

WAWA, INC. TYPICAL FLORIDA PUMP STATION DETAIL

WAWA PREFERRED PRE-FABRICATED PUMP STATION VENDOR:

RILEY & Company, Inc.
Sanford, FL 32773 (Ph. 407-265-9963)

NO SUBSTITUTIONS - NO ALTERNATES
LIFT STATION WILL BE PRIVATELY OWNED AND MAINTAINED.

The H-20 Load Rated Fiberglass Wetwell Must Be Manufactured by L.F. Manufacturing, Giddings, Texas, Which Includes A Written 20 Yr. Warranty. Certification of the wetwell H-20 load rating must be supplied with submittals. H-20 certification must be signed and sealed by an engineer registered in the State of Florida.

After the H-20 load rated wetwell has been installed, the ASTM Certification Number and Serial Tracking Number must be visible.

PUMPS: (3 YEAR WARRANTY)

Submersible grinder pumps shall be RILEY Model RC30087, installed in the H-20 GP FRP wetwell utilizing a dual slide rail system. The grinder unit shall be capable of macerating materials normally found in domestic and commercial sewage into a fine slurry which will pass through the pump and the Sch.80 PVC discharge piping.

Stator winding shall be open type with Class F insulation and shall be heat-shrink fitted into the stator housing. The use of pins, bolts, or other fastening devices is not acceptable.

A heat sensor thermostat shall be attached to the top end of the motor winding and shall be connected in series with the magnetic contactor coil in the control panel to stop motor if winding temperature exceeds 140 C, but shall automatically reset when the winding temperature returns to normal. Two heat sensor thermostats shall be used on three phase motors.

The pump motor grinder shaft shall be AISI 430F SS threaded to take the pump impeller and the grinder impeller.

Upper & lower mechanical seals shall be Silicon Carbide vs Silicon Carbide.

MISCELLANEOUS: All wiring on the back panel shall be contained within the wiring duct. All wiring between the inner door and the back panel shall be contained with in a plastic spiral wrap. Each wire shall have a wire number at each end to correspond to the as built drawing for field troubleshooting.

The control panel must be manufactured in-house by lift station supplier and be a TUV (UL508A Certified) facility.

FASTENERS & APPURTANCES: All fasteners, lifting chains, float cable bracket, hinges, and appurtenances shall be made of AISI 316SS.

A 316SS slide/latch assembly shall be provided for holding the doors open on the wetwell and valve box.

Slide rails shall be made of SCH.40 AISI 304SS pipe.

Pump lifting cables shall be made of AISI 316 SS.

Pump lifting bales shall be made of AISI 316 SS.

H-20 LOAD RATED WETWELL WITH LIFTING LUGS:

The fiberglass wetwell must be H-20 load rated with integral lifting lugs, fiberglass slope in bottom of wetwell and valve box. Certification of the H-20 load rating must be supplied at the time of submittals to Engineer. The wetwell shall be manufactured of fiberglass reinforced polyester (FRP) of depth and diameter as shown on the lift station elevation detail. The wall thickness shall be adequate for the depth of the wetwell to maintain the H-20 LOAD RATING.

EXECUTION:

Installation shall be in strict accordance with the manufacturer's recommendations in the locations shown on the drawing.

INSPECTION & TESTING: A factory representative shall be provide for a one (1) time start-up and shall have complete knowledge of the proper operation and maintenance of complete system. Megger the motors. The pump motors shall be megged out prior to the start-up to ensure that the insulation of the pump motor/cable is intact. The pump controls and pumps shall be checked for mechanical reliability and proper operation.

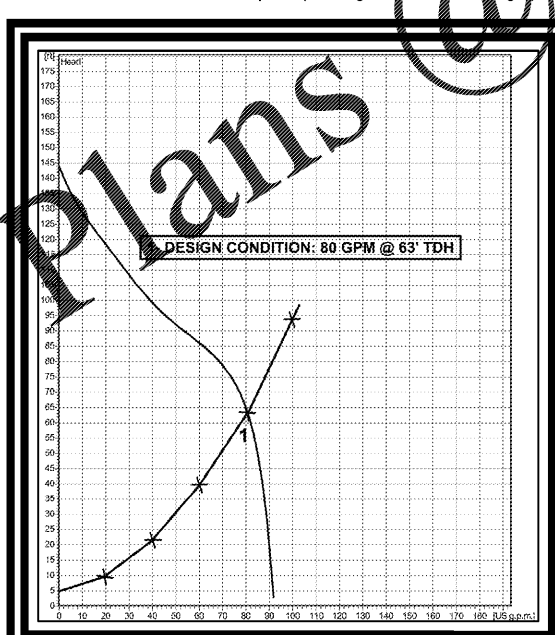
CITY OF JACKSONVILLE REQUIREMENTS:

1. A COPY OF THE DETAILED AND DIMENSIONED AS-BUILT DRAWING, INCLUDING LOCATION AT PUMP STATION AND FORCE MAIN POINT OF CONNECTION WITH REGIONAL UTILITY, AS SUBMITTED TO THE REGIONAL UTILITY, SHALL BE PROVIDED TO THE DIVISION.
2. AN UNOBSTRUCTED SIGN MADE OF DURABLE WEATHER RESISTANT MATERIAL AT A LOCATION VISIBLE TO THE PUBLIC. THE SIGN SHALL BE POSTED AT ALL PUMPING STATIONS AND LIFT STATIONS WITH THE FOLLOWING, CURRENT, INFORMATION:
 - 2.1. TWENTY-FOUR (24) HOUR TELEPHONE BEEPER NUMBER FOR OPERATOR NOTIFICATION;
 - 2.2. NAME AND ADDRESS OF THE OPERATOR; AND
 - 2.3. NAME, ADDRESS, AND TELEPHONE NUMBER OF THE PUMP STATION OR LIFT STATION OWNER.
3. ALL PUMP STATIONS AND LIFT STATIONS SHALL BE CONSTRUCTED WITH A MINIMUM OF TWO (2) PUMPS. EACH PUMP SHALL BE A STANDBY FOR THE OTHER AND SHALL BE OF THE SAME CAPACITY AND CAPABLE OF HANDLING FLOWS IN EXCESS OF THE DESIGN PEAK FLOW. THE CONTROL SYSTEM SHALL AUTOMATICALLY ALTERNATE PUMPING STARTS SHOULD THE LEAD PUMP FAIL. THE STATION SHALL ACTIVATE AN ALARM PRIOR TO ALTERNATION AND START OF THE LAG PUMP.

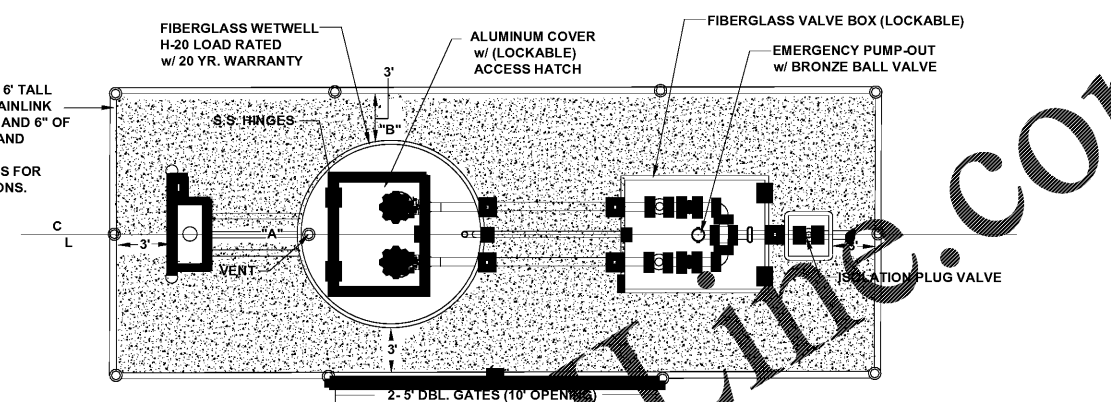
PUMP DATA	
PRIMARY PUMP CAPACITY	80 GPM
PRIMARY TDH	63 'TDH
SECONDARY PUMP CAPACITY	80 'TDH
SECONDARY TDH	63 'TDH
PUMP MANUFACTURER	RILEY
PUMP MODEL #	RC30087
R.P.M.	3450
HORSEPOWER	4.10
ELECTRICAL/ VOLTS / PHASE	208V/3
FULL LOAD AMPS/ PER PUMP	10.20
PUMP DISCHARGE SIZE	2"

ELEVATIONS	
TOP OF WETWELL	26.45
INLET INVERTS	22.00
HIGH LEVEL ALARM (HLA)	21.50
2nd PUMP ON (LAG)	21.00
1st PUMP ON (LEAD)	20.50
PUMPS OFF (OFF)	19.50
BOTTOM OF WETWELL	16.45
WETWELL DIAMETER	48"

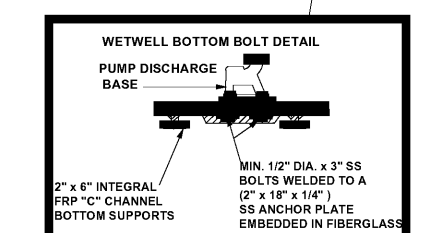
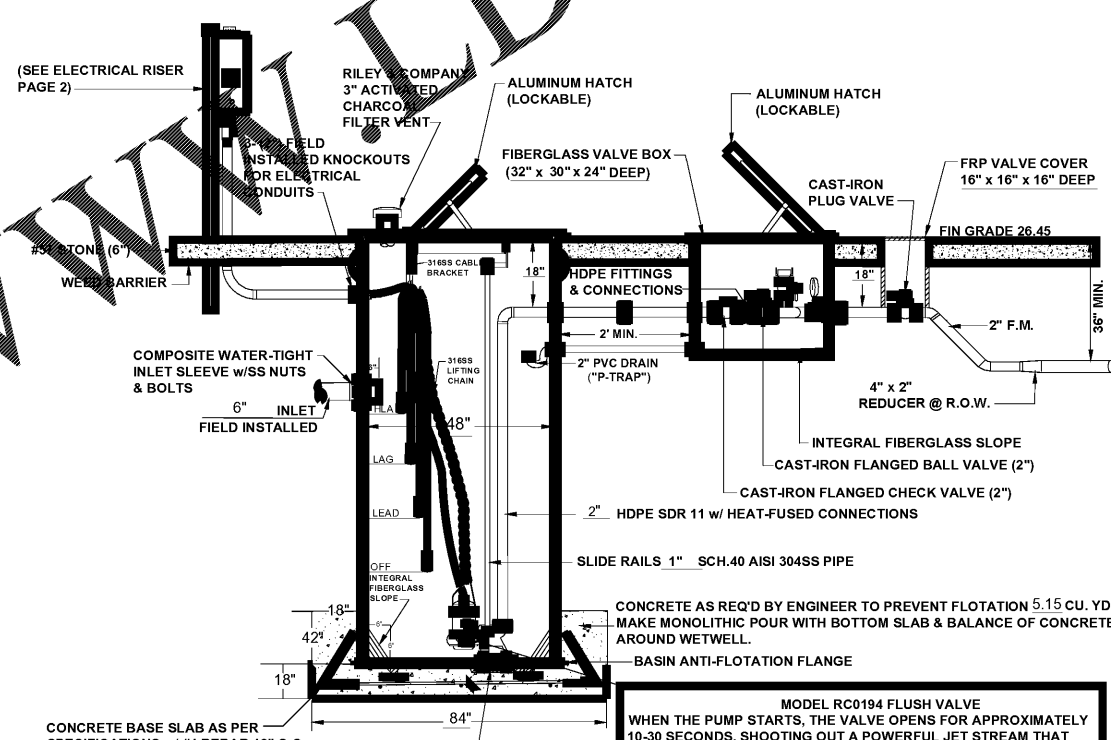
1. Water service with hose bibb and reduced pressure backflow preventer to be installed near lift station. (See Electrical Riser Illustration Page 2)
2. Control panel shall be NEMA 4X fiberglass enclosure (30" x 30" x 10" Deep)
3. All wiring shall be copper and shall meet all NEC and manufacturer's requirements
4. Control panel and top hatch shall be located above the 100 yr. flood elevation.
5. Wetwell access cover, valve box, and control panel shall be pad lockable.
6. Control panel shall have audible and visual alarm system, motor overload, and phase/voltage protection.
7. Electric service cable and conduit shall be sized per NEC and local codes.
8. System shall be operated and maintained to provide uninterrupted service as required by Chapter 62-604.500.
9. Approved Operation & Maintenance Manual(O&M) shall be kept available at a site acceptable to FDEP for use by operation and maintenance personnel or inspection by DEP personnel.
10. All fasteners inside wetwell shall be stainless steel.
11. A weather resistant emergency contact sign shall be installed at lift station and made visible to the public (Lettering shall be min. 2" in height)



CONTRACTOR TO INSTALL 6' TALL COMMERCIAL GRADE - CHAINLINK FENCING, WEED BARRIER, AND 6" OF #57 STONE INSIDE FENCE AND AROUND LIFT STATION. SEE CONSTRUCTION PLANS FOR OVERALL FENCE DIMENSIONS.



NOTE: PUMP CONTROL PANEL SHALL BE LOCATED FEET FROM WETWELL PERIMETER AT POINT "A" OR "B"



MODEL RC0194 FLUSH VALVE
WHEN THE PUMP STARTS, THE VALVE OPENS FOR APPROXIMATELY 10-30 SECONDS, SHOOTING OUT A POWERFUL JET STREAM THAT FLUSHES ALL SOLIDS INTO SUSPENSION, READY TO BE PUMPED AWAY. BECAUSE THE FLUSHING SEQUENCE IS AN INTEGRAL PART OF THE PUMPING CYCLE, FLUSHING OCCURS EVERY TIME THE PUMP STARTS. THIS REDUCES GREASE AND SOLIDS BUILD-UP AND REDUCES UNPLEASANT ODORS.

01-17-2020

REVISIONS BY	

RILEY & Company, Inc.
5491 Benchmark Lane
Sanford, FL 32773
PH. 407-265-9963

WAWA - EDGEWOOD &
COMMONWEALTH - JAX. (PG. 1 OF 2)

DRAWN	
CHECKED	
DATE	
SCALE	
JOB NO.	

BOHLER ENGINEERING
SITE/CIVIL AND CONSULTING ENGINEERING
PERMITS/INSPECTIONS
TRANSPORTATION SERVICES
SUSTAINABLE DESIGN
CONSTRUCTION MANAGEMENT
FLORIDA BUSINESS CENTER OF AUTHORITY # 30789
LANDSCAPE ARCHITECTURE LICENSE # 1402000010

- ♦ BALTIMORE, MD
- ♦ BIRMINGHAM, AL
- ♦ CHICAGO, IL
- ♦ CINCINNATI, OH
- ♦ COLUMBIA, SC
- ♦ DALLAS, TX
- ♦ DENVER, CO
- ♦ HOUSTON, TX
- ♦ JACKSONVILLE, FL
- ♦ KANSAS CITY, MO
- ♦ MIAMI, FL
- ♦ MINNEAPOLIS, MN
- ♦ NEW YORK, NY
- ♦ PHILADELPHIA, PA
- ♦ RICHMOND, VA
- ♦ SEATTLE, WA
- ♦ TAMPA, FL
- ♦ WASHINGTON, DC
- ♦ WASHINGTON, DC

REVISIONS				
REV	DATE	COMMENT	BY	
Δ	01/08/18	PER CITY & JEA COMMENTS	JRT	
Δ	03/06/18	PER CITY & FDOT COMMENTS	JRT	
Δ	04/16/18	PER FOOT COMMENTS	JRT	
Δ	01/28/20	FORCE MAIN & IRRIGATION REVISION	ASZ	
Δ	02/11/20	EOD COMMENTS	ASZ	
Δ	09/25/20	PER WAWA	KM	

811 KNOW WHAT'S BELOW
ALWAYS CALL 811
BEFORE YOU DIG
www.callsunshine.com

PERMIT SET
PROJECT NO.: FL1710004
DRAWN BY: JRT
CHECKED BY: ASZ
DATE: 9/28/20
SCALE: AS NOTED
CAD ID: ODD

Wawa FOR BRIGHTWORK REAL ESTATE
LOCATION OF SITE
1004 EDGEWOOD AVE NORTH
JACKSONVILLE, FL 32254
CITY OF JACKSONVILLE

BOHLER ENGINEERING
3820 NORTHDALE BLVD., SUITE 300B
TAMPA, FLORIDA 33624
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CENTER OF AUTHORITY # 30789
LANDSCAPE ARCHITECTURE LICENSE # 1402000010

SHEET TITLE: **CONSTRUCTION DETAILS**
SHEET NUMBER: **D-9**