

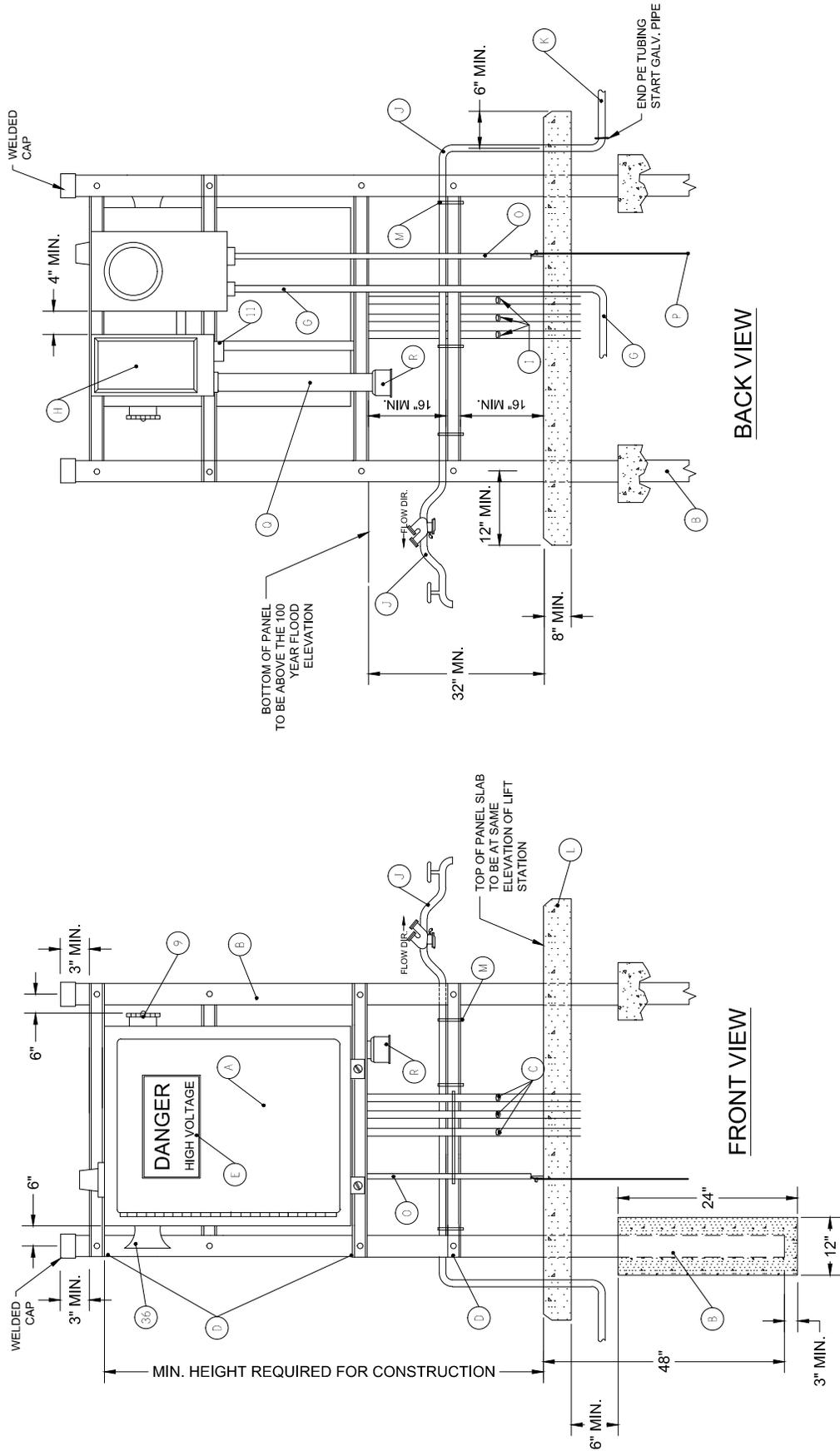
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SECTION 4

LIFT STATIONS

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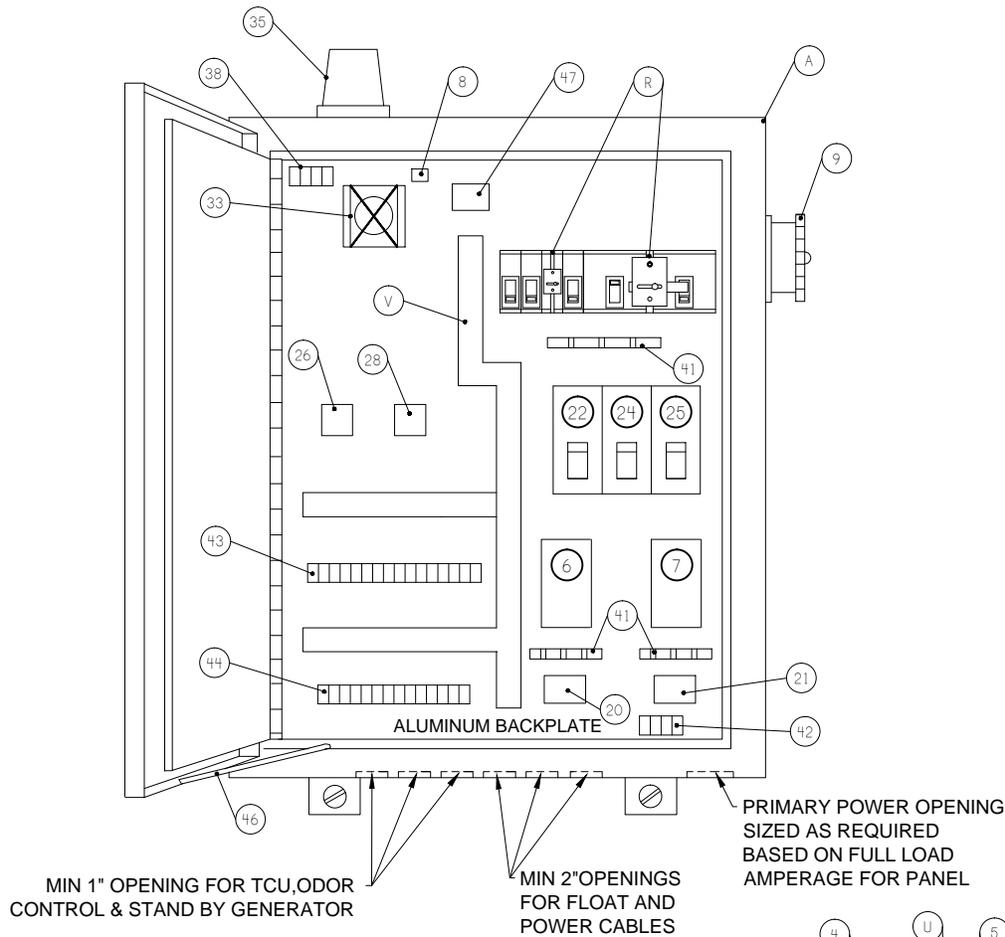


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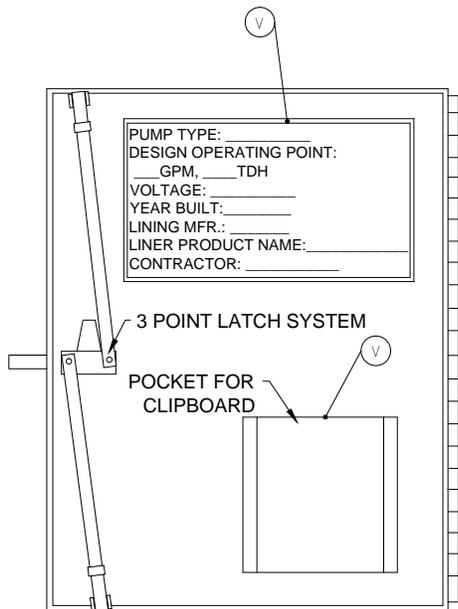
240V-3PH MOTOR CONTROL CENTER PANEL MOUNTING

CHARLOTTE COUNTY UTILITIES

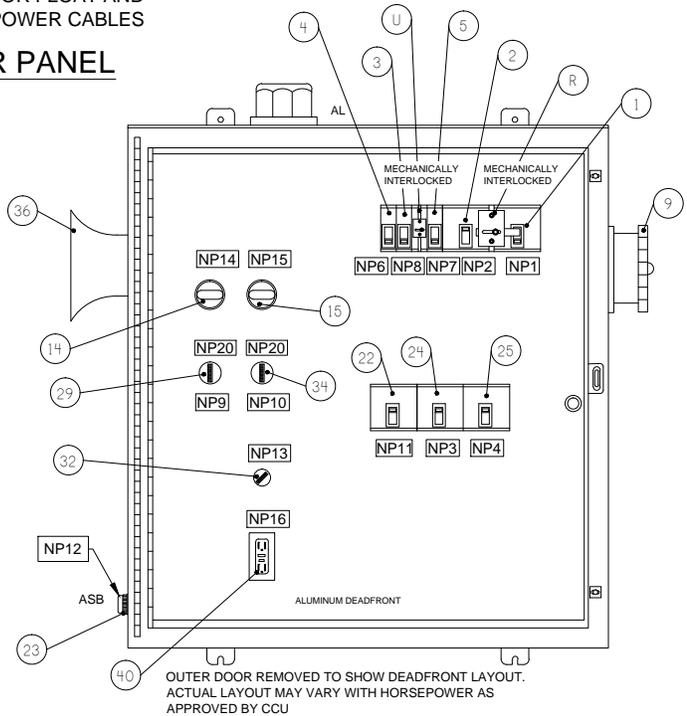
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LS-01
ID: LS-01-CPM.dwg



INTERIOR PANEL



BACK OF ENCLOSURE DOOR



DEADFRONT DOOR

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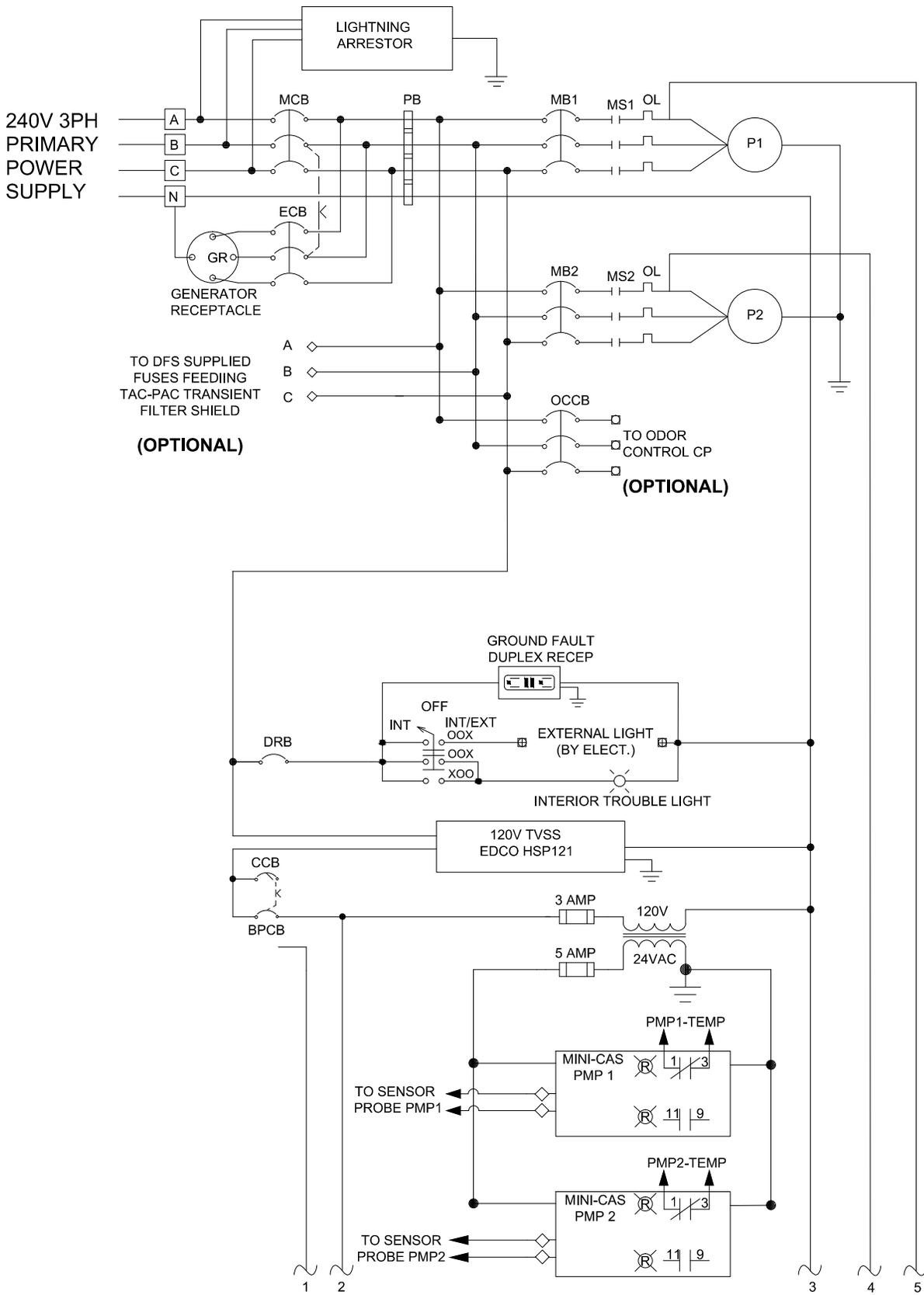
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**MOTOR CONTROL CENTER
 PANEL LAYOUT 240V-3PH
 CHARLOTTE COUNTY UTILITIES**

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LS-02

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240V 3-PHASE CONTROL PANEL SCHEMATIC - 1

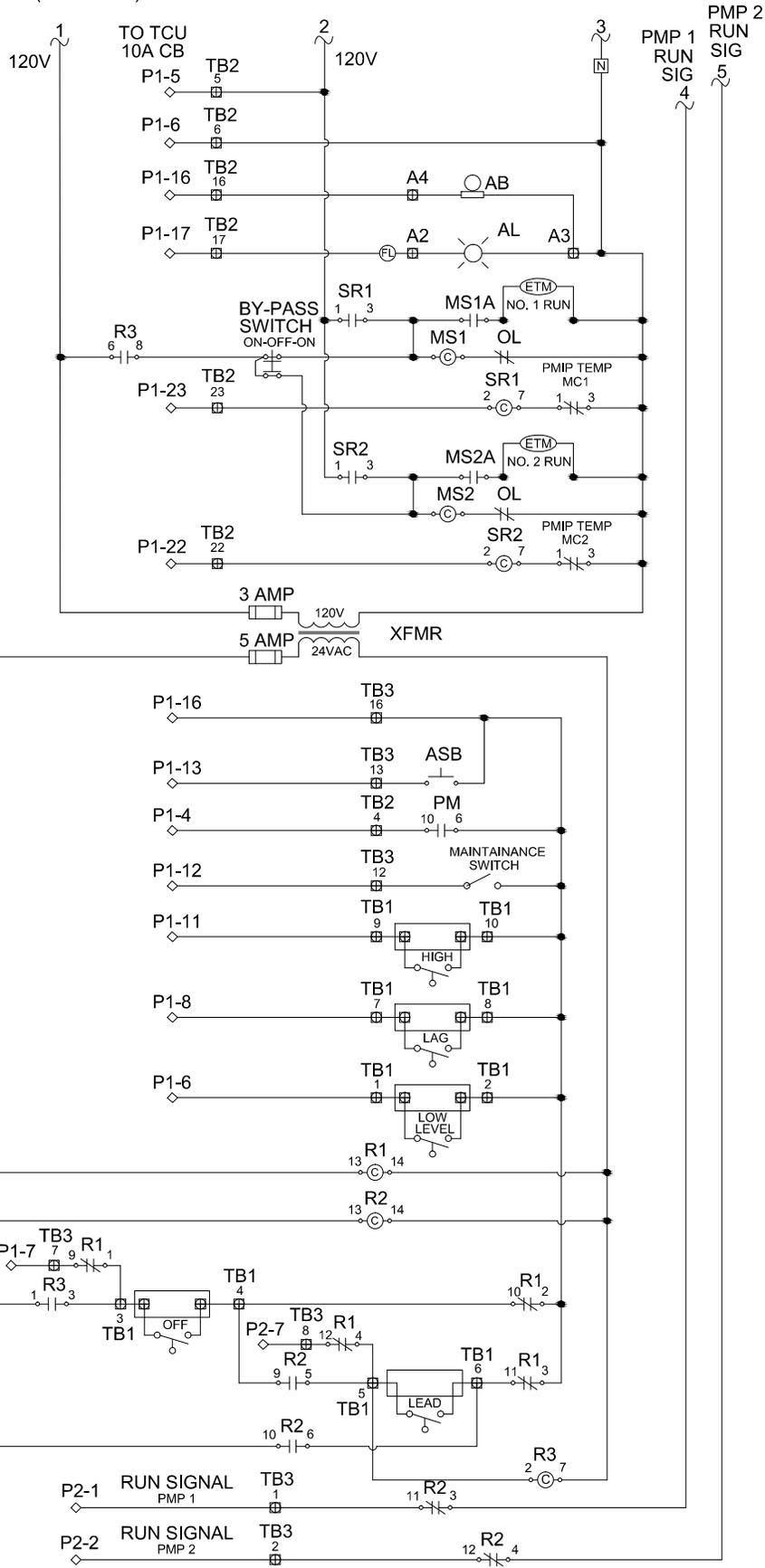
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LS-03

ID: LS-03-SCH-1.dwg

(OPTIONAL)



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240V 3-PHASE CONTROL PANEL SCHEMATIC - 2

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LS-04

ID: LS-04-SCH-2.dwg

MOTOR CONTROL PANEL LEGEND

AB -ALARM BELL	GR -GENERATOR RECEPTACLE
AC -AIR COMPRESSOR	HOA -HAND-OFF-AUTO SELECTOR SWITCH
AH -ALARM HORN	MB -MOTOR BREAKER
AL -ALARM LIGHT	MCB -MAIN CIRCUIT BREAKER
ASB -ALARM SILENCE BUTTON	MES - MAINTAINANCE ENTRY SWITCH
BPCB -BYPASS CIRCUIT BREAKER	MS -MOTOR STARTER
BPR - BYPASS RELAY	OL -OVERLOAD HEATER
CCB -CONTROL CIRCUIT BREAKER	PB -POWER BLOCK
DRB -DUPLEX RECEPTACLE BREAKER	
ECB -EMERGENCY CIRCUIT BREAKER	
ETM -ELAPSED TIME METER	
	SF - SEAL FAIL RELAY
	SR -STARTER RELAY
	SS - SURGE SUPPRESSOR
FL -FLASHER	TB -TERMINAL BLOCK
FR -FLOAT REGULATOR	
GFDR -GROUND FAULT DUPLEX RECEPTACLE	XFMR - TRANSFORMER

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**240V - 3PH MOTOR CONTROL
CENTER-PANEL LEGEND
CHARLOTTE COUNTY UTILITIES**

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LS-05

ID: LS-05-MTRCP.dwg

MOTOR CONTROL CENTER SPECIFICATION 240 3PH

ITEM NO.	ABBREV.	PART	QUANTITY	DESCRIPTION
1	ECB	EMERGENCY CIRCUIT BREAKER	1	SQ-D FAL _____ 3-POLE _____ A
2	MCB	MAIN CIRCUIT BREAKER	1	SQ-D FAL _____ 3-POLE _____ A
3	BPCB	BYPASS CONTROL CIRCUIT BREAKER	1	SQ-D FAL _____ 1-POLE 15 AMP
4	DRB	DUPLEX RECEPTICAL BREAKER W/GFI	1	SQ-D FAL _____ 1-POLE 15 AMP
5	CCB	CONTROL CIRCUIT BREAKER	1	SQ-D FAL _____ 1-POLE 15 AMP
6	MS 1	MOTOR STARTER	1	SQ-D 8536 _____ (SIZE _____)
7	MS 2	MOTOR STARTER	1	SQ-D 8536 _____ (SIZE _____)
8	FL	ALARM FLASHER RELAY	1	SSAC FS-126
9	GR	GENERATOR RECEPTACLE	1	RUSSELSTOLL DS2414MP000 480V 304 S.S. LOCKING HASP
10		NOT USED		
11	LA	LIGHTNING ARRESTER	1	SQ-D #SP3650 650 V, 3PH
12	TCU	TELEMETRY CONTROL UNIT	1	DATAFLOW TCU
13		NOT USED		
14	ETM 1	ELAPSED TIME METER	1	ETMAC 200-10NG7 ROUND MOUNT
15	ETM 2	ELAPSED TIME METER	1	ETMAC 200-10NG7 ROUND MOUNT
16	SS	SURGE SUPPRESSOR	1	EDCO HSP - 121 RTIRM
17	CPT	CONTROL POWER TRANSFORMER		
18		NOT USED		
19	OL	OVERLOAD HEATER (IN PANEL)		SQ-D _____, _____, _____
20	SF 1	SEAL FAIL RELAY	1	DEVERSIFIED SPM - 120 - AAB - 100K
21	SF 2	SEAL FAIL RELAY	1	DEVERSIFIED SPM - 120 - AAB - 100K
22	OCCB	ODOR CONTROL CIRCUIT BREAKER	1	SQ -D FAL _____ 3 POLE _____ A (IF REQUIRED)
23	ASB	ALARM SILENCE BUTTON	1	SIEMENS-ALLIS 3SB02-PFB10 OR SQ-D SKRIRH13
24	MB 1	MOTOR BREAKER PUMP #1	1	SQ-D FAL _____ 3-POLE _____ A
25	MB 2	MOTOR BREAKER PUMP #2	1	SQ-D FAL _____ 3-POLE _____ A
26	SR 1	STARTER RELAY	1	DAYTON 8 - PIN, 120 VAC 50/60 HZ #5Z45 W/SOCKET 3 5X852
27	BPR	BYPASS CONTROL RELAY	3	OMRON 14 PIN MY4AC1101205
28	SR 2	STARTER RELAY	1	DAYTON 8 - PIN, 120 VAC 50/60 HZ #5Z45 W/SOCKET 3 5X852
29	HOA 1	HAND-OFF-AUTO SWITCH	1	SQUARE"D" SWITCH CSS0001SKS43B CONTACT BLOCK-CT9001KA-1 LEDGEN 9001KN2G0SP
30	MES	MAINTAINANCE / ENTRY SWITCH	1	SPST SWITCH
31	FR	FLOAT REGULATOR		ROTO-FLOAT TYPE S, LIQUID LEVEL SENSOR
32	TLS	TROUBLE LIGHT SWITCH INT. & EXT.	1	SQ-D SKSF43BH2 & KA1
33	TL	TROUBLE LIGHT	1	LEVITON 9880 (40 WATT BULB)
34	HOA 2	HAND-OFF-AUTO SWITCH	1	SQUARE"D" SWITCH CSS0001SKS43B CONTACT BLOCK-CT9001KA-1 LEDGEN 9001KN2G0SP
35	AL	ALARM LIGHT	1	INGRAM LRX-40 or OHIO ELECTRIC RL-3K
36	AH 1	ALARM HORN	1	ALA-876-N5. EDWARDS 120V
37	AH 2	ALARM HORN	1	ALA-876-N5. EDWARDS 12V
38	TB 3	TERMINAL BLOCK #3	1	SQ-D 5B364 4PT
39		NOT USED		
40	GFDR	GROUND FAULT DUPLEX RECEPTACLE	1	15A-ARROW HART OR LEVITON
41	PB	POWER BLOCK	1	BUSSMAN # 16021-3
42	TB 4	TERMINAL BLOCK #4	1	SQ-D 5B364 6PT
43	TB 2	TERMINAL BLOCK #2 (RTU)	1	SQ-D 5B364 30PT (IF REQUIRED)
44	TB 1	TERMINAL BLOCK #1	1	SQ-D 5B364 12PT
45	BATT	BATTERY	1	
46		DOOR BAR WIND RESTRAINT	1	
47	NB	NEUTRAL BLOCK	1	GB-1 WEIDMULLER
48	BUAC	BATTERY BACK-UP MODULE	1	
49	MC	MOUNTING CHANNEL	4	SQ-D 9080GH112
50	XFMA	TRANSFORMER	1	MICRON, 3100LP7JK

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**240V - 3PH MOTOR CONTROL
CENTER-PANEL LEGEND
CHARLOTTE COUNTY UTILITIES**

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LS-06

ID: LS-06-MTRSP.dwg

LABEL SPECIFICATION

ITEM NO.	LABEL INSCRIPTION	QUANTITY	BACKGROUND COLOR
NP1	ECB	1	RED
NP2	MCB	1	BLACK
NP3	MB#1	1	BLACK
NP4	MB#2	1	BLACK
NP5			
NP6	DRB	1	BLACK
NP7	CCB	1	BLACK
NP8	BPCB	1	BLACK
NP9	PUMP#1	1	BLACK
NP10	PUMP#2	1	BLACK
NP11	OCCB	1	BLACK
NP12	ASB	1	RED
NP13	TLS	1	BLUE
NP14	ETM #1	1	BLUE
NP15	RESET	1	BLUE
NP16	GFDR	1	BLUE
NP17	No. 1 RUN	1	GREEN
NP18	No. 2 RUN	1	GREEN
NP19	ETM 2	1	BLUE
NP20	HOR	1	BLUE
NP21			

- LABELS SHALL BE LAMINATED PLASTIC WITH WHITE 1/4" HIGH ENGRAVED LETTERS.
- BACKGROUND COLOR OF LABELS SHALL BE AS INDICATED ABOVE.
- LABELS SHALL BE ATTACHED WITH PERMANENT ADHESIVE.

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**240V - 3PH MOTOR CONTROL
CENTER-PANEL LEGEND
CHARLOTTE COUNTY UTILITIES**

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LS-07

ID: LS-07-LBLSP.dwg

MOTOR CONTROL CENTER (MCC) MOUNTING NOTES

- A. THE MCC ENCLOSURE SHALL HAVE A PAD LOCKABLE HASP AND A THREE POINT LATCH SYSTEM AND WIND RESTRAINER ARM THAT INCLUDES HARDWARE TO RESTRAIN THE DEAD FRONT DOOR WHEN OPENED. THE HASP AND HARDWARE SHALL BE TYPE 316 STAINLESS STEEL.
- B. TWO (2) 4 INCH DIAMETER SCHEDULE 80 ALUMINUM PIPES 10 FEET LONG WITH 4 INCH WELDED ALUMINUM CAPS SHALL BE ANCHORED IN CONCRETE FROM 3 INCHES BELOW THE BOTTOM OF THE PIPE TO 12 INCHES BELOW THE FINISHED GRADE.
- C. THREE (3) "EY6" EXPLOSION PROOF CLASS 1 SEAL-OFF 2 INCH DIAMETER SEAL WITH NON-HARDENING CONDUIT SEALANT AS APPROVED BY THE MANUFACTURER FOR A TEMPORARY SEAL.
- D. THE ALUMINUM PIPES SHALL INCLUDE TYPE 316 STAINLESS STEEL H-1 7/8 INCH CHANNEL STRUT C/W TYPE 316 STAINLESS STEEL. DISSIMILAR METALS SHALL BE ISOLATED WITH RUBBER GASKETS.
- E. PLASTIC WARNING LABEL STATING "DANGER HIGH VOLTAGE" SHALL BE INSTALLED ON THE OUTSIDE OF THE ENCLOSURE DOOR AND BE SECURED TO THE DOOR WITH ADHESIVE OR CEMENT.
- F. TWO (2) INCH CONDUIT AND WIRING BETWEEN THE FPL METER CAN AND THE SAFETY DISCONNECT PANEL AND THE SAFETY DISCONNECT PANEL AND THE MCC.
- G. Underground conduit and wiring between the FPL meter can and the FPL hand hole.
- H. FUSED SAFETY DISCONNECT IN A NEMA 4X ENCLOSURE WITH A LOCKING PLATE. INSTALL AN EXTERNAL LIGHTING ARRESTOR. POWER FROM THE MCC SHALL EXIT THE ENCLOSURE FROM THE UNDERSIDE.
- I. THREE (3) 2" CONDUIT AND WIRING BETWEEN THE MCC AND THE WETWELL. FROM THE TOP OF THE SWEEP TO THE MCC SHALL BE TYPE 316 STAINLESS STEEL AND FROM THE TOP OF THE SWEEP TO THE INSIDE OF THE WETWELL SHALL BE SCHEDULE 80 PVC.
- J. 3/4" GALVANIZED STEEL PIPE WITH TWO (2) 90 DEGREE BENDS TO THE BACKFLOW PREVENTION DEVICE AND THE HOSE BIB.
- K. 3/4" POLYETHYLENE PIPING FROM THE WATER METER AND THE WATER SERVICE GALVANIZED PIPE.
- L. CONCRETE SLAB.
- M. WORM DRIVE CLAMPS. (3 MINIMUM)
- N. ONE (1) NUMBER 6 WIRE GROUND IN 1/2" SCHEDULE 80 PVC.
- O. GROUND ROD.
- P. THREADED RIGID TYPE 316 STAINLESS STEEL CONDUIT SIZED AS REQUIRED BY FULL LOAD AMPERAGE.
- Q. CAST ALUMINUM TYPE LB FITTING WITH ALUMINUM CAP.
- R. HEAVY DUTY MECHANICAL INTERLOCK FOR EMERGENCY POWER TRANSFER.
- S. PANDUIT TO BE FILLED TO ONLY 50% CAPACITY.
- T. IF REQUIRED, ONE (1) INCH PVC AND TYPE 316 STAINLESS STEEL CONDUIT BETWEEN THE MCC AND THE TCU CONTROL PANEL ENCLOSURE, THE AREA LIGHT, THE STAND-BY GENERATOR, AND/OR THE ODOR CONTROL IN ACCORDANCE WITH THE ENGINEERING DRAWINGS.
- U. ALL INTERNAL MCC WIRING SHALL BE STRANDED WIRE AND PERMANENTLY NUMBERED.
- V. PLASTIC LIFT STATION LABEL AND POCKET FOR CLIP BOARD, PROVIDED AND INSTALLED BY THE CONTRACTOR ON THE BACK OF THE MCC ENCLOSURE DOOR USING AN ADHESIVE OR CEMENT.

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**240V - 3PH MOTOR CONTROL
CENTER-MOUNTING NOTES
CHARLOTTE COUNTY UTILITIES**

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LS-08

ID: LS-08-MTRCMN.dwg

TCU FUNCTIONS

MOD R - RIM006

BATTERY TEST		BIAS VOLTAGE		TCU POWER	
RADIO KEY CURRENT		RADIO SIGNAL STRENGTH		INTERNAL TEMPRATURE	

MOD A - DMM002

PUMP 1 STATUS		PUMP 2 STATUS		PHASE MONITOR BYPASS	
OFF FLOAT INPUT		LEAD FLOAT INPUT		LAG FLOAT INPUT	
HIGH FLOAT INPUT		ANY PUMP		WORKING AT L/S	

MOD B - DCM001

STARTER 1 OUT		STARTER 2		AUXILLARY OUT	
ALARM LIGHT STATUS		ALARM HORN STSTUS		ALARM SILENCE INPUT	
STATION DISABLE		AC POWER		DC BIAS	
PHASE SEQUENCE		PROCESS			

MOD C - DCM001

ANALOG INPUT 1		ANALOG INPUT 2		FLOAT SQUENCE	
PHASE VOLTAGE		CONFIGURATION			

MOD D - DCM001

PUMP 1 DISABLE		PUMP 2 DISABLE		PUMP 1 OVERRIDE	
PUMP 2 OVERRIDE		PIMP 1 STARTER		PUMP2 STARTER	
PUMP 1 STOP		PUMP 2 STOP			

MOD E - ACM001

FLOW EQUALIZATION		LOW WELL LEVEL		HIGH WELL LEVEL	
HOA 1		HOA 1		HOA 1	
HOA 2		HOA 2		HOA 2	

MOD G - DCM001

AUX OUT OVERRIDE		ALARM LIGHT OVERRIDE		ALARM HORN OVERRIDE	
AUX OUT DISABLE		ALARM LIGHT DISABLE		ALARM HORN DISABLE	
PUMP OVERRIDE REST		ANALOG UPDATING			

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240V 3 PHASE-TCU FUNCTIONS

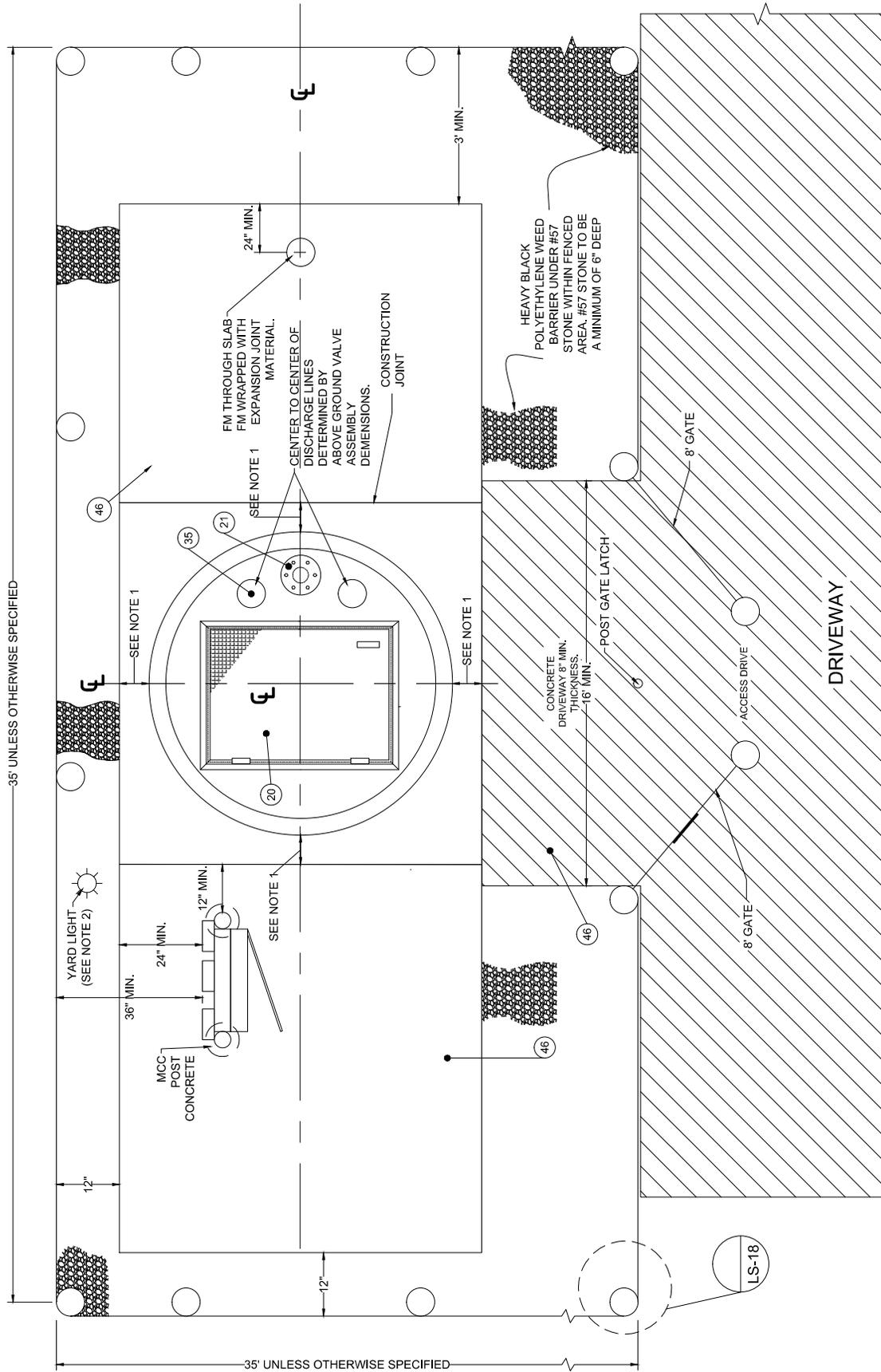
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LS-09

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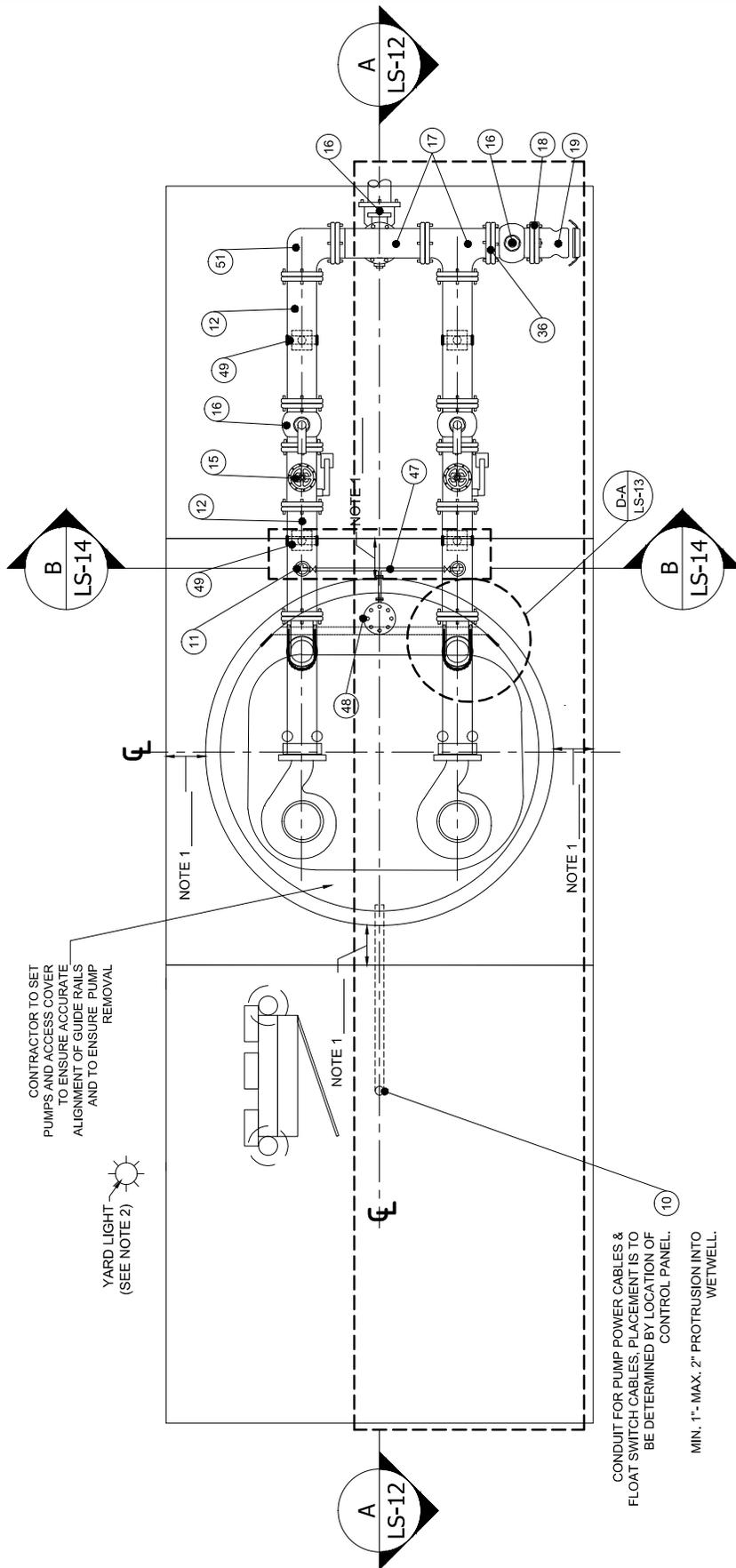
- NOTES:**
1. DISTANCE (12" MINIMUM) BASED ON WETWELL OUTSIDE DIAMETER.
 2. YARD LIGHT AND CONDUIT TO BE INSTALLED AS SHOWN ON ENGINEERING DRAWINGS.



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**SITE PLAN-ABOVE GROUND
VALVE- LIFT STATION
CHARLOTTE COUNTY UTILITIES**

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LS-10
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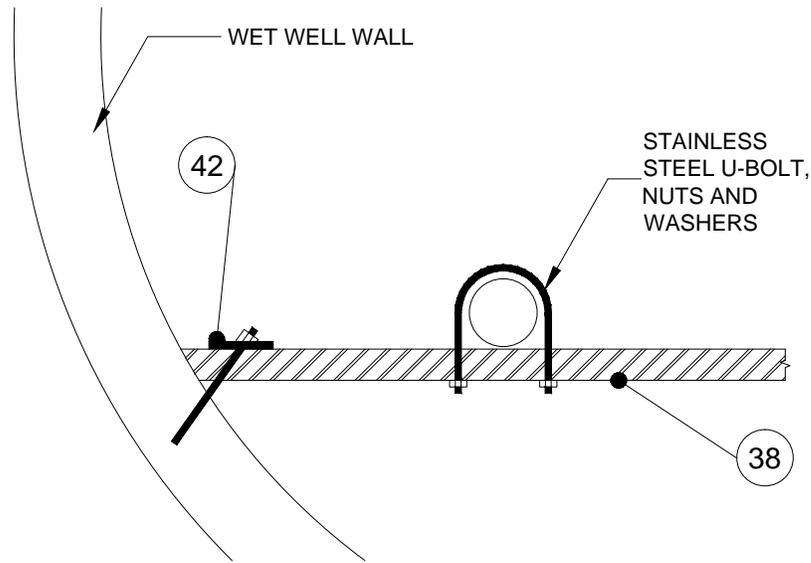


- NOTES:**
1. DISTANCE (12" MINIMUM) BASED ON WET WELL OUTSIDE DIAMETER.
 2. YARD LIGHT AND CONDUIT TO BE INSTALLED AS SHOWN ON ENGINEERING DRAWINGS.

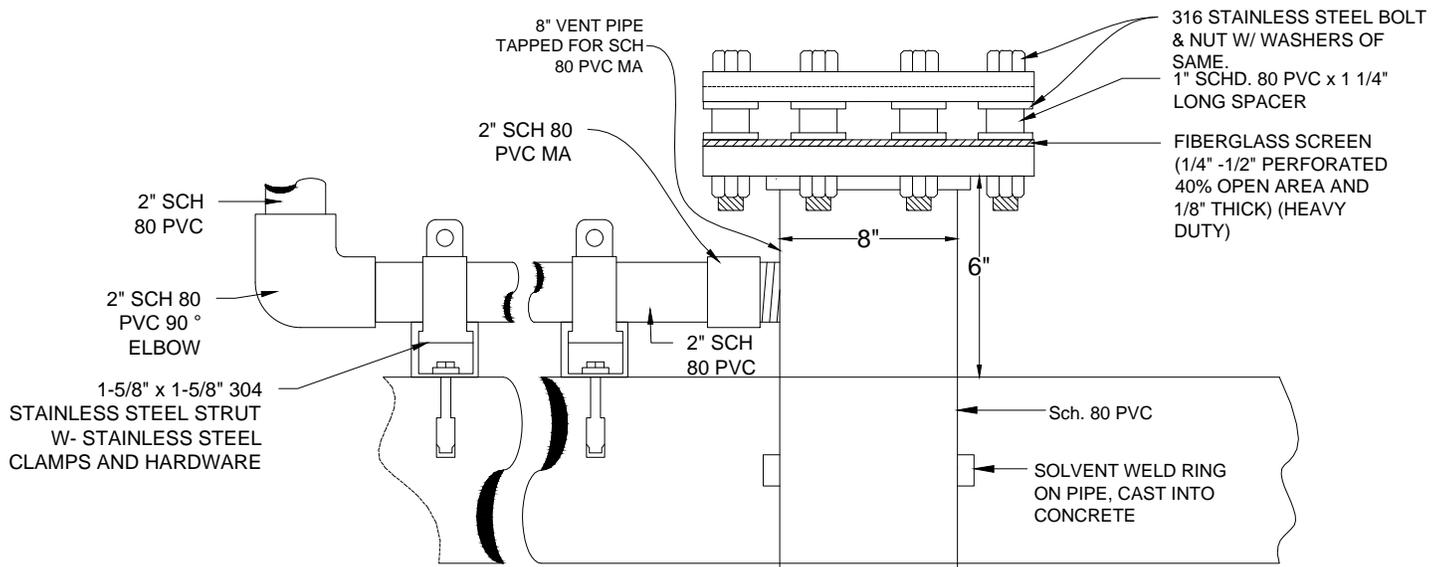
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**PIPING PLAN-ABOVE GROUND
VALVES- STANDARD LIFT STATION
CHARLOTTE COUNTY UTILITIES**

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LS-11
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DETAIL "A"



DETAIL "B"

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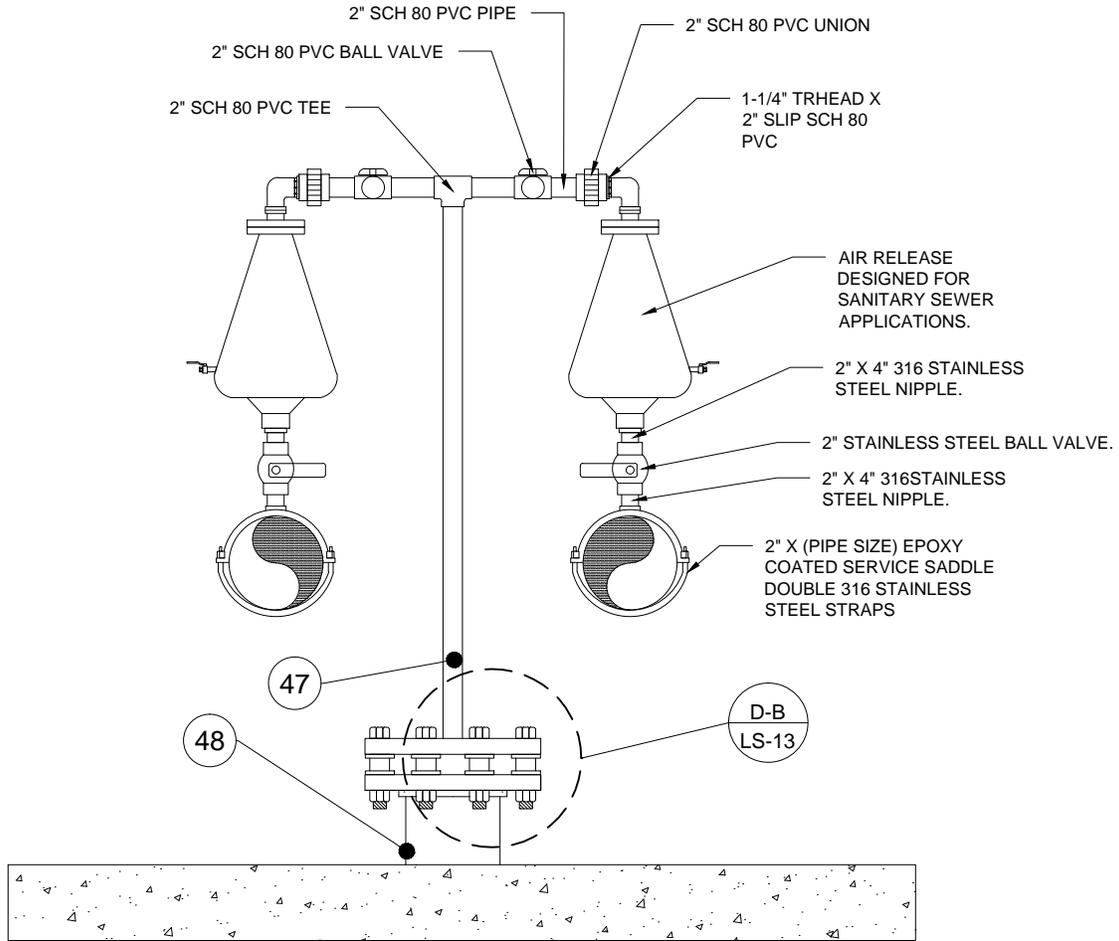
DETAILS A & B-ABOVE GROUND VALVES- STANDARD LIFT STATION

CHARLOTTE COUNTY UTILITIES

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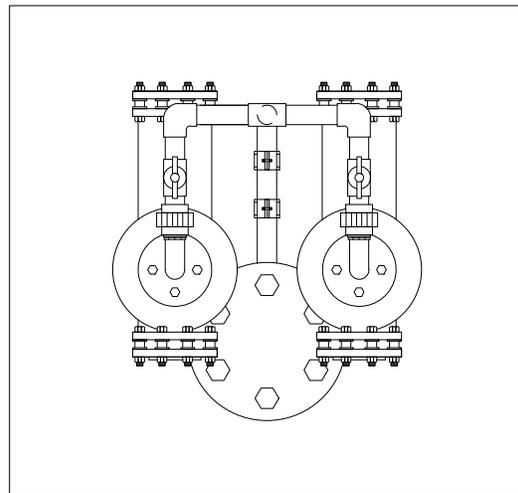
LS-13

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8" AND LARGER

SECTION B-B



4" AND 6" PIPING

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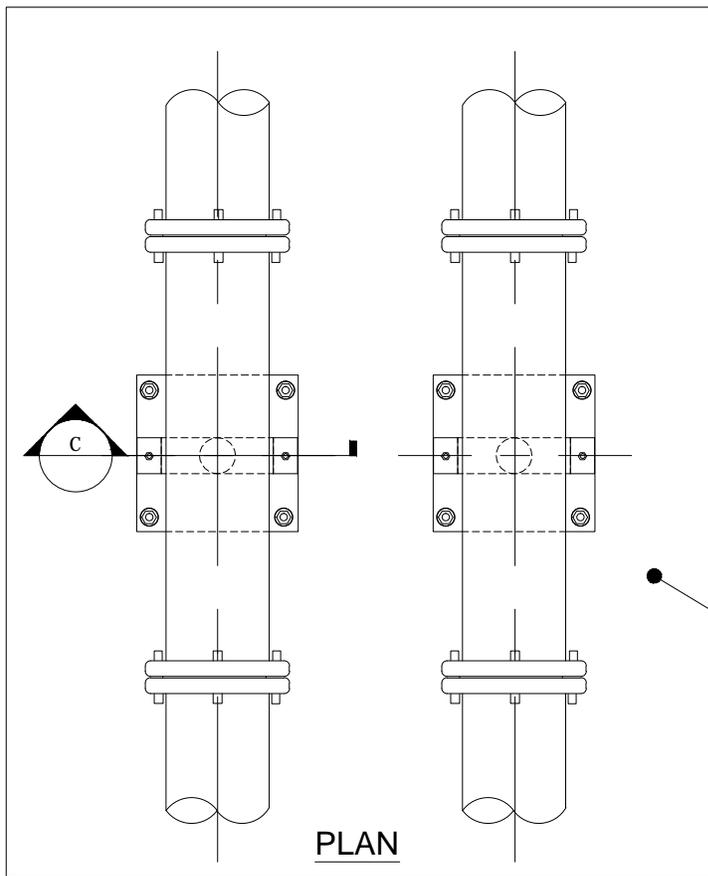
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**SECTION B-B / ABOVE GROUND
VALVES- STANDARD LIFT STATION
CHARLOTTE COUNTY UTILITIES**

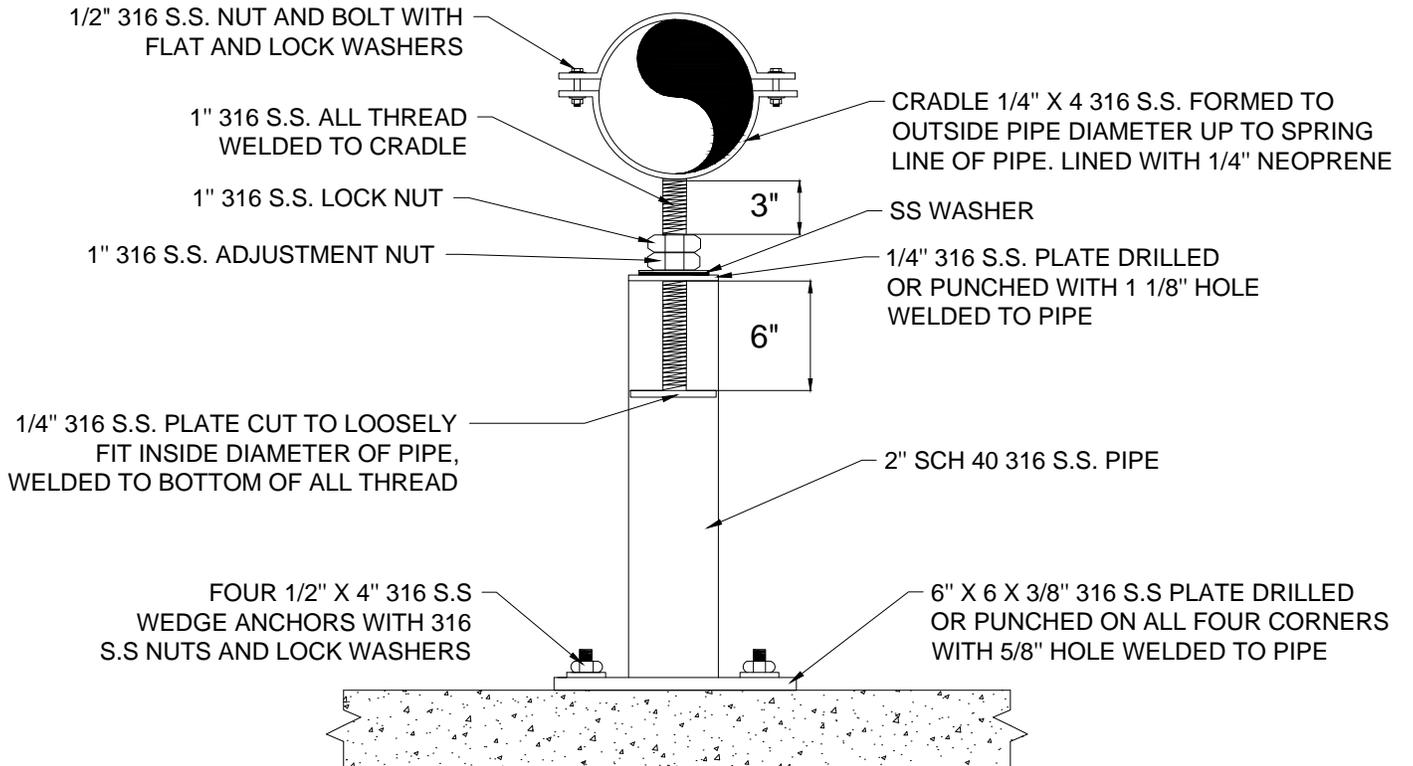
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LS-14

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NOTE:
 MAXIMUM HEIGHT FROM BOTTOM
 OF PIPE TO TOP OF SLAB 24"

1/2" 316 S.S. NUT AND BOLT WITH
 FLAT AND LOCK WASHERS

1" 316 S.S. ALL THREAD
 WELDED TO CRADLE

1" 316 S.S. LOCK NUT

1" 316 S.S. ADJUSTMENT NUT

CRADLE 1/4" X 4 316 S.S. FORMED TO
 OUTSIDE PIPE DIAMETER UP TO SPRING
 LINE OF PIPE. LINED WITH 1/4" NEOPRENE

SS WASHER

1/4" 316 S.S. PLATE DRILLED
 OR PUNCHED WITH 1 1/8" HOLE
 WELDED TO PIPE

1/4" 316 S.S. PLATE CUT TO LOOSELY
 FIT INSIDE DIAMETER OF PIPE,
 WELDED TO BOTTOM OF ALL THREAD

3"

6"

2" SCH 40 316 S.S. PIPE

FOUR 1/2" X 4" 316 S.S.
 WEDGE ANCHORS WITH 316
 S.S. NUTS AND LOCK WASHERS

6" X 6 X 3/8" 316 S.S. PLATE DRILLED
 OR PUNCHED ON ALL FOUR CORNERS
 WITH 5/8" HOLE WELDED TO PIPE

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DATE: 11/01/2011
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**DISCHARGE PIPE SUPPORT DETAIL
 ABOVE GROUND VALVES
 STANDARD LIFT STATION
 CHARLOTTE COUNTY UTILITIES**

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LS-15
ID: LS-15-AGV-SD.dwg

DRAWING LEGEND

1. CENTRIFUGAL NON-CLOG SUBMERSIBLE PUMP - TYPE _____, MODEL NO. _____, IMPELLER NO. _____, _____ VOLTS, H.P., _____ GPM @ _____ TDH, (2 REQUIRED).
2. CCU APPROVED MANUFACTURER COMPATIBLE _____" STANDARD DISCHARGE CONNECTION (2 REQ'D). ADJUST FOR PUMP TO WETWELL BOTTOM CLEARANCE AS REQUIRED BY PUMP MANUFACTURER WITH 4000 PSI TYPE II CONCRETE.
3. _____" DIAMETER SCH 40 WELDED STAINLESS STEEL PIPE TYPE 316, MUST BE WITHIN 1/4" TOLERANCE OF FITTING INTO GUIDE RAIL BRACKETS AS PER MFG. (4 REQUIRED)
4. _____" CLASS 53 D.I. EPOXY LINED PIPE, PLAIN END BY FLANGE END. (AS NEEDED)
5. PUMP POWER CABLE (2 REQUIRED).
6. PUMP LIFTING CHAIN (2 REQUIRED).
7. LIQUID LEVEL SENSOR, EACH SENSOR CABLE SHALL BE CONTINUOUS (NO SPLICES) AND A MINIMUM OF 40 FEET IN LENGTH (5 REQUIRED).
8. LIQUID LEVEL SENSOR CABLE HOLDER TYPE 316SS WITH PUMP LIFTING CABLE RING. FURNISH WITH NOT LESS THAN 6 PRONGS.
9. _____" D.I.P.S. SDR 11 HDPE 90 DEGREE ELBOW WITH FUSED FLANGE W/ STAINLESS STEEL BACK UP RING AT SPOOL PIECE.
10. 2" CONDUIT FOR CABLES (3 REQUIRED). FROM TOP OF SWEEP TO MCC TO BE 316 STAINLESS STEEL & FROM TOP OF SWEEP TO INSIDE OF WET WELL TO BE PVC SCH. 80. END AT WET WELL TO BE SEALED WITH DUXSEAL. CLAMP CONDUIT TO BOTTOM STRUT OF MCC. (SEE SECTION A-A OF WET WELL DETAIL.)
11. 2" FLANGED AUTOMATIC AIR-RELEASE VALVE D-020, MANUFACTURED BY A.R.I. ON LINE OR APPROVED EQUAL. WITH _____" EPOXY COATED STAINLESS STEEL STRAP SADDLE.
12. _____" x 24" LONG FLANGE BY FLANGE DI PIPE.
13. _____" HDPE FUSION COUPLER (IF NEEDED)
14. _____"x _____" MJ REDUCER (IF NEEDED)
15. _____" MUELLER-A-2602-6-01-E193 OR M&H "QUIET CLOSING SWING CHECK" WITH WEIGHT AND LEVER.
16. _____" PLUG VALVE (3 REQ'D).
17. _____" DI TEE.
18. _____" x _____" D.I. COMPANION FLANGE.
19. 6" COUPLER.
20. ACCESS COVER. INSTALLED PER MFG. ACTUAL HATCH SIZE TO ACCOMMODATE PUMPS (MIN. 36x48)
21. STATION VENT - (SEE DETAIL "B" SHEET LS-13).
22. _____" PVC 90° ELBOW RESTRAINED.
23. #5 REBAR AT 12" ON CENTER EACH WAY.
24. WRAP
25. UPPER GUIDE RAIL BRACKETS (2 REQUIRED)
26. FOR GUIDE RAILS OVER 15 FT INSTALL INTERMEDIATE GUIDE RAIL BRACKETS (2 REQUIRED) (SEE DETAIL "A" SHEET LS-13)
27. 1" CONDUIT FOR CABLE FROM TOP OF SWEEP TO MCC, TO BE 316 SS; FROM TOP OF SWEEP TO BOTTOM OF SLAB TO BE SCH. 80 TO YARD LIGHT

DATE: 11/01/2011

DRAWN BY: DEC

APPROVED BY: BRB

LEGEND ONE
ABOVE GROUND VALVES
STANDARD LIFT STATION
CHARLOTTE COUNTY UTILITIES

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LS-16

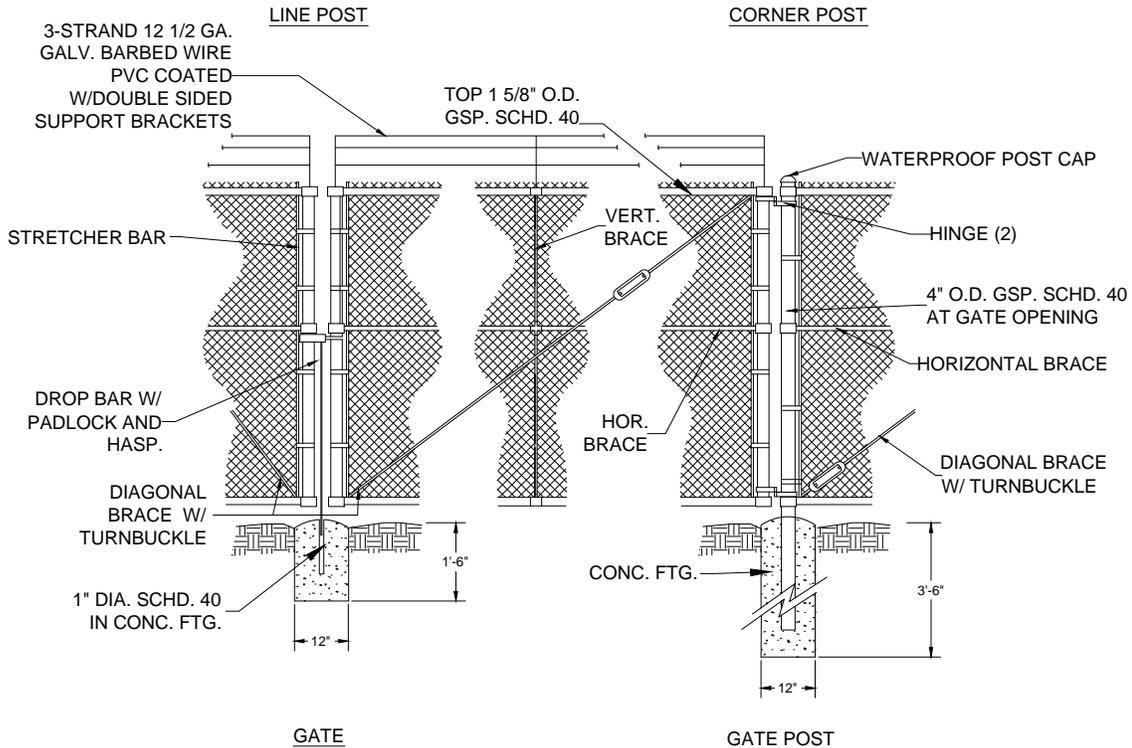
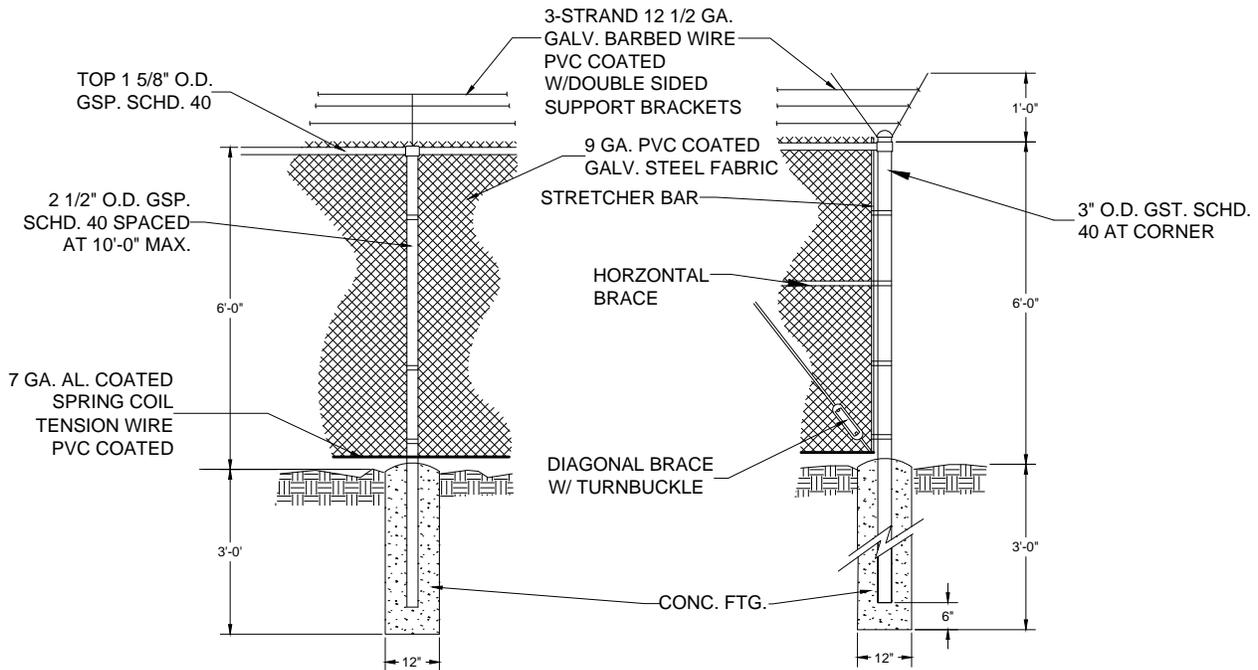
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DRAWING LEGEND CONTINUED

- 28. ANCHOR BOLTS 4 PER PUMP
- 29. _____ " CLASS 53 DI EPOXY LINED SOLID SLEEVE - RESTRAINED JOINT.
- 30. TONGUE AND GROOVE JOINT WITH SEAL.
- 31. PROVIDE 12 INCHES OF COMPACTED CRUSHED STONE OR PEA GRAVEL LEVELING COURSE. COMPACT TO STABILIZE. WET WELL SHALL BE PLACED ON UNDISTURBED SUB-BASE OR 100% COMPACTED CLEAN FILL.
- 32. ELASTOMERIC GASKET BOOT.
- 33. _____ " 316 STAINLESS STEEL INSERT
- 34. _____ " HDPE DIPS SDR-11 FUSED 90° ELBOW
- 35. "LINK SEAL" MODEL S-316 FOR D.I.P.S. / CAST OR CORE BIT DRILLED HOLE, TYPE WALL SLEEVE PIPE SUPPORTS W/ S.S. BOLTS (2).
- 36. ALL GASKETS SHALL BE 1/8" THICK SBR AS MANUFACTURED BY: U.S. PIPE "FLANGE - TYPE" OR AMERICAN CAST IRON PIPE "TORUSEAL".
- 37. _____ " MJ GATE VALVE .
- 38. 1-5/8"x 1-5/8" SLOTTED 12 GAUGE CHANNEL STRUT . TO BE PLACED AT 6' INTERVALS ON PIPE LONGER THAN 10 FEET (SEE DETAIL "A" SHEET LS-13). IF LESS THAN 10 FEET, PLACE AT MIDPOINT OF PIPE.
- 39. _____ " x _____ " D.I. FLANGED REDUCER (IF REQUIRED)
- 40. _____ " D.I.P.S. SDR 11 HDPE WITH FUSED FLANGE W/ STAINLESS STEEL BACK UP RING, (USE BENDS AS NECESSARY)
- 41. NOT USED
- 42. 5/8" x 6" 316 S.S. RED HEAD WITH WASHER AND NUT. (2 REQUIRED) (SEE DETAIL "A" SHEET LS-13)
- 43. PRECAST CONCRETE WET WELL TOP, WITH BROOM FINISH.
- 44. PRECAST CONCRETE WET WELL AND BASE.
- 45. WET WELL LINING
- 46. 8" MINIMUM POURED IN PLACE CONCRETE SLAB EVEN WITH WET WELL TOP AND TO HAVE A BROOM FINISH.
- 47. 1" OR 2" (MATCH A.R.V. DISCHARGE) PVC SCH. 80. DISCHARGE LINE FROM A.R.V.'s, WITH FITTINGS. (FROM A.R.V.'S TO TOP OF WET WELL SLAB)
- 48. CAST PVC SCH 80 A.R.V. PIPE INTO PROPOSED SLAB, EXTEND 2" BELOW BOTTOM OF EXISTING SLAB. PROTECT FROM PLUGGING DURING LINER APPLICATION.
- 49. STAINLESS STEEL SUPPORT CRADLE (SEE DETAIL SHEET LS-14) (4 REQUIRED)
- 50. _____ " x 90° EPOXY LINED MJ BEND. (RESTRAINED JOINT AND THRUST BLOCK AS REQUIRED) (2 REQUIRED)
- 51. _____ " x 90° EPOXY LINED DI FLANGED BEND

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DATE: 11/01/2011	<p>LEGEND TWO</p> <p>ABOVE GROUND VALVES</p> <p>STANDARD LIFT STATION</p> <p>CHARLOTTE COUNTY UTILITIES</p>	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN CCU APPROVAL.
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NOTES:

1. DOUBLE GATE TO BE 16'-0" CLEAR OPENING OR AS SPECIFIED.
2. PVC COATED GALVANIZED STEEL WOVEN WIRE FABRIC TO BE STRETCHED TAUT W/STRETCHER BARS AND STRAPS AND FASTENED TOP & BOTTOM AND AT POSTS WITH GALV. PVC COATED PIG RING TIES. AS TO COMPLY WITH ASTM-392, CLASS II.
3. EACH GATE TO BE SECURED OPEN WITH A GATE STOP SET IN CONCRETE.
4. ALL HARDWARE, PIPE AND ACCESSORIES TO COMPLY TO ASTM 1-120,123,153 AND TO BE PVC COATED AND MATCH IN COLOR.
5. COLOR OF FENCING, POSTS, HARDWARE AND BARBED WIRE SHALL BE PVC COATED BLACK. UNLESS APPROVED BY CCU.

DATE: 11/01/2011

DRAWN BY: DEC

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**SECURITY FENCE-ABOVE GROUND
VALVES- STANDARD LIFT STATION
CHARLOTTE COUNTY UTILITIES**

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LS-18

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