

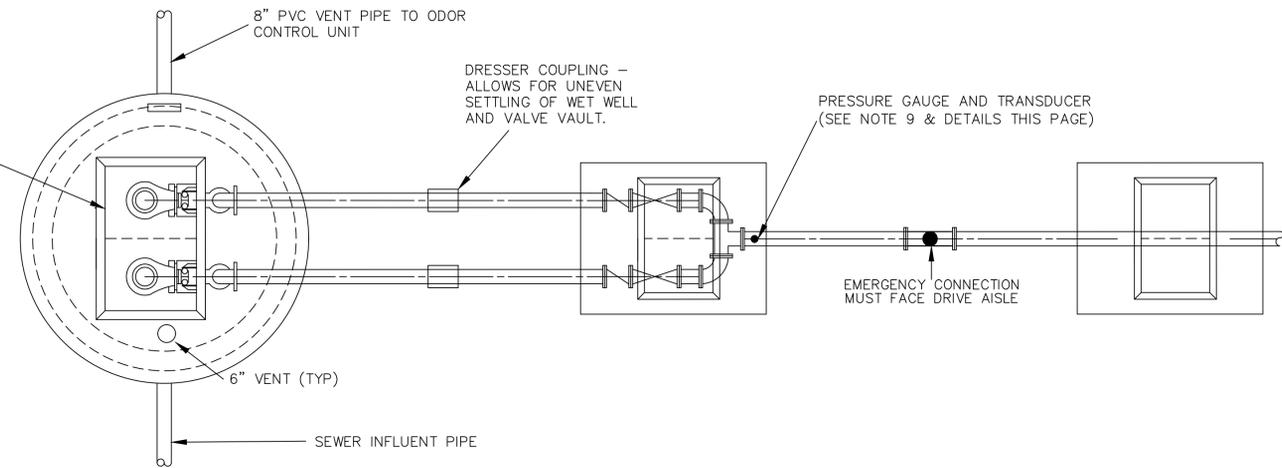
Revisions	
1.01 - DATED 10/15/2013	
1.02 - DATED 7/15/2015	
1.03 - DATED 10/27/2015	
1.04 - DATED 3/28/2017	
1.05 - DATED 11/9/2018	
1.06 - DATED 11/28/2018	
1.07 - DATED 12/5/2019	
Pump Station Section Rev	

ITEM	ELEVATION (NAVD 88)
(A) TOP ELEV.	
(B) INFLUENT PIPE (INVERT)	
(C) HIGH WATER ALARM	
(D) START LEAD PUMP	
(E) START LAG PUMP	
(F) PUMP OFF	
(G) BOTTOM OF WETWELL	

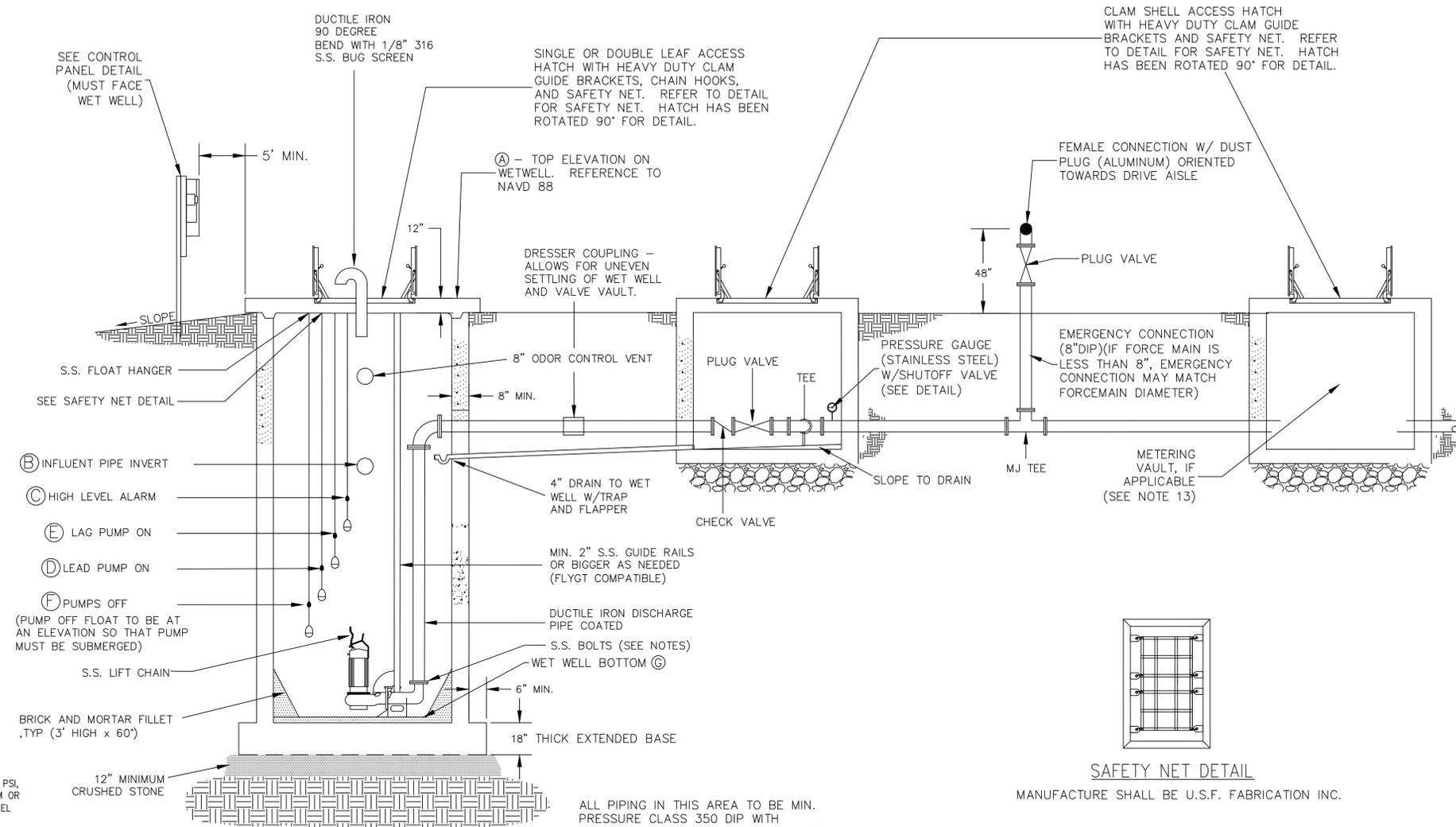
ITEM	VALUE
WETWELL DIAMETER (MIN. 8')	
ROHN 65G TOWER HEIGHT	
PUMP MAKE	
PUMP MODEL	
IMPELLER SIZE	
VOLTAGE	
PHASE	
HORSEPOWER	
RPM	
DISCHARGE FLOW RATE AT DISCHARGE HEAD	GPM @ TDH

NOTES:

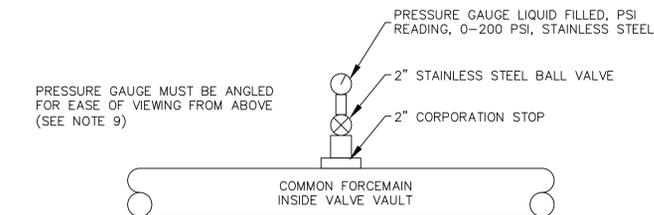
1. WET WELL LEVEL AND ALARMS TO BE CONTROLLED BY A FLOAT SYSTEM. THE PUMP STATION CONTROLS SHALL BE EQUIPPED WITH FOUR FLOATS; ONE EACH FOR LEAD PUMP, LAG PUMP, HIGH WATER ALARM AND PUMPS OFF.
2. ALL POWER TO THE PUMP STATION SHALL BE 3 PHASE POWER. FOR PUMP STATIONS 10 HP AND LESS THE POWER MAY BE SINGLE PHASE.
3. ALL HATCHES SHALL BE PROVIDED WITH OSHA APPROVED FALL SAFETY DEVICE-SEE DETAIL.
4. INSTALL ALL JUNCTION BOXES EQUAL TO OR GREATER THAN 2 FEET ABOVE 100 YEAR WATER SURFACE ELEVATION.
5. PIPE STANCHIONS SHALL BE STAINLESS STEEL AND DESIGNED BY THE ENGINEER TO ADEQUATELY SUPPORT THE SIZE AND WEIGHT OF THE ELECTRICAL AND SCADA COMPONENTS MOUNTED TO THEM. ALL COMPONENTS SHALL BE MOUNTED USING 316 SS ANCHOR BOLTS.
6. ALL PUMP STATION CONTROL PANELS SHALL BE EQUIPPED WITH A TERMINAL BLOCK WITH DRY CONTACTS TO ALLOW CONNECTION TO SCADA CONTROL PANEL.
7. THE CONTRACTOR SHALL INSTALL A SCADA CONTROL PANEL PER BRUNSWICK COUNTY SPECIFICATIONS.
8. INSTALL OUTSIDE WATERPROOF 120VAC OUTLET (GFCI PROTECTED)
9. MOUNT A LIQUID FILLED PRESSURE GAUGE ON THE FORCE MAIN. IT SHALL BE LOCATED IN THE VALVE VAULT ON THE COMMON FORCE MAIN DOWNSTREAM OF THE TEE AND ORIENTED FOR EASE OF VIEWING FROM ABOVE.
10. PUMP LIFTING CHAINS SHALL BE STAINLESS STEEL AND ALL FLANGE BOLTS SHALL BE 316 STAINLESS STEEL.
11. ALL DIP AND FITTINGS SHALL BE COATED ON THE OUTSIDE AND INSIDE PER BRUNSWICK COUNTY SPECIFICATIONS.
12. BRUNSWICK COUNTY MAY REQUIRE A PRESSURE TRANSDUCER IN ADDITION TO A PRESSURE GAUGE ON THE COMMON FORCE MAIN INSIDE THE VALVE VAULT (SEE DETAIL ON SHEET 4 OF 4).
13. BRUNSWICK COUNTY MAY REQUIRE A FLOW METER VAULT. MINIMUM SIZE IS 6' X 6' X 6'. A 4" DRAIN LINE TO WET WELL WITH TRAP AND FLAPPER IS REQUIRED. METER VAULT MAY ALSO DRAIN TO THE VALVE VAULT.



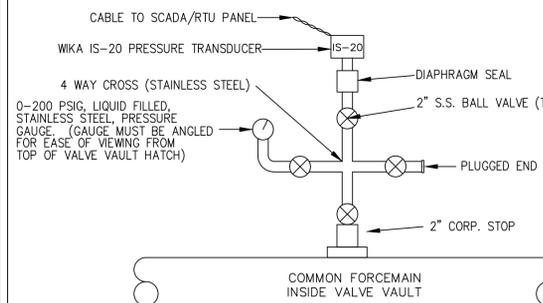
PUMP STATION - PLAN
NOT TO SCALE



PUMP STATION - SECTION
NOT TO SCALE



PRESSURE GAUGE DETAIL
FOR PUMP STATION THAT CONNECTS DIRECTLY TO GRAVITY SEWER
SEE TECHNICAL SPEC 023 SECTION 6



PRESSURE GAUGE AND TRANSDUCER DETAIL
FOR PUMP STATION THAT CONNECTS DIRECTLY TO A FORCEMAIN
SEE TECHNICAL SPEC 023 SECTION 6

NOTES:

1. PRESSURE TRANSDUCER - WIKA IS-20, 0-200 PSI, OUTPUT 4-20 MA, CABLE LENGTH 100' MINIMUM OR AS REQUIRED TO CONNECT TO SCADA/RTU PANEL WITHOUT SPLICES (PART #52358038)
2. DIAPHRAGM SEAL - WIKI, TYPE L990.36, 1/2" NPT PRESSURE TRANSDUCER CABLE MUST REACH THE SCADA/RTU PANEL WITHOUT SPLICING AND WILL BE INSTALLED IN A 1" DIAMETER, SCH. 80 PVC CONDUIT.
3. CONTRACTOR SHALL ASSEMBLE THE "PRESSURE GAUGE AND TRANSDUCER DETAIL AS COMPACTLY AS POSSIBLE INSIDE THE PUMP STATION VALVE VAULT.

COUNTY OF BRUNSWICK



PUMP STATION DETAILS
FOR
BRUNSWICK COUNTY
50HP OR SMALLER PUMP STATION
NORTH CAROLINA

Date: 05-24-12
Scale: NTS
Drawn By: JDM
Checked By: WLP



SAFETY NET DETAIL
MANUFACTURE SHALL BE U.S.F. FABRICATION INC.