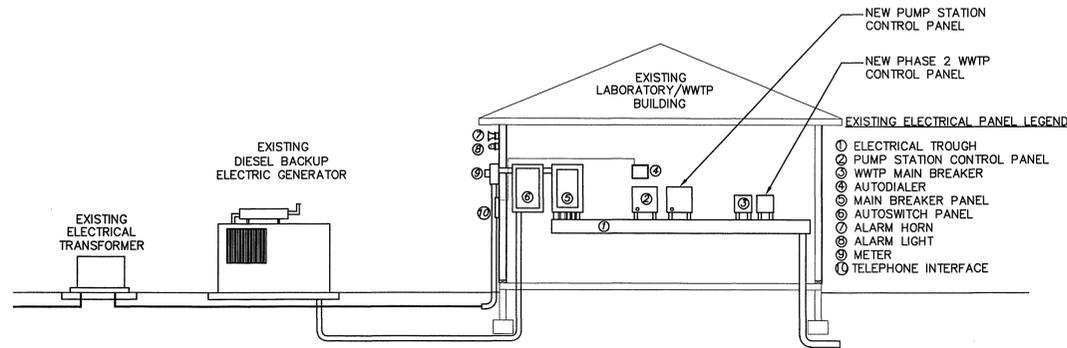


ELECTRIC SERVICE & CONTROL PANEL SCHEMATIC DIAGRAM

ELECTRIC GENERAL NOTES:
 1. ELECTRIC SERVICE PROVIDED BY SOUTHSIDE ELECTRIC. CONTRACTOR SHALL COORDINATE TRANSFORMER AND SERVICE INSTALLATION WITH ELECTRIC UTILITY COMPANY.
 2. ELECTRIC SERVICE SHALL BE THREE PHASE.
 3. THE DIESEL BACKUP ELECTRIC GENERATOR SHALL BE SIZED TO SERVE THE ULTIMATE WWTP CONFIGURATION INCLUDING THREE PACKAGE WASTEWATER TREATMENT PLANTS AND THREE PUMP STATIONS.
 4. CONDUIT SHALL BE SOLVENT WELDED PVC OR GALVANIZED STEEL.
 5. ALL ELECTRICAL CONSTRUCTION SHALL CONFORM TO NEMA AND BOCA CODES. ELECTRICAL PERMITS SHALL BE OBTAINED FROM BEDFORD COUNTY PRIOR TO COMMENCING ELECTRIC EQUIPMENT INSTALLATION.
 6. THE EXISTING AUTO DIALER SHALL BE MODIFIED TO ACCOMMODATE THE INSTALLATION OF THE NEW PHASE 2 WWTP & EFFLUENT PUMP STATION.



NOTES:

- SEE WWTP SITE PLAN FOR PROPOSED TREATMENT PLANT AND EQUIPMENT INSTALLATION LOCATIONS.
- WWTP SHALL HAVE A CLASS I RELIABILITY RATING WITH EMERGENCY BACK-UP GENERATOR CAPABILITY.
- THE EFFLUENT PUMPS SHALL BE CONFIGURED FOR A DUPLEX ALTERNATING ARRANGEMENT AND INCLUDING A LEAD-LAG OPERATION.
- SEE DETAIL SHEETS HEREIN FOR EXACT DIMENSIONS AND SPECIFICATIONS FOR THE WWTP, EFFLUENT PUMP STORAGE TANK, AND LABORATORY BUILDING.
- THE EFFLUENT SUBMERSIBLE PUMPS SHALL BE GOULDS MODEL 100H RATED AT 100 GPM @ 109.27 FT Total Dynamic Head.
- EFFLUENT PUMPS SHALL BE CONTROLLED USING A PRESSURE SENSING SWITCH APPARATUS SUCH AS MANUFACTURED BY HYDROMATIC OR EQUIVALENT.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PROPOSED EQUIPMENT FOR REVIEW BY THE CONSULTING ENGINEER.
- REFER TO THE PROJECT MANUAL FOR DETAIL SPECIFICATIONS FOR PROPOSED EQUIPMENT.
- ALL INSTALLATION SHALL ADHERE TO THE LATEST REGULATIONS SET FORTH BY FRANKLIN COUNTY AND THE VIRGINIA DEPARTMENT OF HEALTH.
- ALL CONCRETE AND STEEL TANK PENETRATIONS SHALL BE PROPERLY SEALED USING A NON-CORROSIVE NON-SHRINKING GROUT.
- THE CONTRACTOR MAY SUBMIT AN ALTERNATE EFFLUENT STORAGE TANK DESIGN AND LABORATORY BUILDING DESIGN. THE SUBMITTAL SHALL BE DIMENSIONED AND AT SHALL PROVIDE EQUIVALENT WORKING CAPACITIES OR FLOOR AREA.
- ALL CHEMICAL FEED LINES, ELECTRICAL POWER SUPPLY, AND ELECTRICAL EQUIPMENT CONTROL CIRCUITS SHALL BE INSTALLED IN APPROPRIATED SIZED PVC CONDUITS. THE CONTRACTOR SHALL SUBMIT A SHOP DRAWING INDICATING CONDUIT DIAMETERS AND PROPOSED ROUTING CONFIGURATION FOR CONDUIT. THE CONDUIT SHALL BE BURIED BELOW GROUND. PENETRATIONS THROUGH TANK AND BUILDING WALLS SHALL ADHERE TO APPLICABLE CODES AND SHALL BE PROPERLY SEALED.

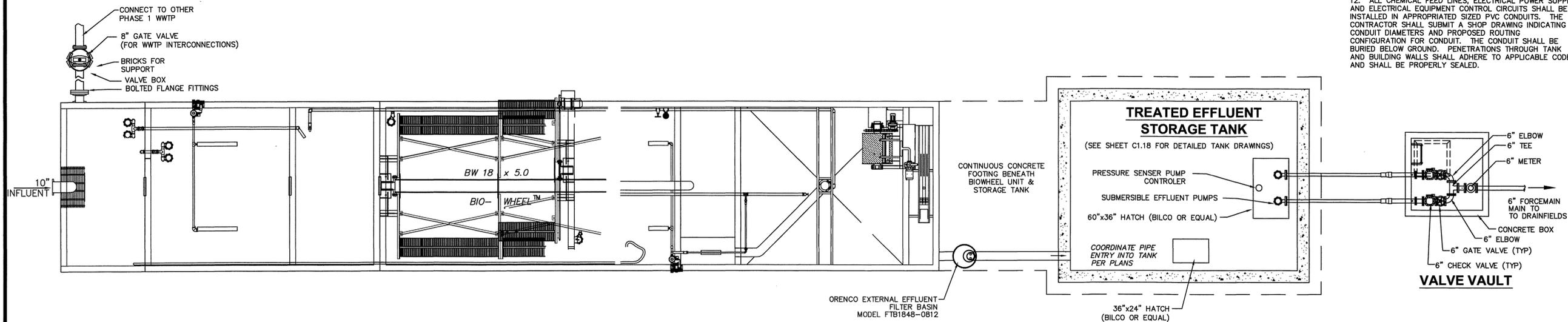


ACS DESIGN

Engineering • Planning • Surveying
Construction Management

2203 Peters Creek Road, NW
Roanoke, Virginia 24017
Phone: 540 562 2345
Fax: 540 562 2344
Email: info@acsdesignllc.com
www.acsdesignllc.com

**LAKEWATCH PLANTATION
COMMUNITY SEWER SYSTEM
PHASE 1
FRANKLIN COUNTY, VIRGINIA**

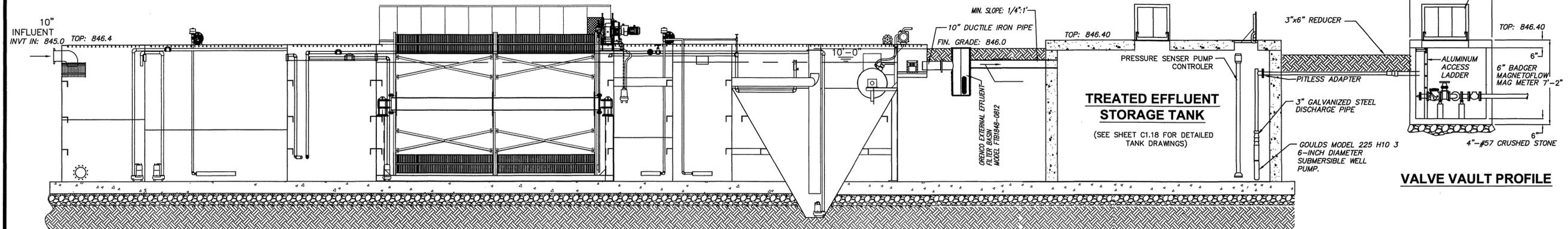


GENERAL WWTP CONFIGURATION PLAN

NOTE: ONLY CENTER BIOWHEEL UNIT SHOWN

NOTES:

- THE MASTER METER IN THE VALVE VAULT SHALL BE AN INDICATING, TOTALIZING, AND RECORDING STYLE METER.
- LOCATE ACCESS HATCH DIRECTLY OVER PROPOSED LADDER INSTALLATION AS SHOWN



GENERAL WWTP CONFIGURATION PROFILE

DRAWN BY: AH

DESIGNED BY: DE

CHECKED BY: DE

DATE: JAN. 26, 2006

SCALE: NTS

REVISIONS

REVISION	DATE	COMMENT
1		REVISED EFFLUENT STORAGE PER VHD/05/06

SHEET No.

C1.10

WWTP GENERAL CONFIGURATION

JOB No. 05076