

VOID
Not installed
with this project.

GENERAL NOTES

1. See Pump Station Site Plan, Sheet C4.1, for locations of pump station, force main, and external electrical control panel.
2. All construction shall conform to DEQ Sewage Collection & Treatment (SCAT) regulations and Franklin County Utility regulations.
3. All reinforcing steel shall be 60 KSI tensile strength.
4. All concrete shall be Portland cement Type I, 4000 PSI. All concrete structures shall be made watertight using non-shrink grout and/or PVC waterstops as indicated.
5. Concrete structures shall be pre-cast. Contractor shall submit shop drawings of pre-cast structures prior to installation. Pre-cast manufacturer shall be responsible for structural design of any pre-cast structure.
6. Aluminum hatches shall be manufactured by BILCO or equivalent.
7. Contractor shall coordinate installation of electrical service with local electric utility company.
8. Contractor shall supply a rake to remove screenings from the bar screen and a 38 gallon plastic trash can for the screenings. Also provide a 50 pound bag of lime to cover the screenings periodically to control odors and vectors.
9. All pump station piping shall be ductile iron.

PUMP STATION OPERATION SEQUENCE

1. A rise in the water level closes the lead pump control switch (thru transducer) and the lead pump, M1 or M2, starts.
2. A continued rise in water level closes lag pump switch (by way of pressure transducer set point) and lag pump, M1 or M2 starts.
3. A continued rise in water level closes alarm switch (pressure transducer) and the outside warning light turns on and a horn sounds. The auto dialer is also activated. The horn and exterior light may be turned off by a manual switch PB1 close to SR.
4. A continued rise in water level closes the back-up alarm switch (pressure transducer), sends another alarm signal to the autodialer and turns on both pumps until low float is reached.
5. As low water is reached, the emergency high water level alarm turns off.
6. As the level drops the lag pump switch opens. The pump is kept operating by auxiliary contact M1 or M2.
7. A continued drop in the level opens the alarm switch and shuts off outside warning light.
8. A continued drop in level opens the lead pump switch. The pump is kept operating by auxiliary contact M1 or M2.
9. A continued drop in the level opens the "all off" switch and both pumps shut off.
10. A continued drop in the level opens the low water level alarm switch and turns off all pumps.
11. Detection of phase failure or phase reversal will shut down pumps and activate the auto dialer.
12. All alarms will activate the autodialer. The autodialer will contact a manned station and report the current system condition.

PUMP STATION EQUIPMENT NOTES

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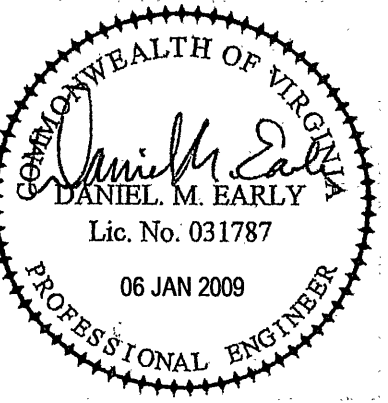
PUMP SCHEDULE	
DESIGNATION	LEAD/LAG PUMPS
DESCRIPTION	SUBMERSIBLE GRINDER
MANUFACTURER	HYDROMATIC ®
MODEL NUMBER	HPGH/H/X-750
VOLTAGE	208 VOLTS
FLOW CAPACITY	62.5 GPM
TOTAL DYNAMIC HEAD (TDH)	109 FEET
MOTOR HORSEPOWER	7.5 HP
PUMP SPEED	3,450 RPM
IMPELLER DIAMETER	6.75 INCHES

PUMP LEVEL CONTROL SCHEDULE			
CONDITION		LEVELS	ELEVATION
8-INCH INVERT IN		14.00 FT	1139.00
EMERGENCY BACKUP ALARM (MERCURY FLOAT)		7.50 FT	1132.50
HIGH WATER LEVEL ALARM		7.00 FT	1132.00
LAG PUMP ON		6.50 FT	1131.50
LEAD PUMP ON		6.00 FT	1131.00
PUMPS OFF		2.00 FT	1127.00
SUMP		0.00 FT	1125.00

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PUMP STATION EQUIPMENT NOTES

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2203 PETERS CREEK ROAD
ROANOKE, VIRGINIA 24017
P 540.562.2345 F 562.2344
INFO@ACSDSIGNLLC.COM
WWW.ACSDSIGNLLC.COM

**WIRTZ SERVICES, LLC
WIRTZ CENTRAL SEWER SYSTEM
FRANKLIN COUNTY, VIRGINIA**

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DRAWN BY:	JJD,WTW
DESIGNED BY:	JJD
CHECKED BY:	
DATE:	06 JAN 2009
JOB NUMBER:	05353A

REVISIONS:	
No. 1	
No. 2	
No. 3	
No. 4	
No. 5	

SHEET NO.:

C4.2

PUMP STATION EQUIPMENT PLAN