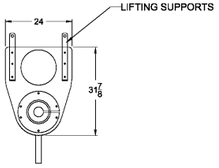
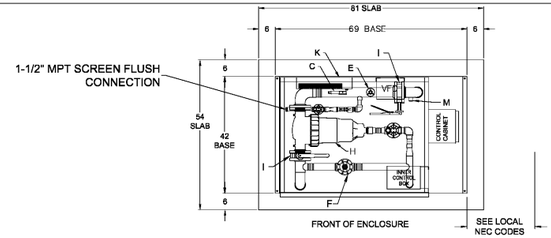
PUMP STATION SPECIFICATIONS:
NAME: RIVERWOOD HIGH SCHOOL
STATION MODEL: BMXV-1-15-460-3-100-115
STATION TOTAL PERFORMANCE: 100 GPM @ 115 PSI
PUMP HORSEPOWER:
PUMP NO.1 15HP
CHECK VALVE SIZE:
PUMP NO.1 3"
ISOLATION VALVE SIZES:
STATION INLET ISOLATION VALVE SIZE: 3"
STATION DISCHARGE ISOLATION VALVE SIZE: 3"
DISCHARGE MANIFOLD SIZE: 3"
POWER REQUIREMENTS: 460 V, 60 HZ, 3 PHZ, 42 FLA (EST.)
EXHAUST FAN REQUIREMENTS: 240 CFM

STATION COMPONENTS:
A SUBMERSIBLE PUMP AND MOTOR
B FLOATING HDPE PUMP SLED
C PRESSURE TRANSDUCER WITH GAUGE
D CHECK VALVE
E FLOW SENSOR
F PRESSURE RELIEF VALVE
G STATION FAN HOOD MOUNTED
H V200 FILTER WITH 300 MICRON SCREEN
I STATION ISOLATION VALVE
J 3" FLG INTAKE DROP PIPE
K 500 WATT ENCLOSURE HEATER
L 3" FLG DISCHARGEE DROP PIPE
M 1" MIN. BLOW-OUT FITTING
N MARINE GRADE ALUMINUM ENCLOSURE (UNPAINTED)
O STAINLESS STEEL BASE (UNPAINTED)
P DISCHARGE LINE
Q SELF-FLUSHING INTAKE SCREEN
R PUMP SLED STANDS

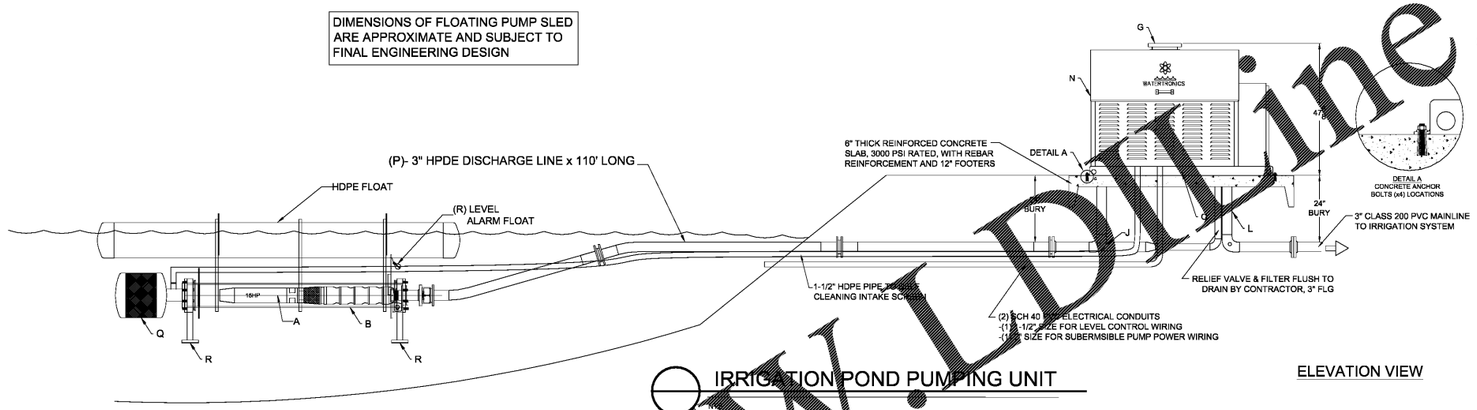


FRONT VIEW OF BMX

DIMENSIONS OF FLOATING PUMP SLED ARE APPROXIMATE AND SUBJECT TO FINAL ENGINEERING DESIGN

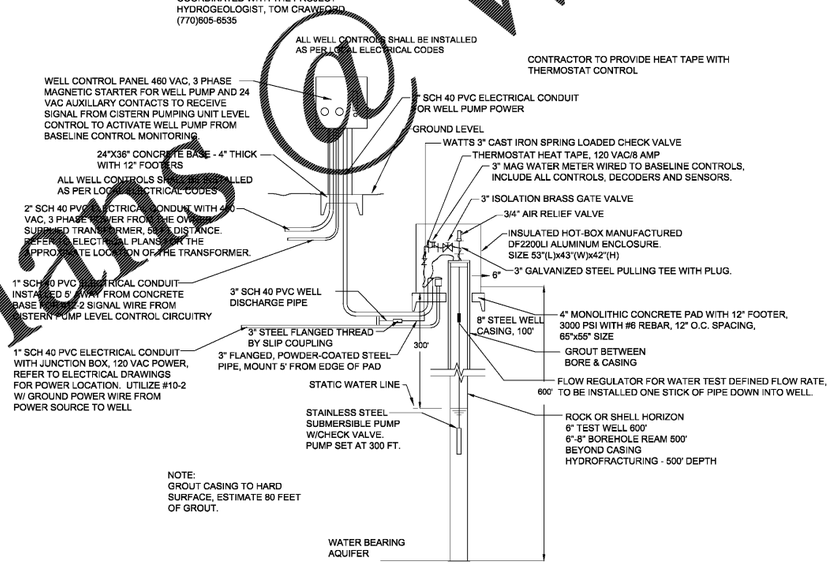


PLAN VIEW



IRRIGATION POND PUMPING UNIT
ELEVATION VIEW

PUMP LOCATION NOTES:
1. INSTALLATION CONTRACTOR SHALL COORDINATE WITH HYDROGEOLOGY REPORT PREPARED FOR THE OWNER.
2. PUMP LOCATION SHALL BE TESTED AND COORDINATED WITH THE PROJECT HYDROGEOLOGIST, TOM CRAWFORD (770)905-6535



IRRIGATION REPLENISHMENT WELL
NTS

IRRIGATION REPLENISHMENT WELL

PROJECT DESCRIPTION:
The well drilling contractor is responsible for producing (1) wells that will replenish the Irrigation pond for the Riverwood High School project in Sandy Springs, Georgia The well driller shall supply (1) wells that each shall supply 68 gallons per minute, 97,000 gallons per day from each well at a well casing discharge head of 150 TDH.

The following are phases that the contractor shall proceed to accomplish and identify these phases by line item in the well installation.

TASK #1: HYDROGEOLOGIST
Well driller shall utilize existing hydrogeologist report from Dan Harman giving underground well fracture information for wells. The well report includes prioritized well locations and exact location shall be staked by Dan Harman. The Irrigation Well denoted on Irrigation Plans are for bidding only and shall be located on site by Dan Harman. The Well Drilling Contractor shall retain Dan Harman to answer questions during the well drilling installation and testing.

TASK #2: WELL DRILLING SERVICES
Drill 6" test well at designated sites recommended by Dan Harman coordinated by the well driller. The well driller will then case the well with an 8" Steel casing. The casing will be set into the rock or shell horizon and grouted into place in accordance with the specification of the Georgia authorities for irrigation wells. Air test the well for a preliminary assessment of capacity. The potential for producing the quantities of water desired will be evaluated by stem tests at the time of drilling. For Bid purposes, assume 600' well, 100' of 8" Steel Casing, 15 bags of Bentonite clay grout, 500' of 6"-8" Borehole ream beyond casing for each well, 500' of Hydrofracturing.

Price Per Foot
8" Steel Casing:
Grout:
Drill 6" Rock Hole:
8" Borehole Ream 6" - 8", 500' BEYOND 80 FT CASING::
Hydrofracturing, 500' Depth:

TASK #3: WELL AQUIFER TEST
Perform aquifer test on the wells of adequate capacity. Assess reliability capacity and pumping level. The aquifer test will be of a duration of at least 24 hours and will consist of measuring the pumping level, and a long term capacity test. . The results shall be certified by an approved Hyrdogeologist and then the results will be used to evaluate the capacity of the well and selection of permanent pumping equipment.

TASK #4: WELL PUMP AND CONTROLS INSTALLATION
PUMP INSTALLATION: After owner acceptance of Tasks 1, 2, and 3, the well driller shall install a carefully sized and selected pump. The well disconnect shall be made to activate the well from a level control from the cistern irrigation pumping equipment. Electrical equipment includes primary and secondary lightning protection, with ground grid, disconnect, and magnetic starter, to have well be activated from pond pump unit level controls. Pump size will vary with the yield of the well and the pumping level of the well. The well driller shall submit and describe material information for Owners quality acceptance before starting installation.

For Bid purposes, assume two Wells at 68 gpm pump set 300' on 3" pipe, 460 VAC, 3 phase power supply. Discharge head of 150 TDH to open discharge at well head; Price each well separately for individual well installation if required.

The Contractor shall be responsible for submitting Georgia, State DNR-EPD intent to Drill Registration paper work and assist Owner in pulling final Georgia, State DNR-EPD permits. The Contractor shall observe all local codes and ordinances, and easements. Electrical supply, shall be coordinated with Electrical Engineer before Construction. Contractor shall verify and install if Required. The discharge piping connecting to the cistern level control and wiring for said level control activation. Well driller shall be responsible for all clean up and site disturbance repair from well construction.

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Architecture Planning Facilities Design

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RELEASED FOR CONSTRUCTION

CONSULTANT
BREEDLOVE LAND PLANNING
LLP PROJECT # 18032

SEAL

DATE	NO.	DESCRIPTION
03/28/18		GDOE PRELIMINARY SUBMITTAL DESIGN DEVELOPMENT
06/19/18		SDS CONSTRUCTION DOCUMENTS
09/17/18		GDOE CHECK SET/ PERMIT SET
10/10/18		FINAL GDOE SUBMITTAL
11/01/18		ISSUED FOR PROPOSALS

CHAPMAN GRIFFIN LANIER SUSSENBACH ARCHITECTS
400 Galleria Pkwy . Suite 100 . Atlanta, Ga 30339 . Phone: 404.733.5190

DOE FACILITY CODE 660 -3066
RIVERWOOD HIGH SCHOOL - PHASE 3-8
AUDITORIUM/GYMNASIUM ADDITION
5900 RAIDER DRIVE NW SANDY SPRINGS, GA 30328
FULTON COUNTY SCHOOLS RFP NO. 411-19

SHEET TITLE
IRRIGATION DETAILS

PROJECT NO. 16015.02
DATE: 10.31.18
DRAWN BY: ICS
CHECKED BY: HOB
SHEET NO. I-200

8/28/2017 10:06:37 AM