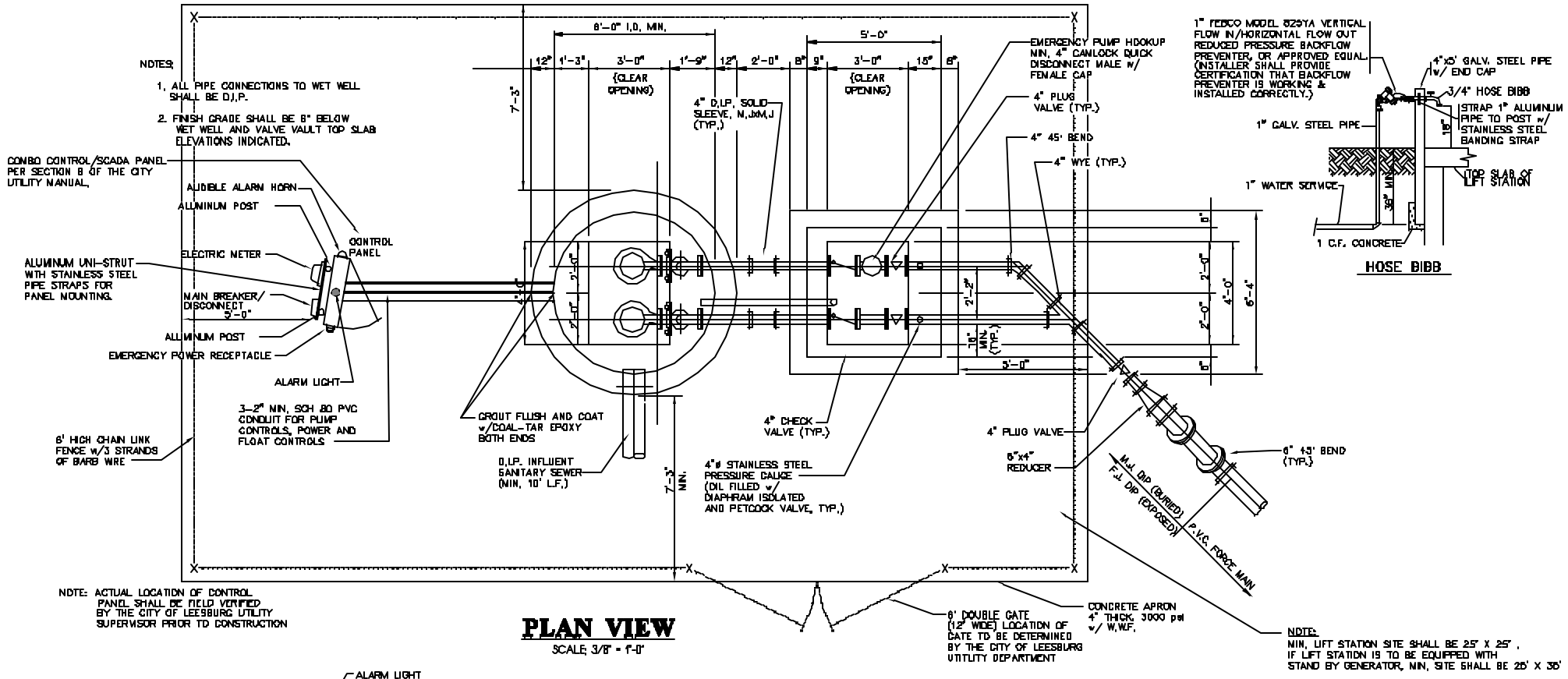
NOTES:

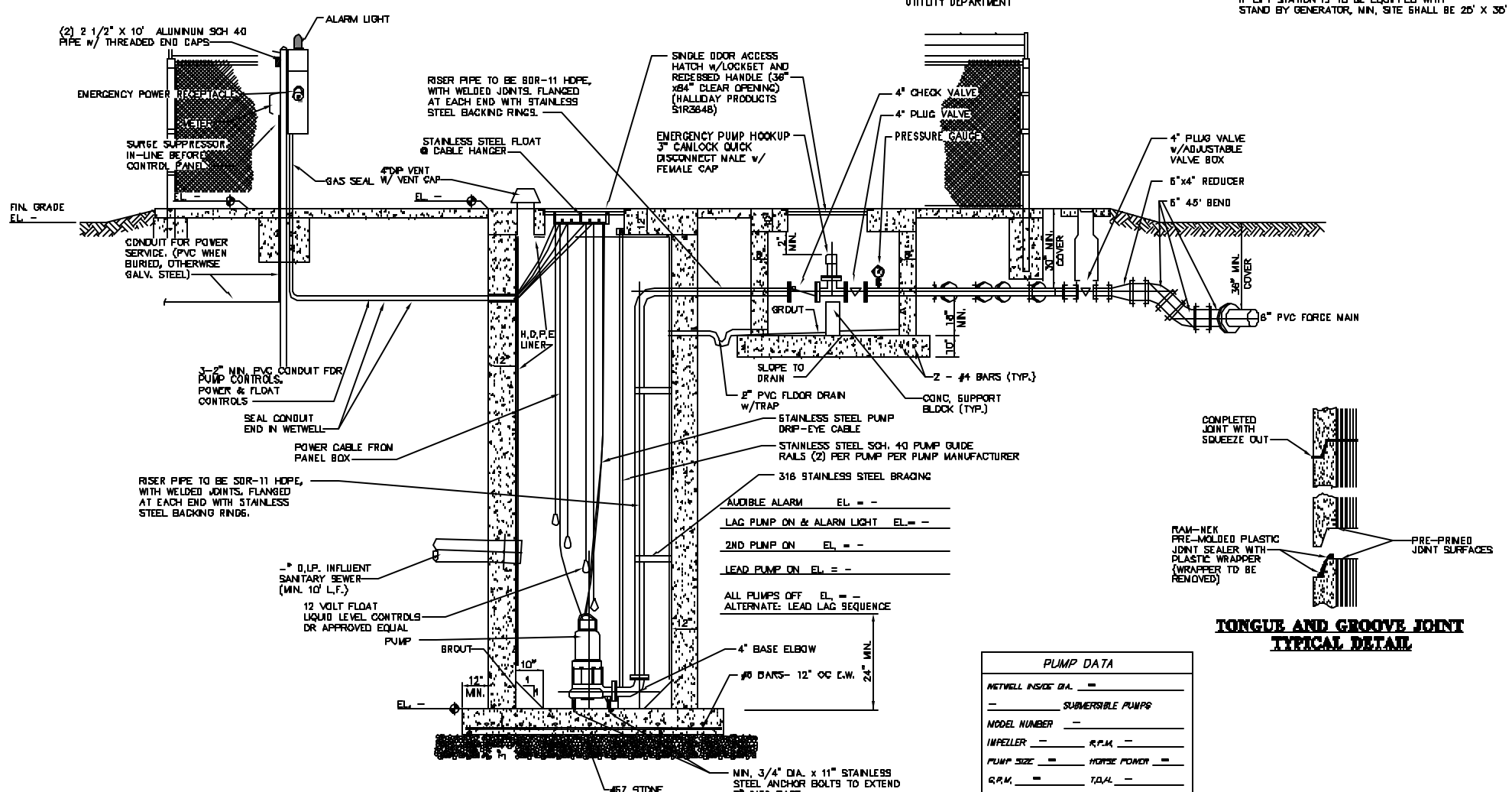
1. ALL PIPE CONNECTIONS TO WET WELL SHALL BE D.I.P.
2. FINISH GRADE SHALL BE 8" BELOW WET WELL AND VALVE VAULT TOP SLAB ELEVATIONS INDICATED.



PLAN VIEW

SCALE: 3/8" = 1'-0"

HOSE BIBB



SECTION

SCALE: 3/8" = 1'-0"

PUMP DATA	
WETWELL INSIDE DIA.	-
-	SUBMERSIBLE PUMPS
MODEL NUMBER	-
IMPELLER -	R.P.M. -
PUMP SIZE -	HORSE POWER -
G.P.M. -	T.D.H. -
ELECTRICAL REQUIREMENTS * -	

*NOTE: ELECTRICAL REQUIREMENT TO BE VERIFIED BY CONTRACTOR.

TONGUE AND GROOVE JOINT TYPICAL DETAIL

NOTES:

1. PUMPS: SHALL BE HYDROMATIC SUBMERSIBLE PUMPS,PUMPS SHALL HAVE (2) 2" STAINLESS STEEL GUIDE RAILS PER PUMP AND A BPI FRONT DUPLEX SYSTEM.
2. LEVEL CONTROLS: SHALL BE IN ACCORDANCE WITH SECTION 8 OF THE CITY UTILITY MANUAL.
3. WET WELL ACCESS COVER: SHALL HAVE CLEAR OPENING OF 38"x84" AS MANUFACTURED BY HALLIDAY PRODUCTS OR APPROVED EQUAL. ACCESS FRAME AND COVER SHALL HAVE A 1/4" THICK ONE-PIECE, MILL FINISH, EXTRUDED ALUMINUM FRAME, INCORPORATING A CONTINUOUS CONCRETE ANCHOR. DOOR PANEL(S) SHALL BE 1/4" ALUMINUM DIAMOND PLATE, REINFORCED TO WITHSTAND A LIVE LOAD OF 300 psf. DOOR(S) SHALL OPEN TO 90° AND AUTOMATICALLY LOCK WITH STAINLESS STEEL HOLD OPEN ARMS WITH ALUMINUM RELEASE HANDLES, DOOR(S) SHALL CLOSE FLUSH WITH THE FRAME. UNIT SHALL LOCK WITH A NONCORROSIVE LOCKING BAR, FRAME SHALL SUPPORT GUIDE RAILS AND CABLE HOLDER FOR ELECTRICAL WIRING. ALL ACCESS FRAME, COVER, AND HARDWARE SHALL BE CONSTRUCTED OF STAINLESS STEEL. ALL SURFACES IN CONTACT WITH CONCRETE SHALL HAVE A SHOP COAT OF ZINC CHROMATIC PRIMER APPROVED ALKALI RESISTANT PAINT OR APPROVED PROTECTIVE COATING. DOUBLE DOOR ACCESS COVERS SHALL HAVE REMOVABLE CENTER BAR SUPPORT. COVER MUST BE COMPATIBLE WITH PUMP.
4. VALVE VAULT ACCESS COVER: SHALL HAVE CLEAR OPENING OF 36"x84" ACCESS AS MANUFACTURED BY HALLIDAY PRODUCTS OR APPROVED EQUAL. ACCESS FRAME AND COVER SHALL HAVE A 1/4" THICK ONE-PIECE, MILL FINISH, EXTRUDED ALUMINUM FRAME, INCORPORATING A CONTINUOUS CONCRETE ANCHOR. DOOR PANEL(S) SHALL BE 1/4" ALUMINUM DIAMOND PLATE, REINFORCED TO WITHSTAND A LIVE LOAD OF 300 psf. DOOR(S) SHALL OPEN TO 90° AND AUTOMATICALLY LOCK WITH STAINLESS STEEL HOLD OPEN ARMS WITH ALUMINUM RELEASE HANDLES, DOOR(S) SHALL CLOSE FLUSH WITH THE FRAME. UNIT SHALL LOCK WITH A NONCORROSIVE LOCKING BAR. ALL ACCESS FRAME, COVER, HARDWARE, AND FASTENERS SHALL BE CONSTRUCTED OF 316 STAINLESS STEEL. ALL SURFACES IN CONTACT WITH CONCRETE SHALL HAVE A SHOP COAT OF ZINC CHROMATIC PRIMER, APPROVED ALKALI RESISTANT PAINT OR APPROVED PROTECTIVE COATING. DOUBLE DOOR ACCESS COVERS SHALL HAVE REMOVABLE CENTER BAR SUPPORT. COVER MUST BE COMPATIBLE WITH PUMP.
5. ELECTRICAL SERVICE ENTRANCE: PROVIDE METER SOCKET AND MAIN DISCONNECT MEETING APPLICABLE ELECTRIC CODES AND REQUIREMENTS OF POWER COMPANY. LIGHTNING AND VOLTAGE SURGE PROTECTION TO BE PROVIDED. COST FOR THE ELECTRICAL SERVICE AND COORDINATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
6. CONTROL PANEL: SHALL BE IN ACCORDANCE WITH SECTION 8 OF THE CITY UTILITY MANUAL. PANEL SHALL BE EQUIPPED WITH THREE, 2" X 6" ALUMINUM NIPPLES TO THE SEALOFFS, WITH SCH 80 PVC TO WET WELL.
7. PAINT: INSIDE AND OUTSIDE OF VALVE VAULT SHALL BE PAINTED WITH TWO COATS OF "POXITAR" OR EQUAL APPLIED AS PER MANUFACTURER'S RECOMMENDATIONS.
8. VALVE VAULT : PRECAST CONCRETE 80"x 84" (MINIMUM) INSIDE DIMENSIONS.
9. STEEL PLACED IN BOTTOM SLAB IS TO BE IDENTICAL TO THE TOP SLAB EXCEPT THAT DIAGONAL BARS AND OPENINGS ARE ELIMINATED, STEEL IS CONTINUOUS AND SLAB IS SOLID.
10. CONTRACTOR TO CONFIRM SERVICE ARRANGEMENTS WITH POWER COMPANY BEFORE COMMENCING WORK. CONTRACTOR TO RUN UNDERGROUND WIRING TO NEAREST TRANSFORMER OR HAND HOLE.
11. ALL FASTENERS ON FLANGES AND ETC. INSIDE WET WELL WILL BE STAINLESS STEEL
12. DIMENSIONS BETWEEN CENTERLINE OF PIPES ARE STANDARD FOR PIPE SIZES SPECIFIED.
13. SHOP DRAWINGS OF ENTIRE INSTALLATION MUST BE APPROVED BY CITY PRIOR TO PLACEMENT OF ORDER.
14. PLUG VALVES SHALL BE SERIES 100, AS MANUFACTURED BY DEZURIK CORP., AND CLOW OR APPROVED EQUAL. VALVES SHALL BE CONSTRUCTED WITH RESILIENT FACED PLUGS, ON BY-PASS LINES. VALVES SHALL BE BURIED WITH ACCESS THROUGH CAST IRON VALVE BOXES. VALVES SHALL HAVE A 2" OPERATION NUT, ONE(1) 6' LONG VALVE WRENCH SHALL BE PROVIDED TO THE CITY OF LEESBURG PER LIFT STATION. ALL PLUG VALVES 8" AND SMALLER SHALL BE 1/4 TURN TYPE.
15. ALL EXPOSED AND EMBEDDED CONDUITS TO BE SCHEDULE 80 PVC.
16. ALL EXPOSED METAL SHALL BE PAINTED WITH TWO (2) COATS OF EXTERIOR BLACK ENAMEL PAINT.
17. ALL EXTERNAL PIPING SHALL BE DUCTILE IRON CLASS 50 (FLANGED JOINT FOR EXPOSED PIPE & MECHANICAL JOINT FOR BURIED PIPE). ALL INTERNAL WET WELL PIPING FROM THE PUMP DISCHARGE ELBOW TO THE VALVE BOX SHALL BE MINIMUM SDR-11 HDPE.
18. ALL DIMENSIONS AND LOCATIONS OF UTILITIES TO BE FIELD VERIFIED BY CONTRACTOR.
19. PRESSURE GAUGES SHALL BE STAINLESS STEEL WITH STAINLESS STEEL DIAPHRAGM, LIQUID FILLED, 4" DIAMETER DIAL WITH 0-100 psi RANGE. GAUGES SHALL BE AS MANUFACTURED BY WKA, LOWER MOUNT, TYPE 233.3D AND DIAPHRAGMS SHALL BE AS MANUFACTURED BY HYETT, MODEL 43MCR-01 OR APPROVED EQUALS.
20. CHECK VALVES SHALL BE MUELLER, KENNEDY, AMERICAN-DARLING, OR DRESSER WITH OUTSIDE LEVER AND WEIGHT.
21. PADLOCKS FOR ACCESS COVERS AND CONTROL PANEL SHALL BE MASTER NO. 4 BRASS PADLOCK, KEYED ALIKE, FURNISH TWO(2) KEYS PER LOCK. BOLTS IN LOCKING DEVICE SHALL BE STAINLESS STEEL.
22. WET WELL TO BE H.D.P.E. LINED WITH AN AGRU SURE GRIP LINER OR APPROVED EQUAL, WITH A MINIMUM THICKNESS OF 2 MM, MECHANICALLY ANCHORED TO THE CONCRETE. ALL JOINTS SHALL BE EXTRUSION WELDED BY CERTIFIED WELDERS.
23. SOD ALL AREAS DISTURBED BY CONSTRUCTION.
24. ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE WILL REQUIRE SHOP COATING OF SUITABLE PROTECTIVE COATING TO RESIST CORROSION.
25. BYPASS PUMPING: CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BYPASS PUMPING. A BYPASS PUMPING PLAN SHALL BE SUBMITTED AT THE TIME OR PERMIT APPLICATION TO THE ENVIRONMENTAL SERVICES DIRECTOR. CITIZEN CONSIDERATION WILL BE REVIEWED WHEN BYPASS PUMPING EQUIPMENT IS REQUIRED. SOUND ATTENUATING ENCLOSURES MAY BE REQUIRED, AT THE DISCRETION OF THE ENVIRONMENTAL SERVICES DIRECTOR.

DUPLEX Lift Station

Standard Details

City of Leesburg

FARNER BARLEY AND ASSOCIATES, INC.
ENGINEERS
SURVEYORS
PLANNERS
360 North Sinclair Avenue O Tavares Florida 32778 O (352) 343-8481

DATE: January 2004

DETAIL S-11