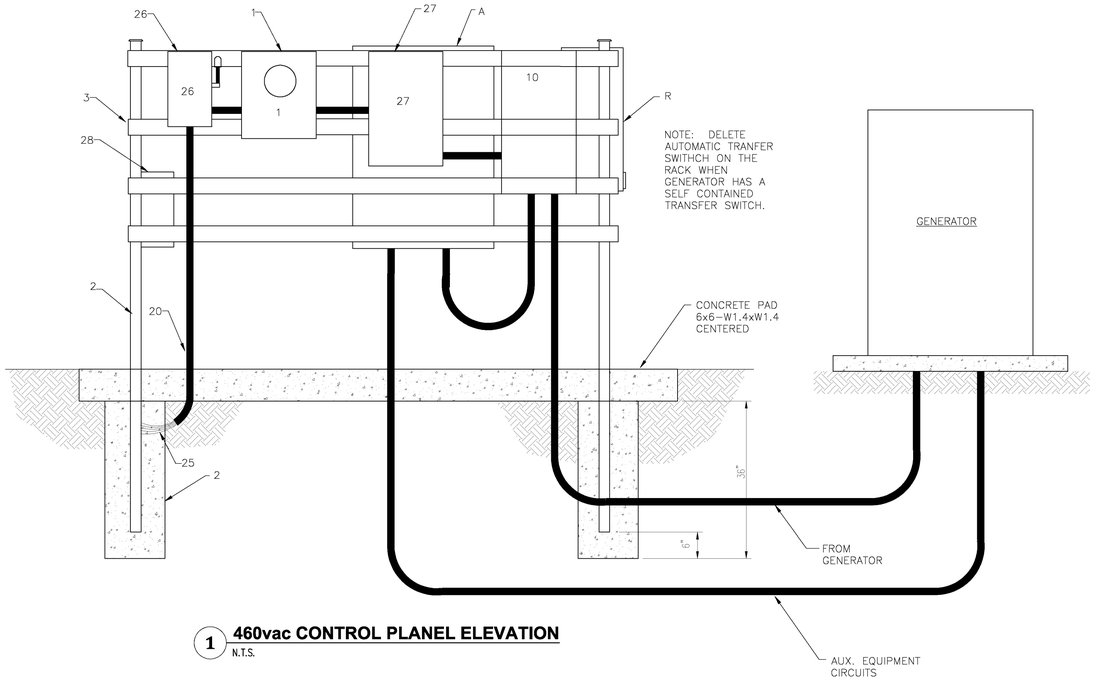
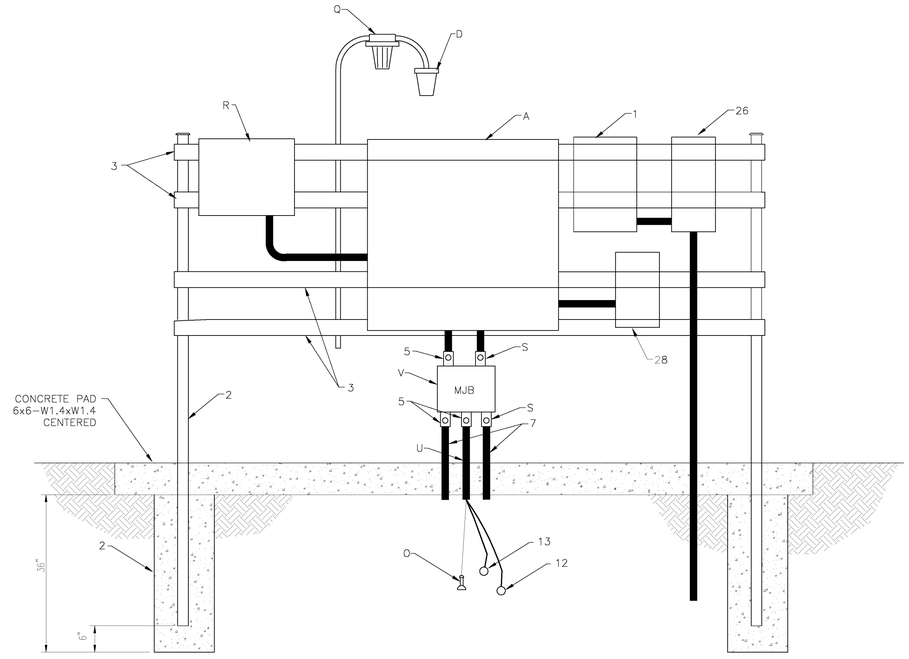
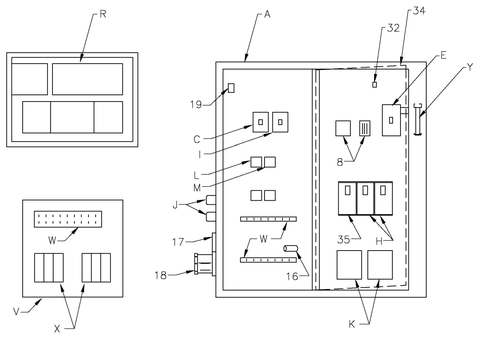


1 460vac CONTROL PLANEL ELEVATION
N.T.S.



2 CONTROL PANEL CENTER - 460v 3ph
N.T.S.



GS 2000 SERIES
SEWAGE LIFT STATION (TYPICAL)
460v PUMPS - INNER PANEL

CONSTRUCTION NOTES:

A. PANEL ENCLOSURE NEMA 4x, 304 STAINLESS STEEL (30x26x8 IN)
B. LS150 PLC/RTU CONTROL PACKAGE
C. GFI/AREA LIGHT CIRCUIT BREAKER
D. AREA LIGHT
E. MAIN PANEL CIRCUIT BREAKER (480v)
F. GENERATOR RECEPTACLE (PYLE NATIONAL JRE 4100)
G. SURGE ARRESTOR
H. MOTOR CIRCUIT BREAKERS (230v)
I. CONTROL CIRCUIT BREAKER (120v)
J. SELECTOR SWITCHES (ALLEN-BRADLEY KEYED)
K. MOTOR STARTERS (SIEMENS HD)
L. CONTROL RELAY (11 PIN)
M. CONTROL RELAY (8 PIN)
N. ALARM TD RELAY (8 PIN)
O. TRANSDUCER ASSEMBLY
P. STARTER TD RELAY (8 PIN) OVER 30 HP DUPLEX
Q. ALARM LIGHT (Red)
R. RTU ENCLOSURE
S. 2 INCH SEAL OFF (TRANSDUCER CORD)
T. NOT USED
U. 2 INCH GALVANIZED PVC COATED CONDUIT
V. MOTOR JUNCTION BOX
W. CONTROL/SENSORS TERMINAL STRIP
X. MOTOR TERMINAL BLOCKS
Y. PANEL BREAKER OPERATOR
Z. NOT USED
1. METER BASE
2. 2 INCH GALVANIZED PIPE W/CAPS AND BASE ANCHORED IN CONCRETE
3. 1⅝ INCH SQ. STEEL CHANNEL W/ PIPE CLAMPS & RUBBER ENDS CAPS
4. ½ INCH RIGID GALVANIZED PIPE
5. 2 INCH SEAL OFF
6. NOT USED
7. 2 INCH GALVANIZED PVC COATED CONDUITS (PUMP CORDS)
8. PHASE MONITOR AND SUPPRESSER FUSES WITH BLOCK (500V)
9. PUMP CORD AND SENSOR ENTRANCE INTO WET WELL
10. MAIN NF SAFETY SWITCH
11. PVC AIR TUBE GUIDE, NM STRAPS & ANCHORS W/ STAINLESS SCREWS
12. LOW LIMIT BALL
13. HIGH LIMIT ALARM BALL
14. NOT USED
15. NOT USED
16. ALARM LIGHT FLASHER UNIT
17. AREA LIGHT SWITCH (W.P. FLUSH)
18. G.T.C.I. RECEPTACLE (W.P. BOX AND COVER)
19. CONTROL (X-2) LUG
20. 2 INCH GALVANIZED PVC COATED CONDUIT
21. 2 INCH GALVANIZED PVC COATED CONDUIT
22. ¾ INCH GALVANIZED PVC COATED CONDUITT
23. #4 BSD CU WIRE
24. ⅝ INCH X 8 FOOT GALVANIZED GROUND RODS
25. SERVICE ENTRANCE CABLE (SEE SPECIFICATION SHEET)
26. 600v 100amp NF 3P SAFETY SWITCH
27. MAIN DISCONNECT 3R SINGLE BREAKER IN ENCLOSURE
28. 2KVA 230v X 120v TRANSFORMERS DRY (CONTROL & LIGHTING)
29. 75KVA 460v X 230v 3ph TRANSFORMER
30. BUCK/BOOST TRANSFORMERS DRY 12/24v X240/480v
31. TYPE 3R WIRE TROUGH
32. EQUIPMENT GROUND LUG
34. DEAD FRONT INNER DOOR W/BARRIER (ALUMINUM) 460V SIDE ONLY
35. CIRCUIT BREAKER FOR LIGHTING & CONTROL TRANSFORMER (480V)

WINTER GARDEN STANDARDS INCORPORATED WITH DESIGN ENGINEERS DOCUMENTS:

THE DETAILS, NOTES AND SPECIFICATIONS SHOWN ON THIS SHEET REPRESENT THE NOTED STANDARDS OF THE CITY OF WINTER GARDEN FOR CONSTRUCTION OF PUBLIC WORKS AND UTILITY INFRASTRUCTURE. BY INCLUDING THE STANDARDS, THE DESIGN ENGINEER HAS ACKNOWLEDGED THAT THEY ARE EFFECTIVE TO THE PROJECT AND THAT DETAILS, NOTES, OR SPECIFICATIONS ARE AS PROVIDED BY THE CITY AND HAVE NOT BEEN REVISED OR MODIFIED WITHOUT WRITTEN APPROVAL FROM THE CITY ENGINEER OR UTILITY DIRECTOR.

NOTE:
SEWER LIFT STATION INSTALLATION AND MATERIAL SHALL CONFORM TO MINIMUM REQUIREMENTS OF NEC 500 THROUGH 504 FOR HAZARDOUS/CLASSIFIED LOCATIONS.

REVISIONS

No.	ITEM	DATE
1	Control Panel & Notes	4/4/14
2	Conduits & Seal Offs	5/29/18
3	Conduits	5/29/19

CITY OF WINTER GARDEN, FLORIDA
STANDARDS AND SPECIFICATIONS
FOR LIFT STATION ELECTRICAL PANEL

WINTER GARDEN

STANDARD DETAILS
FOR
ELECTRICAL – 460VAC WYE

DATE
MAY 2019
SHEET
7