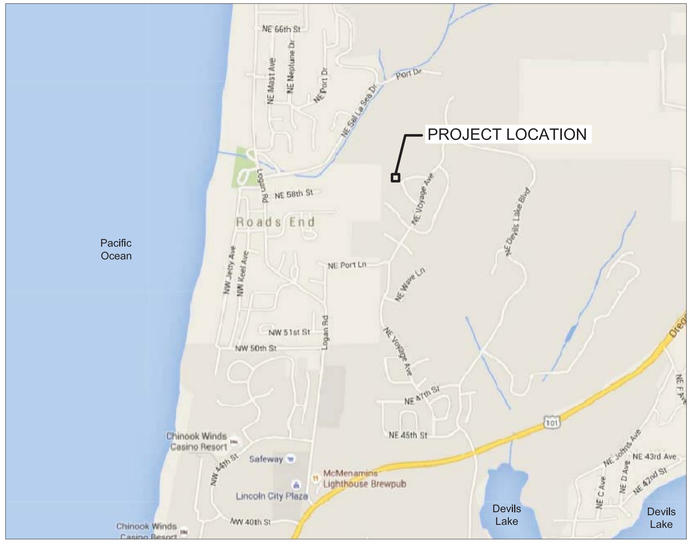
VOYAGE PUMP STATION IMPROVEMENTS

LINCOLN CITY, OREGON

VOYAGE PUMP STATION DESIGN DATA	
PUMP STATION	
LOCATION:	NORTHERN AREA OF CITY EAST OF ROADS END
TYPE:	DUPLEX SUBMERSIBLE
PUMP TYPE:	CONSTANT SPEED, CENTRIFUGAL NON-CLOG
CAPACITY/ OPERATION POINT:	EST. 285 GPM AT 57 FT TDH EACH PUMP
PUMP HP (EACH):	7.2 HP
LEVEL CONTROL TYPE:	PRIMARY-PRESSURE TRANSDUCER, SECONDARY-LIQUID LEVEL SENSOR
OVERFLOW POINT:	PROPOSED WET WELL HATCH, EL=133.5'
OVERFLOW DISCHARGE:	DOWN GRADIENT TO WOODED NATURAL AREA
FEMA 100-YR FLOOD ELV.	N/A
TIME TO OVERFLOW:	166 MIN. AT 12 GPM AVERAGE FLOW RATE FROM PUMP ON LEVEL
AUXILIARY POWER TYPE:	CITY DIESEL GENERATOR, PORTABLE, BROUGHT TO SITE
LOCATION:	RECEPTACLE ON SITE AT EX. CONDO BUILDING, NORTH OF PUMP STATION
OUTPUT:	VARIABLE KW TO SUIT PS, 60 A PLUG
FUEL TANK CAPACITY:	CITY WILL REFILL AS NEEDED TO RUN PORTABLE EG CONTINUOUSLY
TRANSFER SWITCH:	MANUAL
ALARM TELEMETRY TYPE:	CELLULAR NETWORK COMMUNICATION
EPA RELIABILITY CLASS:	1
FORCE MAIN	
EXISTING LENGTH, TYPE:	594 LF PVC, 6-INCH
PROPOSED LENGTH, TYPE:	615 LF PVC, 6-INCH
VELOCITY AT NEW PUMPING RATE:	3.2 FT/SEC AT EST. 285 GPM FLOW RATE
PROFILE:	CONTINUOUSLY ASCENDING
DISCHARGE MANHOLE (EXIST):	EX. MANHOLE EAST OF PUMP STATION, MANHOLE #12 IN NE VOYAGE AVE.
AIR RELEASE VALVES:	NONE
VACUUM RELEASE VALVES:	NONE
AVERAGE DETENTION AT NEW PUMPING RATE:	3.3 MIN. AT EST. 285 GPM FLOW RATE
SULFIDE CONTROL SYSTEM:	NONE



SITE VICINITY MAP
SCALE: NONE

INDEX TO DRAWINGS

GENERAL NOTES

1. CITY MUST PRE-APPROVE ANY SIGNIFICANT DEVIATION FROM THESE DEQ-APPROVED CONSTRUCTION PLANS.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT VERSIONS OF THE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION (OSS) AND OREGON STANDARD DRAWINGS (OSD) PUBLISHED JOINTLY BY ODOT AND OREGON CHAPTER OF AMERICAN PUBLIC WORKS ASSOCIATION, AND ALL APPLICABLE LINCOLN CITY "MATERIALS AND CONSTRUCTION STANDARDS" AND THE MUNICIPAL CODE OF ORDINANCES. THE CITY ENGINEER WILL DETERMINE ANY PROJECT-SPECIFIC REQUIREMENTS THAT MAY DEVIATE FROM THE REFERENCED STANDARDS IF APPLICABLE AND DETERMINE THE ORDER OF PRECEDENCE IN THE CASE OF CONFLICTING REQUIREMENTS. UNLESS OTHERWISE DIRECTED, THE MORE STRINGENT REQUIREMENT WILL CONTROL.
3. CONTRACTOR SHALL CALL UTILITY NOTIFICATION CENTER (811) PRIOR TO CONSTRUCTION.
4. NO WORK SHALL BE CONDUCTED DURING WEEKENDS OR OUTSIDE OF NORMAL CITY WORK HOURS, UNLESS PRIOR PERMISSION IS OBTAINED.
5. CONTRACTOR SHALL PROVIDE 48 HOUR NOTIFICATION TO THE CITY PUBLIC WORKS DEPARTMENT PROJECT MANAGER OR DESIGNEE PRIOR TO THE START OF CONSTRUCTION.
6. SEE TOPOGRAPHIC SURVEY OF SITE FOR HORIZONTAL AND VERTICAL DATUM INFORMATION.
7. IF REQUIRED, CONSTRUCTION SURVEY STAKING SHALL BE PROVIDED BY THE CONTRACTOR.
8. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ACCURATE AS-BUILT RECORD OF INSTALLED WORK AND FOUND CONDITIONS AT THE END OF CONSTRUCTION.
9. LOCATION OF EXISTING UTILITIES AND CONDUITS IS APPROXIMATE ONLY. THE CONTRACTOR SHALL FIELD LOCATE (POTHOLE IF NEEDED) AND VERIFY EXISTING LOCATION AND DEPTH OF ALL UTILITIES AND CONDUITS BEFORE EXCAVATION WORK. CONTRACTOR WILL BE HELD FULLY LIABLE FOR ANY DAMAGE REPAIR TO EXISTING UNDERGROUND FACILITIES.
10. THE CONTRACTOR SHALL THOROUGHLY REVIEW THESE DOCUMENTS FOR CONFLICTS WITH EXISTING AND PROPOSED NEW UTILITIES. NOTIFY THE CITY IMMEDIATELY OF ANY POTENTIAL CONFLICTS. NEITHER THE CITY OR THE CITY'S REPRESENTATIVES/DESIGN CONSULTANTS SHALL BE RESPONSIBLE FOR ADDITIONAL CONSTRUCTION COSTS/DELAYS ASSOCIATED WITH POTENTIAL CONFLICTS THAT ARE REFLECTED ON THESE DOCUMENTS.
11. CONTRACTOR SHALL REPORT ALL DAMAGE TO EXISTING FACILITIES IMMEDIATELY TO THE CITY.
12. THE LIMITS OF CONSTRUCTION SHALL BE THE PUMP STATION AREA OR AS DIRECTED BY THE CITY. ALL DISTURBED AREAS SHALL BE RESEEDED OR RESTORED ACCORDING TO PLANS OR SPECIFICATIONS. MAINTAIN ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES IN PLACE UNTIL DISTURBED AREAS ARE STABILIZED TO PREVENT EROSION.
13. AT THE END OF EACH WORKDAY, THE CONTRACTOR SHALL CLEAN THE PROJECT AREA AND LEAVE IT IN A NEAT AND SECURED MANNER. UPON COMPLETION, THE CONTRACTOR SHALL LEAVE THE PROJECT AREA FREE OF DEBRIS AND UNUSED MATERIAL.
14. THE CONTRACTOR SHALL PRUNE ALL VEGETATION WITHIN THE PUMP STATION SITE AS NECESSARY AWAY AND UP FROM WORK AREA AND PERFORM ANY ROOT REMOVAL AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PROTECT ALL EXISTING LANDSCAPING THAT IS TO REMAIN.
15. CONTRACTOR SHALL NOTIFY OTHER PUBLIC UTILITIES (GAS, PHONE, ELECTRIC, CABLE TV) TO MAKE ALL NECESSARY ADJUSTMENTS TO RESPECTIVE FACILITIES ALL AT CONTRACTOR EXPENSE.
16. THE TERM "CITY" OR "OWNER" SHALL MEAN THE CITY OF LINCOLN CITY, PUBLIC WORKS DEPARTMENT. "ENGINEER" SHALL MEAN THE CITY ENGINEER OR PUBLIC WORKS DIRECTOR OR THEIR DESIGNATED REPRESENTATIVE.
17. NOTICE TO EXCAVATORS: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503) 232-1987.

811 Know what's **below.** **Call** before you dig.

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Vancouver, WA 98663
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REGISTERED PROFESSIONAL ENGINEER
13475
George Drake
OREGON
JAN. 15, 1987
GEORGE L. DRAKE
EXPIRES: 12/31/17

VOYAGE PUMP STATION IMPROVEMENTS
TITLE SHEET

City of Lincoln City
801 SW HWY 101
LINCOLN CITY, OR. 97367
(541) 996-2151 FAX (541) 994-4881

NO.	REVISION	BY	DATE	CHK

PROJECT: 70970.000
DRAWN: PBS
CHECKED: GD
DATE: AUGUST 16, 2016

DWG NO. C0
SHEET NO. 1 OF 15

ISSUED FOR CONSTRUCTION AUGUST 16, 2016

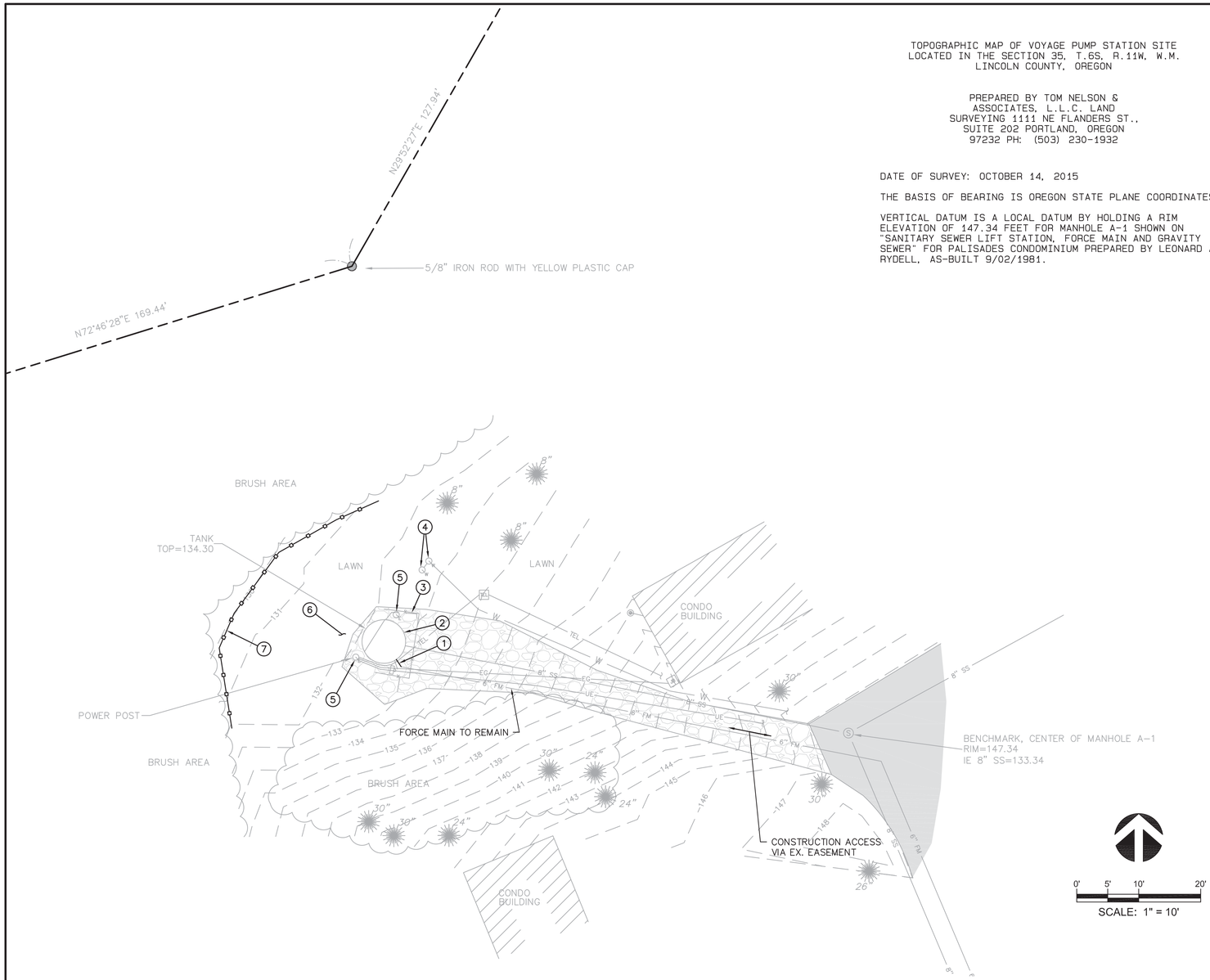
TOPOGRAPHIC MAP OF VOYAGE PUMP STATION SITE
LOCATED IN THE SECTION 35, T.6S, R.11W, W.M.
LINCOLN COUNTY, OREGON

PREPARED BY TOM NELSON &
ASSOCIATES, L.L.C. LAND
SURVEYING 1111 NE FLANDERS ST.,
SUITE 202 PORTLAND, OREGON
97232 PH: (503) 230-1932

DATE OF SURVEY: OCTOBER 14, 2015

THE BASIS OF BEARING IS OREGON STATE PLANE COORDINATES.

VERTICAL DATUM IS A LOCAL DATUM BY HOLDING A RIM ELEVATION OF 147.34 FEET FOR MANHOLE A-1 SHOWN ON "SANITARY SEWER LIFT STATION, FORCE MAIN AND GRAVITY SEWER" FOR PALISADES CONDOMINIUM PREPARED BY LEONARD A. RYDELL, AS-BUILT 9/02/1981.

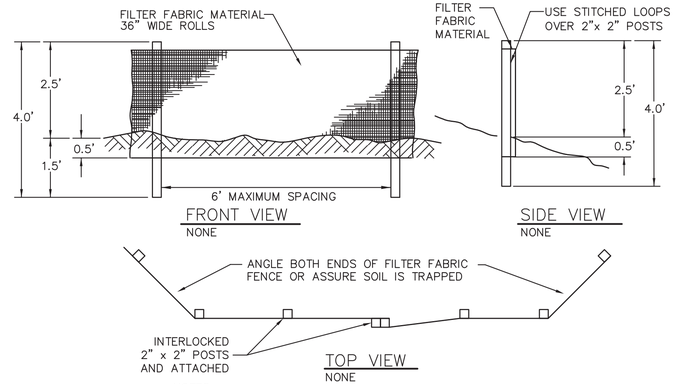


LEGEND

- EXISTING FOUND MONUMENT
- EXISTING POWER METER
- EXISTING POWER JUNCTION BOX
- EXISTING WATER METER
- EXISTING TELEPHONE RISER
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORMWATER CLEANOUT
- EXISTING CONIFEROUS TREE WITH SIZE
- SUBJECT PROPERTY
- SILT FENCE OR EQUAL SEDIMENT BARRIER
- EXISTING FORCE MAIN
- EXISTING FENCELINE
- EXISTING CONTOUR
- EXISTING SANITARY SEWER LINE
- EXISTING BUILDING
- EXISTING GRAVEL SURFACE
- EXISTING PAVEMENT SURFACE

DEMOLITION KEYNOTES

1. ABANDON EXISTING FORCE MAIN IN PLACE. PLUG END.
2. REMOVE EXISTING PUMP STATION DRY PIT AND EQUIPMENT, EXISTING WET WELL TO REMAIN.
   NOTE: REFER TO GENERAL CONSTRUCTION SEQUENCE ON DWG C2; COORDINATE PUMP STATION DEMOLITION WITH OTHER WORK AND FLOW BYPASS.
3. REMOVE AND SALVAGE WOODEN SCREEN FOR REUSE.
4. PROTECT EXISTING WATER METER AND BACKFLOW PREVENTOR TO REMAIN.
5. PROTECT EXISTING ELECTRICAL AND COMPONENTS TO REMAIN OR TO BE RELOCATED.
6. DETERMINE EXISTING UNDERGROUND UTILITY AND CONDUIT CONFLICTS WITH VALVE VAULT INSTALLATION. RELOCATE/REMOVE AS REQUIRED TO CLEAR EXCAVATION AREA.
7. INSTALL SEDIMENT BARRIER PRIOR TO DEMOLITION WORK OR CONSTRUCTION.



NOTES:
1. BURY BOTTOM OF FILTER FABRIC 6" MIN. VERTICALLY BELOW GRADE.
2. 2" x 2" FIR, PINE, OR STEEL FENCE POSTS.
3. STITCHED LOOPS TO BE INSTALLED UPHILL SIDE OF SLOPE.
4. COMPACT NATIVE FILL IN ALL AREAS OF FILTER FABRIC TRENCH.

SEDIMENT FENCE

SCALE: NONE

EROSION PREVENTION & SEDIMENT CONTROL STANDARD NOTES

1. CITY MUST PRE-APPROVE ANY MAJOR DEVIATION FROM THIS PLAN.
2. INSTALL SILT FENCE AROUND LOWER SIDES OF EXISTING PUMP STATION, EXISTING MANHOLES AND NEW CONSTRUCTION AREA. CONTRACTOR SHALL KEEP THE STREET CLEAN FROM DIRT AND DEBRIS DURING CONSTRUCTION ACTIVITIES
3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE AND IN WORKING CONDITION PRIOR TO ANY LAND DISTURBING ACTIVITY INCLUDING CLEARING OR GRADING. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE APPROVED BY THE CITY EROSION SPECIALIST PRIOR TO THE COMMENCEMENT OF WORK. AN ON-SITE INSPECTION SHALL BE REQUESTED WHEN EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE AND PRIOR TO COMMENCEMENT OF WORK. ONCE APPROVED, THE SITE MUST BE MAINTAINED THROUGH THE LIFE OF THE PROJECT, AS SHOWN ON THE PLANS.
4. PRIOR TO ANY SITE EXCAVATION, ALL STORM DRAIN INLETS SHALL BE PROTECTED DOWN SLOPE FROM ANY DISTURBED OR CONSTRUCTION AREAS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAINAGE SYSTEM PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREAS. CLEAN FILTER FABRIC AS NECESSARY TO MAINTAIN DRAINAGE. REMOVE FILTER AND CLEAN CATCH BASINS FOLLOWING COMPLETION OF SITE WORK.
5. NEWLY CONSTRUCTED OR MODIFIED INLETS AND CATCH BASINS SHALL BE PROTECTED FROM SEDIMENT IMMEDIATELY UPON INSTALLATION.
6. THE CONTRACTOR SHALL NOT ALLOW SEDIMENT OR DEBRIS TO ENTER NEW OR EXISTING PIPES, CATCH BASINS OR INFILTRATION SYSTEMS. IF THIS OCCURS, THE CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT FROM THE CATCH BASINS AND STORM PIPES IMMEDIATELY. FINAL ACCEPTANCE WILL NOT BE ISSUED BY THE CITY UNTIL THIS OCCURS.
7. ALL EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY THE APPROPRIATE BEST MANAGEMENT PRACTICES (BMPS). FROM OCTOBER 1 TO APRIL 30, NO SOILS SHALL BE EXPOSED AND UNWORKED FOR MORE THAN TWO (2) DAYS. FROM MAY 1 TO SEPTEMBER 30, NO SOILS SHALL BE EXPOSED AND UNWORKED FOR MORE THAN SEVEN (7) DAYS.
8. SOIL STOCKPILES SHALL BE STABILIZED FROM EROSION, PROTECTED WITH SEDIMENT TRAPPING MEASURES, AND WHEN POSSIBLE, BE LOCATED AWAY FROM STORM DRAIN INLETS, WATER WAYS AND DRAINAGE CHANNELS.
9. IF THE BMPS APPLIED TO A SITE ARE INSUFFICIENT TO PREVENT SEDIMENT FROM REACHING WATER BODIES, ADJACENT PROPERTIES, STORM FACILITIES OR PUBLIC RIGHT-OF-WAY, THEN THE CITY SHALL REQUIRE ADDITIONAL BMPS.
10. IF THE CITY INSPECTOR OR ENGINEER(S) HAS EVIDENCE OF POOR CONSTRUCTION PRACTICES OR IMPROPER EROSION PREVENTION BMPS, CITATIONS AND/OR A STOP WORK ORDER SHALL BE ISSUED UNTIL PROPER MEASURES HAVE BEEN TAKEN AND APPROVED BY THE CITY OF LINCOLN CITY.
11. PAVEMENT SWEEPING AND SHOVELING IS REQUIRED. WASHING THE PAVEMENT INTO THE STORM SYSTEM IS NOT PERMITTED.
12. IF SEDIMENT, MUD OR DEBRIS IS TRANSPORTED ONTO A PAVED SURFACE OR ROADWAY, THE PAVED SURFACE OR ROADWAY SHALL BE THOROUGHLY CLEANED WITH HIGH EFFICIENCY STREET SWEEPERS AT THE END OF EACH WORKDAY, OR MORE OFTEN IF NECESSARY. SIGNIFICANT SOIL DEPOSITS SHALL BE REMOVED FROM ROADS BY SHOVELING AND SWEEPING. STREET WASHING IS NOT ALLOWED UNLESS APPROVED BY THE ENGINEER AND ONLY AFTER SEDIMENT IS REMOVED IN THE MANNER DESCRIBED ABOVE.
13. INSTALL SEDIMENT FENCE PER PLAN PRIOR TO CONSTRUCTION AND/OR EXCAVATION TO PREVENT SILT INTRUSION INTO R/W AND PERVIOUS CONCRETE SIDEWALK.
14. PERMEABLE PAVEMENT AREAS SHALL BE PROTECTED FROM SEDIMENT DURING AND AFTER INSTALLATION.
15. ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS SHALL BE REGULARLY INSPECTED AND MAINTAINED TO ENSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.
16. THE CONTRACTOR SHALL MAINTAIN AND HAVE ON-SITE A WRITTEN LOG OF EROSION PREVENTION AND SEDIMENT CONTROL BMP MAINTENANCE.
17. ALL TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER SITE STABILIZATION IS ACHIEVED OR AFTER TEMPORARY BMPS ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED PER PLAN.

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EXPIRES: 12/31/17

VOYAGE PUMP STATION IMPROVEMENTS
EXISTING CONDITIONS AND DEMOLITION PLAN

City of Lincoln City
801 SW HWY 101
LINCOLN CITY, OR. 97367
(541) 996-2151 FAX (541) 994-4881

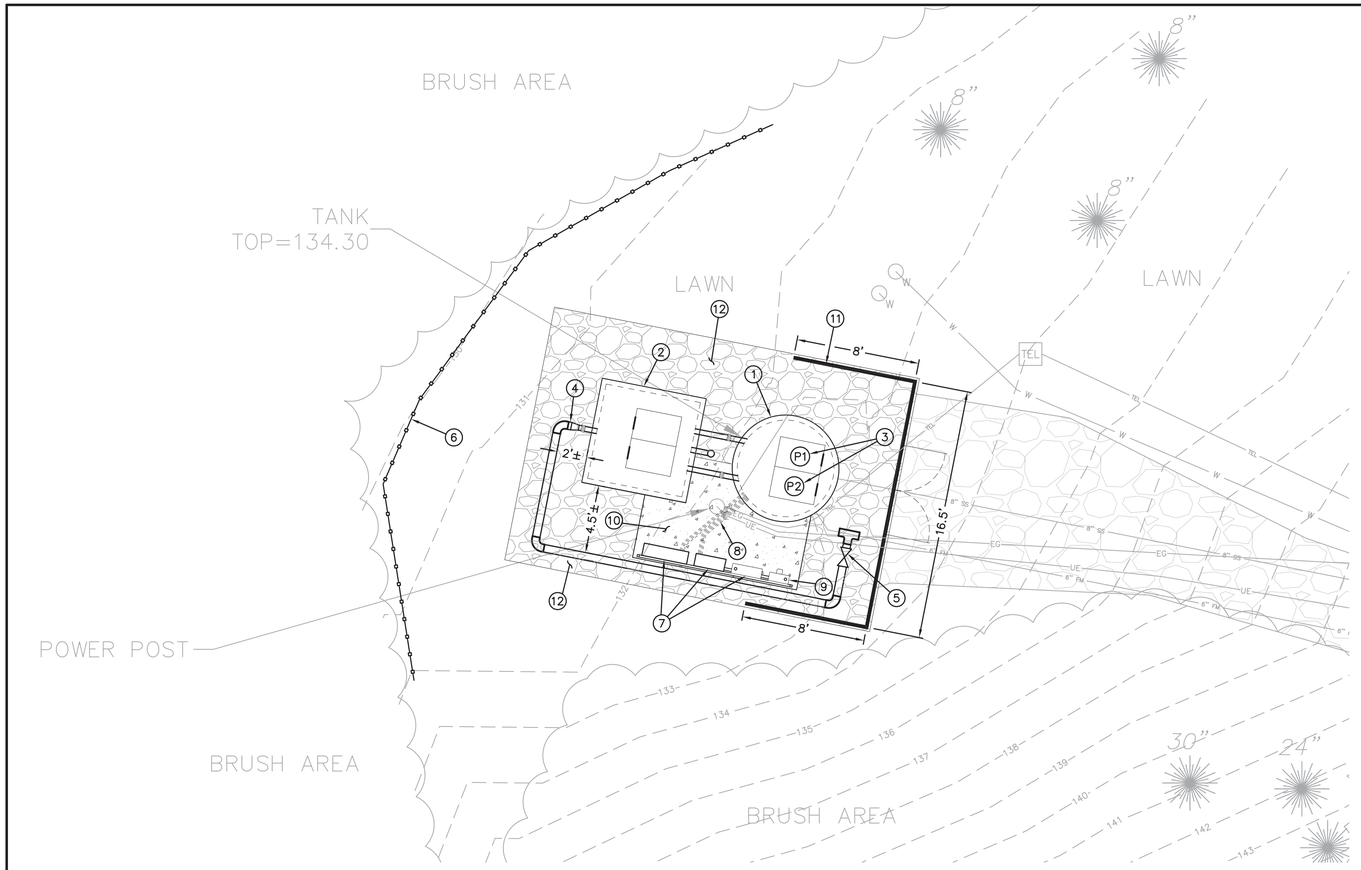
NO.	REVISION	BY	DATE	CHK

PROJECT:	70970.000
DRAWN:	PBS
CHECKED:	GD
DATE:	AUGUST 16, 2016

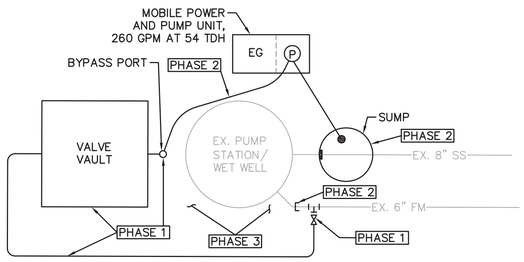
DWG NO. C1

SHEET NO. 2 OF 15

ISSUED FOR CONSTRUCTION AUGUST 16, 2016



SITE PLAN
SCALE: 1" = 5'



FLOW MANAGEMENT NOTES:

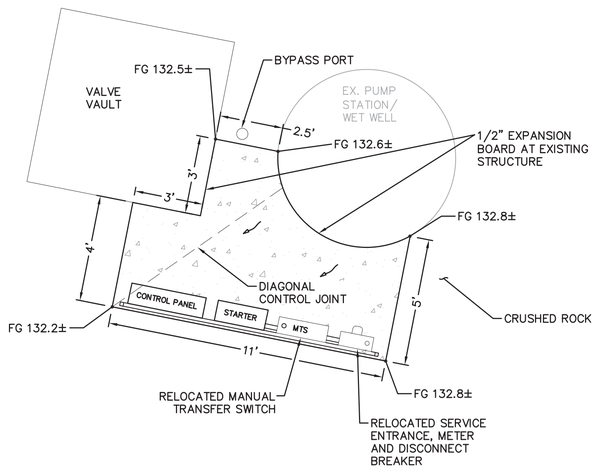
PHASE 1
CONSTRUCT NEW VALVE VAULT, NEW BYPASS PUMPING PORT, AND NEW FORCE MAIN CONNECTION TO EXISTING FORCE MAIN. MAINTAIN EXISTING PUMP STATION IN NORMAL OPERATION UNDER EXISTING POWER SUPPLY. CONNECTION TO EXISTING FORCE MAIN SHALL BE TAPPING SLEEVE/VALVE, FORCE MAIN REMAINING IN SERVICE.

PHASE 2
CONSTRUCT TEMPORARY FLOW MANAGEMENT SYSTEM INCLUDING MOBILE POWER AND PUMP UNIT CONNECTION TO BYPASS PORT SUMP ON OR NEAR EXISTING 8" SANITARY SEWER. AFTER PHASE 1 WORK ACCEPTED BY CITY , INSTALL TEMPORARY PLUG ON SUMP OUTLET AND PUMP TO BYPASS PORT AROUND EXISTING PUMP STATION. DISCHARGE PIPE VALVES IN VALVE VAULT TO BE CLOSED TO ALLOW TEMPORARY PUMPING THROUGH NEW FORCE MAIN/EXISTING FORCE MAIN TO OFFSITE GRAVITY MANHOLE. AUTOMATIC CONTROLS ON PUMPING REQUIRED. NOISE SILENCER ON POWER UNIT TO BE HOSPITAL GRADE. SHUTDOWN EXISTING PUMP STATION AND PLUG EXISTING FORCE MAIN OUTSIDE WET WELL.

PHASE 3
CONSTRUCTION NEW PUMP STATION/WET WELL AND ELECTRICAL IMPROVEMENTS COMPLETE, TESTED AND ACCEPTED BY CITY.

PHASE 4
DECOMMISSION TEMPORARY FLOW MANAGEMENT SYSTEM AND REMOVE FROM SITE. NEW PUMP STATION FULLY OPERATIONAL. COMPLETE SITE RESTORATION.

TEMPORARY FLOW BYPASS PLAN
SCALE: NTS



CONCRETE MAINTENANCE PAD
SCALE: NTS

GENERAL CONSTRUCTION NOTES

1. CONTRACTOR SHALL FIELD VERIFY THE LOCATION, ALIGNMENT, DEPTH AND INVERTS OF ALL EXISTING UTILITIES, INCLUDING EXISTING FORCE MAIN, UNDERGROUND POWER CONDUIT, UNDERGROUND EMERGENCY GENERATOR CONDUIT, OTHER EXISTING ELECTRICAL CONDUITS AND WATER SERVICE PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
2. NOTIFY CITY IMMEDIATELY OF EXISTING UTILITY CONFLICTS WITH NEW CONSTRUCTION.
3. NO GEOTECHNICAL INVESTIGATION HAS BEEN PERFORMED. CONTRACTOR SHALL MAKE OWN DETERMINATION OF EXISTING CONDITIONS. PROVIDE SHORING AT EXCAVATION PER OSHA REQUIREMENTS. PROVIDE DEWATERING, IF NECESSARY.
4. SECURE THE SITE WITH FENCING TO PROTECT THE PUBLIC DURING CONSTRUCTION.
5. TEMPORARY FLOW BYPASS REQUIRED, PROVIDE DETAIL WORK PLAN FOR CITY APPROVAL PRIOR TO CONSTRUCTION.

CONSTRUCTION KEYNOTES

(1) CONSTRUCT 6' PRECAST CONCRETE WET WELL EXTENSION AND CONCRETE COVER WITH ACCESS HATCH.

(2) CONSTRUCT 7' X 7' NOMINAL PRECAST CONCRETE VALVE VAULT WITH ACCESS HATCH.

(3) CONSTRUCT DUPLEX FLYGT SUBMERSIBLE PUMP STATION IN EXISTING WET WELL, COORDINATE WITH TEMPORARY FLOW MANAGEMENT, SEE SHEET C3.

(4) CONSTRUCT 6" FORCE MAIN CONNECTION TO EX. 6" FORCE MAIN, PVC C900 DR18, DI FITTINGS, RESTRAIN ALL FLEXIBLE/MECHANICAL JOINTS. LOCATE TO AVOID EXISTING UNDERGROUND POWER/EG AND OTHER UNDERGROUND FACILITIES TO REMAIN.

(5) CONNECT NEW 6" FORCE MAIN TO EXISTING 6" FORCE MAIN WITH TAPPING SLEEVE AND GATE VALVE. COORDINATE WITH TEMPORARY FLOW MANAGEMENT.

(6) PROVIDE SEDIMENT BARRIER FOR EROSION CONTROL, SEDIMENT FENCE OR EQUAL.

(7) CONSTRUCT NEW ELECTRICAL CONTROL PANEL, STARTER AND RELOCATE EX. MANUAL TRANSFER SWITCH, SEE ELECTRICAL PLAN.

(8) CONSTRUCT PVC SCH 40 SLEEVES FOR PUMP CABLES AND CONTROLS CABLES FROM PUMP STATION TO CONTROL PANEL. SIZE AND QUANTITY AS REQUIRED.

(9) RELOCATED EX. POWER SERVICE ENTRANCE, METER AND DISCONNECT BREAKER. SEE ELECTRICAL PLAN.

(10) CONSTRUCT 4" THICK CONCRETE MAINTENANCE PAD AT ELECTRICAL PANELS. SEE DETAIL, THIS SHEET.

(11) REVISE AND ENLARGE EXISTING SCREENING FACILITY TO SHIELD RESIDENT VIEW OF PUMP STATION. CONSTRUCT SIMILAR TO EXISTING AND PAINT. APPROX. 32 LF INCLUDING 8' DOUBLE GATE.

(12) CONSTRUCT CRUSHED ROCK SURFACE AROUND PUMP STATION, VALVE VAULT AND MAINTENANCE PAD. PROVIDE 3/4"–0, 3" MIN. COMPACTED DEPTH. EXTEND AT LEAST 4' IN ALL DIRECTION AROUND PUMP STATION STRUCTURES.

GENERAL CONSTRUCTION SEQUENCE

PHASE 1

1. HOLD PRE–CONSTRUCTION MEETING WITH CITY.
2. LOCATE EXISTING FORCE MAIN, CONDUITS AND OTHER UTILITIES.
3. PROVIDE FLOW BYPASS PLAN TO CITY FOR APPROVAL.
4. PROTECT IN PLACE EXISTING PUMP STATION, FORCE MAIN AND APPURTENANCES UNLESS FLOW BYPASS HAS BEEN FULLY INSTALLED.
5. CONSTRUCT NEW VALVE VAULT FORCE MAIN AND ELECTRICAL SYSTEMS TO EXTENT POSSIBLE WITH EXISTING PUMP STATION IN OPERATION.
6. CONNECT NEW FORCE MAIN TO EXISTING FORCE MAIN USING TAPPING SLEEVE AND GATE VALVE.
7. PERFORM TESTING AND INSPECTIONS ON NEW VALVE VAULT AND FORCE MAIN COMPONENTS PER CITY REQUIREMENTS.

PHASE 2

8. INSTALL FLOW BYPASS FOR TEMPORARY FLOW MANAGEMENT. IT SHALL BE EQUAL TO EXISTING PUMP STATION PEAK FLOW RATE OF 260 GPM AT 54 TDH UNLESS OTHERWISE APPROVED BY CITY. SET TEMPORARY SUMP ON OR NEAR EXISTING INFLUENT SEWER. CONNECT DISCHARGE OF FLOW BYPASS TO NEW 4" BYPASS FLANGE.

PHASE 3

9. DEMOLISH EXISTING PUMP STATION DRY WELL AND EXISTING WET WELL FILLET. CLEAN EXISTING WET WELL AND INSTALL NEW WET WELL EXTENSION AND COVER.
10. INSTALL NEW DUPLEX PUMP STATION IN EXISTING AND EXTENDED WET WELL AND REMAINING PUMP STATION IMPROVEMENTS.
11. PERFORM TESTING AND INSPECTIONS ON NEW PUMP STATION IMPROVEMENTS PER CITY REQUIREMENTS.
12. PLACE NEW PUMP STATION IN SERVICE.
13. COORDINATE WITH THE CITY FOR PUNCH LIST ITEMS.

PHASE 4

14. REMOVE TEMPORARY FLOW MANAGEMENT SYSTEM AND COMPLETE SITE RESTORATION WORK.

NOTE: SEQUENCING SHOWN IS SUGGESTED GENERAL APPROACH TO WORK. CONTRACTOR SHALL PROVIDE DETAILED PROJECT SCHEDULE AND PROPOSED WORK PLAN THAT ADDRESS THE PROJECT WORK AND THE GENERAL CONSTRUCTION SEQUENCE. ALTERNATE CONSTRUCTION SEQUENCE OR APPROACH ACCEPTABLE WITH PRIOR CITY APPROVAL.

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PUMP STATION SITE PLAN

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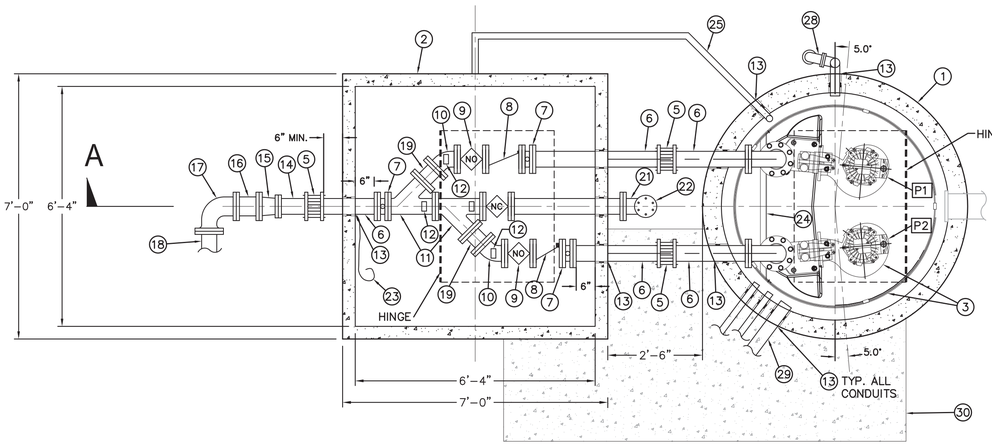
NO.	REVISION	BY	DATE	CHK

PROJECT: 70970.000
DRAWN: PBS
CHECKED: GD
DATE: AUGUST 16, 2016

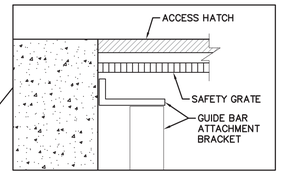
DWG NO. C2
SHEET NO. 3 OF 15

ISSUED FOR CONSTRUCTION AUGUST 16, 2016



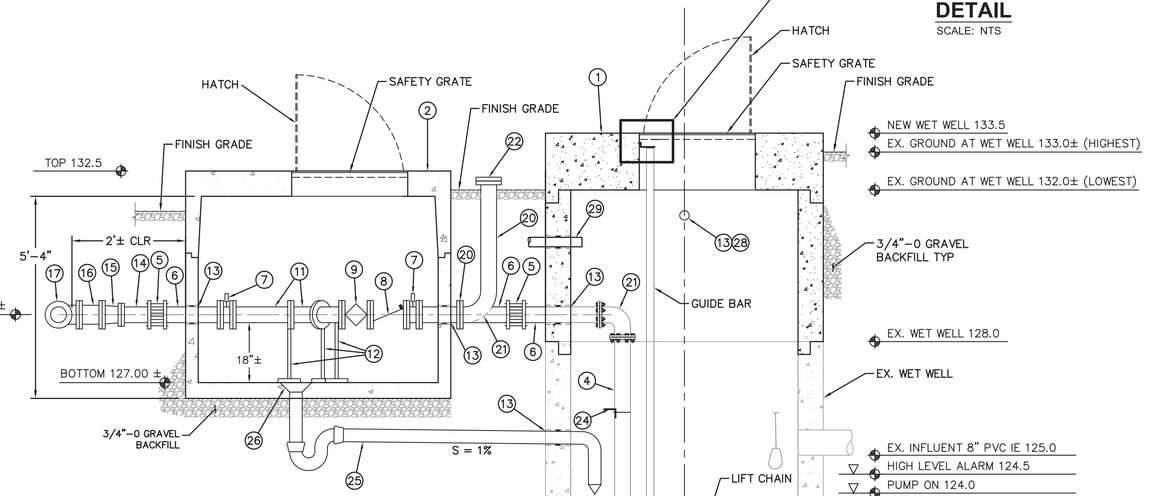
PLAN VIEW

SCALE: 1" = 2'



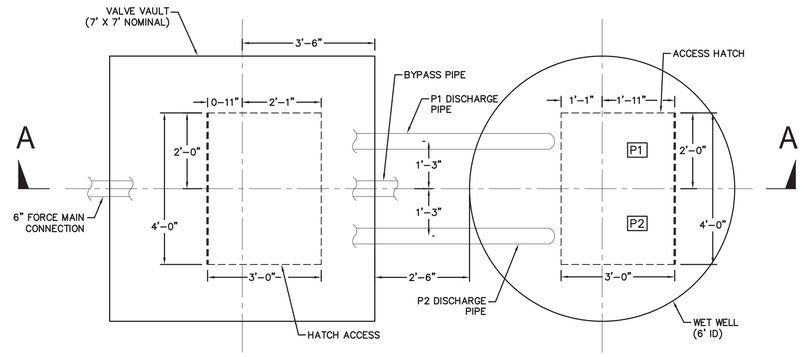
DETAIL

SCALE: NTS



SECTION A - A'

SCALE: 1" = 2'



NOTE:
1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH PROPOSED EQUIPMENT AND MATERIALS.

SUPPLEMENTAL DIMENSIONAL PLAN

SCALE: NTS

GENERAL NOTES

1. DESIGN BASED ON FLYGT PUMP.
2. PROVIDE 316 SST KELLUM GRIPS FOR ALL WET WELL CABLES (5 ± FOR: 1 EACH PUMP, FLOAT SWITCH, PRESSURE TRANSDUCER).
3. PLACE ALL CONDUIT IN SEALED PENETRATION THROUGH CONCRETE.
4. PROVIDE GUIDE RAIL SUPPORTS ATTACHED TO VERTICAL DISCHARGE PIPE AND TO EXISTING WET WELL AS SHOWN.
5. WET WELL, VALVE VAULT, AND HATCH SIZES ARE NOMINAL. PROVIDE DETAILED SHOP DRAWINGS SHOWING PROPOSED MATERIAL TO BE INCORPORATED INTO THE WORK.
6. DUCTILE IRON PIPE SHALL BE CLASS 50.
7. ALL MJ FITTINGS SHALL BE PROVIDED WITH MECHANICAL RESTRAINT. "MEGA-LUG" OR EQUAL.

CONSTRUCTION KEY NOTES

(1) PRECAST CONCRETE, 72" INSIDE DIAMETER WET WELL EXTENSION. CONCRETE COVER WITH ACCESS HATCH. WET WELL EXTENSION SHALL MATCH DIAMETER OF EXISTING 72" WET WELL, HEIGHT 5'-6" (INCLUDE COVER). ACCESS HATCH OPENING SHALL BE 3'X4' (NOMINAL) WITH 300 PSF LOADING SINGLE OR DUAL LEAF SPRING ASSISTED DOORS WITH RECESSED HANDLE. FINISH SHALL BE ALUMINUM WITH NON-SLIP TREATMENT ON DOOR EXTERIOR WITH LOCKING ASSEMBLY. CITY WILL PROVIDE PADLOCK. PROVIDE SAFETY GRATE COORDINATED WITH DOOR OPENING.

(2) 7' X 7' X 5'-6" +/- TALL (NOMINAL) PRECAST VALVE VAULT. ACCESS HATCH OPENING SHALL BE 3'X4' (NOMINAL) WITH 300 PSF LOADING SINGLE OR DUAL LEAF SPRING ASSISTED DOORS WITH RECESSED HANDLE. FINISH SHALL BE ALUMINUM WITH NON-SLIP TREATMENT ON DOOR EXTERIOR WITH LOCKING ASSEMBLY. CITY WILL PROVIDE PADLOCK. PROVIDE SAFETY GRATE COORDINATED WITH DOOR OPENING.

(3) SUBMERSIBLE SEWAGE PUMP ASSEMBLY MOUNTED IN FRP TOP LINER. FLYGT MODEL NP-3102.830 4" VOLUTE PUMP EQUIPPED WITH A 230 VOLT/3 PHASE/60 HZ 7.2 HP 1750 RPM MOTOR, 489 HIGH CHROME IMPELLER WITH STAINLESS STEEL GUIDE RAIL SYSTEMS, FLS LEAKAGE DETECTOR AND SUBMERSIBLE CABLES.

(4) 4" DI DISCHARGE PIPE, FLG, LENGTH AS REQUIRED, VERIFY CONNECTION TO PUMP DISCHARGE.

(5) 4" DI MJ SLEEVE, RESTRAINED.

(6) 4" DI PIPE SPOOL FLG X PE, LENGTH AS REQUIRED.

(7) 4" FLOW THROUGH PRESSURE GAUGE WITH ISOLATION VALVE, FLG

(8) 4" SWING CHECK VALVE, FLG X FLG.

(9) 4" PLUG VALVE, FLG X FLG.

(10) 4" DI 45° BEND, FLG X FLG

(11) 4" DI WYE, FLG X FLG.

(12) GALVANIZED PIPE SUPPORT, 3 EA.

(13) WALL PENETRATION, SEAL WATERTIGHT SEE SHEET C5

(14) 4" DI PIPE PE X PE, LENGTH AS REQUIRED.

(15) 6" X 4" DI INCREASER, MJ X MJ, RESTRAINED.

(16) 6" PVC PIPE, C900 DR18, LENGTH AS REQUIRED.

(17) 6" DI 90° BEND, MJ X MJ, RESTRAINED.

(18) 6" PVC PIPE, C900 DR18, CONNECT TO EXISTING FORCE MAIN, MAINTAIN LEVEL OR UPWARD SLOPE.

(19) 4" DI SPOOL, FLG X FLG, LENGTH AS REQUIRED TO ALIGN PARALLEL PIPE RUN IN VALVE VAULT WITH PUMP DISCHARGE PIPING IN WET WELL.

(20) 4" DI SPOOL, FLG X FLG, LENGTH AS REQUIRED.

(21) 4" DI 90° BEND, FLG X FLG.

(22) 4" DI BLIND FLANGE FOR PUMP BYPASS/FORCE MAIN DRAIN PORT.

(23) PROVIDE 6' COIL OF PVC FORCE MAIN "GREEN" COATING TRACER WIRE IN VALVE VAULT.

(24) PUMP DISCHARGE PIPE SUPPORT, SEE SHEET X.

(25) 3" ABS DRAIN FROM VALVE VAULT.

(26) 4" STAINLESS STEEL FLOOR DRAIN AND GRATE.

(27) DUCK BILL CHECK VALVE.

(28) WET WELL VENT.

(29) CONDUIT S FOR ELECTRICAL AND CONTROL CABLES, AS REQUIRED.

(30) CONCRETE PAD, 4" THICK.

(31) INSTALL FRP LINER WITH PUMPS PER FLYGT TOP STATION INSTRUCTION. WORK WILL INCLUDE REMOVAL OF EXISTING CONCRETE FILLET, INSTALLATION OF WALL BRACKETS AND PLACEMENT OF CONCRETE UNDER AND AROUND LINER (NO VIBRATION ALLOWED).

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George Drake
OREGON
JAN. 15, 1987
GEORGE L. DRAKE
EXPIRES: 12/31/17

VOYAGE PUMP STATION IMPROVEMENTS

PUMP STATION PLAN & SECTION

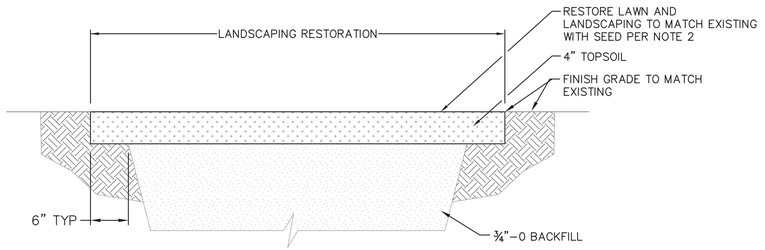
City of Lincoln City
801 SW HWY 101
LINCOLN CITY, OR. 97367
(541) 996-2151 FAX (541) 994-4881

NO.	REVISION	BY	DATE	CHK

PROJECT: 70970.000
DRAWN: PBS
CHECKED: GD
DATE: AUGUST 16, 2016

DWG NO. C3
SHEET NO. 4 OF 15

ISSUED FOR CONSTRUCTION AUGUST 16, 2016

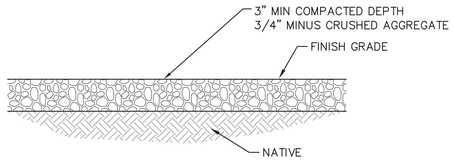


GENERAL NOTES

1. LANDSCAPE RESTORATION SHALL INCLUDE RESTORATION TO PRE–CONSTRUCTION CONDITION OF ANY AND ALL AREAS DISTURBED BY CONSTRUCTION.
2. SEED MIX: LINCOLN MIX FROM RQ MILLS (ACE) HARDWARE IN LINCOLN CITY (A FESCUE, RYE MIX) OR APPROVED EQUAL.

LANDSCAPING RESTORATION DETAIL

SCALE: NTS



GRAVEL RESTORATION DETAIL

SCALE: NTS

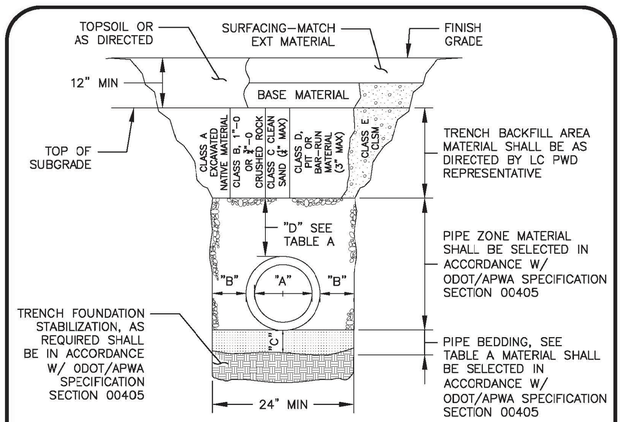


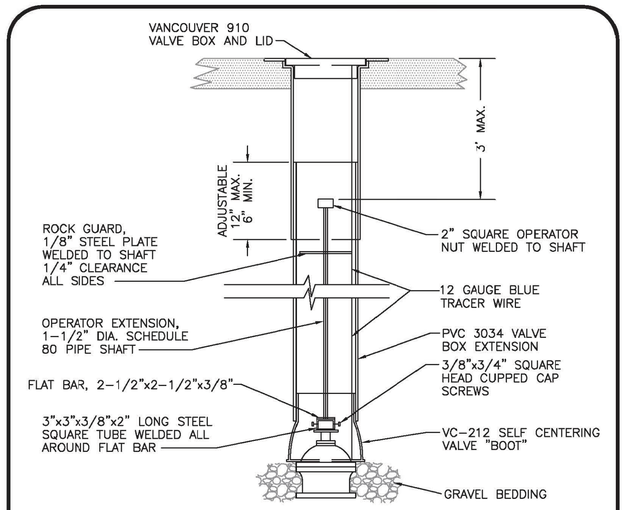
TABLE A

"A" (in)	"B" (in)	"C" (in)	"D" (in)
4	10	4	8
6	10	4	8
8	10	6	10
10	10	6	10
12	12	6	10
15	12	6	10
18	16	6	12
21	16	6	12
24	18	6	12
30	18	6	12
36	24	6	14
42	24	6	14
48	24	6	14
54	24	6	14
60	24	6	14
66	24	6	14
72	24	6	14

NOTES:

1. "A" = NOMINAL PIPE DIAMETER.
2. SURFACING OF PAVED AREAS SHALL COMPLY W/ OREGON STANDARD DRAWING RD302.
3. FOR PIPE INSTALLATION IN EMBANKMENT AREAS WHERE THE TRENCH METHOD WILL NOT BE USED & THE PIPE IS GREATER THAN OR EQUAL TO 36" DIAMETER, INCREASE DIMENSION "B" TO NOMINAL PIPE DIAMETER.
4. PIPES OVER 72" DIAMETER ARE STRUCTURES, & ARE NOT APPLICABLE TO THIS DRAWING.
5. INSTALL TRACER WIRE ALONG CROWN OF PIPE.
6. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR THE CONDITON OF THE STREET REPAIR FOR A PERIOD OF 1 YEAR AFTER RECEIVING FINAL PROJECT APPROVAL/ACCEPTANCE.
7. MATERIAL IN THE PIPE ZONE SHALL BE COMPACTED BY VIBRATORY PLATE OR JUMPING JACK PER CURRENT APWA SPECIFICATIONS.
8. CONTRACTOR IS RESPONSIBLE FOR PLATING TRENCH WHILE CLSM BACKFILL MATERIAL CURES.
9. TEE CUT FOR ASPHALT PATCHING WILL BE MADE AFTER TRENCH EXCAVATION & BACKFILL. EDGES OF CUT SHALL BE FREE OF ANY SPALLING, BROKEN EDGES, CRACKS, UPLIFT & UNDERMINED SUBGRADE.
10. IF HOT MIX ASPHALT IS UNAVAILABLE, THE CONTRACTOR SHALL USE COLD MIX AS A TEMPORARY PATCH UNTIL HOT MIX IS AVAILABLE FOR PERMANENT REPAIRS.
11. ALL EDGES OF THE PERMANENT PATCHING SHALL BE TACK & SAND SEALED.
12. PATCHING OF THE TRENCH SAHLL BE COMPLETED NO LATER THAN 2 DAYS AFTER INSTALLATION INSPECTION. THE CITY RESERVES THE RIGHT TO MAKE REPAIRS & BILL THE CONTRACTOR ACCORDINGLY IF PATCHING HAS NOT BEEN COMPLETED AS REQUIRED.
13. THE ASPHALT PATCH SHALL BE COMPACTED TO A MIN. OF 92% DENSITY, W/ A MAX. SURFACE SMOOTHNESS DEVIATION OF ¼" PER ODOT/APWA SPECIFICATION 00745.70(b).
14. FOR MULTIPLE PIPE INSTALLATIONS SEE PIPE CLEARANCES STANDARD DETAIL.
15. THE CONTRACTOR SHALL SCHEDULE INSPECTIONS A MIN. OF 24–HOURS IN ADVANCE W/ LINCOLN CITY PUBLIC WORKS DEPARTMENT AT (541) 996–2154.

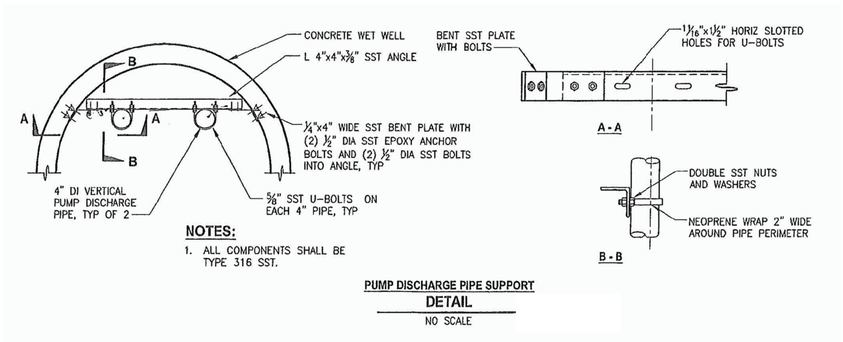
CITY OF LINCOLN CITY
TYPICAL TRENCH DETAIL



NOTES:

1. VALVE BOX NOT TO REST ON OPERATOR ASSEMBLY.
2. OPERATOR EXTENSION REQUIRED WHEN VALVE NUT IS DEEPER THAN 4' FROM FINISHED GRADE.
3. CENTER VALVE BOX ON AXIS OF OPERATOR NUT.
4. ALL VALVES SHALL BE SET ON PRECAST CONCRETE BLOCK.
5. WELDS SHALL BE A MINIMUM OF ¼" ALL AROUND.
6. HOT DIP GALVANIZE OPERATOR EXTENSION AFTER MANUFACTURE.
7. FOR BUTTERFLY VALVES, MODIFICATION OF VC 212 MAY BE NECESSARY TO ENSURE THAT THE VALVE NUT IS CENTERED IN BOX & THAT THE RISER ASSEMBLY IS VERTICALLY PLUMB.

CITY OF LINCOLN CITY
VALVE BOX AND OPERATOR EXTENSION ASSEMBLY

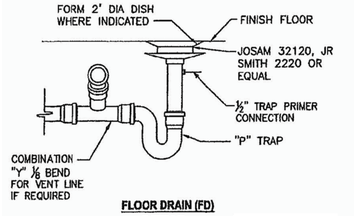


NOTES:

1. ALL COMPONENTS SHALL BE TYPE 316 SST.

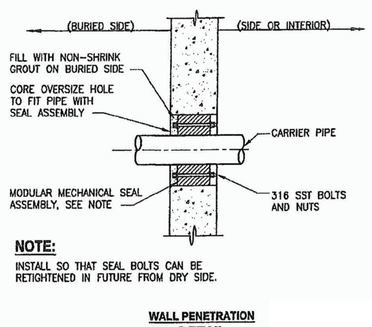
PUMP DISCHARGE PIPE SUPPORT DETAIL

NO SCALE



FLOOR DRAIN (FD) DETAIL

NO SCALE

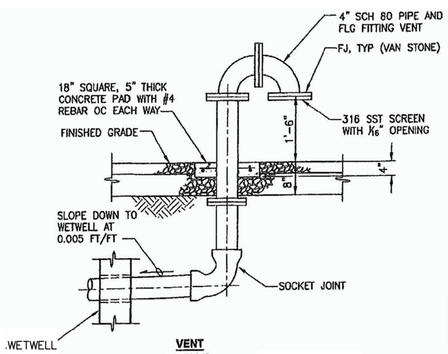


NOTE:

INSTALL SO THAT SEAL BOLTS CAN BE RETIGHTENED IN FUTURE FROM DRY SIDE.

WALL PENETRATION DETAIL

NO SCALE

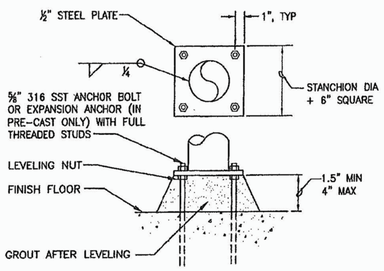


VENT DETAIL

NO SCALE

TABLE C–PIPE STANCHION DIAMETER (SCHEDULE 40 STEEL)

PIPE SIZE (INCHES)	NOMINAL PIPE STANCHION DIA. (INCHES)	PIPE SIZE (INCHES)	NOMINAL PIPE STANCHION DIA. (INCHES)
–	–	12	6
–	–	14	6
–	–	16	6
4	2	18	8
6	2½	20	8

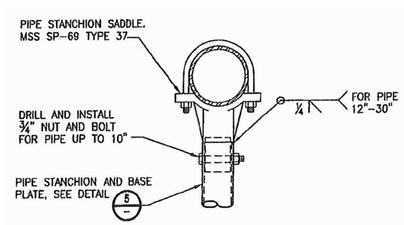


NOTE:

SPACING SHALL NOT EXCEED 10'

PIPE STANCHION AND BASE PLATE STRUCTURAL ATTACHMENT DETAIL

NO SCALE



4" THROUGH 30" PIPE SADDLE DETAIL

NO SCALE

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JAN. 15, 1987
GEORGE L. DRAKE

EXPIRES: 12/31/17

VOYAGE PUMP STATION IMPROVEMENTS

DETAILS

ISSUED FOR CONSTRUCTION AUGUST 16, 2016

City of Lincoln City
801 SW HWY 101
LINCOLN CITY, OR. 97367
(541) 996-2151 FAX (541) 994-4881

NO.	REVISION	BY	DATE	CHK

PROJECT:	70970.000
DRAWN:	PBS
CHECKED:	GD
DATE:	AUGUST 16, 2016

DWG NO. C4

SHEET NO. 5 OF 15

BILL OF MATERIALS

TAG	DESCRIPTION	CATALOG NUMER	MANUFACTURER
1	CONTACTOR	A26N1-30-10-84	ABB
2	ELECTRIC OVERLOAD RESET	DR25-A-24	ABB
3	CIRCUIT BREAKER ACCESSERY	KT3VD-M	ABB
4	PISTOL HANDLE	OHB80L6	ABB
5	SHAFT	OXP6X430	ABB
6	CIRCUIT BREAKER 30 AMP	T1N030TL	ABB
7	CIRCUIT BREAKER 60 AMP	T1N060TL	ABB
8	OVERLOAD RELAY	TA250U19	ABB
9	PUSHBUTTON	800-AR2D1	ALLEN BRADLEY
10	PUSHBUTTON	800H-AR2D2	ALLEN BRADLEY
11	SWITCH	800H-JR2A	ALLEN BRADLEY
12	FLOAT SWITCH	1046376	PRIMEX
13	PWR DISTRIBUTION BLOCK, 3 POLE	67543	FERRAZ
14	PWR DISTRIBUTION BLOCK, 1 POLE	67541	FERRAZ
15	FUSE BLOCK	USCC3I	FERRAZ
16	MOISTURE RELAY	14-40 71 13	FLYGT
17	FLOAT PAK CONTROLLER	962004-013	PRIMEX
18	ENCLOSURE	A483612SSLP	HOFFMAN
19	BACK PANEL	A48P36	HOFFMAN
20	PUMP CONTROLLER	LSC MICRO-VPAC IIT	PRIMEX
21	TIMER	GTSY-4SN6A100	IDEC
22	POWER SUPPLY	PS5R-SD24	IDEC
23	RELAY	RU4S-C-A119	IDEC
24	RELAY	RU4S-C-D24	IDEC
25	GFCI RECEPTACLE	7599-1	LEVITON
26	TERMINAL FUSE BLOCK	3004171	PHOENIX CONTACT
27	TERMINAL	3044102	PHOENIX CONTACT
28	IS BARRIER	5202B2	PR ELECTRONICS
29	INTRUSION SWITCH	2507A-L	SENTROL
30	TRANSFORMER	9070TF50D23	SQUARE D
31	CIRCUIT BREAKER	QOU110	SQUARE D
32	SURGE ARRESTOR	SDSA3650	SQUARE D
33	VOLTAGE MONITOR	460	SYMCOM
34	UPS	BVUPS24PFA	TRANSTRONICS
35	BATTERY	WKA12-12F2	WERKER
36	ULTRA SONIC TRANSDUCER	dBi-10010000001-H	PULSAR
37	1.5 Kva TRANSFORMER	GENERIC	GENERIC
38	ELECTRIC HEATER	DAH1001A	HOFFMAN
39	STARTER PANEL	A30240SSLP W/PANEL	HOFFMAN
40	WIRELESS MONIORING SYSTEM	MODEL M803 W/ COMM 16 ANT.	MISSION COMM.

TAG 2

1

DRAWING LIST

ONE-LINE SYMBOLS

- CONTACT NORMALLY OPEN
- CONTACT NORMALLY CLOSED
- GROUND
- CIRCUIT BREAKER
- TRANSFORMER
- CONNECTION POINT
- THERMAL OVERLOAD
- CR# — CONTROL RELAY COIL
- MS# — MOTOR STARTER
- TD# — TIMING DEVICE
- SWITCH NORMALLY OPEN
- SWITCH NORMALLY CLOSED
- DIGITAL OUTPUT
- DIGITAL INPUT
- ANALOG INPUT
- 400 — TERMINAL BLOCK (FIELD MOUNTED)
- FUSE
- LIQUID LEVEL SWITCH NORMALLY OPEN CLOSE ON RISE
- RESISTOR 250 OHM
- T.C. — CONTACT TIME DELAY NORMALLY OPEN ON DELAY
- DISTRIBUTION BLOCK
- CIRCUIT BREAKER 3-WIRE 60A

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
ATS	TRANSFER SWITCH, AUTOMATIC
C	CONDUIT
CB	CIRCUIT BREAKER
CT	CURRENT TRANSFORMER
(E)	EXISTING
GFI	GROUND FAULT INTERRUPTER
HP	HORSEPOWER
JB	JUNCTION BOX
MCB	MINIMUM CIRCUIT BREAKER
MTS	TRANSFER SWITCH, MANUAL
NO	NORMALLY OPEN
NC	NORMALLY CLOSED
OL	OVERLOAD
PH	PHASE
PRI	PRIMARY
UON	UNLESS OTHERWISE NOTED
WP	WEATHERPROOF
XP	EXPLOSIONPROOF

POWER SYMBOLS

- RECEPTACLE, 120V DUPLEX +18" AFF
- POWER POLE
- C — MAGNETIC CONTACTOR
- T — TRANSFORMER
- DISCONNECT, NON-FUSED
- F — DISCONNECT, FUSED
- ELECTRICAL CONNECTION, SINGLE MOTOR
- ELECTRICAL DISTRIBUTION PANEL, SURFACE
- MISCELLANEOUS PANEL, SURFACE
- 2KW — ELECTRICAL BASEBOARD HEATER (WATTAGE NOTED)
- RECEPTACLE (ALENA 4xOR HOSEDOWN) 20AMP RATED 3 PH 3 WIRE
- PLUG RATED 3 PH 3 WIRE

ISSUED FOR CONSTRUCTION WITH REVISIONS
August 16 2016

REGISTERED PROFESSIONAL ENGINEER 17911PE OREGON JULY 25, 1995 JOHN S. SHAFER
EXPIRES: 06/30/2018

Digitally signed by John S Shafer
Date: 2016.09.01 09:32:13 -07'00'

EVERGREEN ENGINEERING
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www.evergreenengineering.com

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VOYAGE PUMP STATION IMPROVEMENTS

ELECTRICAL LEGEND

City of Lincoln City
801 SW HWY 101
LINCOLN CITY, OR. 97367
(541) 996-2151 FAX (541) 994-4881

NO.	REVISION	BY	DATE	CHK
0	ISSUED FOR CONSTRUCTION	RHG	8/15/16	JSS
1	IFC W/REVISIONS	RHG	8/16/16	JSS
2	IFC W/REVISIONS	RHG	9/1/16	JSS

PROJECT: 3205.0
DRAWN: DMT
CHECKED: JSS
DATE: 2/15/16
DWG NO. E0
SHEET NO. 1 OF 10

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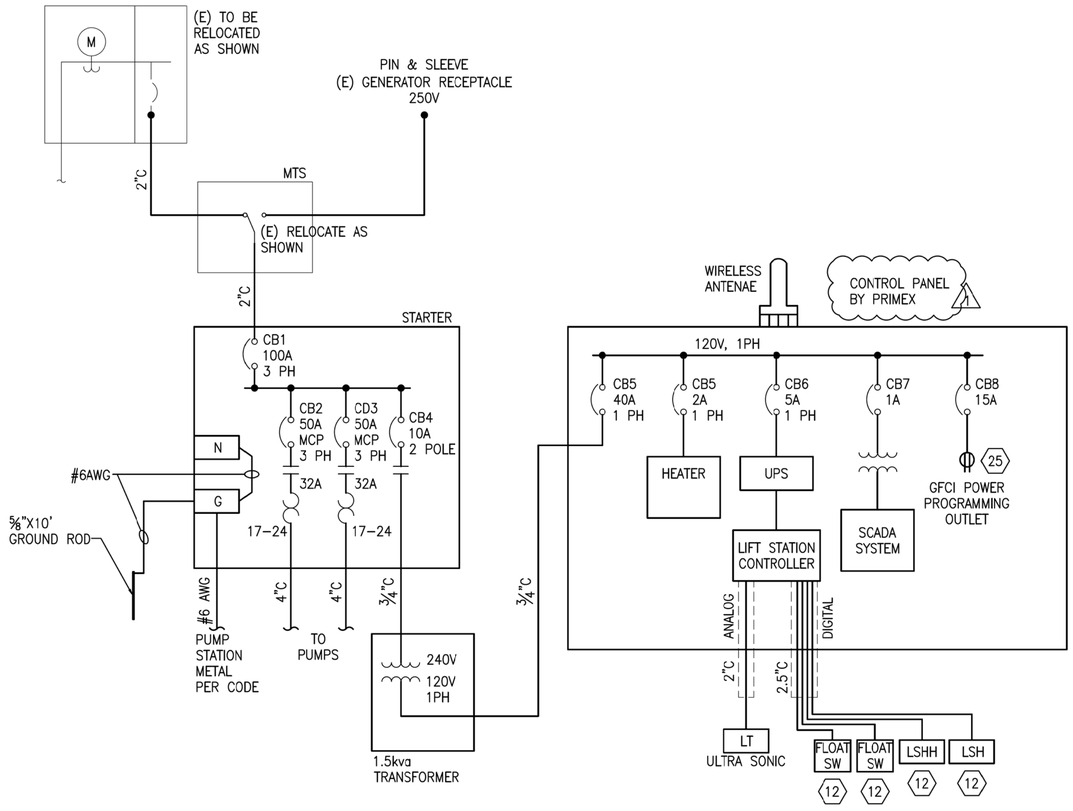
GENERAL NOTES:

A. ONLY ONE MOTOR WILL BE RUN AT A TIME.



IMPROVEMENT SCHEMATIC

NONE

LOAD SUMMARY

	PANEL SCHEDULE								
VOLTS	230 3ph	-							
SIZE	60	-							
MAIN BREAKER	60 AMPS	-							
10 A/C SYM									
			LOAD	LOAD	LOAD	LOAD	CKT		
				L1	L2	L3			
NO	CIRCUIT DESCRIPTION		kVA	A	A	A	BKR		
1	7.2 hp motor		0	20.0			50/3		
	-		0		20.0				
	-		0			20.0			
2	7.2 hp motor		0	20.0			50/3		
	-		0		20.0				
	-		0			20.0			
3	Transformer		0	6.3			10/2		
	-		0		6.3				
		CONNECTED LOAD	0	46.3	46.3	40.0			
		TOTAL kVA	0	kVA					
		TOTAL AMPS PHASE L1		33.3	A				
		TOTAL AMPS PHASE L2			33.3	A			
		TOTAL AMPS PHASE L3				27.0	A		
		MAX AMPS	33.25	AMPS					

VOLTS	120/230 1ph	-							
SIZE	1.5KVA	-							
MAIN BREAKER	20 amps at 120x2	-							
10 A/C SYM									
			LOAD	*LOAD*	*LOAD*	*CKT*			
				L1	*L2*				
NO	*CIRCUIT DESCRIPTION*		*kVA*	*A*	*A*	*BKR*	#		
1	Heater		0.0	0.8		20/1			
3	ups, scada, and PLC		0.0		2.5	20/1			
		CONNECTED LOAD	0.7	0.4	0.3				
		TOTAL kVA	0.7	kVA					

VOYAGE PUMP STATION IMPROVEMENTS
ELECTRICAL ONE-LINE DIAGRAM

City of Lincoln City
801 SW HWY 101
LINCOLN CITY, OR. 97367
(541) 996-2151 FAX (541) 994-4881

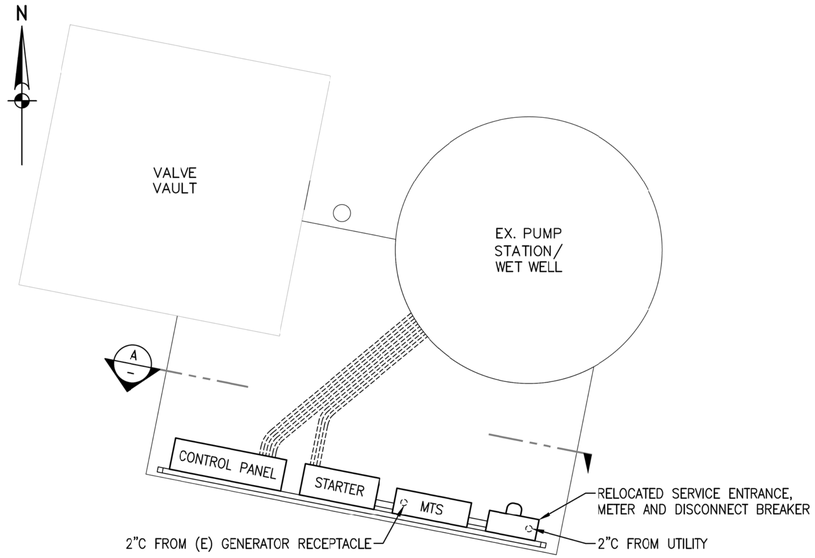
NO.	REVISION	BY	DATE	CHK
0	ISSUED FOR CONSTRUCTION	RHC	8/15/16	JSS
1	IFC W/REVISIONS	RHC	8/16/16	JSS

PROJECT:	3205.0
DRAWN:	ADP
CHECKED:	JSS
DATE:	1/25/16
DWG NO.	E1
SHEET NO.	2 OF 10

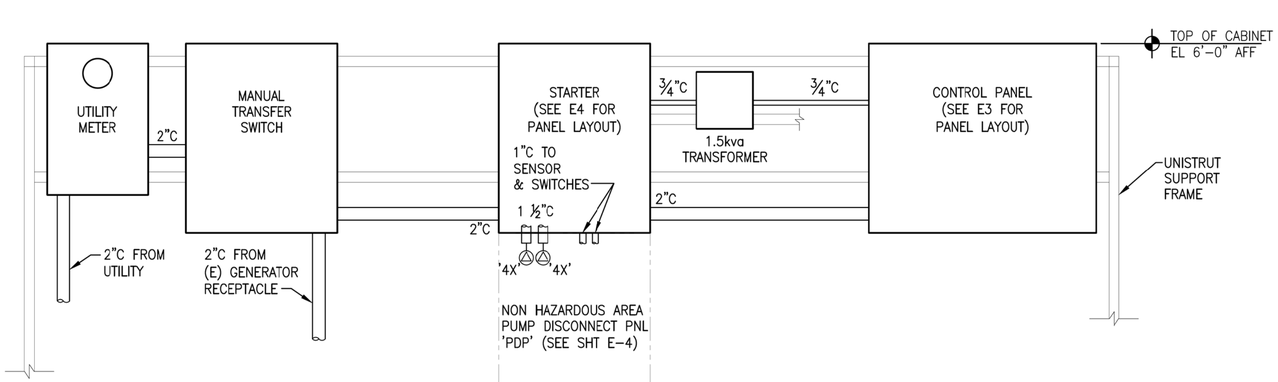
ISSUED FOR CONSTRUCTION WITH REVISIONS
August 16 2016

REGISTERED PROFESSIONAL ENGINEER
17911PE
OREGON
JULY 25, 1995
JOHN S. SHAFER
EXPIRES: 06/30/2018

Digitally signed by John S Shafer
Date: 2016.08.16 15:49:53 -07'00'



PLAN
1/2"=1'-0"



A
SECTION
1"=1'-0"

ISSUED FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER 17911PE OREGON JULY 25, 1995 JOHN S. SHAFER
EXPIRES: 06/30/2018

Digitally signed by John S Shafer
Date: 2016.08.16 15:38:06 -07'00'

EVERGREEN ENGINEERING
Engineering and Construction Services
EUGENE, OREGON
www.evergreenengineering.com

NOTES:

A. ALL CONDUITS SHALL BE ROUTED UNDERGROUND PER NEC, NFPA 820, AND LOCAL CODES FOR THE APPLICATION.

B. ALL CONDUIT LOCATIONS SHALL BE COORDINATED WITH EQUIPMENT SUPPLIERS PRIOR TO INSTALLATION.

C. CONDUITS FROM THE WET WELL SHALL BE PROPERLY SEALED TO MAINTAIN AN UNCLASSIFIED RATING AT THE EXTERIOR ENCLOSURE.

D. SEE 33 09 10 ELECTRICAL SPECIFICATIONS FOR CONTROL PANEL DESIGN AND PROGRAMMING REQUIREMENT

E. 2 POWER METERS ARE PRESENT AT SITE. COORDINATE WITH UTILITY WHICH METER IS TO STAY AND HOW TO DISPOSITION THE 2ND METER.

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VOYAGE PUMP STATION IMPROVEMENTS

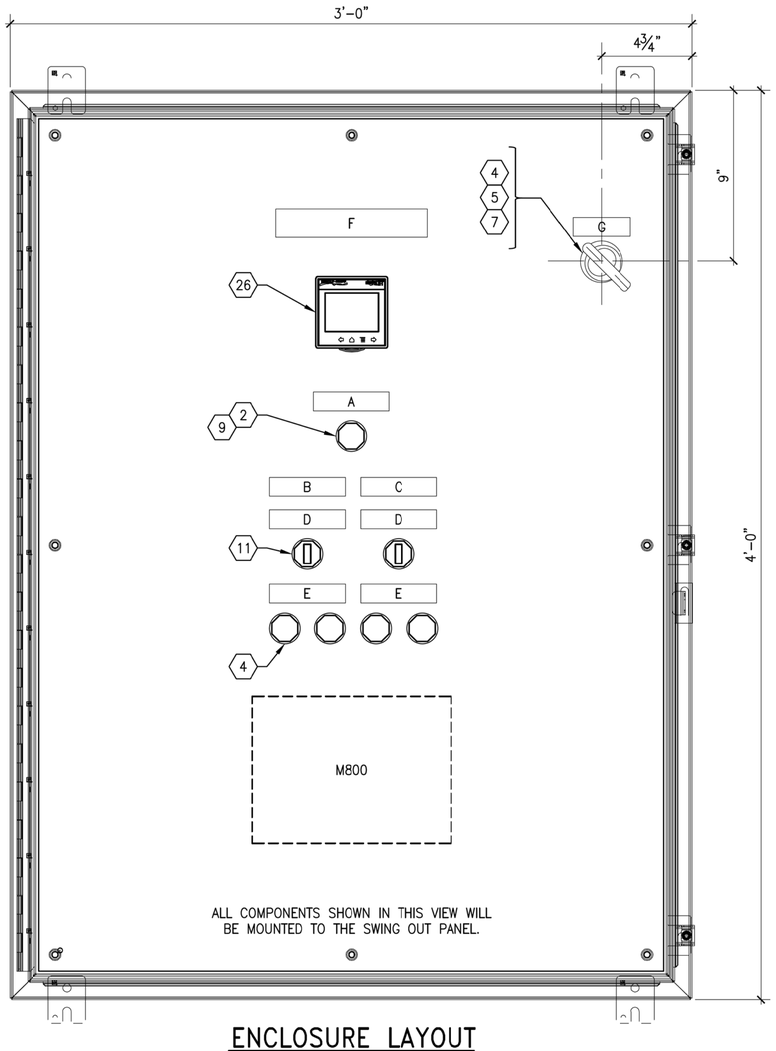
ELECTRICAL LAYOUT

City of Lincoln City
801 SW HWY 101
LINCOLN CITY, OR. 97367
(541) 996-2151 FAX (541) 994-4881

NO	REVISION	BY	DATE	CHK
0	ISSUED FOR CONSTRUCTION	RHG	8/15/16	JSS

PROJECT:	3205.0
DRAWN:	ADP
CHECKED:	JSS
DATE:	1/25/16
DWG NO.	E2
SHEET NO.	3 OF 10

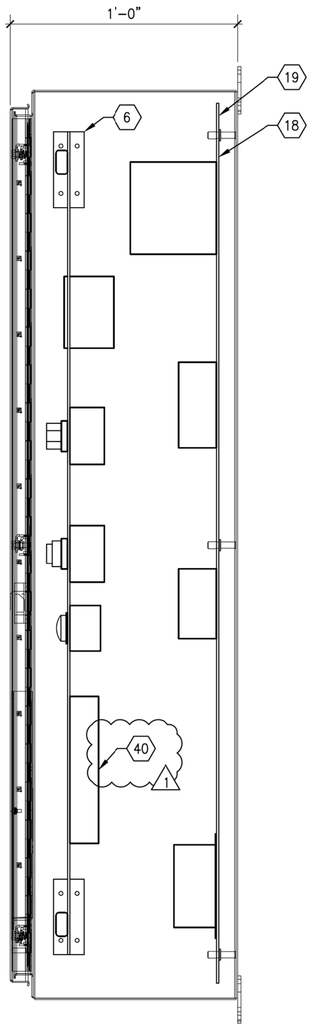
NAMEPLATE SCHEDULE			
TAG	DESCRIPTION	SIZE	QUANTITY
A	BACKUP RESET	1x4	1
B	PUMP 1	1x4	1
C	PUMP 2	1x4	1
D	HAND–OFF–AUTO	1x4	2
E	OVERTEMP RESET, OVERLOAD RESET	1x4	2
F	VOYAGE PUMP STATION	1.5x8	1
G	MAIN POWER	1x3	1

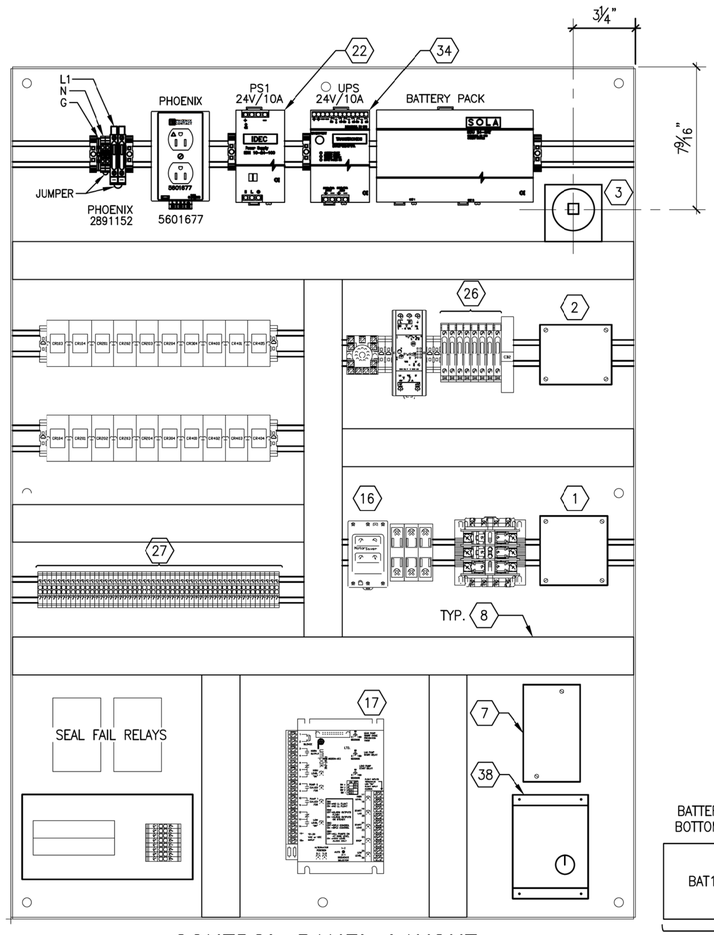


ENCLOSURE LAYOUT

3"=1'–0"

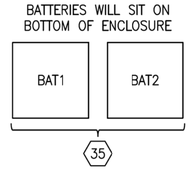
NOTES:
1. ENCLOSURE IS A NEMA TYPE 4X HOFFMAN STAINLESS.
2. UL 508A, UL 698A.





CONTROL PANEL LAYOUT

3"=1'–0"



1" 2" 4" 6" 8" 10" 12"

SCALE

ISSUED FOR CONSTRUCTION WITH REVISIONS
September 01 2016

REGISTERED PROFESSIONAL ENGINEER
17911PE
OREGON
JULY 25, 1995
JOHN S. SHAFER
EXPIRES: 06/30/2018

Digitally signed by John S Shafer
Date: 2016.09.01 09:33:00 -07'00'

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VOYAGE PUMP STATION IMPROVEMENTS

ENCLOSURE DETAIL

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NOTES:

A. ALL CONDUITS SHALL BE ROUTED UNDERGROUND PER NEC, NFPA 820, AND LOCAL CODES FOR THE APPLICATION.

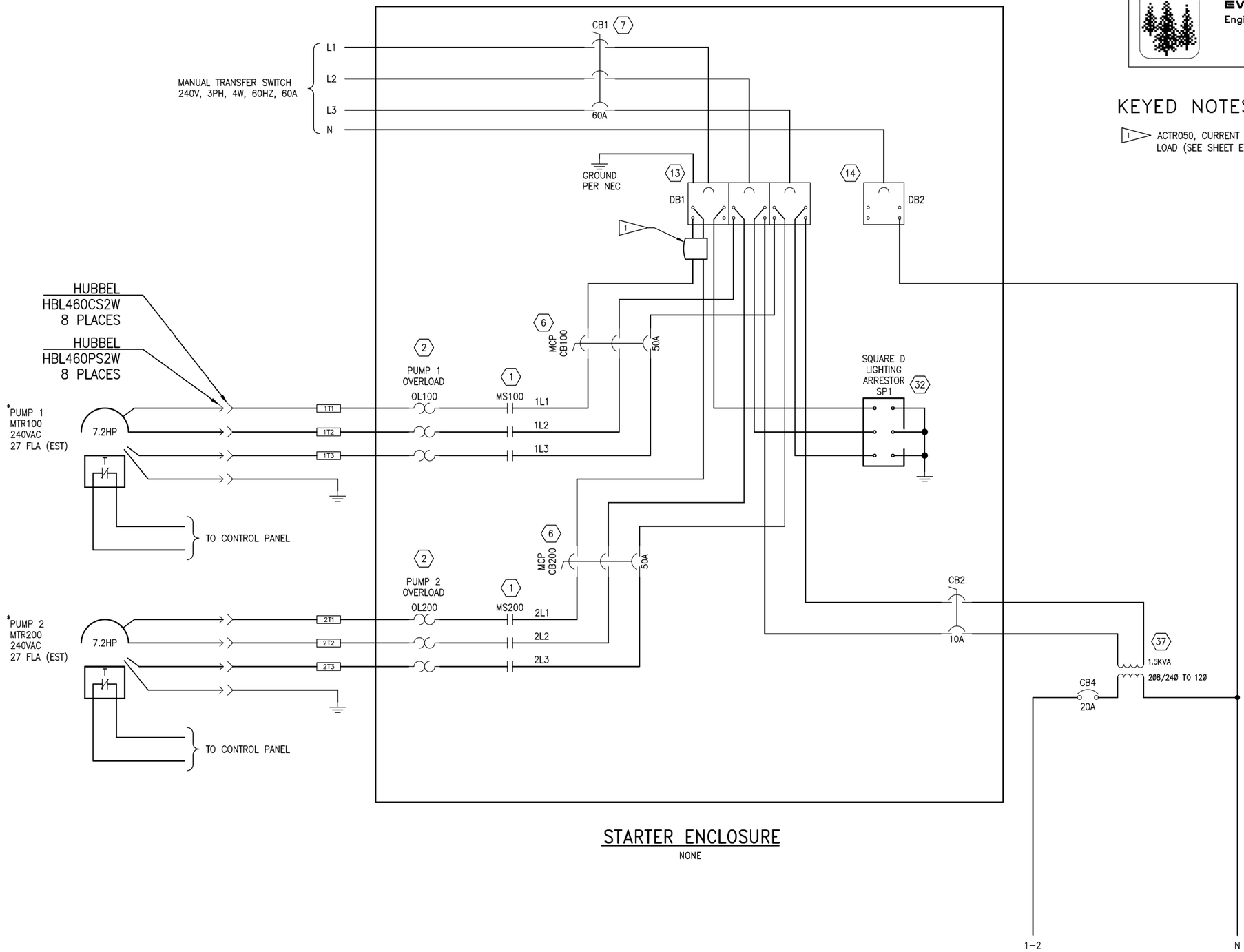
B. ALL CONDUIT LOCATIONS SHALL BE COORDINATED WITH EQUIPMENT SUPPLIERS PRIOR TO INSTALLATION.

C. CONDUITS FROM THE WET WELL SHALL BE PROPERLY SEALED TO MAINTAIN AN UNCLASSIFIED RATING AT THE EXTERIOR ENCLOSURE.

D. SEE 33 09 10 ELECTRICAL SPECIFICATIONS FOR CONTROL PANEL DESIGN AND PROGRAMMING REQUIREMENT

NO.	REVISION	BY	DATE	CHK
0	ISSUED FOR CONSTRUCTION	RHG	8/15/16	JSS
1	IFC W/REVISIONS	RHG	9/1/16	JSS

PROJECT: 3205.0
DRAWN: DMT
CHECKED: JSS
DATE: 2/15/16
DWG NO. E3
SHEET NO. 4 OF 10



KEYED NOTES:

1. ACTR050, CURRENT TRANSDUCER TO DETECT PUMP LOAD (SEE SHEET E7).

STARTER ENCLOSURE

NONE

ISSUED FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
17911PE
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JULY 25, 1995
JOHN S. SHAFER
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VOYAGE PUMP STATION IMPROVEMENTS
WIRING DIAGRAM
INCOMING POWER

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NO.	REVISION	BY	DATE	CHK
0	ISSUED FOR CONSTRUCTION	RHG	8/15/16	JSS

PROJECT:	3205.0
DRAWN:	DMT
CHECKED:	JSS
DATE:	2/15/16
DWG NO.	E4
SHEET NO.	5 OF 10

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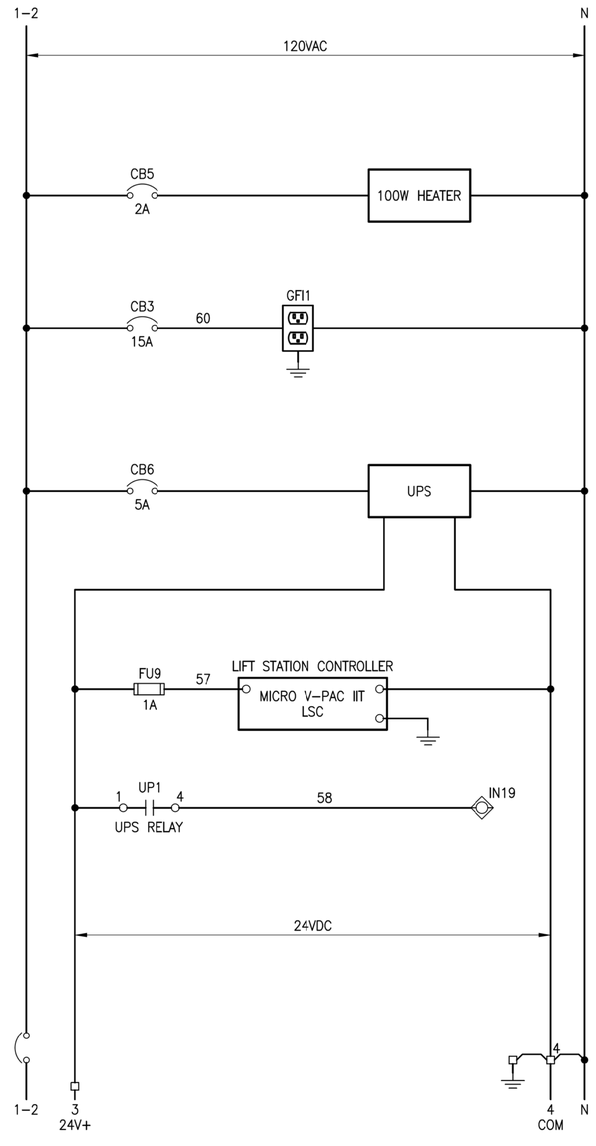
VOYAGE PUMP STATION IMPROVEMENTS
WIRING DIAGRAM
POWER CONTROLS



CONTROL POWER FAILURE

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NO.	REVISION	BY	DATE	CHK
0	ISSUED FOR CONSTRUCTION	RHG	8/15/16	JSS

PROJECT:	3205.0
DRAWN:	DMT
CHECKED:	JSS
DATE:	2/15/16
DWG NO.	E5
SHEET NO.	6 OF 10

ISSUED FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
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JOHN S. SHAFER
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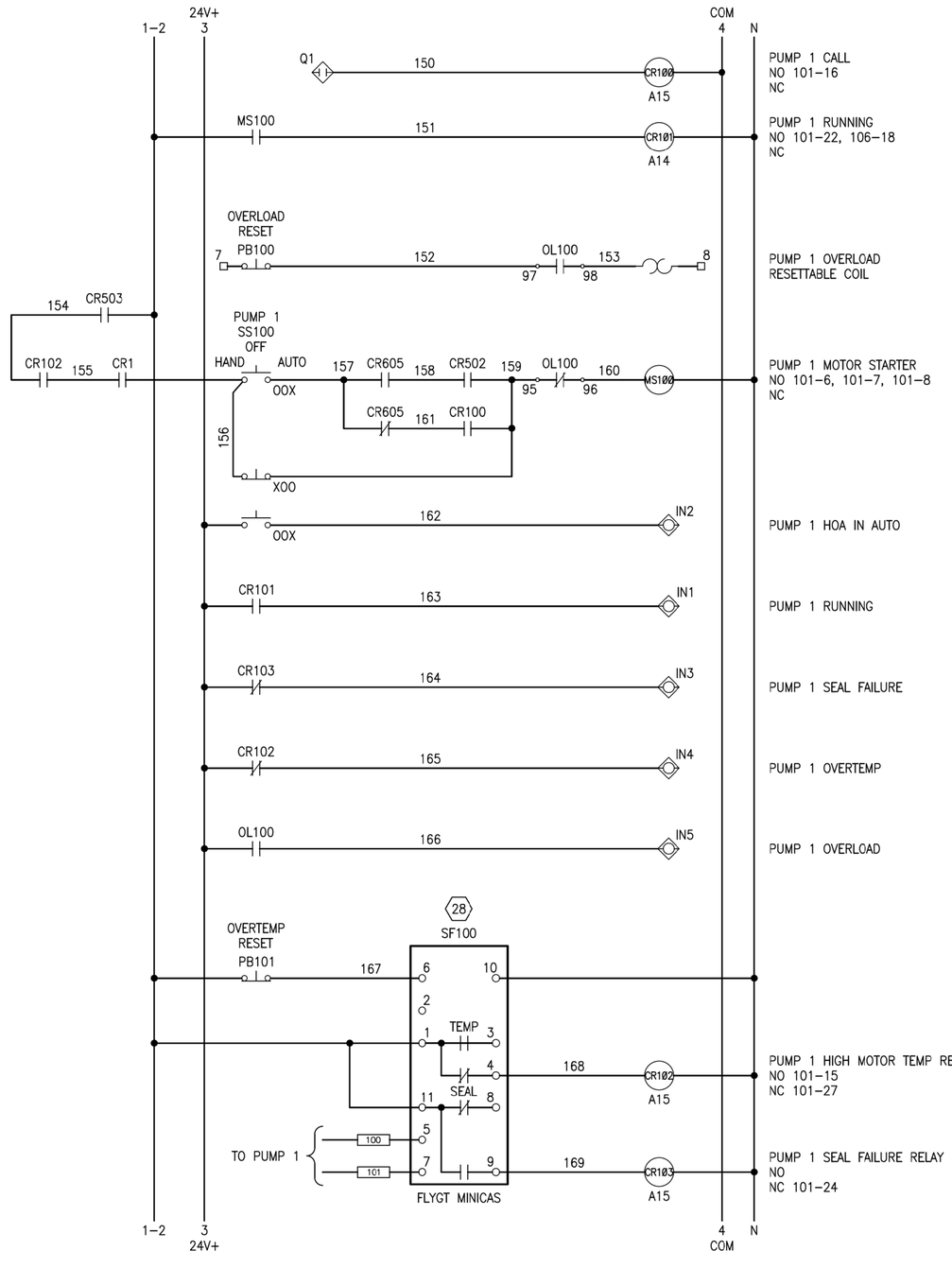
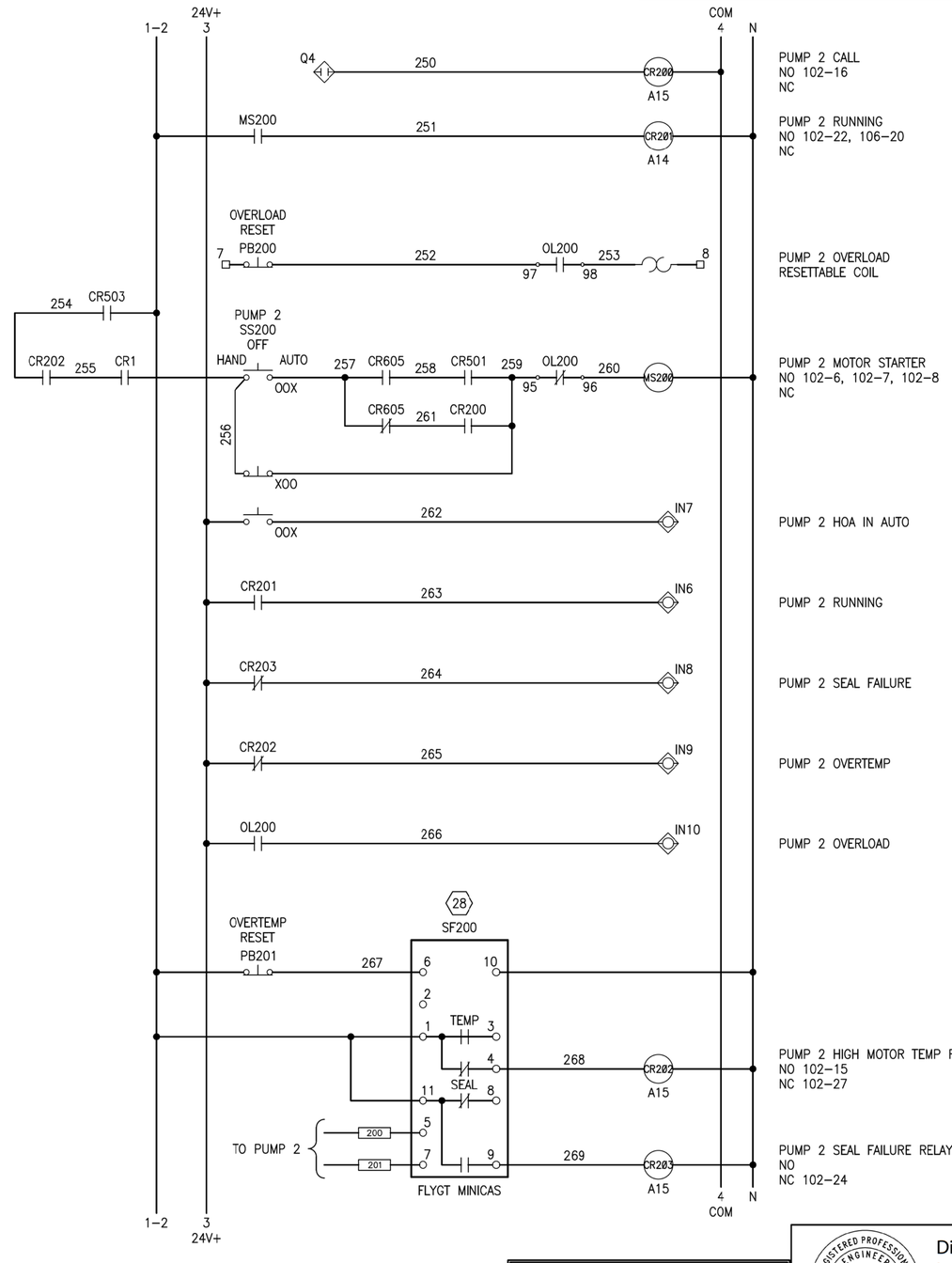
Date: 2016.08.16 15:41:26 -07'00'





*PROVIDED BY OTHERS

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REGISTERED PROFESSIONAL ENGINEER 17911PE OREGON JULY 25, 1995 JOHN S. SHAFER EXPIRES: 06/30/2018

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VOYAGE PUMP STATION IMPROVEMENTS
WIRING DIAGRAM PUMP CONTROLS

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NO.	REVISION	BY	DATE	CHK
0	ISSUED FOR CONSTRUCTION	RHG	8/15/16	JSS

PROJECT:	3205.0
DRAWN:	DMT
CHECKED:	JSS
DATE:	2/15/16
DWG NO.	E6
SHEET NO.	7 OF 10

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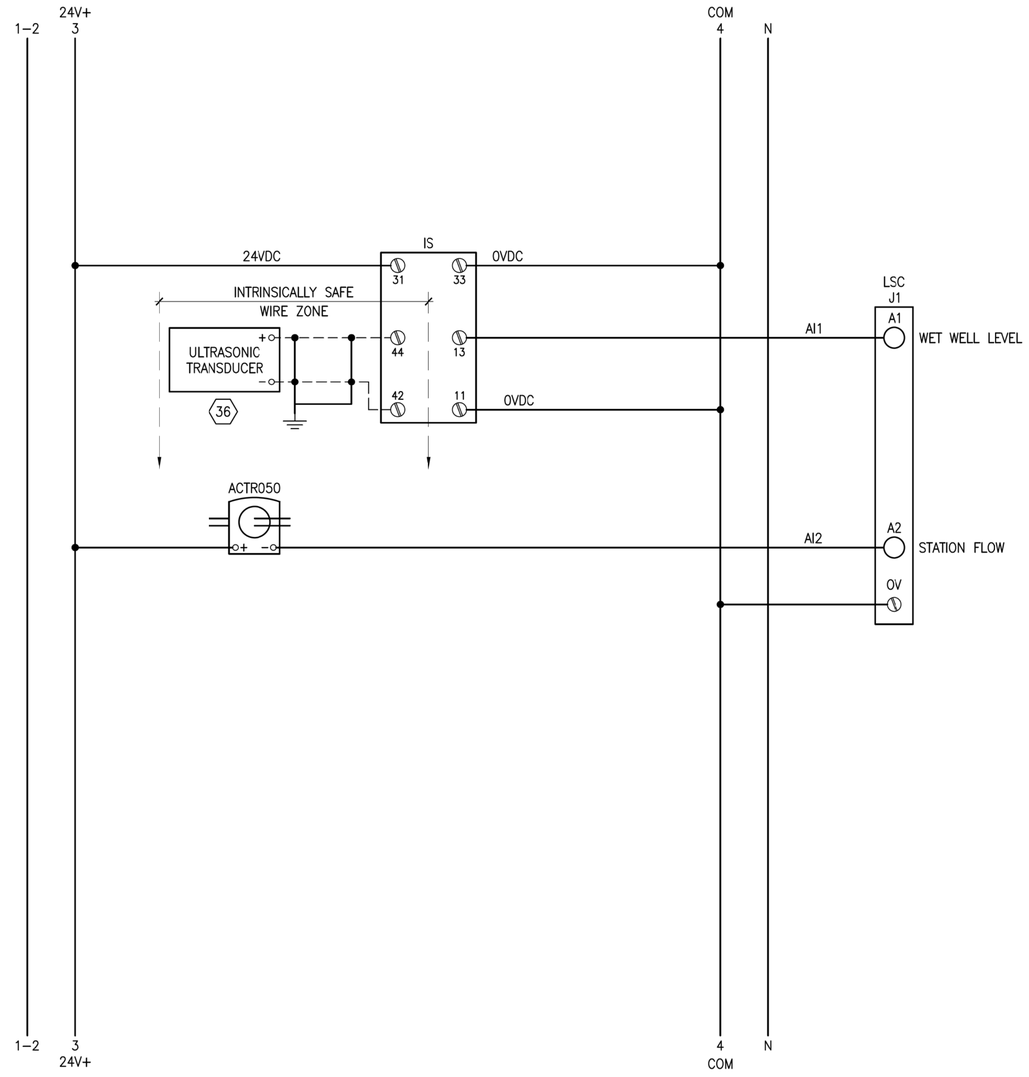
KEYED NOTES:

1. WIRES MEASURED BY CT ON SHEET 4



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JULY 25, 1995
JOHN S. SHAFER
EXPIRES: 06/30/2018

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Date: 2016.08.16 15:44:10 -07'00'

VOYAGE PUMP STATION IMPROVEMENTS
ANALOG WIRING DIAGRAM
WET WELL CONTROLS

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NO.	REVISION	BY	DATE	CHK
0	ISSUED FOR CONSTRUCTION	RHG	8/15/16	JSS

PROJECT:	3205.0
DRAWN:	DMT
CHECKED:	JSS
DATE:	2/15/16
DWG NO.	E7
SHEET NO.	8 OF 10

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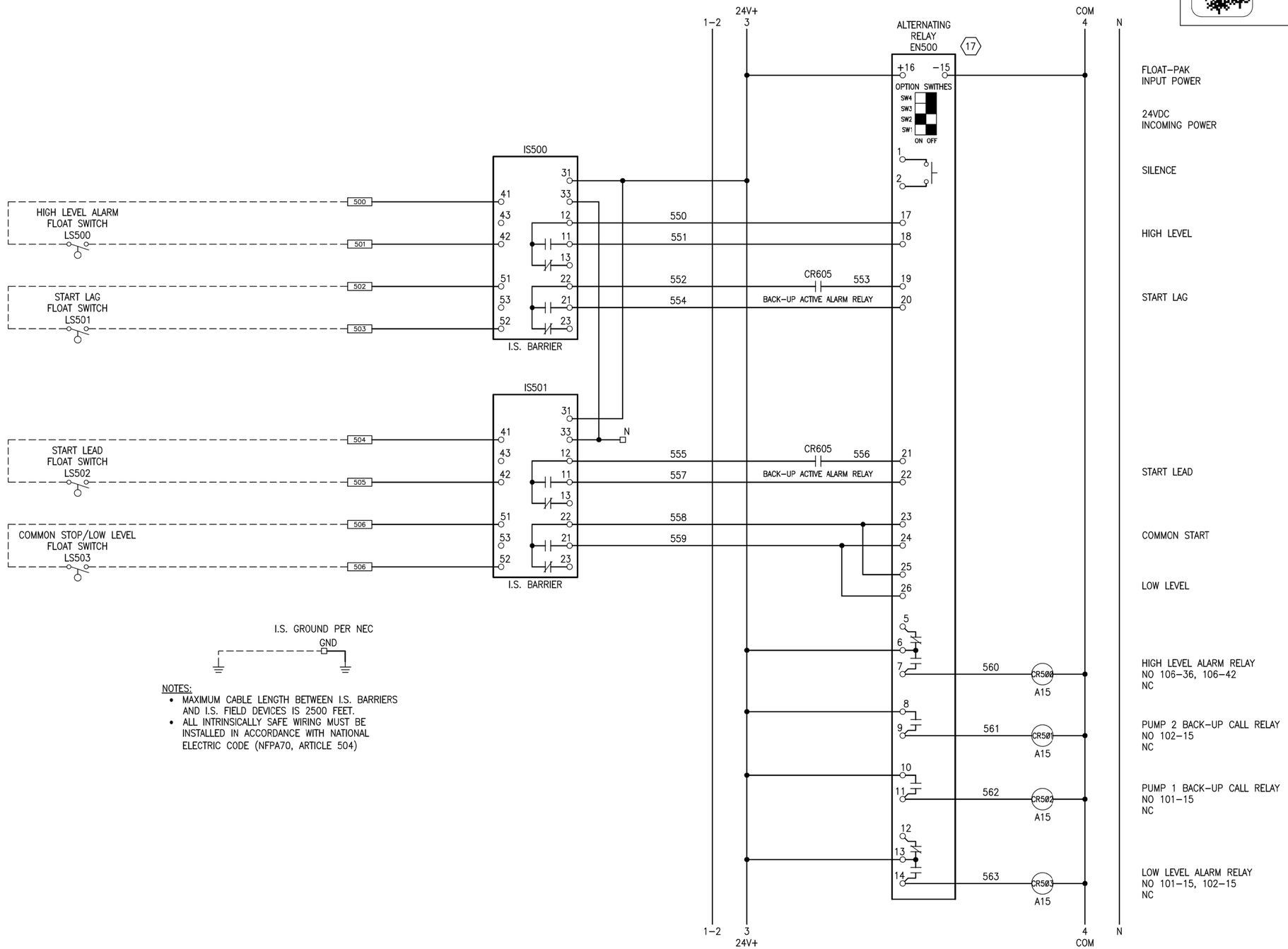
VOYAGE PUMP STATION IMPROVEMENTS
WIRING DIAGRAM
FLOAT BACK-UP CONTROLS



I.S. GROUND PER NEC

NOTES:
- MAXIMUM CABLE LENGTH BETWEEN I.S. BARRIERS AND I.S. FIELD DEVICES IS 2500 FEET.
- ALL INTRINSICALLY SAFE WIRING MUST BE INSTALLED IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (NFPA70, ARTICLE 504)

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NO.	REVISION	BY	DATE	CHK
0	ISSUED FOR CONSTRUCTION	RHG	8/15/16	JSS

PROJECT:	3205.0
DRAWN:	ADP
CHECKED:	JSS
DATE:	JANUARY, 2016
DWG NO.	E8
SHEET NO.	9 OF 10

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JULY 25, 1995
JOHN S. SHAFER
EXPIRES: 06/30/2018

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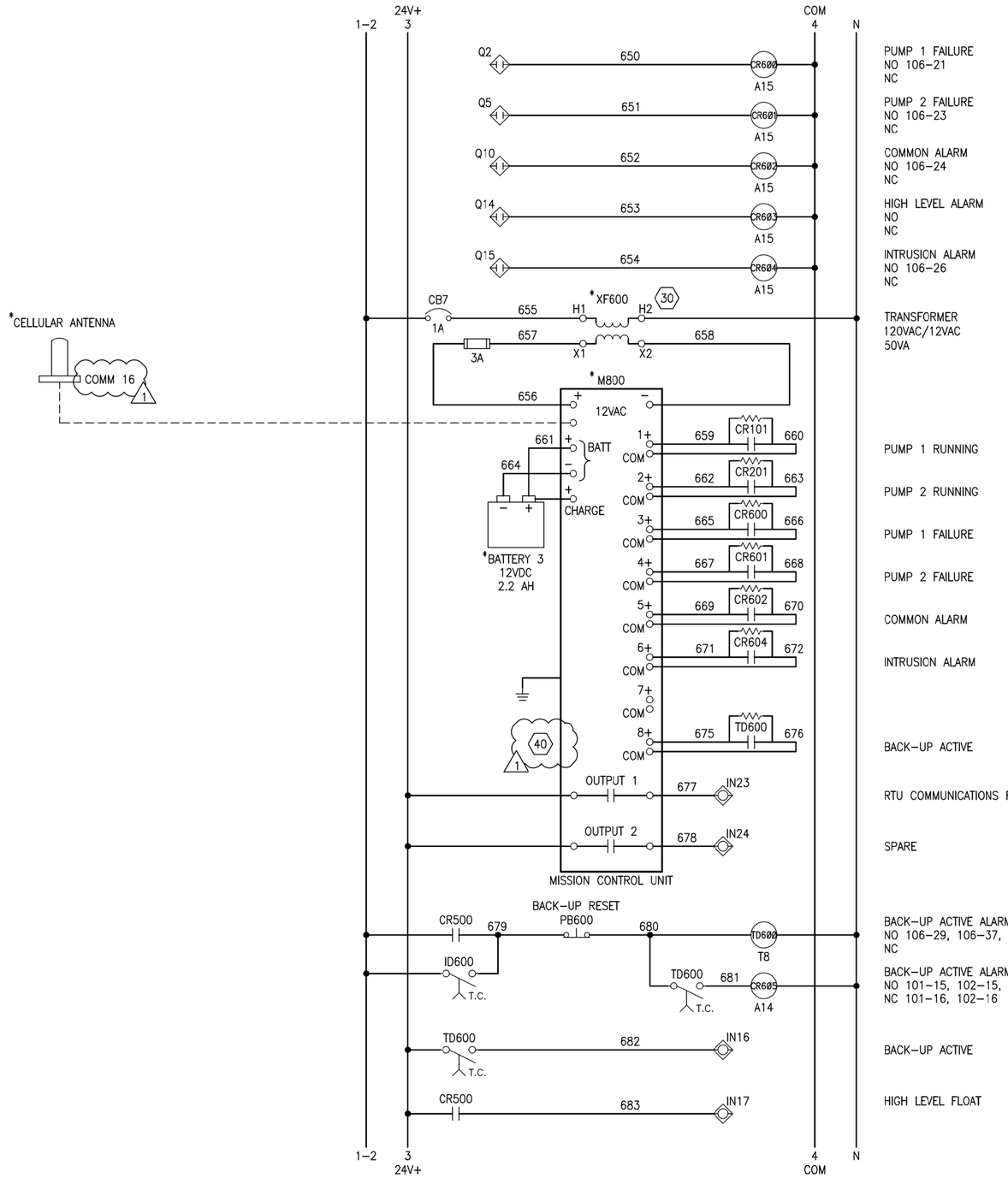
Date: 2016.08.16 15:44:58 -07'00'



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VOYAGE PUMP STATION IMPROVEMENTS
WIRING DIAGRAM
ALARM CONTROLS

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NO.	REVISION	BY	DATE	CHK
0	ISSUED FOR CONSTRUCTION	RHG	8/15/16	JSS
1	IFC W/REVISIONS	RHG	9/1/16	JSS

PROJECT:	3205.0
DRAWN:	DMT
CHECKED:	JSS
DATE:	2/15/16
DWG NO.	E9
SHEET NO.	10 OF 10

ISSUED FOR CONSTRUCTION WITH REVISIONS
September 01 2016

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JULY 25, 1995
JOHN S. SHAFER
EXPIRES: 06/30/2018

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Date: 2016.09.01 09:33:58 -07'00'