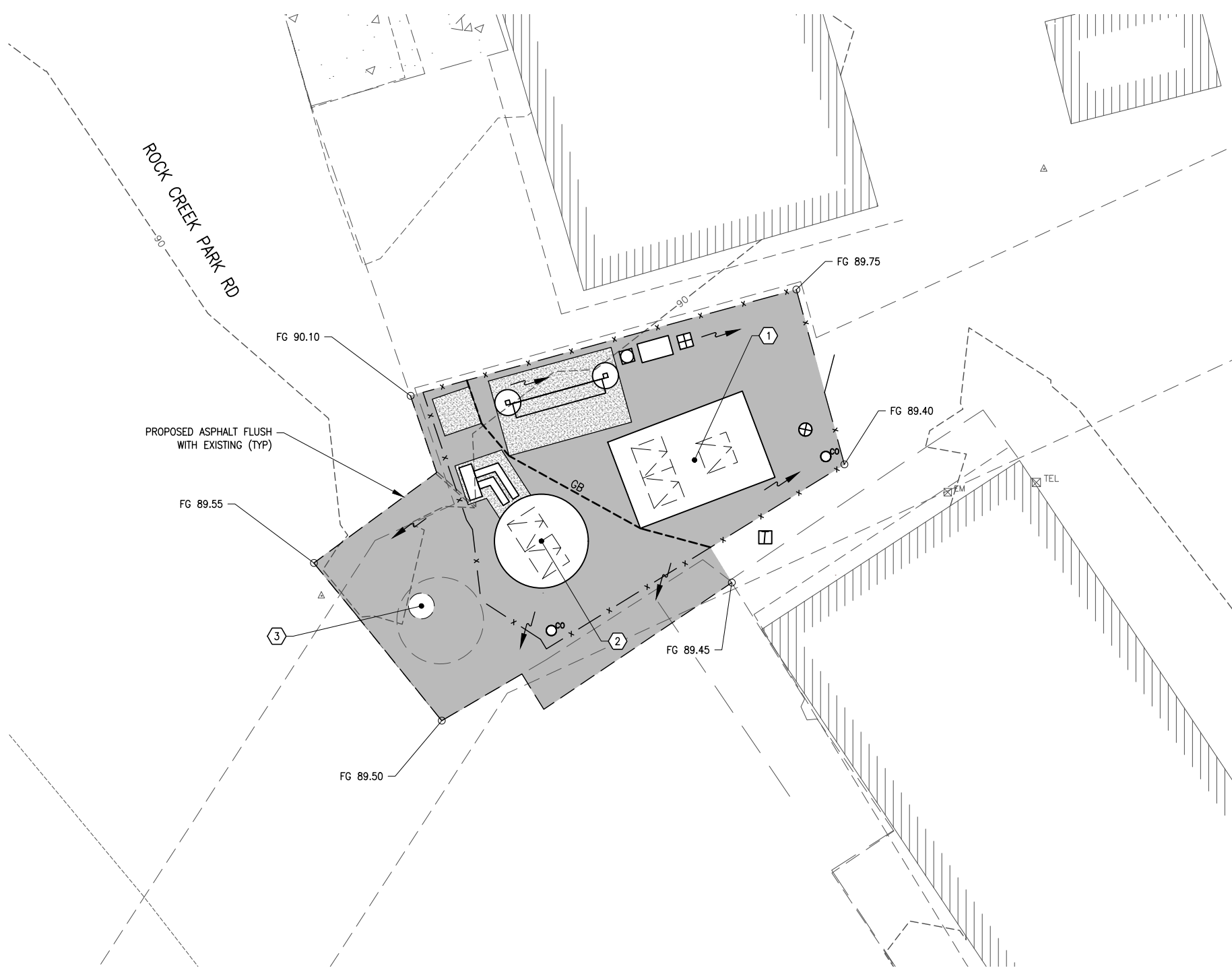
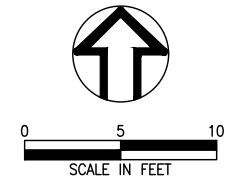
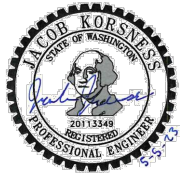
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**CITY OF STEVENSON
 FAIRGROUNDS PUMP
 STATION IMPROVEMENTS**



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 9 of 32

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GRADING LEGEND:

- GB — GRADE BREAK
- FLOW DIRECTION

GRADING NOTES:

1. GRADE ASPHALT SURFACING SUCH THAT RUNOFF FOLLOWS THE FLOW ARROWS SHOWN, WITH MINIMUM SLOPES OF 1.0%.

STRUCTURE ELEVATIONS

- ① VALVE VAULT: 89.80'
- ② WETWELL: 89.80'
- ③ MANHOLE RIM: 89.70'

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

PUMP STATION GRADING PLAN

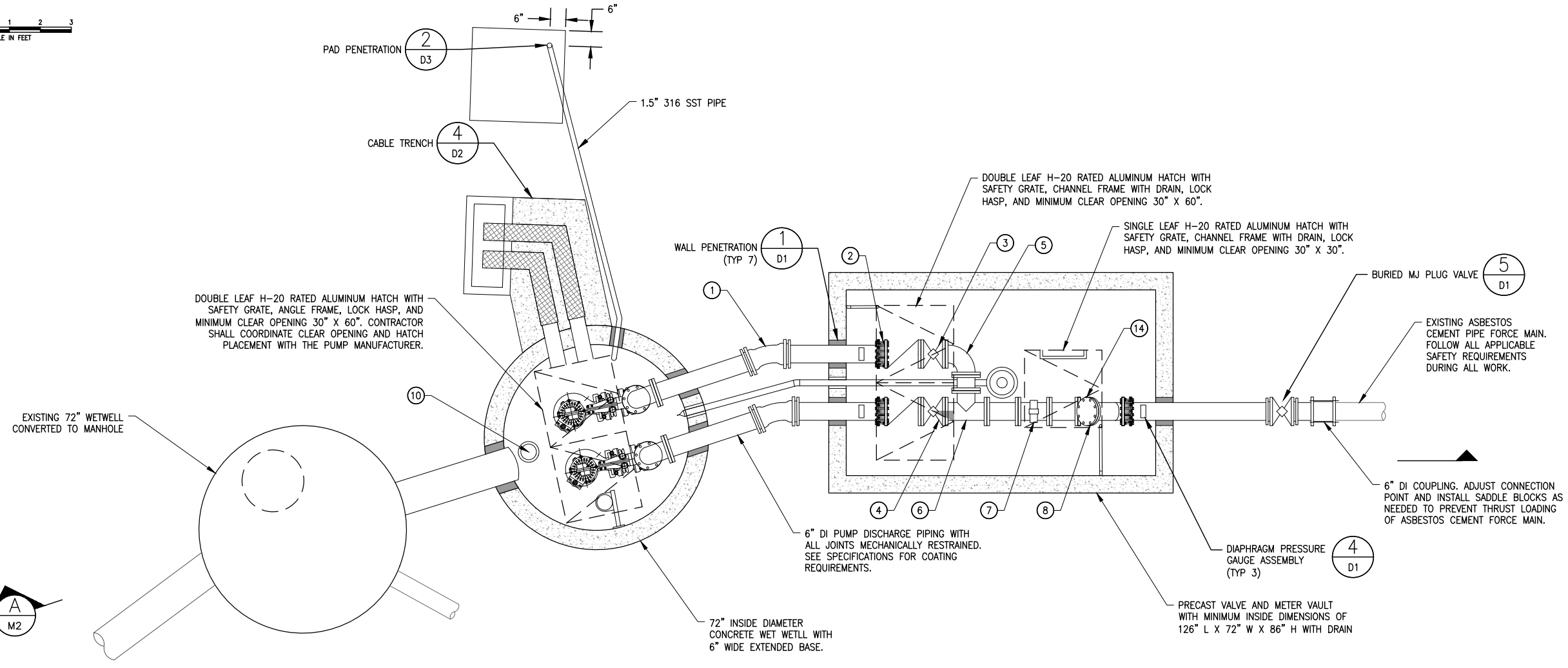
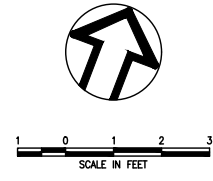
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**CITY OF STEVENSON
 FAIRGROUNDS PUMP
 STATION IMPROVEMENTS**



DRAWING NO:
C6
 10 OF 32



PLAN
1/2" = 1'-0"

MECHANICAL PLAN KEY NOTES

- ① 6" DI 22.5° ELBOW MJ (TYP 2)
- ② 6" RESTRAINED FLANGE ADAPTER, MEGAFLANGE OR APPROVED EQUAL (TYP 5)
- ③ 6" DI LEVER AND WEIGHT STYLE CHECK VALVE FL (TYP 2)
- ④ 6" DI PLUG VALVE FL (TYP 2)
- ⑤ 6" DI 90° ELBOW FL (TYP 3)
- ⑥ 6" DI TEE FL
- ⑦ 6" ELECTROMAGNETIC FLOW METER, SEE ELECTRICAL PLANS AND SPECIFICATIONS.
- ⑧ 6" DI WYE FL
- ⑨ 6" COUPLING
- ⑩ THERN COMMANDER 2000 DAVIT CRANE FLUSH MOUNT SOCKET IMBEDDED IN WET WELL TOP SLAB.

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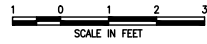
MECHANICAL PLAN

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 DATE: 5/2023

CITY OF STEVENSON
 FAIRGROUNDS PUMP
 STATION IMPROVEMENTS



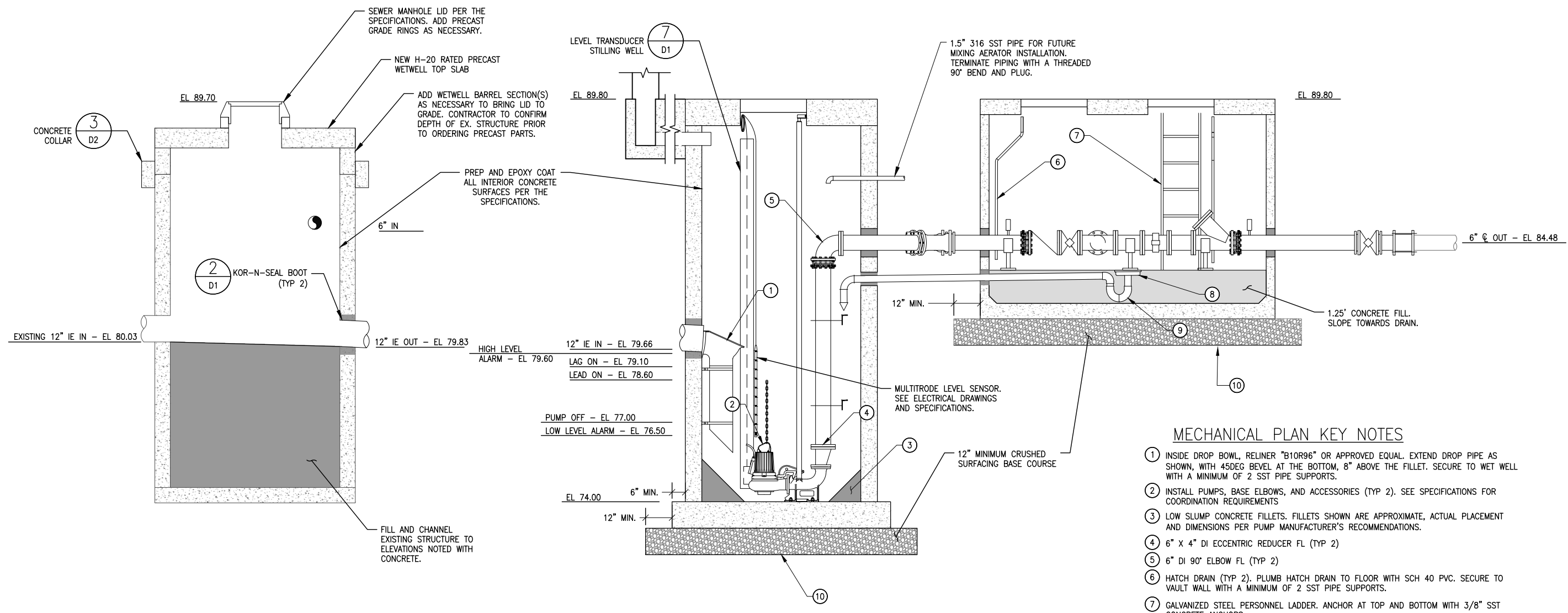
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 11 of 32



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



HIGH LEVEL ALARM - EL 79.60	12" IE IN - EL 79.66
	LAG ON - EL 79.10
	LEAD ON - EL 78.60
PUMP OFF - EL 77.00	
LOW LEVEL ALARM - EL 76.50	

MECHANICAL PLAN KEY NOTES

- ① INSIDE DROP BOWL, RELINER "B10R96" OR APPROVED EQUAL. EXTEND DROP PIPE AS SHOWN, WITH 45DEG BEVEL AT THE BOTTOM, 8" ABOVE THE FILLET. SECURE TO WET WELL WITH A MINIMUM OF 2 SST PIPE SUPPORTS.
- ② INSTALL PUMPS, BASE ELBOWS, AND ACCESSORIES (TYP 2). SEE SPECIFICATIONS FOR COORDINATION REQUIREMENTS
- ③ LOW SLUMP CONCRETE FILLETS. FILLETS SHOWN ARE APPROXIMATE, ACTUAL PLACEMENT AND DIMENSIONS PER PUMP MANUFACTURER'S RECOMMENDATIONS.
- ④ 6" X 4" DI ECCENTRIC REDUCER FL (TYP 2)
- ⑤ 6" DI 90° ELBOW FL (TYP 2)
- ⑥ HATCH DRAIN (TYP 2). PLUMB HATCH DRAIN TO FLOOR WITH SCH 40 PVC. SECURE TO VAULT WALL WITH A MINIMUM OF 2 SST PIPE SUPPORTS.
- ⑦ GALVANIZED STEEL PERSONNEL LADDER. ANCHOR AT TOP AND BOTTOM WITH 3/8" SST CONCRETE ANCHORS.
- ⑧ 3" DIAMETER BRASS FLOOR DRAIN, ZURN OR APPROVED EQUAL.
- ⑨ 3" PVC VAULT DRAIN PIPING WITH TRAP TO WET WELL. MAINTAIN MINIMUM SLOPE OF 0.02 FT/FT. INSTALL SLIP-ON STYLE DUCKBILL CHECK VALVE ON DISCHARGE END.
- ⑩ WOVEN GEOTEXTILE FABRIC FOR SOIL STABILIZATION PER WSDOT STANDARD SPECIFICATION SECTION 9-33.2, TABLE 3.

A SECTION
 M1 1/2" = 1'-0"

MECHANICAL SECTION

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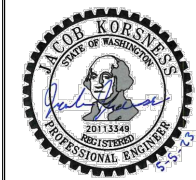
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CITY OF STEVENSON
FAIRGROUNDS PUMP
STATION IMPROVEMENTS



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 12 OF 32

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EQUIPMENT SHELTER PLAN

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CITY OF STEVENSON
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STATION IMPROVEMENTS



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S1
13 OF 32

BUILDING NOTES

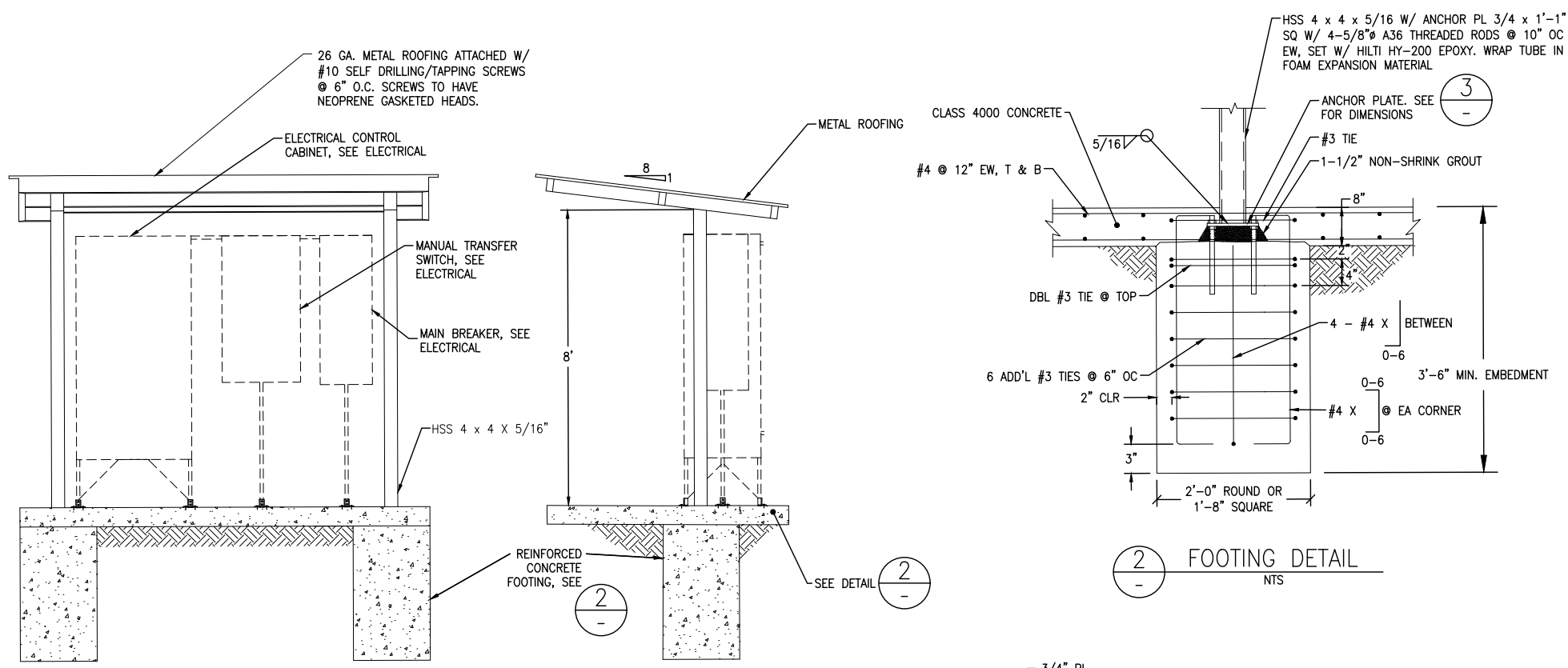
- ALL STRUCTURAL REQUIREMENTS SHOWN SHALL BE CONSIDERED MINIMUM. CONTRACTOR SHALL BE RESPONSIBLE COMPLYING WITH PREVIOUSLY OBTAINED BUILDING PERMIT, OR OBTAINING A BUILDING PERMIT IF ONE HAS NOT ALREADY BEEN ISSUED.
- VERIFY ELECTRICAL AND CONTROL PANEL DIMENSIONS PRIOR TO POURING FOOTINGS AND FABRICATING SHELTER.
- STRUCTURE SHALL BE HOT DIP GALVANIZED AND POWDER COATED IN ACCORDANCE WITH SECTION 09 90 00 OF THE SPECIFICATIONS.
- STRUCTURE POWDER COATING SHALL BE BLACK AND METAL ROOFING SHALL BE GREEN TO MATCH THE EXISTING ROCK CREEK PUMP STATION EQUIPMENT SHELTER.

REINFORCED CONCRETE NOTES

- ALL CONCRETE CONSTRUCTION, INCLUDING BENDING OF BARS, SHALL COMPLY WITH ACI "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318)
- UNLESS OTHERWISE NOTED OR SPECIFIED, ALL STRUCTURAL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI IN 28 DAYS.
- REINFORCEMENT STEEL SHALL BE DEFORMED BARS CONFORMING IN QUALITY TO THE REQUIREMENTS OF ASTM A-615 "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", GRADE 60.
- ALL DETAILING, FABRICATION AND PLACING OF REINFORCING BARS, UNLESS OTHERWISE INDICATED, SHALL BE IN ACCORDANCE WITH THE ACI-315 "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", LATEST EDITION.
- TOLERANCES IN PLACING REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE CRSI PUBLICATION "PLACING REINFORCEMENT BARS".
- STIRRUP SUPPORT BARS SHALL BE PROVIDED BETWEEN ENDS OF TOP BARS AS REQUIRED.
- REINFORCING BARS AND ACCESSORIES SHALL NOT BE IN CONTACT WITH ANY PIPE, PIPE FLANGE OR METAL PARTS EMBEDDED IN CONCRETE. A MINIMUM OF 2 INCHES CLEARANCE SHALL BE PROVIDED AT ALL TIMES.
- UNLESS OTHERWISE INDICATED, ASIDE FROM NORMAL ACCESSORIES USED TO HOLD REINFORCING BARS FIRMLY IN POSITION, THE FOLLOWING SHALL BE ADDED:
 - IN SLABS #5 RISER BARS AT 36 INCHES OC MAXIMUM TO SUPPORT TOP REINFORCING BARS.
 - IN WALLS WITH 2 CURTAINS #3 U OR Z SHAPE SPACERS AT 6 FEET OC EACH WAY.
- METAL CLIPS OR SUPPORTS SHALL NOT BE PLACED IN CONTACT WITH THE FORMS OR THE SUBGRADE. CONCRETE BLOCKS (OR DOBIES) SUPPORTING BARS ON SUBGRADE SHALL BE IN SUFFICIENT NUMBERS TO SUPPORT THE BARS WITHOUT SETTLEMENT, BUT IN NO CASE SHALL SUCH SUPPORT BE CONTINUOUS.
- UNLESS OTHERWISE INDICATED ON THE DRAWINGS, CONCRETE COVER OVER REINFORCING BARS SHALL BE 2" AT UNFORMED SURFACES AND FOOTINGS/BASE SLABS IN CONTACT WITH EARTH, PROVIDE 3" COVER.
- CONCRETE CURING SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. WHERE WATER CURING IS REQUIRED, MEMBRANE CURING IS NOT ALLOWED. THE CONTRACTOR IS WARNED THAT WATER CURING IS DIFFICULT AT TIMES DUE TO WIND AND DRY CONDITIONS. THE CONTRACTOR SHALL STUDY REQUIREMENTS AND SHALL FURNISH ADEQUATE SYSTEMS TO PROVIDE WATER CURING WHERE REQUIRED. TOP OF WALLS SHALL BE KEPT VISIBLY MOIST AT ALL TIMES AND SHALL BE FLOODED NOT LESS THAN THREE TIMES DAILY.
- LAP SPLICES:
 - UNLESS OTHERWISE INDICATED ON THE DRAWINGS, THE LENGTH OF THE LAP SPLICE SHALL BE CLASS "A" WHEN NO MORE THAN 1/2 THE BARS ARE LAP SPICED WITHIN THE TABULATED LENGTH AND CLASS "B" WHEN MORE THAN 1/2 THE BARS ARE LAP SPICED WITHIN THE TABULATED LENGTH.
 - VALUES TABULATED BELOW FOR SPLICES ARE APPLICABLE ONLY WHEN THE COVER IS EQUAL TO ONE BAR DIAMETER OR MORE.
 - WHEN MULTIPLE BARS ARE SPICED AT THE SAME SECTION, THE CLEAR BAR SPACING IS THE MINIMUM CLEAR DISTANCE BETWEEN THE BARS OUTSIDE THE SPLICE LENGTH LESS ONE BAR DIAMETER.
 - UNLESS OTHERWISE INDICATED ON THE DRAWINGS, THE BARS AT A LAP SPLICE SHALL BE IN CONTACT WITH EACH OTHER.
 - FOLLOWING TABULATED VALUES ARE CALCULATED FOR:
F_y = 60,000 PSI
F'_c = 4,000PSI
 - TOP BARS ARE ALL HORIZONTAL REINFORCEMENT PLACED SO THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE BAR.
- CHAMFER ALL EXPOSED EDGES OF CONCRETE INCLUDING SUBMERGED EDGES. USE 1/2" CHAMFER UNLESS OTHERWISE NOTED.

STRUCTURAL STEEL NOTES:

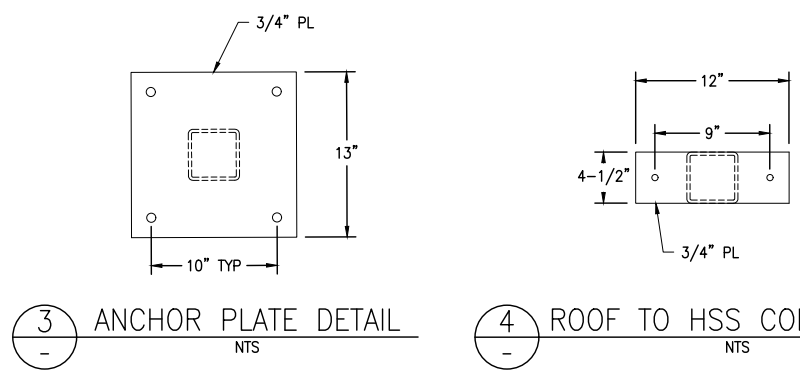
- ALL STEEL USED IN CONSTRUCTION OF THIS STRUCTURE SHALL BE COMPLIANT WITH THE AMERICAN IRON AND STEEL (AIS) REQUIREMENTS AS STATED IN THE CONTRACT DOCUMENTS.
- STEEL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS AS CONTAINED IN THE LATEST EDITION OF THE AISC STEEL CONSTRUCTION MANUAL.
- ALL STRUCTURAL SHAPES, BARS, PLATES AND SHEETS SHALL BE OF STEEL MEETING ASTM A-36 SPECIFICATIONS.
- ALL WELDING SHALL BE BY THE SHIELDED ARC METHOD AND SHALL CONFORM TO AWS CODE FOR THE ARC AND GAS WELDING IN BUILDING CONSTRUCTION. QUALIFICATIONS OF WELDERS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS FOR STANDARD QUALIFICATION PROCEDURE OF THE AWS.



FRONT VIEW

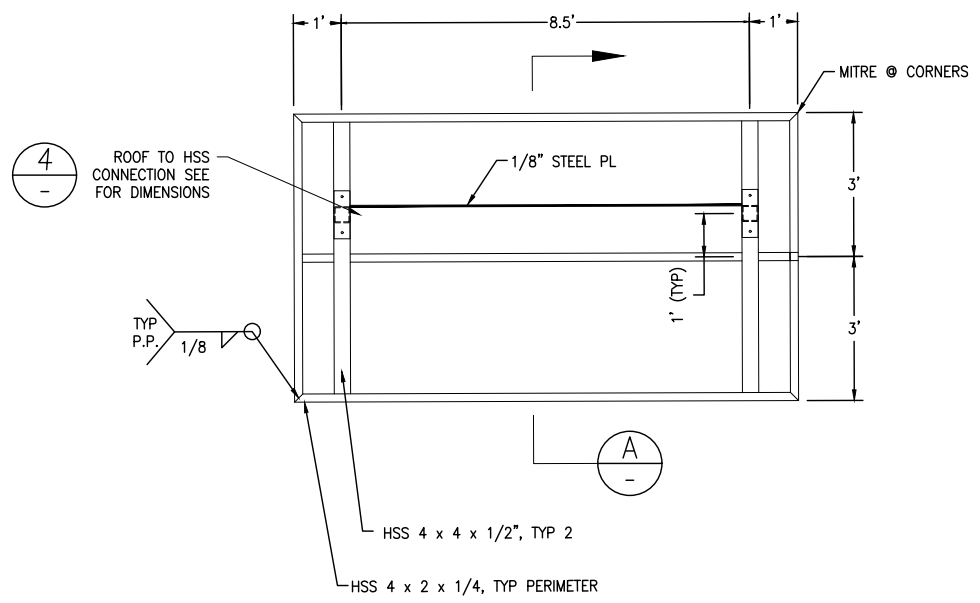
SIDE VIEW

FOOTING DETAIL
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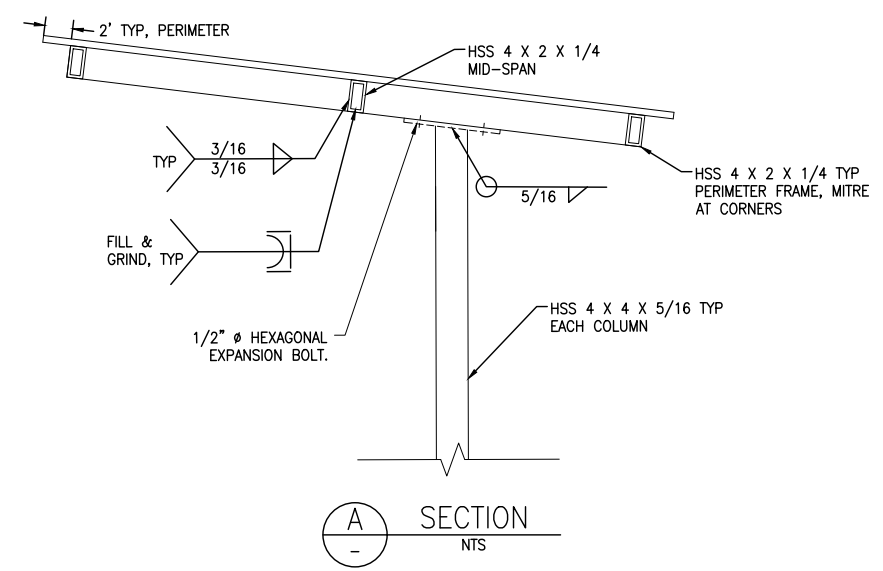
ANCHOR PLATE DETAIL
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ROOF TO HSS CONNECTION
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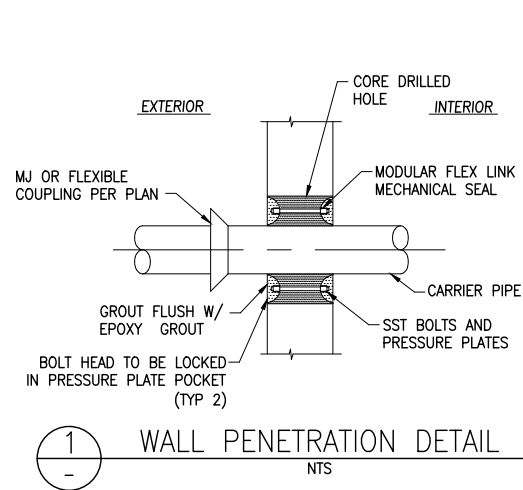
PLAN

ELECTRICAL PANEL KIOSK
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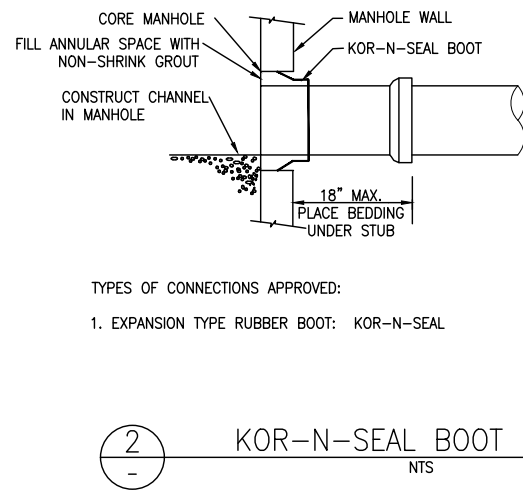


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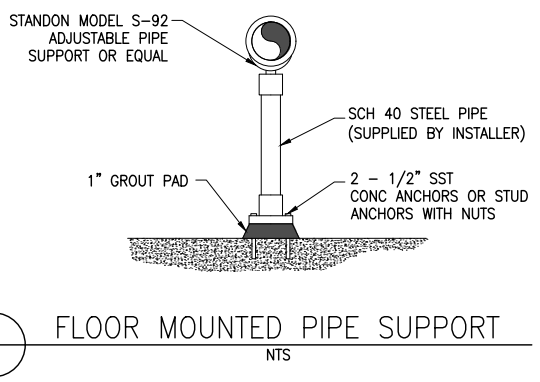


1 WALL PENETRATION DETAIL
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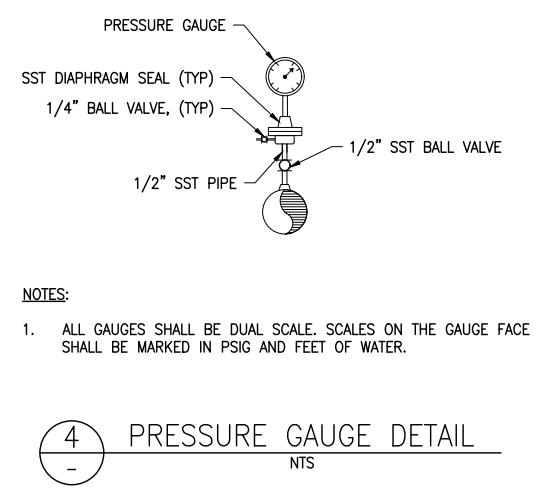


2 KOR-N-SEAL BOOT DETAIL
NTS

- NOTES:
- CENTER STUB OR SLEEVE IN HOLE W/2" GROUDED SPACE ALL AROUND. CORE HOLE 4" LARGER THAN OD OF STUB OR SLEEVE.
 - STANDARD GROUT WILL NOT BE ACCEPTED AS A SUBSTITUTE FOR NON-SHRINK GROUT.

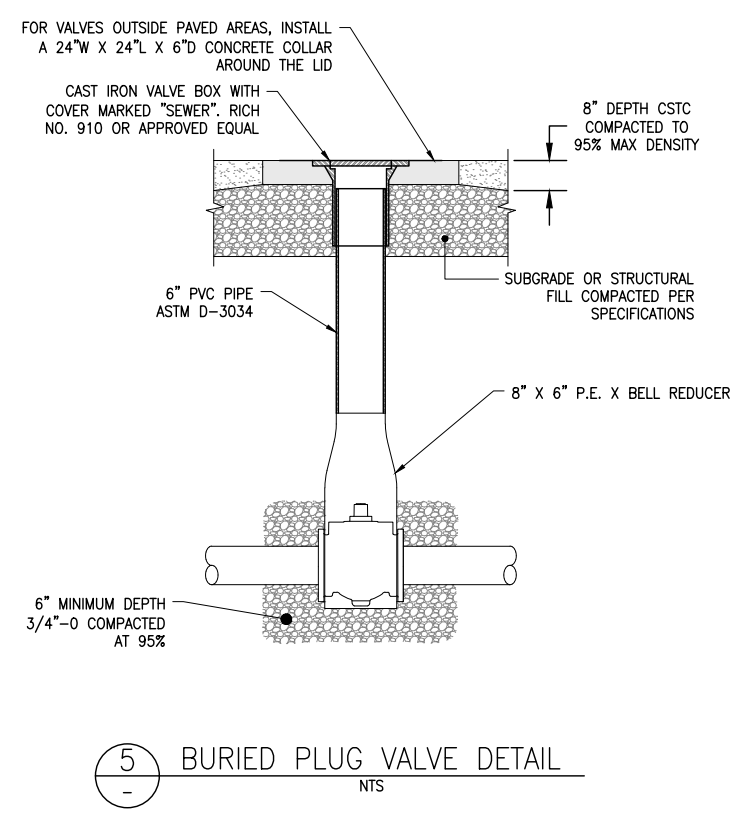


3 FLOOR MOUNTED PIPE SUPPORT
NTS

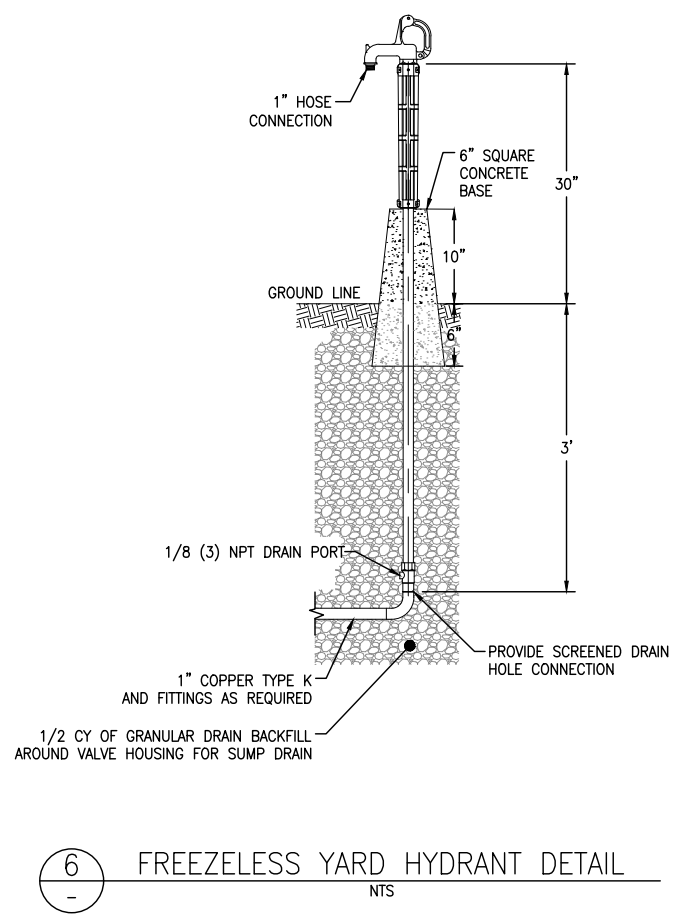


4 PRESSURE GAUGE DETAIL
NTS

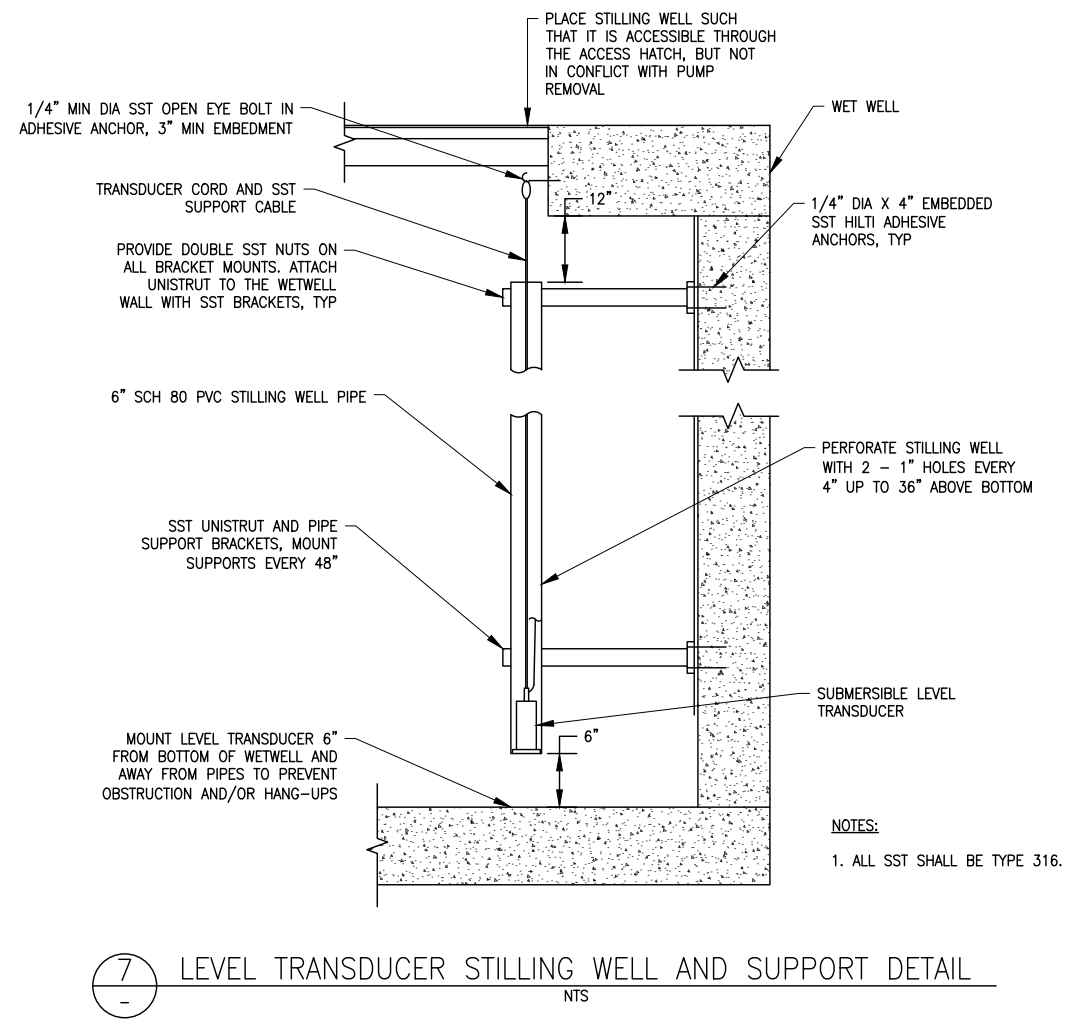
- NOTES:
- ALL GAUGES SHALL BE DUAL SCALE. SCALES ON THE GAUGE FACE SHALL BE MARKED IN PSIG AND FEET OF WATER.



5 BURIED PLUG VALVE DETAIL
NTS

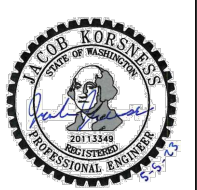


6 FREEZELESS YARD HYDRANT DETAIL
NTS



7 LEVEL TRANSDUCER STILLING WELL AND SUPPORT DETAIL
NTS

- NOTES:
- ALL SST SHALL BE TYPE 316.



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DESIGNED BY: JK/AP
DRAWN BY: CK
CHECKED BY: JW

SCALE: ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY.

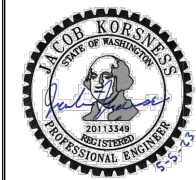
DETAILS I

wallis engineering

PROJECT NO: 1477B
DATE: 5/2023

CITY OF STEVENSON
FAIRGROUNDS PUMP
STATION IMPROVEMENTS





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BY	
DESIGNED BY	JK/AP
DRAWN BY	CK
REVISION	
NO.	

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

DETAILS II

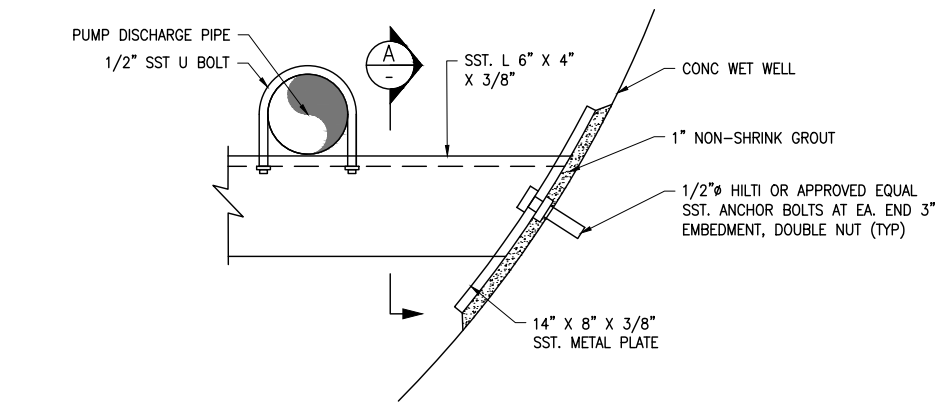
wallis engineering

PROJECT NO: 1477B
DATE: 5/2023

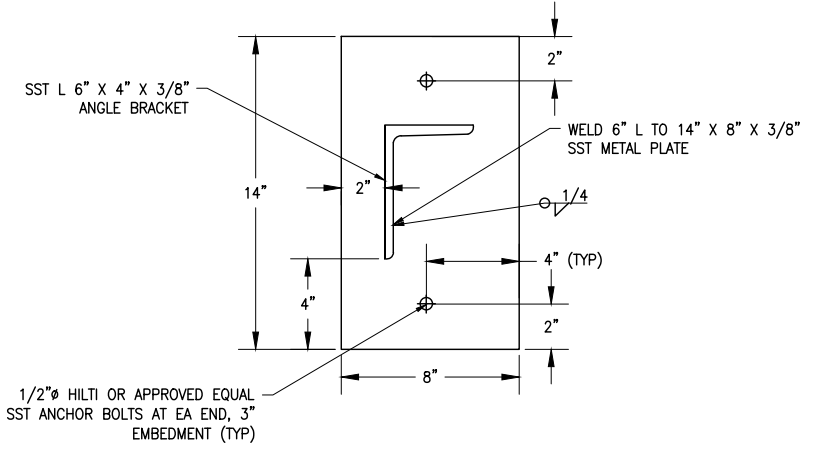
CITY OF STEVENSON
FAIRGROUNDS PUMP
STATION IMPROVEMENTS



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D2
15 OF 32

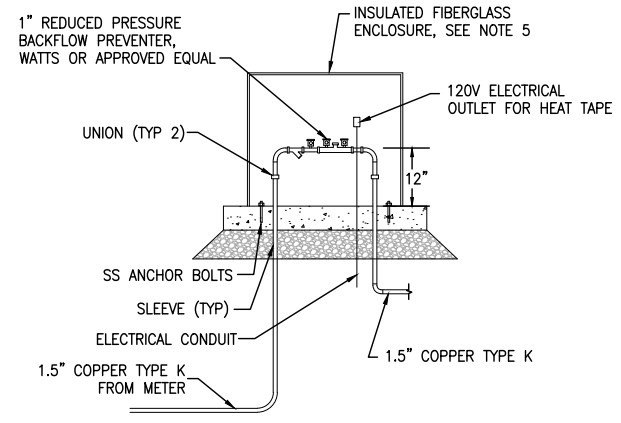


PLAN



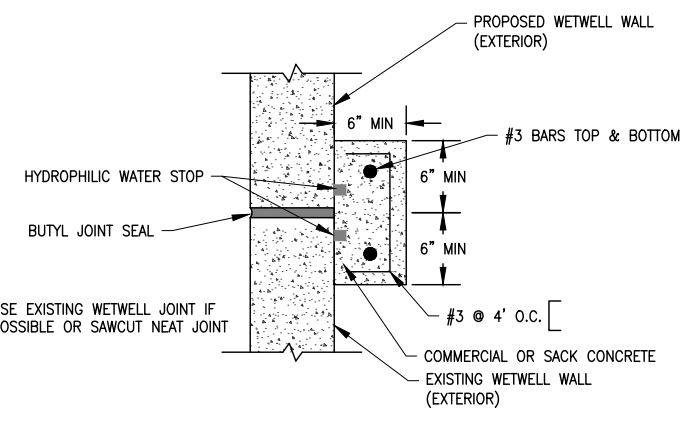
A SECTION

1 PUMP DISCHARGE PIPE - SUPPORT BRACE MOUNTING DETAIL
NTS



2 REDUCED PRESSURE BACKFLOW ASSEMBLY DETAIL
NTS

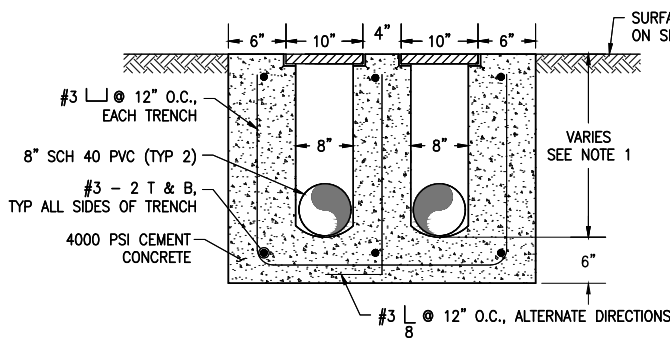
- NOTES:
1. THOROUGHLY FLUSH LINES PRIOR TO INSTALLATION OF BACKFLOW PREVENTER.
 2. THE BACKFLOW ASSEMBLY SHALL BE A STATE APPROVED MODEL AND SHALL INCLUDE A WYE STRAINER AND RESILIENT SEATED SHUTOFF VALVES.
 3. A PLUMBING PERMIT IS REQUIRED. PLEASE CONTACT YOUR LOCAL PLUMBING PERMIT CENTER.
 4. MUST BE TESTED AFTER INSTALLATION BY A WASHINGTON STATE CERTIFIED BACKFLOW ASSEMBLY TESTER. TEST RESULTS SHALL BE SENT TO THE CITY OF STEVENSON WATER DEPARTMENT.
 5. INSULATED FIBERGLASS ENCLOSURE SHALL BE HINGE OPENING WITH BOTTOM DRAIN, MANUFACTURED BY HUBBEL OR APPROVED EQUAL. SIZE ENCLOSURE TO PROVIDE 6" MINIMUM CLEARANCE ALL AROUND PIPE, FITTINGS, AND BACKFLOW ASSEMBLY.



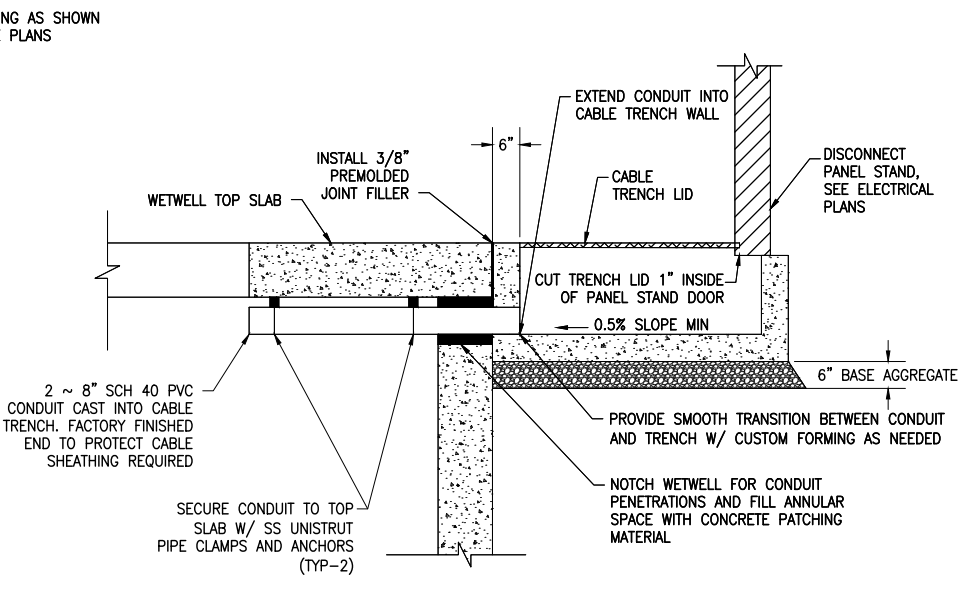
3 CONCRETE COLLAR DETAIL
NTS

NOTE:

1. USE EXISTING WETWELL JOINT IF POSSIBLE OR SAWCUT NEAT JOINT



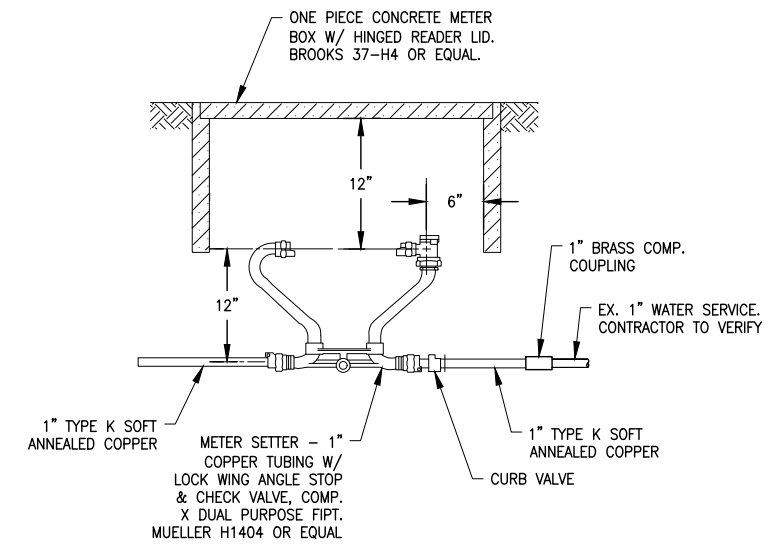
CABLE TRENCH CROSS SECTION



CABLE TRENCH ELEVATION

- NOTES:
1. CABLE TRENCH DEPTH SHALL MATCH THE CABLE CONDUIT INVERT ELEVATION AT THE CONNECTION POINT IN THE WETWELL, AND SHALL SLOPE 0.5% UP AWAY FROM THE WETWELL AS SHOWN ON THE CABLE TRENCH ELEVATION.
 2. CABLE TRENCHES SHALL SLOPE AT CONSTANT SLOPE FROM THE DISCONNECT PANEL TO THE WETWELL, MIN SLOPE 0.5%. FIELD MODIFICATION OF CABLE TRENCH FORM MAY BE REQUIRED.
 3. PROVIDE LIGHT BROOM FINISH ON CONCRETE SURFACE, AND SACK FINISH WITHIN TRENCHES.
 4. CABLE TRENCH LID TO BE CAST IRON TRENCH DRAIN GRATE.

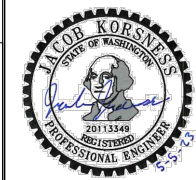
4 CABLE TRENCH DETAIL
NTS



5 WATER SERVICE CONNECTION
NTS

- NOTES:
1. CONTRACTOR SHALL CONTACT THE CITY OF STEVENSON 48 HOURS PRIOR TO INSTALLING ANY WATER SERVICE CONNECTIONS.
 2. METERS WILL NOT BE SET BY THE CITY PRIOR TO DISINFECTION OF THE MAIN AND SERVICE, AND PRIOR TO A SUCCESSFUL BACTERIOLOGICAL TEST.
 3. ALL METER BOXES LOCATED IN DRIVEWAYS, SIDEWALKS, OR OTHER AREAS SUBJECT TO VEHICLE TRAFFIC SHALL HAVE TRAFFIC RATED COVERS.
 4. ALL FITTINGS, NIPPLES, BUSHINGS, AND OTHER APPURTENANCES NOT SHOWN SHALL BE CONSIDERED INCIDENTAL TO THE SERVICE INSTALLATION.

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REVISION: JW

0 1" ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

DETAILS IV

wallis engineering

PROJECT NO: 1477B
DATE: 5/2023

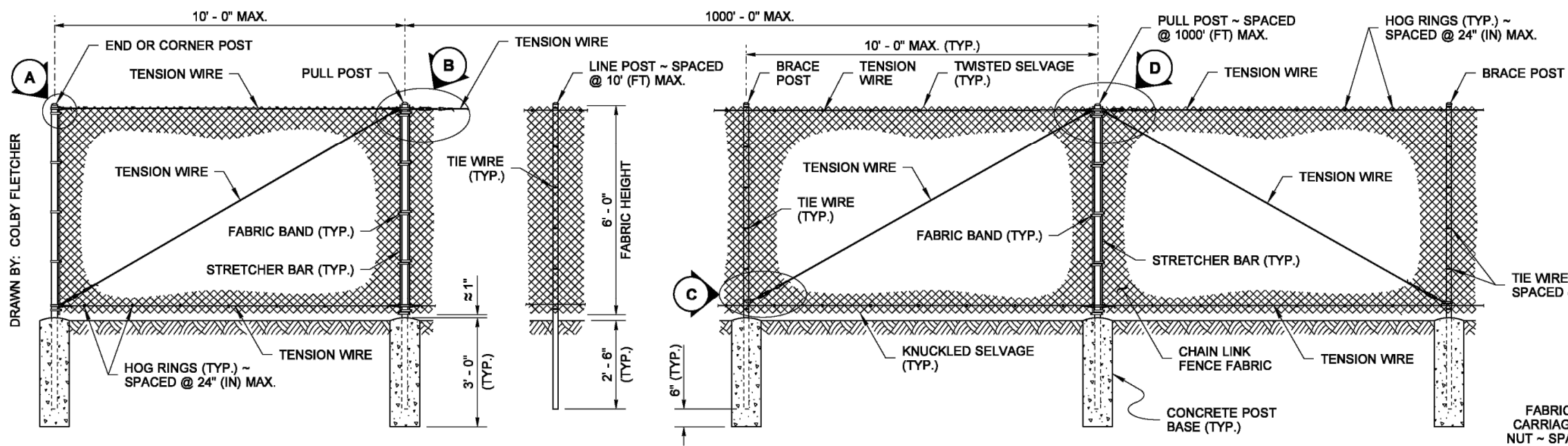
CITY OF STEVENSON
FAIRGROUNDS PUMP
STATION IMPROVEMENTS



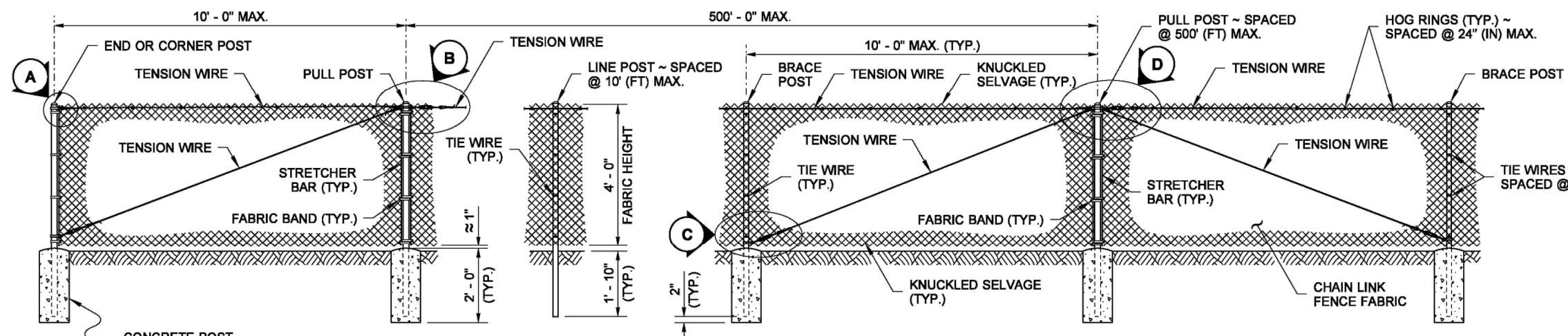
DRAWING NO:
D4
17 OF 32

NOTES

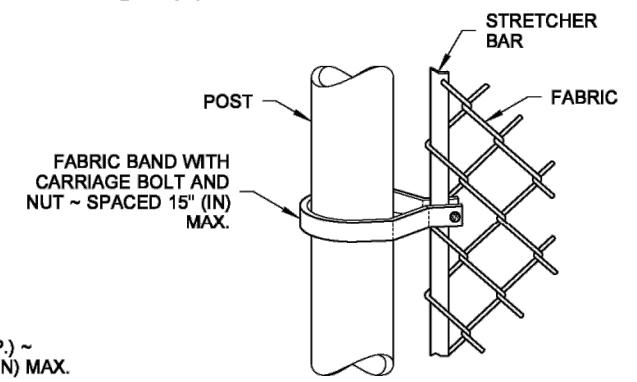
- All concrete post bases shall be 10" (in) minimum diameter.
- Along the top and bottom, using Hog Rings, fasten the Chain Link Fence Fabric to the Tension Wire within the limits of the first full fabric weave.
- Details are illustrative and shall not limit hardware design or post selection of any particular fence type.
- Fencing shall be used for security and boundary delineation only.



TYPE 3



TYPE 4



METHOD OF FASTENING STRETCHER BAR TO POST



Barry, Ed
Jul 14 2015 11:14 AM
**CHAIN LINK FENCE
TYPES 3 AND 4**

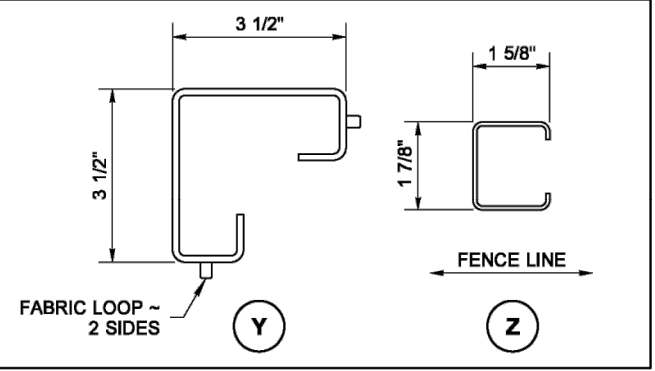
STANDARD PLAN L-20.10-03

SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION
Carpenter, Jeff
Jul 14 2015 11:24 AM
STATE DESIGN ENGINEER
Washington State Department of Transportation

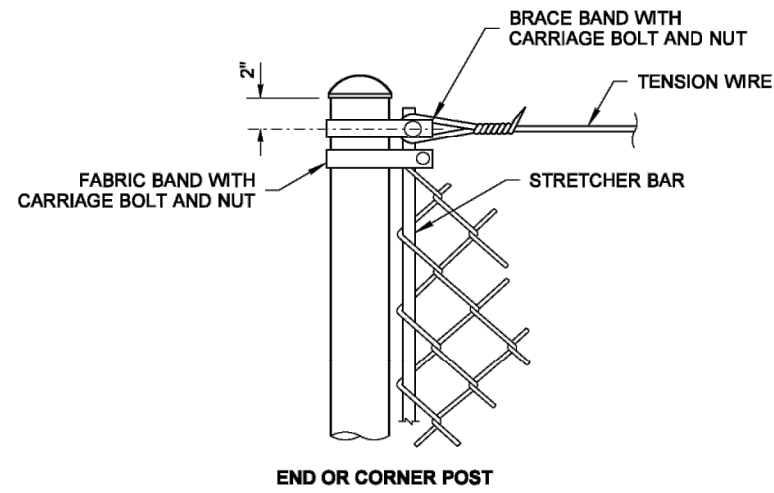
POST AND RAIL SPECIFICATIONS

POST	PIPE	ROLL FORMED	
	NOM. SIZE (SCH. 40) I.D.	SECTION	WEIGHT (lb/ft)
END, CORNER, OR PULL POST	2 1/2" DIAM.	Y	5.10
LINE OR BRACE POST	2" DIAM.	Z	1.85

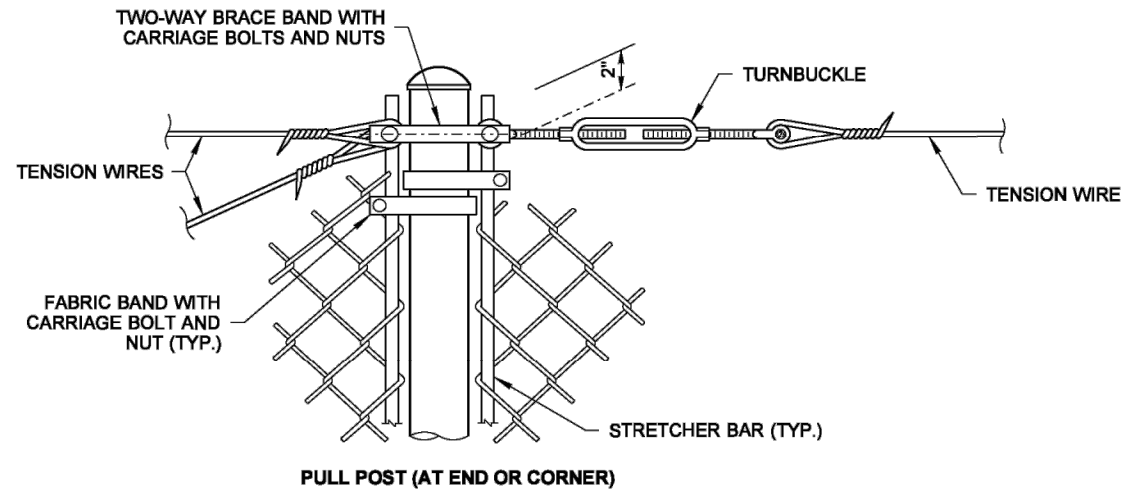


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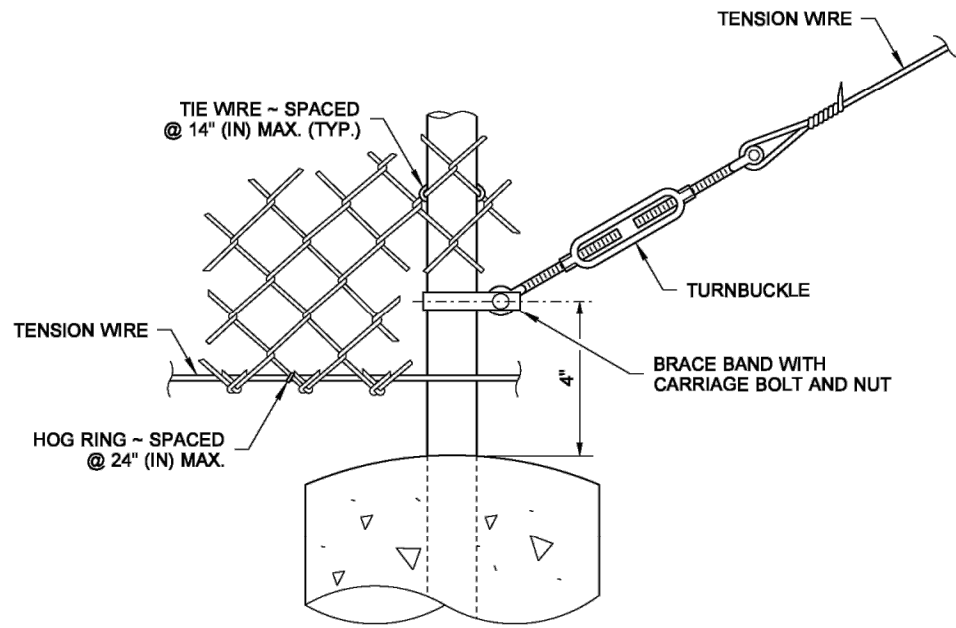
DRAWN BY: COLBY FLETCHER



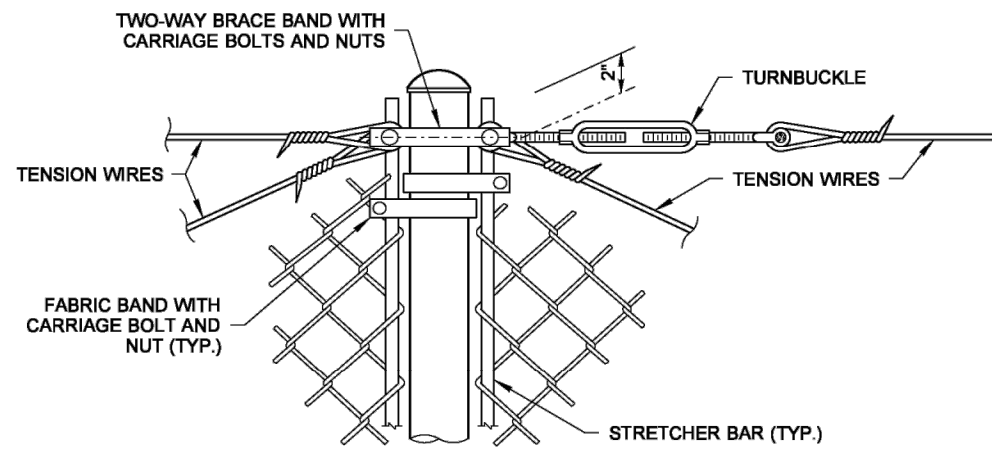
DETAIL **(A)**



DETAIL **(B)**



DETAIL **(C)**



DETAIL **(D)**



Barry, Ed
Jul 14 2015 11:14 AM

**CHAIN LINK FENCE
TYPES 3 AND 4**

STANDARD PLAN L-20.10-03

SHEET 2 OF 2 SHEETS

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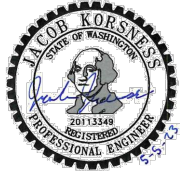
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REVIEWED BY: JW

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

DETAILS V

wallis engineering

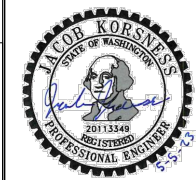
PROJECT NO: 1477B
DATE: 5/2023

CITY OF STEVENSON
FAIRGROUNDS PUMP
STATION IMPROVEMENTS



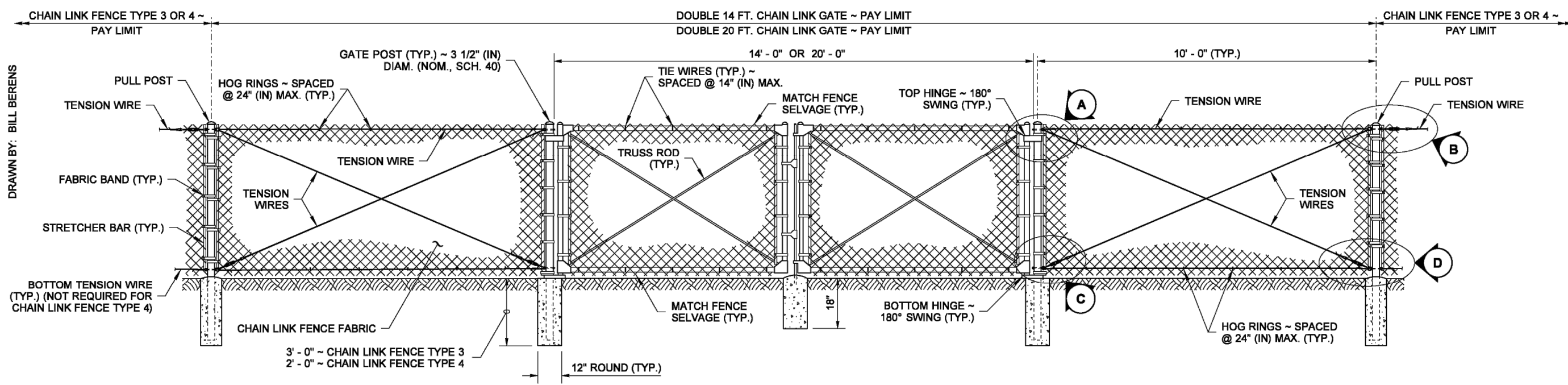
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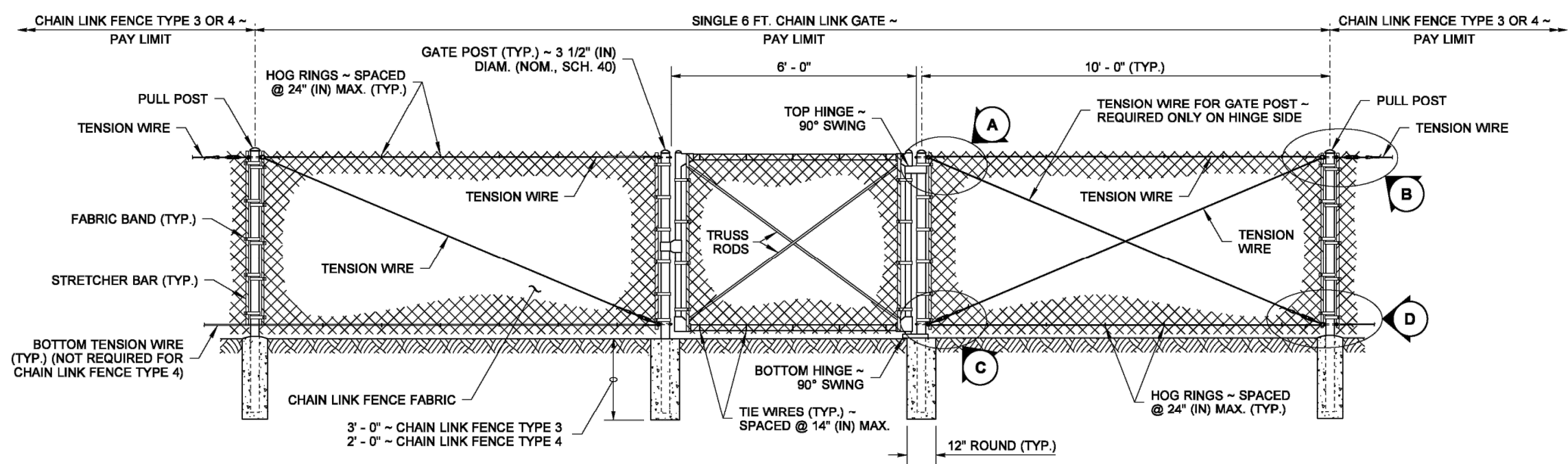


NOTES

1. Materials shall meet the requirements of Standard Specification 9-16.



DOUBLE GATE



SINGLE GATE



Barry, Ed
May 6 2014 3:57 PM

CHAIN LINK GATE

STANDARD PLAN L-30.10-02

SHEET 1 OF 2 SHEETS

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Bakotich, Pasco
Jun 11 2014 1:40 PM

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Washington State Department of Transportation

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BY	JK/AP
REVISION	CK
NO.	JW

DESIGNED BY: JK/AP
DRAWN BY: CK
SCALE: 1" = 10'-0"
IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

DETAILS VI

wallis engineering
PROJECT NO: 1477B
DATE: 5/2023

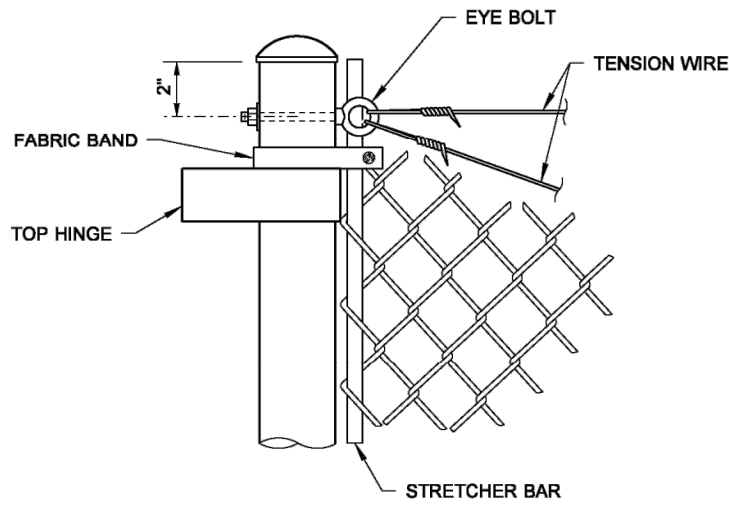
CITY OF STEVENSON
FAIRGROUNDS PUMP
STATION IMPROVEMENTS



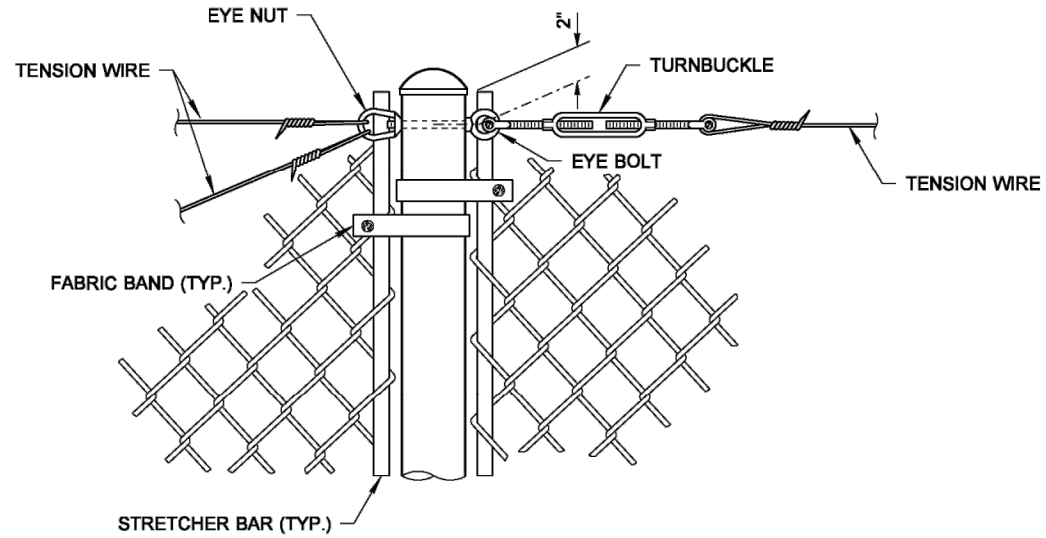
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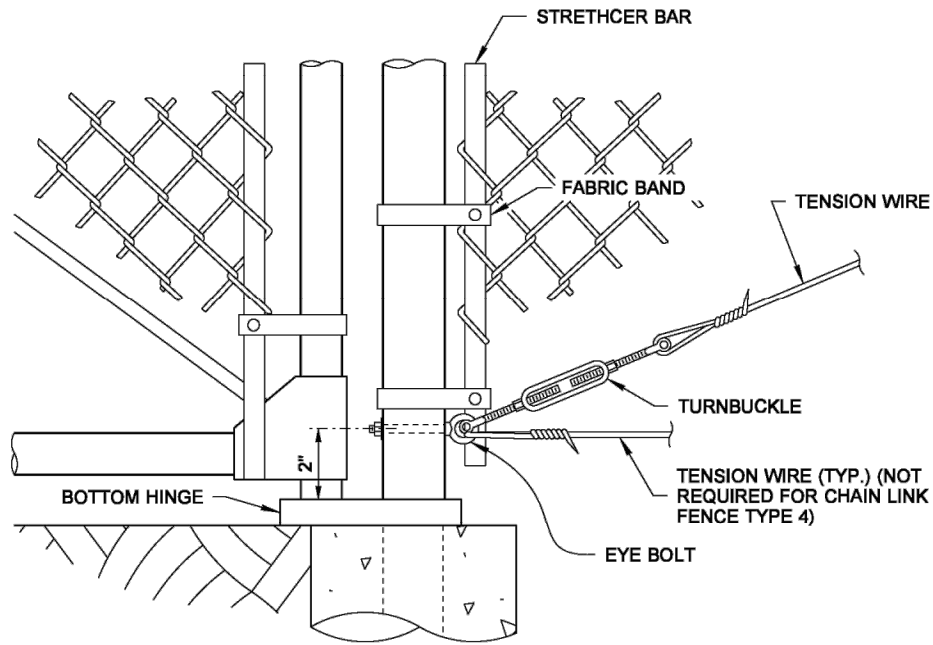
DRAWN BY: BILL BERENS



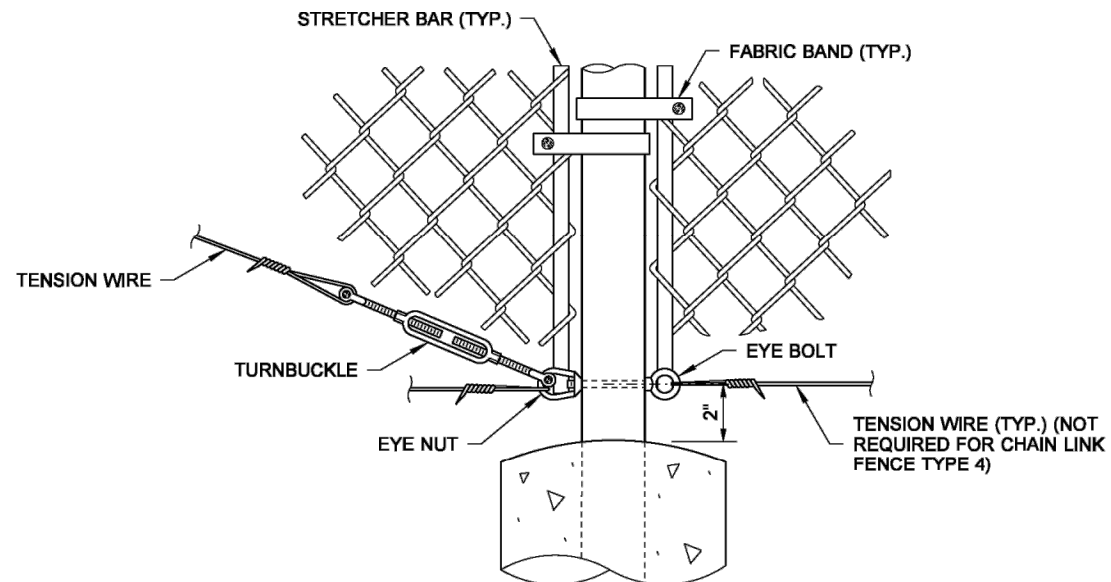
GATE POST
DETAIL A



PULL POST
DETAIL B



GATE POST
DETAIL C



PULL POST
DETAIL D



Barry, Ed
May 6 2014 3:58 PM

CHAIN LINK GATE

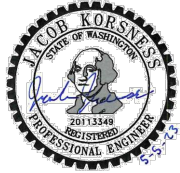
STANDARD PLAN L-30.10-02

SHEET 2 OF 2 SHEETS

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Jun 11 2014 1:41 PM

Washington State Department of Transportation



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REVISION BY: JW

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IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

DETAILS VII

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PROJECT NO: 1477B
DATE: 5/2023

CITY OF STEVENSON
FAIRGROUNDS PUMP
STATION IMPROVEMENTS



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D7

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GENERAL NOTES:

1. ALL MATERIALS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE LATEST NATIONAL ELECTRICAL CODE. ALL MATERIALS SHALL BE NEW AND LISTED BY THE UNDERWRITERS' LABORATORY INC. (UL). ALL ELECTRICAL WORK SHALL BE INSTALLED IN A SAFE AND FUNCTIONAL MANNER.
2. REFER TO THE ELECTRICAL CIRCUIT SCHEDULE FOR CIRCUIT IDENTIFICATIONS, ROUTING, CONDUCTOR SIZES, ETC.
3. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OTHER DISCIPLINES AS REQUIRED TO MITIGATE INTERFERENCES.
4. CONDUIT MATERIAL SHOWN ON ELECTRICAL PLANS ARE SPECIFIC FOR THE LOCATION WHERE THE CONDUIT STARTS. CONTRACTOR IS RESPONSIBLE FOR TRANSITIONING TO APPROVED CONDUIT MATERIAL BASED ON LOCATION AND IN ACCORDANCE TO ELECTRICAL SPECIFICATIONS.

ABBREVIATIONS

a	CIRCUIT BREAKER AUX. CONTACT, CLOSED WHEN BREAKER IS CLOSED	KVA	KILOVOLT AMPERES
A	AMMETER, AMPERES	KVARH	KILOVOLT AMPERES REACTIVE HOURS
AC	ALTERNATING CURRENT	KW	KILOWATT
AD	ANALOG TO DIGITAL	KWH	KILOWATT HOURS
AF	AMPERE FRAME	LCP	LIGHTING CONTROL PANEL
AIC	AMPERES INTERRUPTING CAPACITY	LP	LIGHTING PANEL
ALT	ALTERNATOR	LPS	LOW PRESSURE SODIUM LIGHTING
AM	AUTO/MANUAL CONTROLLER	LT(S)	LIGHT(S)
ANN	ANNUNCIATOR	(M)	MODIFIED
AS	AMMETER SWITCH	Ma	MILLIAMPERES
ASD	ADJUSTABLE SPEED DRIVE	MCC	MOTOR CONTROL CENTER
AT	AMPERE TRIP	MCP	MOTOR CIRCUIT PROTECTOR
ATS	AUTOMATIC TRANSFER SWITCH	MOV	MOTOR OPERATED VALVE
AUTO	AUTOMATIC	MS	MOTOR STARTER
AWG	AMERICAN WIRE GAGE	MTD	MOUNTED
b	CIRCUIT BREAKER AUX. CONTACT, CLOSED WHEN BREAKER IS OPEN	MTG	MOUNTING
BCG	BARE COPPER GROUND	(N)	NEW
C	CONDUIT, CONTACTOR	NEC	NATIONAL ELECTRICAL CODE
CAP	CAPACITOR	NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOC.
CB	CIRCUIT BREAKER	NEUT	NEUTRAL
CC	CONTROL CABLE, CLOSING COIL	NO	NORMALLY OPEN, NUMBER
CHH	COMMUNICATION HANDHOLE	NTS	NOT TO SCALE
CL	CHLORINE	OVHD	OVERHEAD
CKT	CIRCUIT	OL	THERMAL OVERLOAD RELAY
CMH	COMMUNICATION MANHOLE	OT	OVER TEMPERATURE
CO	CONDUIT ONLY	PB	PULLBOX, PUSHBUTTON
COMM	COMMUNICATION	PD	POSITIVE DISPLACEMENT
CON	CONTACTOR	PDP	PUMP DISCONNECT PANEL
COND	CONDUCTOR	PE	PHOTOELECTRIC
CONT	CONTINUED	PEC	PHOTOELECTRIC CELL
CPT	CONTROL POWER TRANSFORMER	PF	POWER FACTOR
CP	CONTROL PANEL	pH	MEASURE OF ACIDITY OR ALKALINITY
CR	CONTROL RELAY	PH	PHASE
CS	CONTROL SWITCH	PLC	PROGRAMMABLE LOGIC CONTROLLER
CT	CURRENT TRANSFORMER	PM	POWER MONITOR
CWP	COLD WATER PIPE	PNL	PANEL
DC	DIRECT CURRENT	PNLBD	PANELBOARD
DIAG	DIAGRAM	PRI	PRIMARY
DISC	DISCONNECT	PS	PRESSURE SWITCH
DISTR	DISTRIBUTION	PSI	POUNDS PER SQUARE INCH
DP	DISTRIBUTION PANEL	PWR	POWER
DPDT	DOUBLE POLE, DOUBLE THROW	(RL)	RELOCATE
DPST	DOUBLE POLE, SINGLE THROW	(RLD)	RELOCATED
EXST	EXISTING	RCPT	RECEPTACLE
EF	EXHAUST FAN	RCT	REPEAT CYCLE TIMER
EHH	ELECTRICAL HANDHOLE	RPM	REVOLUTIONS PER MINUTE
ELEM	ELEMENTARY	RT	RESET TIMER
EMERG	EMERGENCY	SCR	SILICON CONTROLLED RECTIFIER
EFFL	EFFLUENT	SD	SMOKE DETECTOR
EQ	EQUAL	SDBC	SOFT-DRAWN BARE COPPER
EQUIP	EQUIPMENT	SEC	SECONDS, SECONDARY
ETM	ELAPSED TIME METER	SECT	SECTION
FACP	FIRE ALARM CONTROL PANEL	SF	SUPPLY FAN
FIN FL	FINISHED FLOOR	SHH	SIGNAL HANDHOLE
FLEX	FLEXIBLE	SIG	SIGNAL
FLUOR	FLUORESCENT	SN	SOLID NEUTRAL
FO	FIBER OPTIC	SPEC	SPECIFICATIONS
FREQ	FREQUENCY	SPD	SURGE PROTECTIVE DEVICE
FU	FUSE	SPDT	SINGLE POLE, DOUBLE THROW
FUT	FUTURE	SS	STAINLESS STEEL, SOLID
FVNR	FULL VOLTAGE, NON REVERSING	SW	STATE SWITCH
FVR	FULL VOLTAGE, REVERSING	SWBD	SWITCHBOARD
FWD	FORWARD	SWGR	SWITCHGEAR
GA	GAUGE	SYNC	SYNCHRONIZING TERMINAL
GEN	GENERATOR	TB	BOX, TERMINAL BOARD
GFI	GROUND FAULT INTERRUPTER	TC	TELEPHONE CABINET
GRS	GALVANIZED RIGID STEEL	TEMP	TEMPERATURE
H ₂ O ₂	HYDROGEN PEROXIDE	TP	TWISTED PAIR UNSHIELDED
HMI	HUMAN MACHINE INTERFACE	TSP	TWISTED SHIELDED PAIR
HOA	HAND-OFF-AUTOMATIC	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
HOR	HAND-OFF-REMOTE	UH	UNIT HEATER
HORZ	HORIZONTAL	UV	ULTRA VIOLET
HPS	HIGH PRESSURE SODIUM	V	VOLTS
HTR	HEATER	VA	VOLT-AMPERES
HV	HIGH VOLTAGE	VFD	VARIABLE FREQUENCY DRIVE
HZ	HERTZ (CYCLES PER SECOND)	VAR	VOLT AMPERES REACTIVE
IND LT	INDICATING LIGHT	VERT	VERTICAL
INCAND	INCANDESCENT	VH	VAR-HOUR
I/O	INPUT/OUTPUT	VS	VOLTMETER SWITCH
JB	JUNCTION BOX	W	WIRE, WATTS
KA	KILOAMPERES	WHM	WATTHOUR METER
KCMIL	THOUSANDS OF CIRCULAR MILS	WHDM	WATTHOUR DEMAND METER
KV	KILOVOLTS	WP	WEATHERPROOF
		WTRT	WATERTIGHT
		WTP	WATER TREATMENT PLANT

ELECTRICAL PLAN SYMBOLS

	CONDUIT UP
	CONDUIT DOWN
	CONDUIT UP FROM UNDERGROUND RACEWAY
	CONDUIT STUB
	FLEXIBLE CONDUIT OR MFR CONDUIT
	SURFACE RACEWAY
	UNDERGROUND RACEWAY
	HOME RUN, ELECTRICAL PANEL DESTINATION SHOWN
	POWER POLE WITH GUY WIRE
	CONDUIT SEAL
	DUPLEX, QUADPLEX RECEPTACLE, W/DESIGNATOR
	GFI = GROUND FAULT INTERRUPTING
	WP = WEATHERPROOF +48 = HEIGHT AFF.
	SPECIAL EQUIPMENT CONNECTION AS SHOWN
	JUNCTION BOX
	MOTOR CONNECTION, HORSEPOWER INDICATED
	DISCONNECT SWITCH, AMPERAGE RATING SHOWN
	FUSED DISCONNECT SWITCH
	METER BASE
	GENERATOR
	WIFI ACCESS POINT
	TRANSFORMER
	THERMOSTAT
	VAULT
	CONDUIT SEAL-OFF
	GROUND CONNECTION PER NEC ARTICLE 250

MISCELLANEOUS SYMBOLS

	HORN
	BATTERY
	RECEPTACLE
	HEATER
	SCADA/YAGI ANTENNA
	IP CAMERA (PTZ OR OTHER)

ELECTRICAL SYMBOLS

	PANEL WIRING		TIME DELAY RELAY
	FIELD WIRING		PHASE MONITOR RELAY
	TWISTED SHIELDED PAIR		ALTERNATOR RELAY
	SHIELD WIRING		120V CONTROL RELAY, DPDT MINIMUM
	TWISTED SHIELDED TRIAD		24VDC CONTROL RELAY, DPDT MINIMUM
	SHIELD WIRING		RELAY CONTACT - NO, NC
	CONNECTING LINES		PUSHBUTTON OR SWITCH CONTACT BLOCK - NO, NC
	NON-CONNECTING LINES		THREE POSITION SELECTOR SWITCH
	METERBASE W/UTILITY METER		PUSH-TO-TEST LED PILOT LIGHT
	DISCONNECT RECEPTACLE AND PLUG		INDICATOR LIGHT
	MOTOR CONNECTION, HORSEPOWER INDICATED		W - WHITE A - AMBER R - RED G - GREEN
	FUSE, SIZE SHOWN		FLOAT SWITCH - NO, NC
	THERMAL MAGNETIC CIRCUIT BREAKER		TEMPERATURE SWITCH - NO, NC
	MAGNETIC ONLY CIRCUIT BREAKER (MOTOR CIRCUITS ONLY) CONTINUOUS CURRENT RATING AND TRIP SETTINGS SHOWN		LIMIT SWITCH - NO, NC
	MOTOR STARTER, SIZE SHOWN		TIME DELAY CONTACTS, NORMALLY OPEN TIMED CLOSED NORMALLY CLOSED TIMED OPEN
	FUSED TERMINAL BLOCK FUSE SIZE SHOWN		FLOW SWITCH - NO, NC
	CONTROL PANEL TERMINAL BLOCK		PRESSURE SWITCH - NO, NC
	COMPONENT TERMINAL BLOCK		SPEED POTENTIOMETER
	VARIABLE FREQUENCY DRIVE		ELAPSED TIME METER
	SOFT START REDUCED VOLTAGE		COUNTER
	LINE OR LOAD REACTOR, IMPEDENCE SHOWN		TRANSFER SWITCH
	XFMR NAME KVA VOLTAGE (120V-240V-480V-4160V-12.247V) PHASE (1Ø/3Ø), 3W/4W Z% = XXX A FAULT = XXXA		SOLENOID VALVE
	UNGROUNDING DELTA		CURRENT TRANSFORMER
	GROUNDING DELTA		DISCONNECT SWITCH, AMPERAGE RATING SHOWN
	OPEN DELTA		FUSED DISCONNECT
	GROUNDING WYE		TEST POINT TERMINAL
	POWER MONITOR		SINGLE POINT GROUND
	EMERGENCY STANDBY ENGINE GENERATOR, RATING AS INDICATED ON ONE-LINE DIAGRAM		EOL - END OF LINE RESISTOR
	SURGE PROTECTIVE DEVICE		
	PHASE MONITOR RELAY		

NOTE: NOT ALL SYMBOLS OR ABBREVIATIONS USED.

GROUNDING PLAN SYMBOLS

	GROUND ROD
	GROUND TEST WELL
	GROUND CONNECTION TO EQUIPMENT DETAIL CALLOUT SHOWN ON PLAN DWG.
	GROUND CONNECTION, DETAIL CALLOUT SHOWN ON PLAN DWG.
	GROUND CONNECTION TO REBAR, DETAIL CALLOUT SHOWN ON PLAN DWG.
	BELOW GRADE #4/0 AWG BARE COPPER FOR MAIN PLANT GROUND
	BELOW GRADE #2/0 AWG INSULATED COPPER FOR GROUND TAP.
	ABOVE GRADE #2/0 AWG INSULATED GROUND TAP

LIGHTING PLAN SYMBOLS

	FLOOD LIGHT
	WALL SWITCH STANDARD TOGGLE, DESIGNATOR
	2=DOUBLE POLE 4=FOUR WAY 3 = 3-WAY K=KEY OPERATED D = DIMMER WP=WEATHER PROOF T = TIMER TH=THERMAL SWITCH LV=LOW VOLTAGE
	SURFACE MOUNTED LED LUMINAIRE *
	RECESSED MOUNTED LED LUMINAIRE *
	WALL MOUNTED LED LUMINAIRE *
	*SHADED LUMINAIRE INDICATES BATTERY BACKED UNIT
	EXIT SIGN - WALL MOUNTED
	EXIT SIGN - 2 SIDED CEILING MOUNTED
	PHOTOCELL
	MOTION SENSOR
	FLOOD LIGHT
	STANCHION FIXTURE - POLE MOUNT
	STANCHION FIXTURE - WALL MOUNT

GENERAL SYMBOLS

	NEW ELECTRICAL EQUIPMENT
	EXISTING ELECTRICAL EQUIPMENT
	EQUIPMENT TO BE DEMO'D OR REMOVED
	DRAWING NOTE
	ELECTRICAL CIRCUIT IDENTIFICATION
	MULTIPLE ELECTRICAL CIRCUITS, SEPARATE CONDUITS
	MULTIPLE ELECTRICAL CIRCUITS, COMMON CONDUIT (SIZE SHOWN)
	TITLE SCALE



DATE	
BY	
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NO.	

ELECTRICAL LEGEND, SYMBOLS, AND ABBREVIATIONS

wallis engineering

PROJECT NO: 1477B

DATE: 5/2023

CITY OF STEVENSON
FAIRGROUNDS PUMP
STATION IMPROVEMENTS

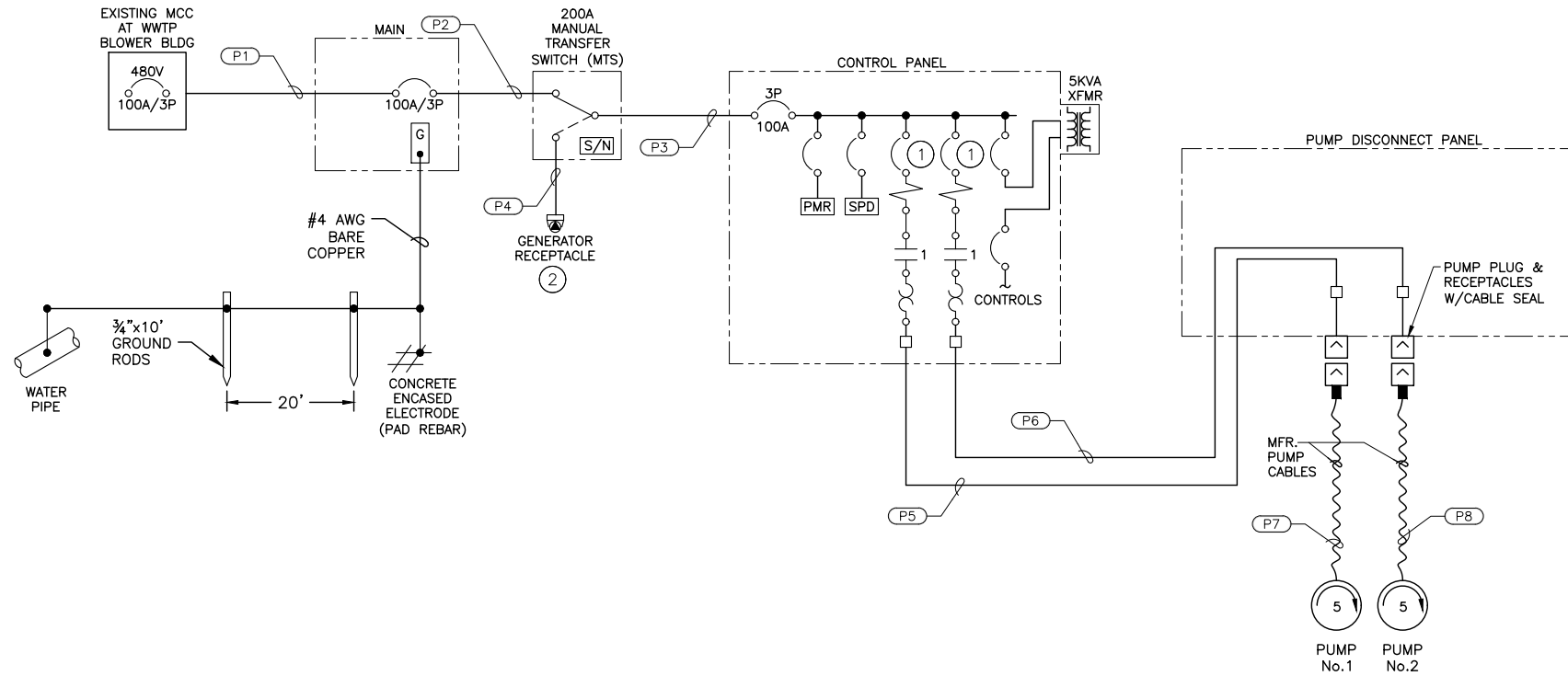


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AK #1018436 PROJECT#: 19.29.04

DRAWING NO:
E1
21 OF 32

- KEY NOTES:**
- 1 PROVIDE AND SIZE CIRCUIT BREAKER FOR MOTOR STARTER PER MANUFACTURER'S RECOMMENDATIONS.
 - 2 200A GENERATOR RECEPTACLE, APPLETON MODEL ADJA20044-200-RS



LOAD SUMMARY			
Voltage	480	3 Phase	4 Wire
DESCRIPTION	LOAD KVA	LOAD HP	Amperes @ 480 VAC
PUMP 1	5.28	5.00	7.6
PUMP 2	5.28	5.00	7.6
XFMR	5		6.2
SUBTOTAL	15.56	10.0	21.4
LARGEST MOTOR X 25%			1.9
NON-MOTOR LOADS X 25%			1.6
SPARE CAPACITY (25%)			5.4
TOTAL		10.0	30.2

1 FAIRGROUND PS ONE-LINE DIAGRAM
SCALE: NTS

2 FAIRGROUNDS LOAD SUMMARY
SCALE: NTS

NO.	REVISION	BY	DATE

DESIGNED BY: MEW
DRAWN BY: AAB
REV: XX

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

ONE-LINE DIAGRAM



PROJECT NO: 1477B
DATE: 5/2023

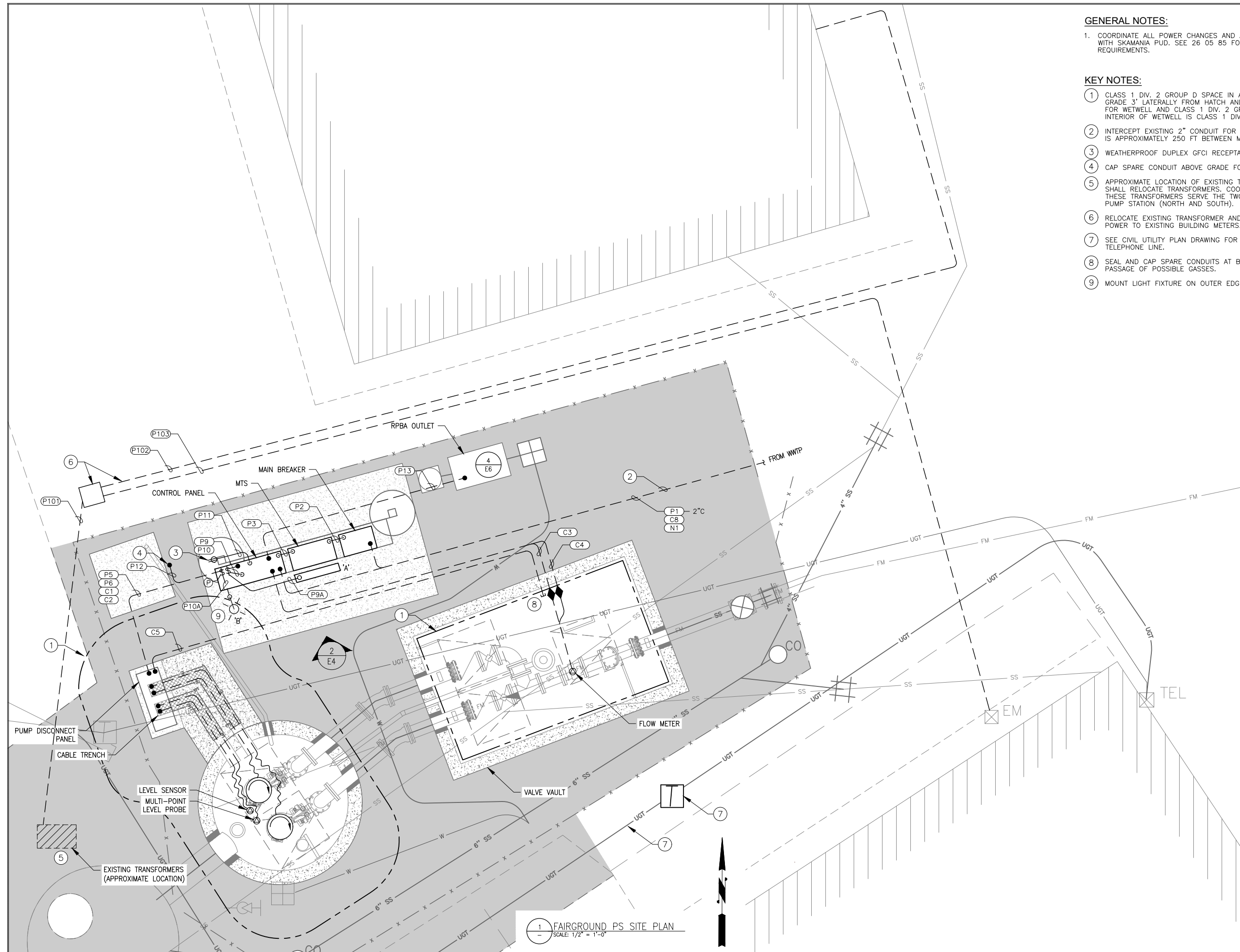
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PROJECT#: 19.29.04

DRAWING NO:
E2
22 OF 32



GENERAL NOTES:

1. COORDINATE ALL POWER CHANGES AND ADDITIONS WITH SKAMANIA PUD. SEE 26 05 85 FOR ADDITIONAL REQUIREMENTS.

KEY NOTES:

- ① CLASS 1 DIV. 2 GROUP D SPACE IN AN ENVELOPE 18" ABOVE GRADE 3" Laterally FROM HATCH AND TRENCH OPENINGS OPENINGS FOR WETWELL AND CLASS 1 DIV. 2 GROUP D SPACE INSIDE VAULTS. INTERIOR OF WETWELL IS CLASS 1 DIV. 1 GROUP D SPACE.
- ② INTERCEPT EXISTING 2" CONDUIT FOR CIRCUITS BACK TO WWTP. IT IS APPROXIMATELY 250 FT BETWEEN MAIN BREAKER AND WWTP MCC.
- ③ WEATHERPROOF DUPLEX GFCI RECEPTACLE.
- ④ CAP SPARE CONDUIT ABOVE GRADE FOR FUTURE AERATOR.
- ⑤ APPROXIMATE LOCATION OF EXISTING TRANSFORMERS. CONTRACTOR SHALL RELOCATE TRANSFORMERS. COORDINATE LOCATION WITH PUD. THESE TRANSFORMERS SERVE THE TWO BUILDINGS ADJACENT TO THE PUMP STATION (NORTH AND SOUTH).
- ⑥ RELOCATE EXISTING TRANSFORMER AND INSTALL NEW UNDERGROUND POWER TO EXISTING BUILDING METERS.
- ⑦ SEE CIVIL UTILITY PLAN DRAWING FOR RELOCATED UNDERGROUND TELEPHONE LINE.
- ⑧ SEAL AND CAP SPARE CONDUITS AT BOTH ENDS TO PREVENT PASSAGE OF POSSIBLE GASSES.
- ⑨ MOUNT LIGHT FIXTURE ON OUTER EDGE OF KIOSK ROOF.



NO.	REVISION	BY	DATE

DESIGNED BY: MEW
 CHECKED BY: AAB
 DRAWN BY: AAB
 REV: XX

ONE INCH = 1" SCALE
 ONE INCH AT FULL SCALE.
 IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

ELECTRICAL SITE PLAN

wallis engineering

PROJECT NO: 1477B
 DATE: 5/2023

**CITY OF STEVENSON
 FAIRGROUNDS PUMP
 STATION IMPROVEMENTS**



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DRAWING NO:
E3
 23 OF 32

1 FAIRGROUND PS SITE PLAN
 SCALE: 1/2" = 1'-0"

CONDUCTOR SIZES ARE BASED ON COPPER CONDUCTORS.
MULTIPLE CIRCUITS RUN IN COMMON CONDUITS ARE SHOWN ON PLANS AND SUPERSEDE THE BASIC CONDUIT SIZE SHOWN.

RACEWAY SIZES ARE IN INCHES WITH QUANTITIES IN EXCESS OF (1) SHOWN IN ADJACENT PARENTHESIS.
P = POWER CONDUCTORS; G = GROUND CONDUCTORS; N = FOR NEUTRAL CONDUCTORS; C = CONTROL CONDUCTORS;
SP = SPARE CONDUCTORS.

CIRCUIT NUMBER	FROM	TO	CONDUCTORS	RACEWAY	NOTES
P1	WWTP MCC (BLOWER BLDG) (100A BREAKER)	MAIN CIRCUIT BREAKER	(3) 3 AWG, P (1) 8 AWG, G	2"	CONNECT TO EXISTING CONDUIT
P2	MAIN CIRCUIT BREAKER	MANUAL TRANSFER SWITCH (MTS)	(3) 3 AWG, P (1) 4 AWG, G	1.25"	
P3	MANUAL TRANSFER SWITCH (MTS)	CONTROL PANEL	(3) 3/0 AWG, P (1) 4 AWG, G	1.25"	
P4	MANUAL TRANSFER SWITCH (MTS)	GENERATOR RECEPTACLE	(3) 3/0 AWG, P (1) 4 AWG, G	-	
P5	CONTROL PANEL (PUMP 1 MOTOR STARTER)	PUMP DISCONNECT PANEL	(3) 12 AWG, P (1) 12 AWG, G	1"	
P6	CONTROL PANEL (PUMP 2 MOTOR STARTER)	PUMP DISCONNECT PANEL	(3) 12 AWG, P (1) 12 AWG, G	1"	
P7	PUMP DISCONNECT PANEL	WET WELL PUMP #1	MANUFACTURER CABLE	CABLE TRENCH	
P8	PUMP DISCONNECT PANEL	WET WELL PUMP #2	MANUFACTURER CABLE	CABLE TRENCH	
P9	CONTROL PANEL	LIGHT SWITCH (SHELTER LIGHT)	(1) 12 AWG, P (1) 12 AWG, N (1) 12 AWG, G	3/4"	
P9A	LIGHT SWITCH (SHELTER LIGHT)	SHELTER LIGHTING	(1) 12 AWG, P (1) 12 AWG, N (1) 12 AWG, G	3/4"	
P10	CONTROL PANEL	LIGHT SWITCH (POLE MOUNTED LIGHT)	(1) 12 AWG, P (1) 12 AWG, N (1) 12 AWG, G	3/4"	
P10A	LIGHT SWITCH (POLE MOUNTED LIGHT)	AREA LIGHT	(1) 12 AWG, P (1) 12 AWG, N (1) 12 AWG, G	1"	
P10B	LIGHT SWITCH (POLE MOUNTED LIGHT)	PHOTOCELL	(3) 12 AWG, C (1) 12 AWG, G	3/4"	
P11	CONTROL PANEL	DUPLEX GFCI OUTLET (MOUNTED ON STRUCTURE POST)	(1) 12 AWG, P (1) 12 AWG, N (1) 12 AWG, G	1"	
P12	CONTROL PANEL	FUTURE AERATOR LOCATION (SEE ELECTRICAL PLAN)	PULL STRING	1"	SPARE CONDUIT FOR FUTURE AERATOR
P13	CONTROL PANEL	RPBA OUTLET	(1) 12 AWG, P (1) 12 AWG, N (1) 12 AWG, G	1"	
C1	CONTROL PANEL	PUMP DISCONNECT PANEL	(2) 12 AWG, P (2) 12 AWG, N (1) 12 AWG, G (8) 14 AWG, C (4) 14 AWG, SP	1"	PANEL HEATER MULTITRODE LEVEL CONTROL RELAY PUMP MOIST, TEMP
C2	CONTROL PANEL	PUMP DISCONNECT PANEL	(1) 18 AWG, TSP (2) 14 AWG, C (4) 14 AWG, SP (1) 18 AWG, TSP, SP	1"	LEVEL TRANSDUCER I.S. BARRIER 24VDC POWER & COMMON
C3	CONTROL PANEL	FLOW TUBE (IN VALVE VAULT)	MANUFACTURER CABLE	1"	SIGNAL CABLE
C4	CONTROL PANEL	FLOW METER (IN VALVE VAULT)	MANUFACTURER CABLE	1"	ELECTRODE CABLE
C5	PUMP DISCONNECT PANEL	VALVE VAULT	PULL CORD	1"	SPARE CONDUIT
C6	PUMP DISCONNECT PANEL	MULTITRODE LEVEL SENSOR	MANUFACTURER CABLE	CABLE TRENCH	
C7	PUMP DISCONNECT PANEL	WETWELL LEVEL TRANSDUCER	MANUFACTURER CABLE	CABLE TRENCH	
C8	CONTROL PANEL	WWTP, BLOWER BUILDING (CONTROL PANEL MCP-BB)	(4) 14 AWG, C (1) 14 AWG, G	2"	EXTEND EXISTING CONDUIT TO CONTROL PANEL
N1	CONTROL PANEL	WWTP, BLOWER BUILDING (FIBER PANEL FPP-3)	6 FIBER PAIR		EXTEND EXISTING CONDUIT TO CONTROL PANEL

P101	PUD PRIMARY LINE	PUD TRANSFORMER (RELOCATE EXISTING)	BY PUD	BY PUD	CONTRACTOR TO TRENCH & BACK FILL FOR RELOCATED TRANSFORMER
P102	PUD TRANSFORMER (RELOCATE EXISTING)	EXISTING BUILDING (NORTH SIDE OF STATION)	(3) 3 AWG, P (1) 8 AWG, G	2"	RELOCATED SERVICE FOR EXISTING BLDG
P103	PUD TRANSFORMER (RELOCATE EXISTING)	EXISTING BUILDING (SOUTH SIDE OF BUILDING)	(3) 3 AWG, P (1) 8 AWG, G	2"	RELOCATED SERVICE FOR EXISTING BLDG

1 CIRCUIT SCHEDULE
SCALE: NONE

TYPE	DESCRIPTION	MOUNTING	VOLTAGE	INPUT WATTS	MANUFACTURER PART NUMBER	BATTERY BACKED	COLOR TEMP	LAMP TYPE LUMENS
A	4' LOW PROFILE ENCLOSED AND GASKETED INDUSTRIAL LED. MOLDED FIBERGLASS HOUSING, ACRYLIC LINEAR RIBBED FROSTED LENS, 80CRI, MEDIUM DISTRIBUTION, 0-10V DIMMING, U.L. LISTED FOR WET LOCATIONS.	SURFACE	120/277V	24	LITHONIA LIGHTING: FEM LED SERIES OR AS APPROVED.	NO	40K	LED 3,790
B	LED FLOOD LIGHT, MULTI-MOUNT WITH ADJUSTABLE ANGLE, MOUNT AT ROOF PEAK EDGE.	MULTI, ADJUSTABLE	120/277V	21	LITHONIA LIGHTING: DSXF1 P1 40K FL MVOLT LED FLOOD LIGHT, OR AS APPROVED	NO	40K	LED 2965

2 LUMINAIRE SCHEDULE
SCALE: NONE



NO.	REVISION	BY	DATE

CIRCUIT &
LUMINAIRE
SCHEDULES

wallis engineering
PROJECT NO: 1477B
DATE: 5/2023

CITY OF STEVENSON
FAIRGROUNDS PUMP
STATION IMPROVEMENTS



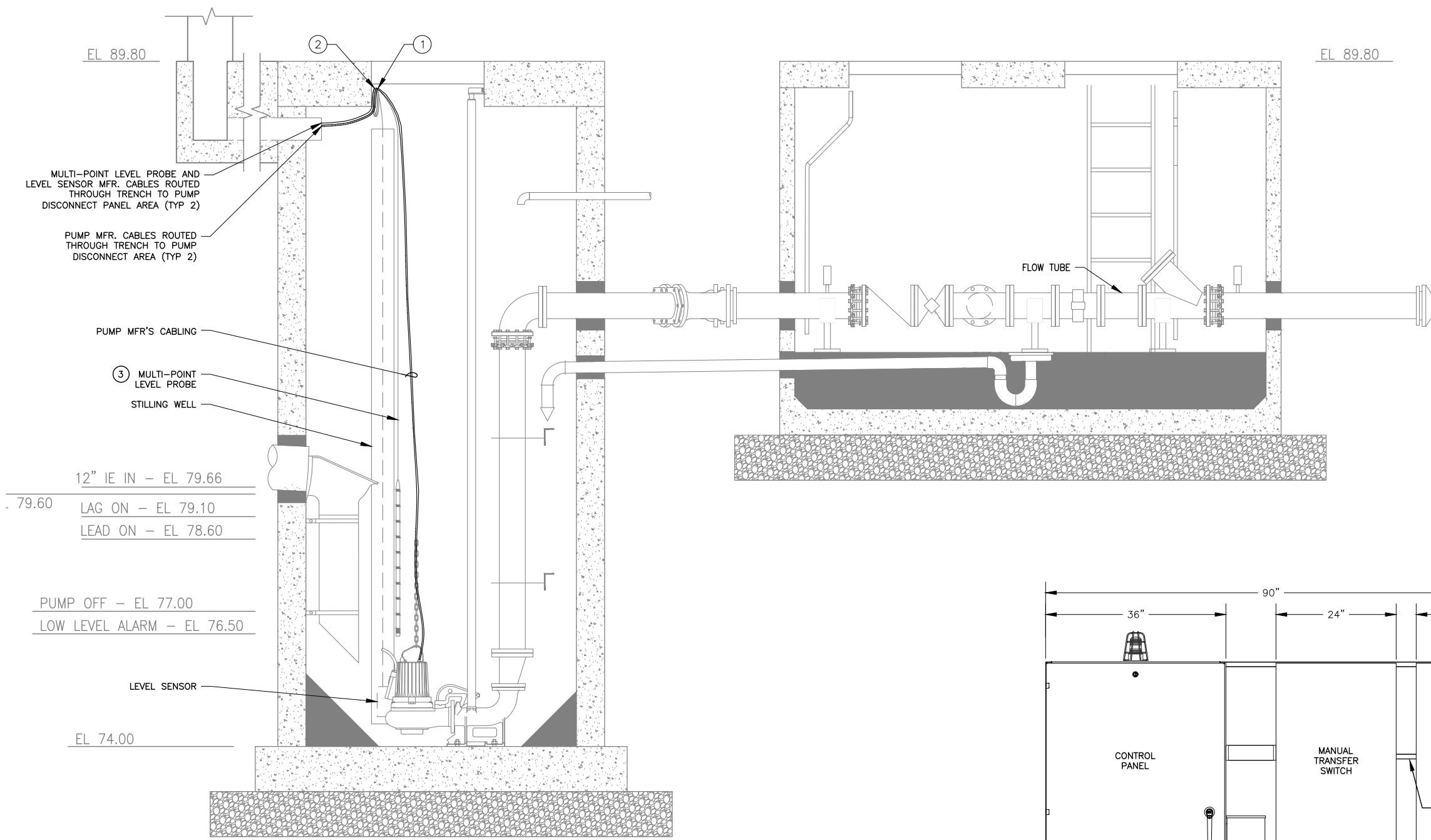
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PROJECT#: 19.29.04

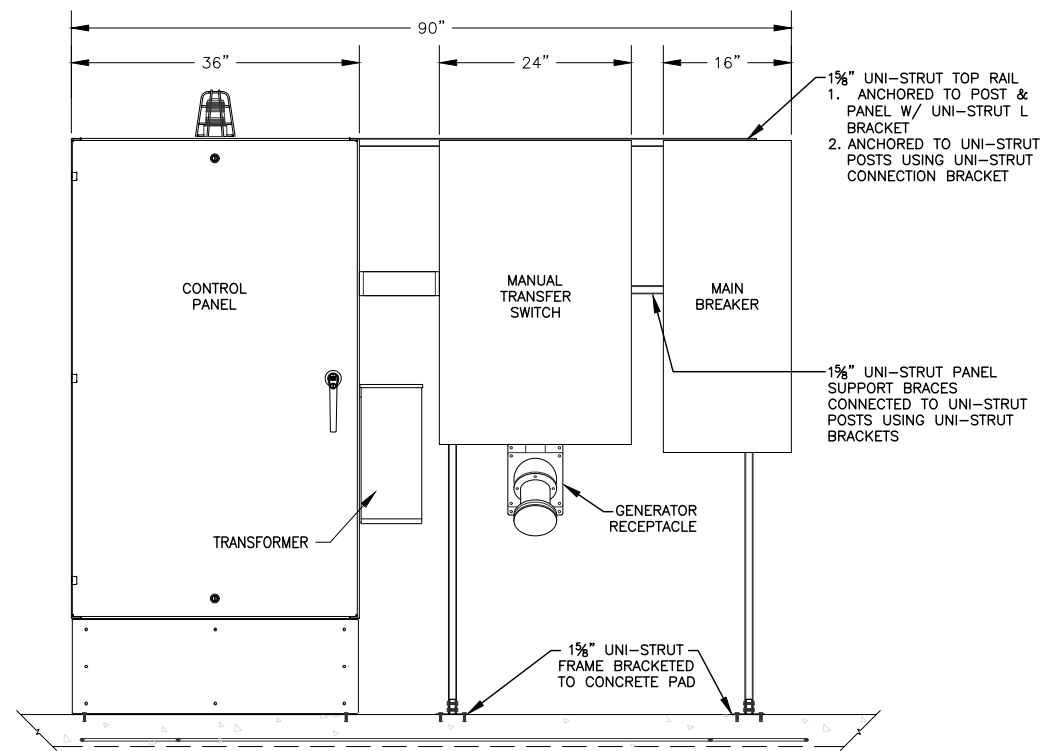
DRAWING NO:

E4

24 OF 32

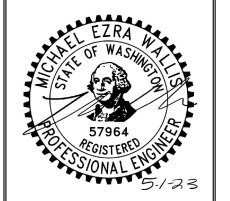


1 FAIRGROUND PS ELEVATION
SCALE: 3/4" = 1'-0"



2 FAIRGROUND PS ELEVATION
SCALE: 1/2" = 1'-0"

- KEY NOTES:**
- 1 PROVIDE 304 SS EYE HOOKS WITH CONCRETE EXPANSION ANCHORS, OR ATTACHED TO HATCH FRAME, FOR SUSPENSION OF MANUFACTURER PUMP CABLES NEAR HATCH AREA IF CABLING SUPPORT MEANS NOT PROVIDED BY PUMP MANUFACTURER.
 - 2 PROVIDE 304 SS EYE HOOKS WITH CONCRETE EXPANSION ANCHORS, OR ATTACHED TO HATCH FRAME, FOR SUSPENSION OF MULTI-POINT LEVEL PROBE AND LEVEL SENSOR AT HATCH AREA.
 - 3 COORDINATE ELEVATION LOCATION OF MULTI-POINT LEVEL PROBE WITH CIVIL DISCIPLINE.



NO.	REVISION	BY	DATE

DESIGNED BY: MEW
CHECKED BY: AAB
REV: XX

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

ELECTRICAL
ELEVATION

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*engineering

PROJECT NO: 1477B
DATE: 5/2023

CITY OF STEVENSON
FAIRGROUNDS PUMP
STATION IMPROVEMENTS



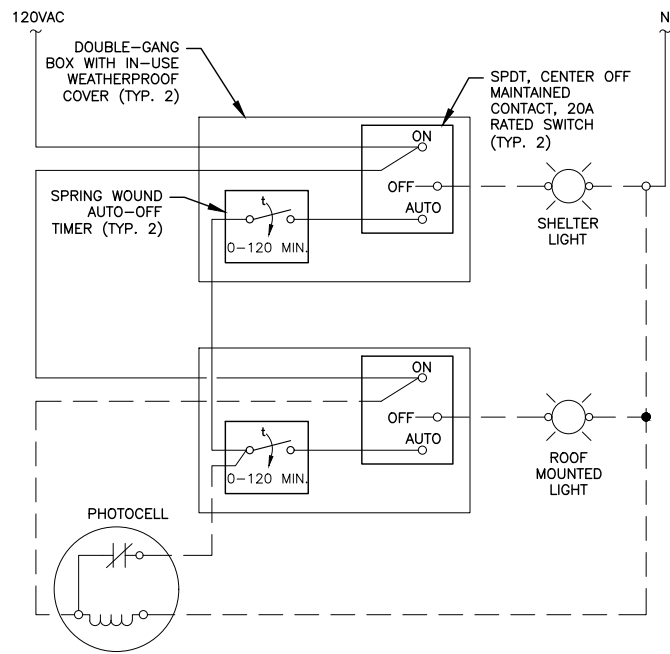
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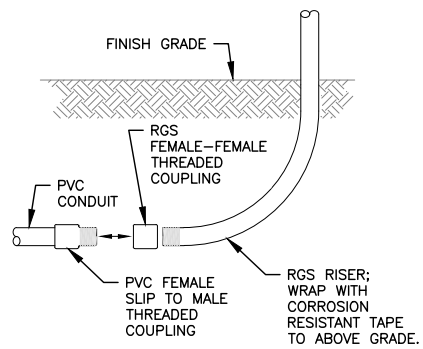
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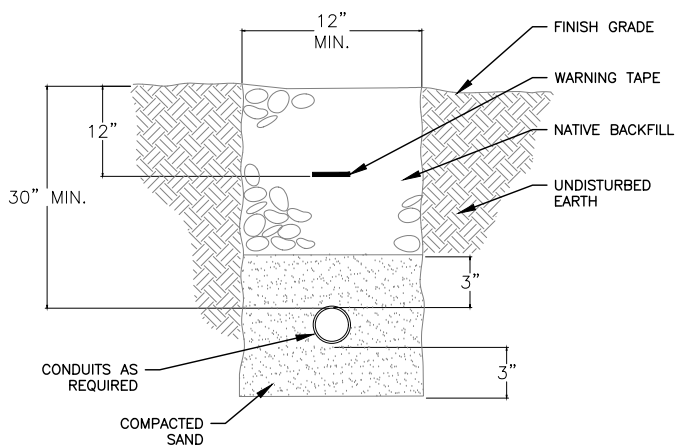
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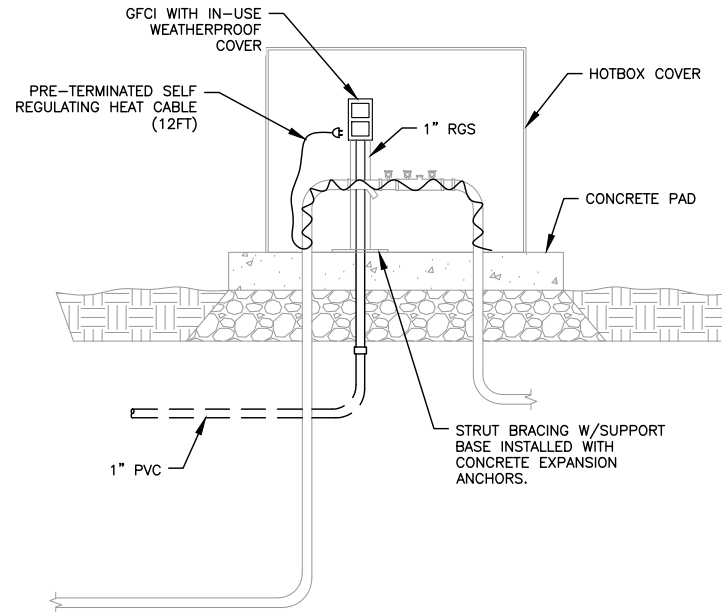
1 LIGHTING SWITCH CONTROL DETAIL
SCALE: NONE



3 CONDUIT TRANSITION
SCALE: NONE



2 TYPICAL CONDUIT TRENCH
SCALE: NONE



4 HOTBOX GFCI DETAIL
SCALE: NONE



NO.	REVISION	BY	DATE
		MEW	
		AAB	
		XX	

DESIGNED BY: MEW
DRAWN BY: AAB
REV: XX

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

ELECTRICAL DETAILS

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PROJECT NO: 1477B
DATE: 5/2023

CITY OF STEVENSON
FAIRGROUNDS PUMP
STATION IMPROVEMENTS



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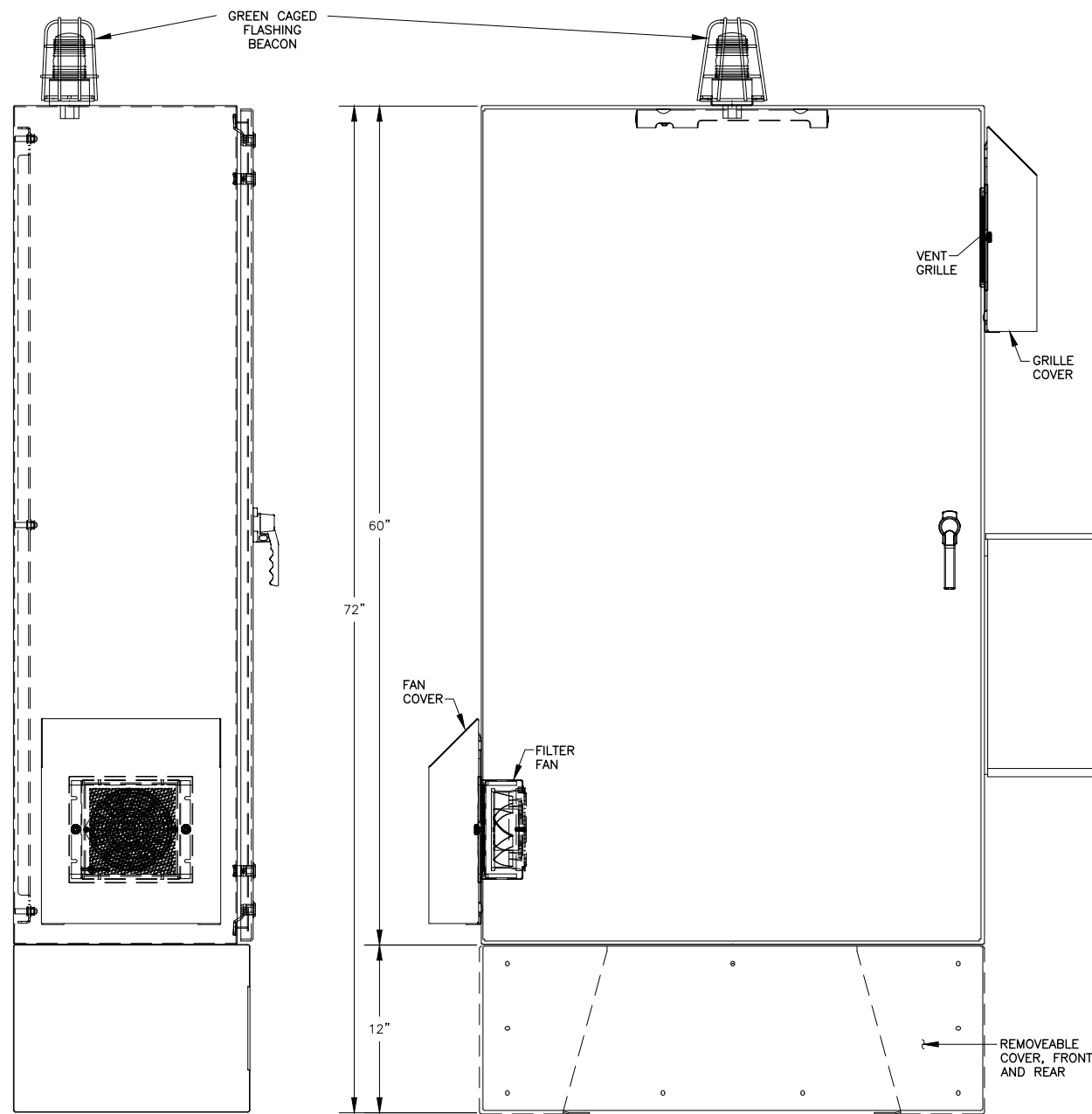
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DRAWING NO:
E6
26 OF 32



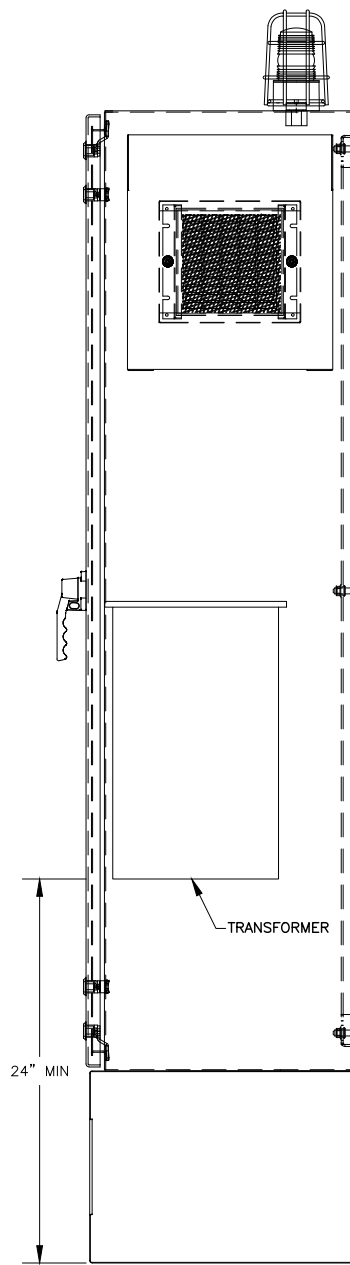
GENERAL NOTES:

- PANEL LAYOUT IS CONCEPTUAL AND FINALIZED LAYOUT SHALL BE PROVIDED BY MANUFACTURER PER UL-508 REQUIREMENTS.
- PANEL SHALL BE STAINLESS STEEL, NEMA 4, MINIMUM 60"H X 36"W X 16"D.

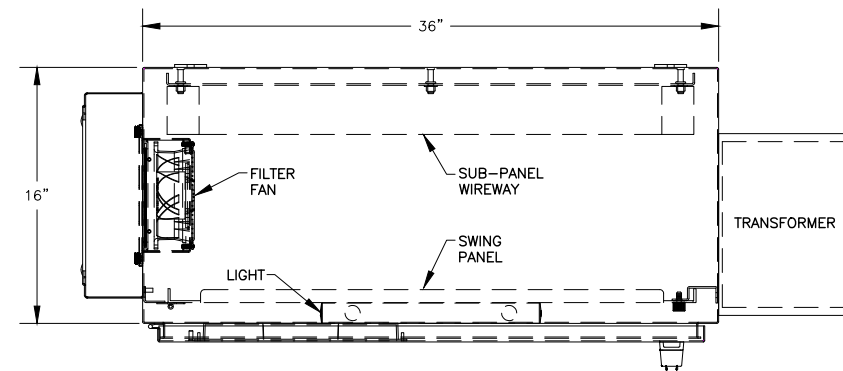


LEFT SIDE
NTS

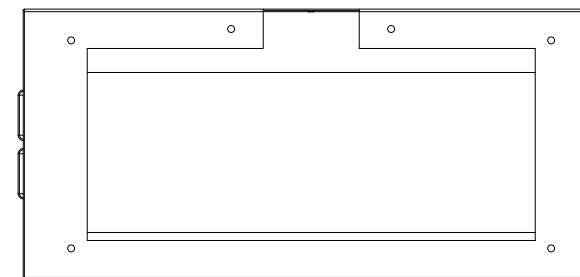
ELEVATION
NTS



RIGHT SIDE
NTS



TOP VIEW
NTS



BOTTOM
NTS

1 FAIRGROUND CONTROL PANEL ENCLOSURE
NTS

NO.	REVISION	BY	DATE

DESIGNED BY: MEW
 DRAWN BY: AAB
 REV: XX

0" = 1" INCH
 1" = 1" INCH AT FULL SCALE.
 IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

CONTROL PANEL
ENCLOSURE



PROJECT NO: 1477B
 DATE: 5/2023

CITY OF STEVENSON
 FAIRGROUNDS PUMP
 STATION IMPROVEMENTS



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DRAWING NO:

11

27 OF 32



DATE	
BY	
REVISION	
NO.	
DESIGNED BY:	MEW
DRAWN BY:	AAB
REV:	XX

CONTROL PANEL LAYOUT



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DATE: 5/2023

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STATION IMPROVEMENTS



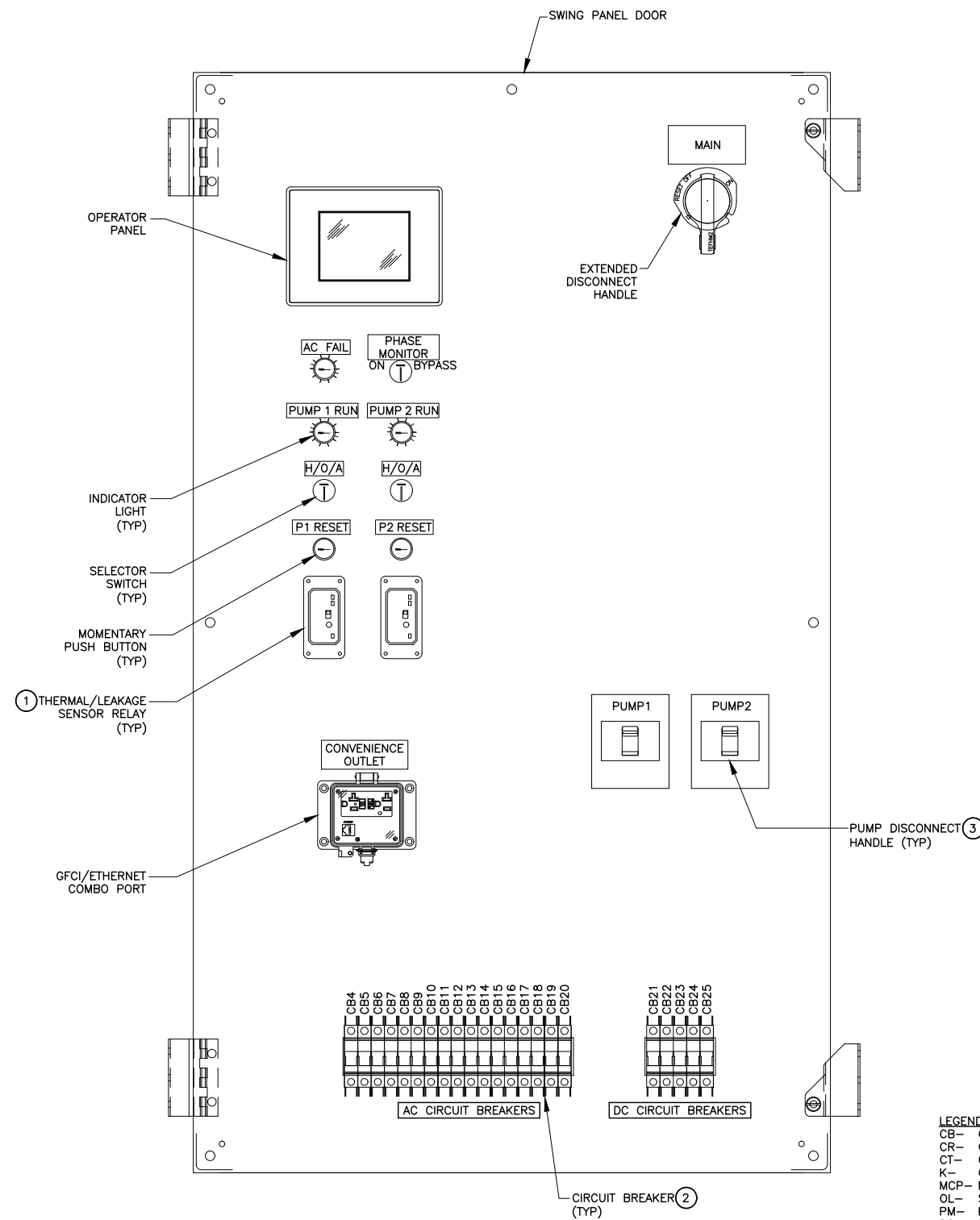
DRAWING NO:
12
28 OF 32

GENERAL NOTES:

- PANEL LAYOUT IS CONCEPTUAL AND FINALIZED LAYOUT SHALL BE PROVIDED BY MANUFACTURER PER UL-508 REQUIREMENTS.

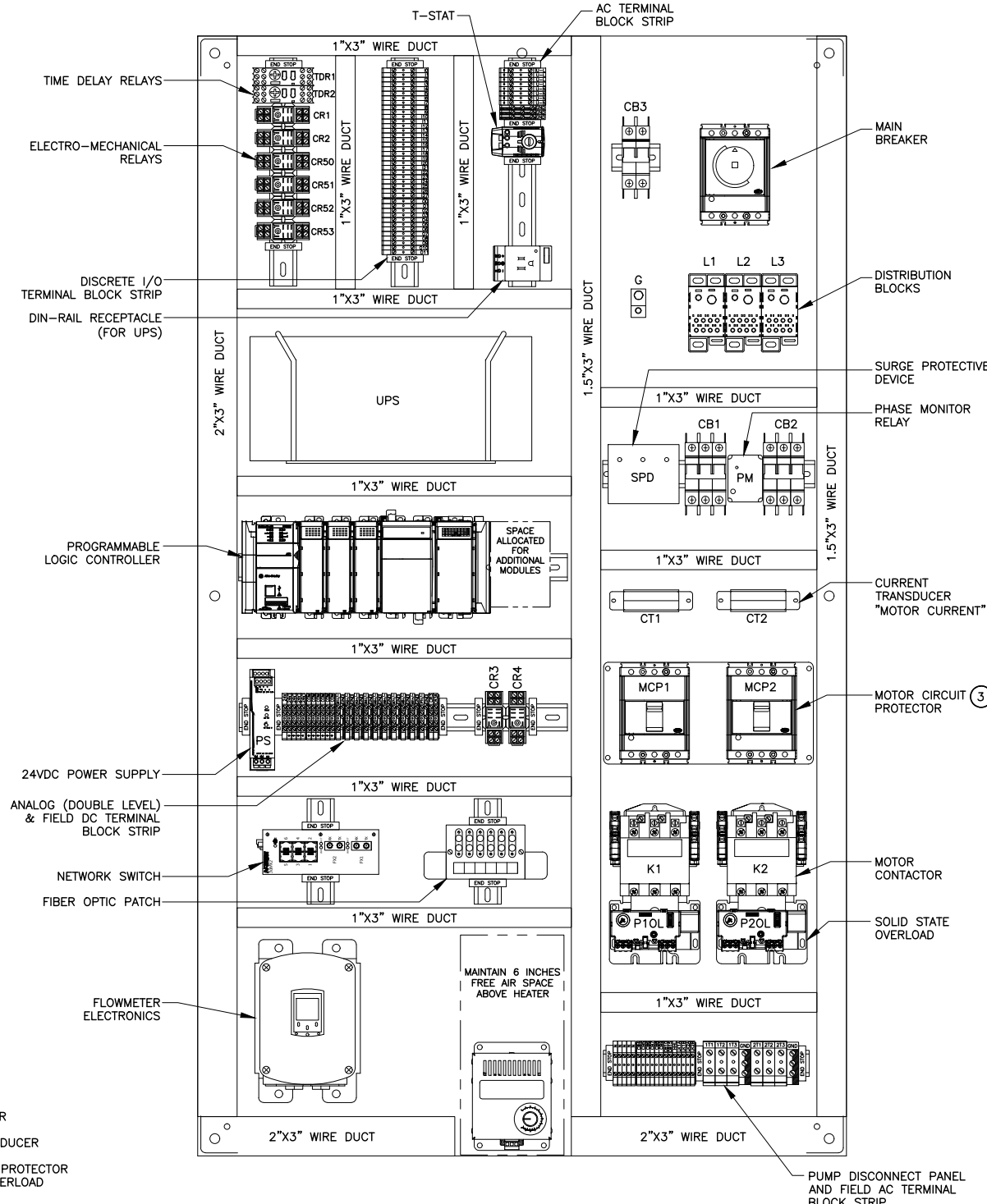
KEY NOTES:

- THERMAL/LEAKAGE SENSOR RELAY FOR FLYGT PUMPS.
- INSTALL CIRCUIT BREAKERS FROM REAR OF SWING PANEL, ONLY ALLOWING ACCESS TO HANDLE. INCLUDE CB NUMBERS AND LABEL WHAT EACH CB FEEDS.
- MOUNT PUMP DISCONNECTS OFF THE BACKPAN SO THAT THE HANDLES ARE "FINGER-SAFE", ONLY ALLOWING ACCESS TO HANDLE.



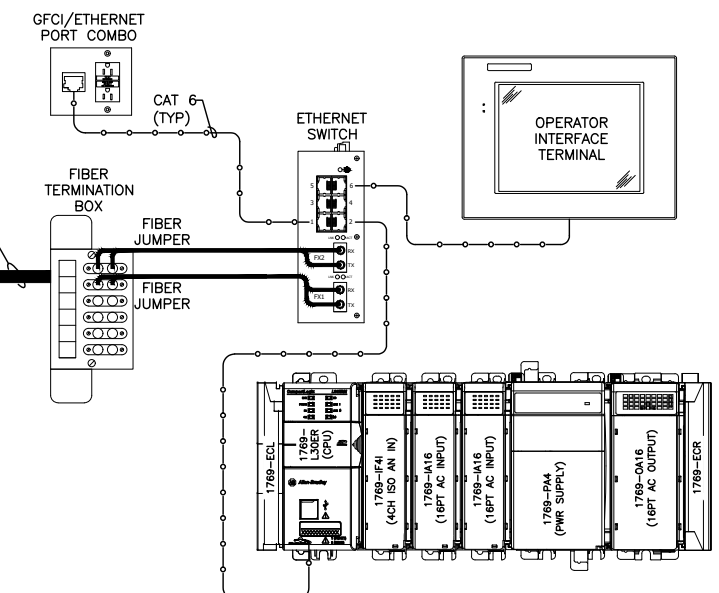
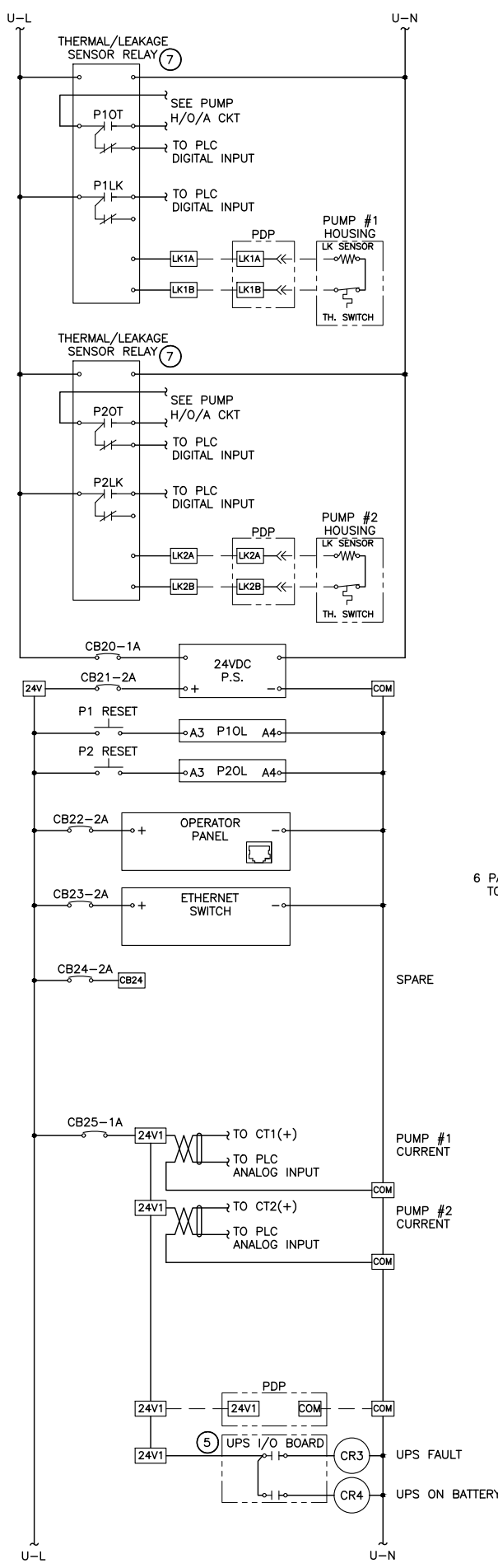
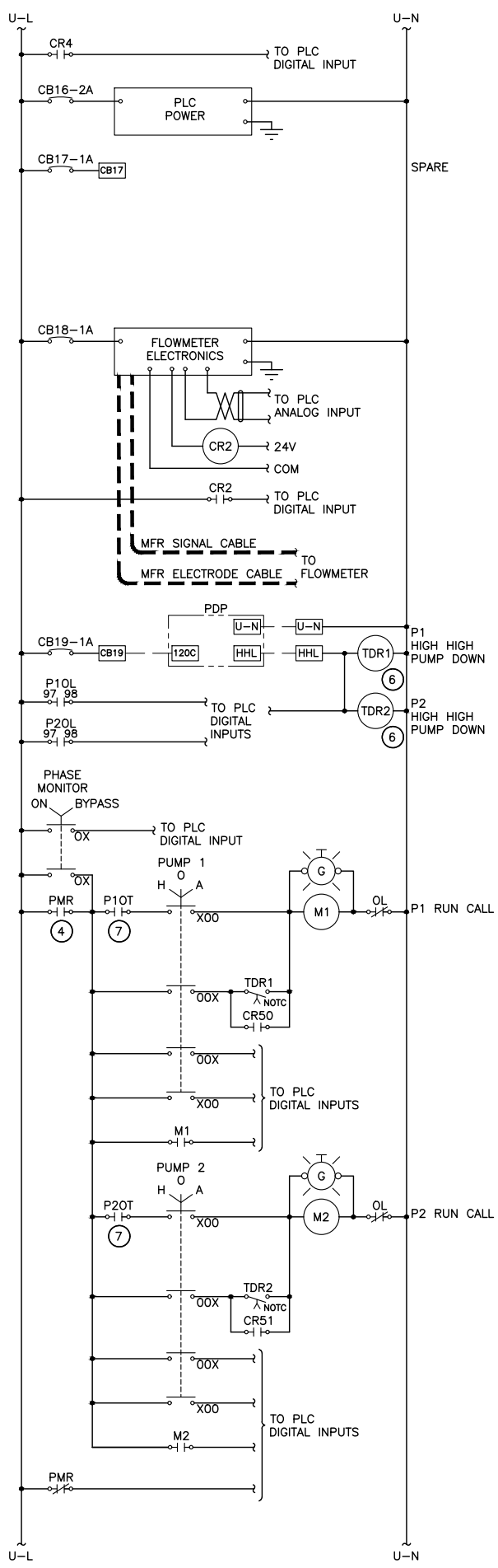
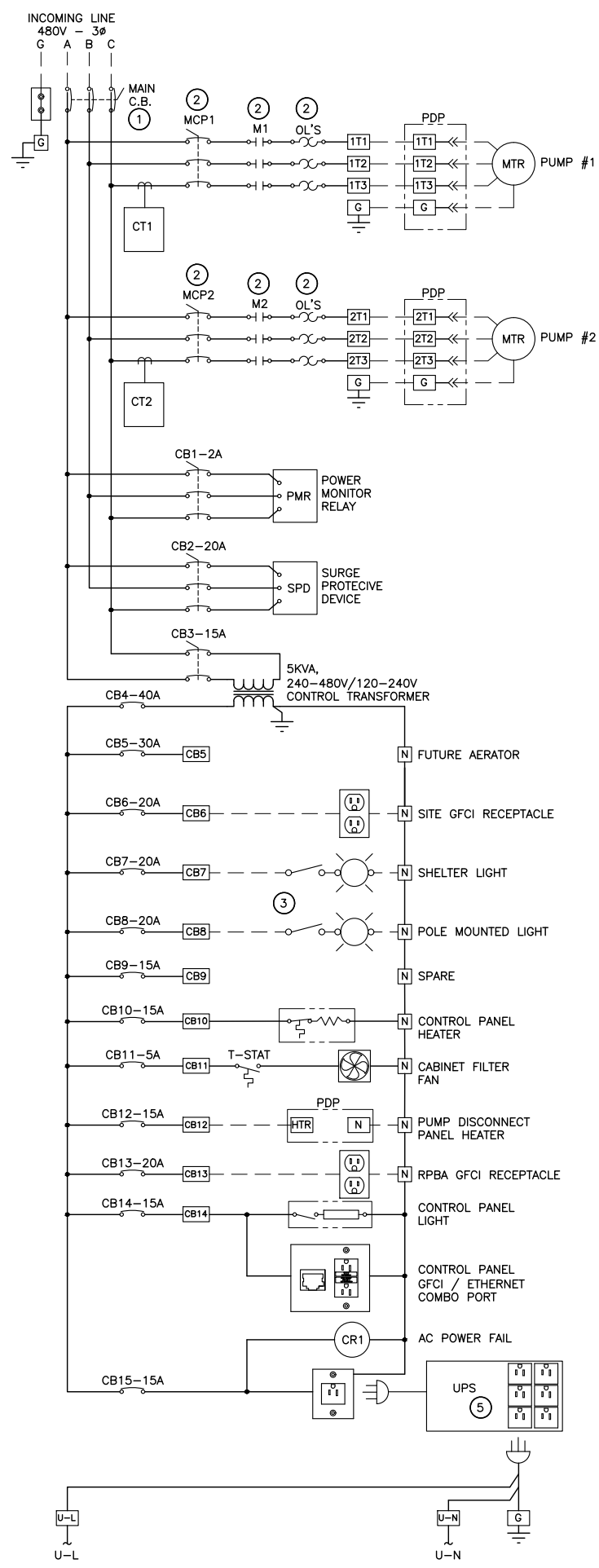
1 SWING PANEL FRONT VIEW
NTS

LEGEND
 CB- CIRCUIT BREAKER
 CR- CONTROL RELAY
 CT- CURRENT TRANSDUCER
 K- CONTACTOR
 MCP- MOTOR CIRCUIT PROTECTOR
 OL- SOLID STATE OVERLOAD
 PM- PHASE MONITOR
 PS- POWER SUPPLY
 SPD- SURGE PROTECTOR



2 SUB-PANEL FRONT VIEW
NTS

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 OR CCB #196597 WA #INDUS1880K9
 AK #1018436
 PROJECT#: 19.29.04



- KEY NOTES:**
- MAIN BREAKER TO BE SIZED PER NEC BASED ON PROJECT PUMP SIZES AND MISCELLANEOUS POWER LOADS.
 - SIZE MOTOR CIRCUIT PROTECTOR, MOTOR STARTER AND SOLID STATE OVERLOADS ON 'FLA' OF PROJECT PUMPS.
 - SEE LIGHT SWITCH DETAIL ON E6.
 - PMR CONTACT IS CLOSED IN "NORMAL" CONDITION, OPENING ON FAULT.
 - INSTALL DRY CONTACT I/O CARD IN THE UPS TO PROVIDE "UPS FAULT" AND "UPS ON BATTERY" SIGNALS.
 - TDR'S TO BE SET 5 SECONDS APART TO STAGGER PUMP STARTS ON HIGH HIGH LEVEL (BACK-UP MODE) PUMP DOWN.
 - THERMAL/LEAKAGE SENSOR CONNECTION FOR FLYGT PUMPS. THERMAL CONTACT CLOSED IN "NORMAL" CONDITION, OPENING ON FAULT. LEAK CONTACT OPEN IN "NORMAL" CONDITION.

1 CONTROL PANEL & NETWORK DIAGRAM
NTS

2 COMMUNICATION BLOCK DIAGRAM
NTS



NO.	REVISION	DATE	BY

DESIGNED BY: MEW
DRAWN BY: AAB
SCALE: 1" = 1'-0"
ONE INCH AT FULL SCALE.
IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

CONTROL PANEL
POWER
DISTRIBUTION AND
NETWORK DIAGRAM

wallis engineering
PROJECT NO: 1477B
DATE: 5/2023

CITY OF STEVENSON
FAIRGROUNDS PUMP
STATION IMPROVEMENTS



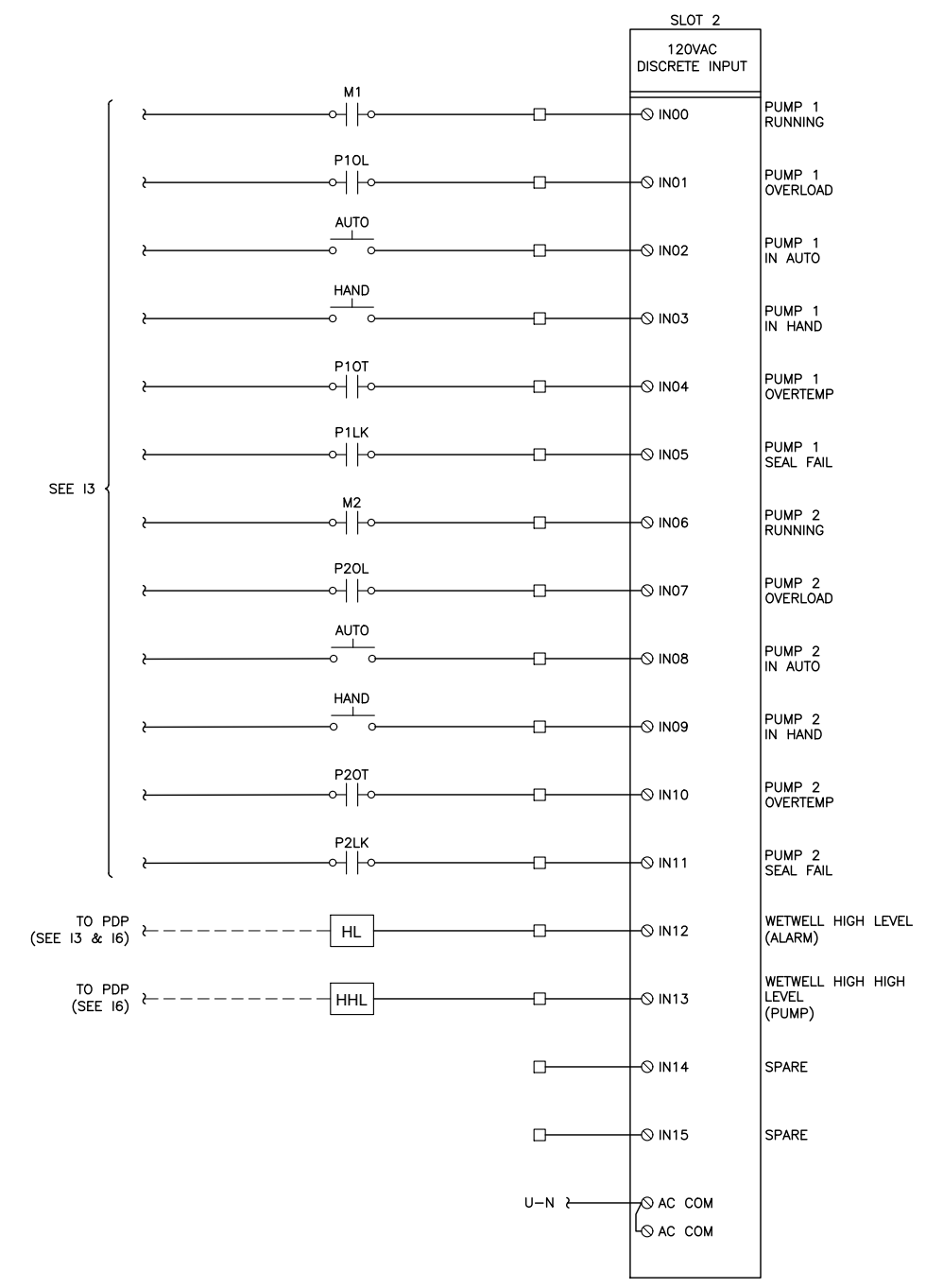
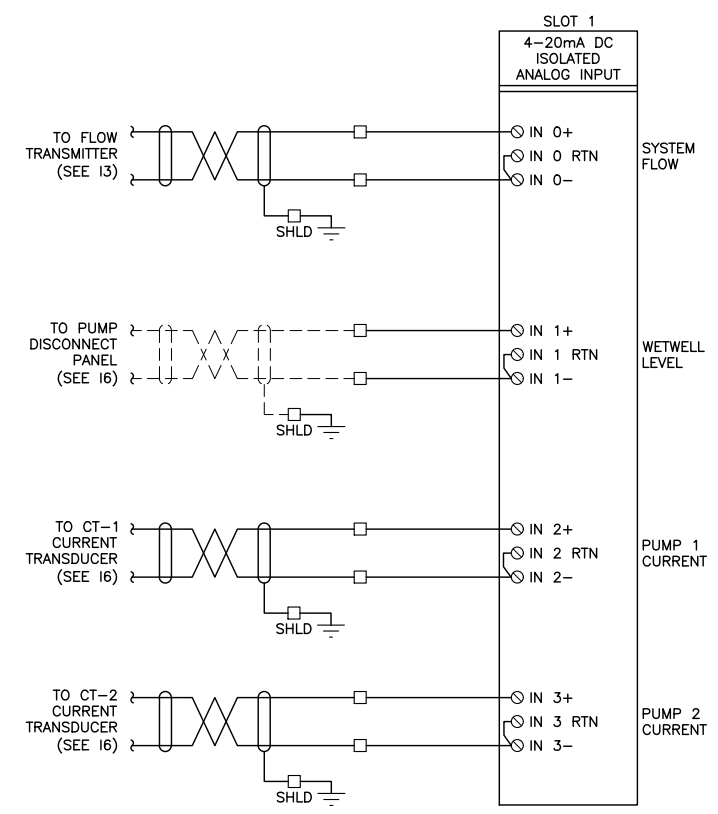
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e-mail: is@industrialsystems-inc.com
CR CCB #196597 WA #INDUSSI88009
AK #1018436
PROJECT#: 19.29.04

DRAWING NO:

13

29 OF 32



NO.	REVISION	BY	DATE

DESIGNED BY: MEW
 DRAWN BY: AAB
 REV: XX
 ONE INCH AT FULL SCALE.
 ONE INCH AT FULL SCALE.
 IF NOT ONE INCH ADJUST
 SCALE ACCORDINGLY

**CONTROL PANEL
PLC IO WIRING I**

wallis
*engineering

PROJECT NO: 1477B
DATE: 5/2023

**CITY OF STEVENSON
FAIRGROUNDS PUMP
STATION IMPROVEMENTS**



**Industrial
Systems INC**

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AK #1018436
PROJECT#: 19.29.04

DRAWING NO:

14

30 OF 32



DATE	
BY	
REVISION	
NO.	
DESIGNED BY:	MEW
CHECKED BY:	AAB
REV:	XX

CONTROL PANEL
PLC IO WIRING II

wallis
*engineering

PROJECT NO: 1477B
DATE: 5/2023

CITY OF STEVENSON
FAIRGROUNDS PUMP
STATION IMPROVEMENTS



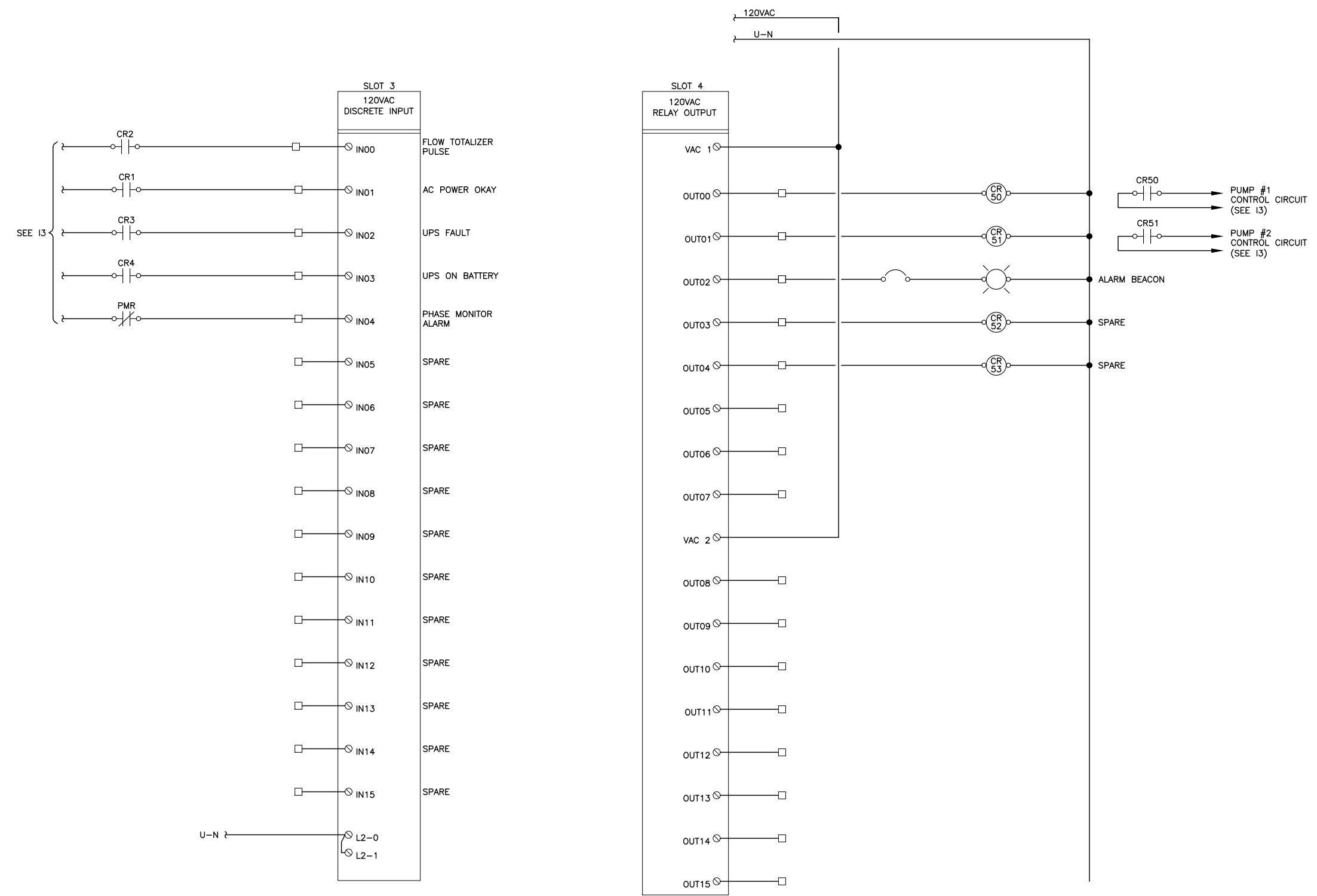
DRAWING NO:

15

31 OF 32

Industrial Systems INC

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AK #1018436
PROJECT#: 19.29.04





DATE	
BY	
REVISION	
NO.	
DESIGNED BY:	MEW
DRAWN BY:	AAB
REV:	XX

**PUMP DISCONNECT
PANEL LAYOUT
ELEVATION**



PROJECT NO: 1477B
DATE: 5/2023

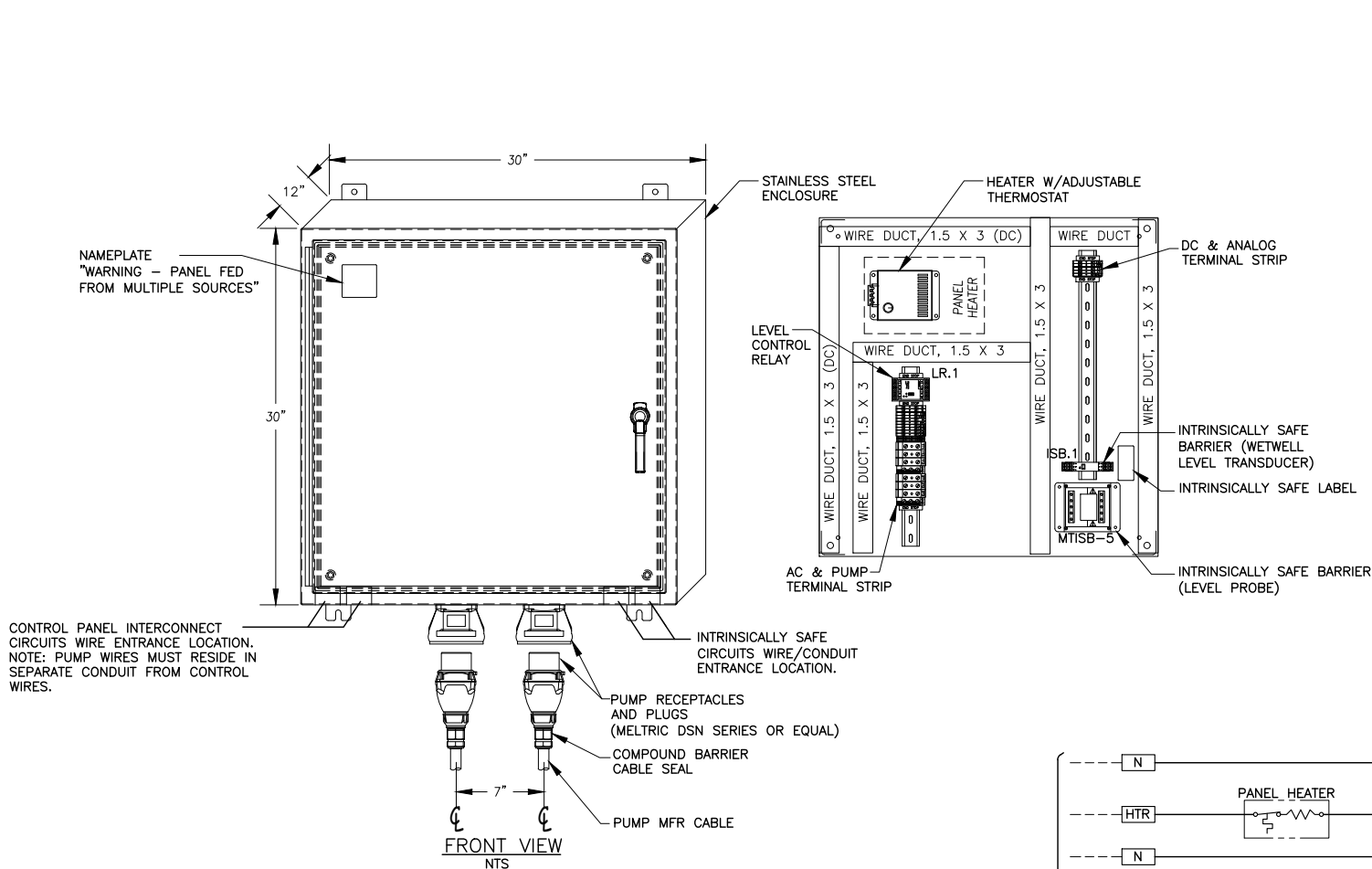
**CITY OF STEVENSON
FAIRGROUNDS PUMP
STATION IMPROVEMENTS**



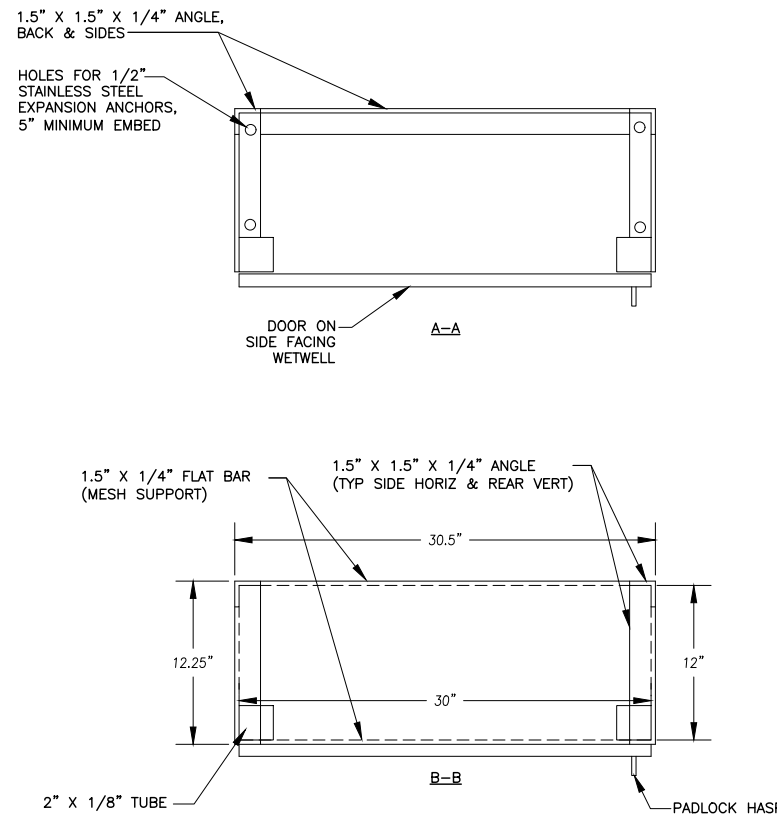
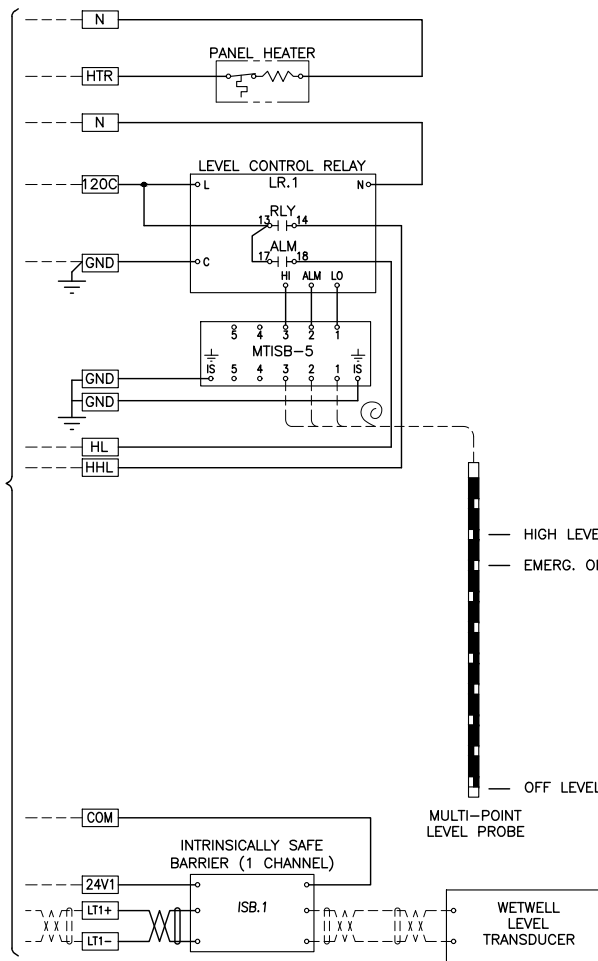
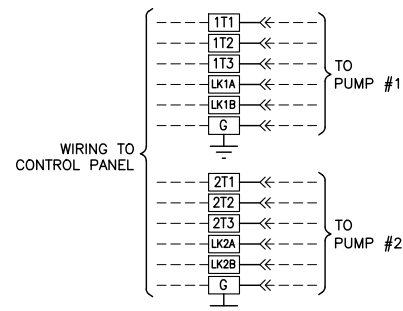
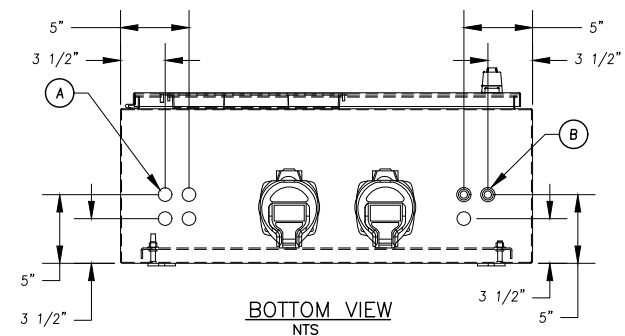
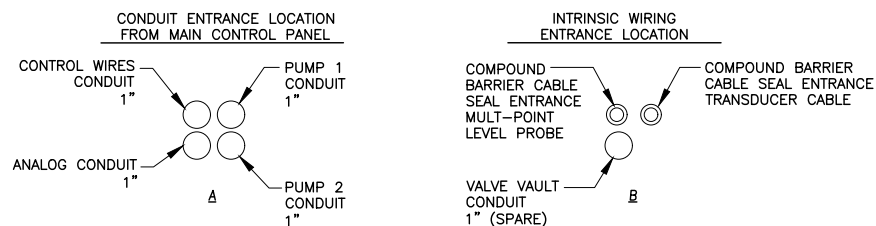
DRAWING NO:

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32 OF 32

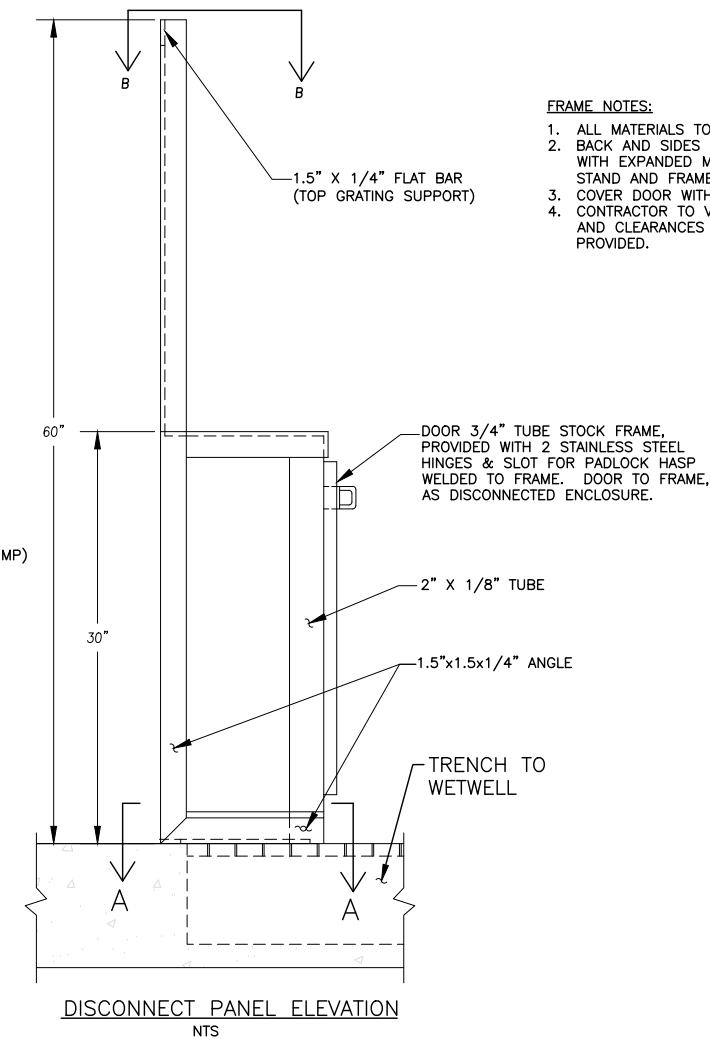


NOTE: ALL CONDUITS MUST BE CONTINUOUS RGS FROM BELOW GRADE TO CONTROL PANEL. REFERENCE NEC ARTICLE 501.15 (B2) EXCEPTION NO. 1.



FRAME NOTES:

1. ALL MATERIALS TO BE STAINLESS STEEL.
2. BACK AND SIDES OF STAND TO BE ENGAGED WITH EXPANDED METAL MESH, WELDED TO STAND AND FRAME (1/2"x13MM).
3. COVER DOOR WITH SAME MESH AS STAND.
4. CONTRACTOR TO VERIFY ALL DIMENSIONS AND CLEARANCES WITH ACTUAL PANEL BEING PROVIDED.



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