

ENGINEER SHALL PROVIDE A SCALED SITE SPECIFIC DETAIL

IF LIFT STATION SITE IS NOT CONTIGUOUS TO PUBLIC R/W, A 15' MINIMUM WIDTH EASEMENT APPROVED BY THE CITY MUST BE PROVIDED TO R/W

# PUMP STATION SITE PLAN

N.T.S.



TECHNICAL  
STANDARDS  
MANUAL

PUMP STATION  
SITE PLAN  
TECHNICAL STANDARDS MANUAL  
CITY OF LYNN HAVEN FLORIDA

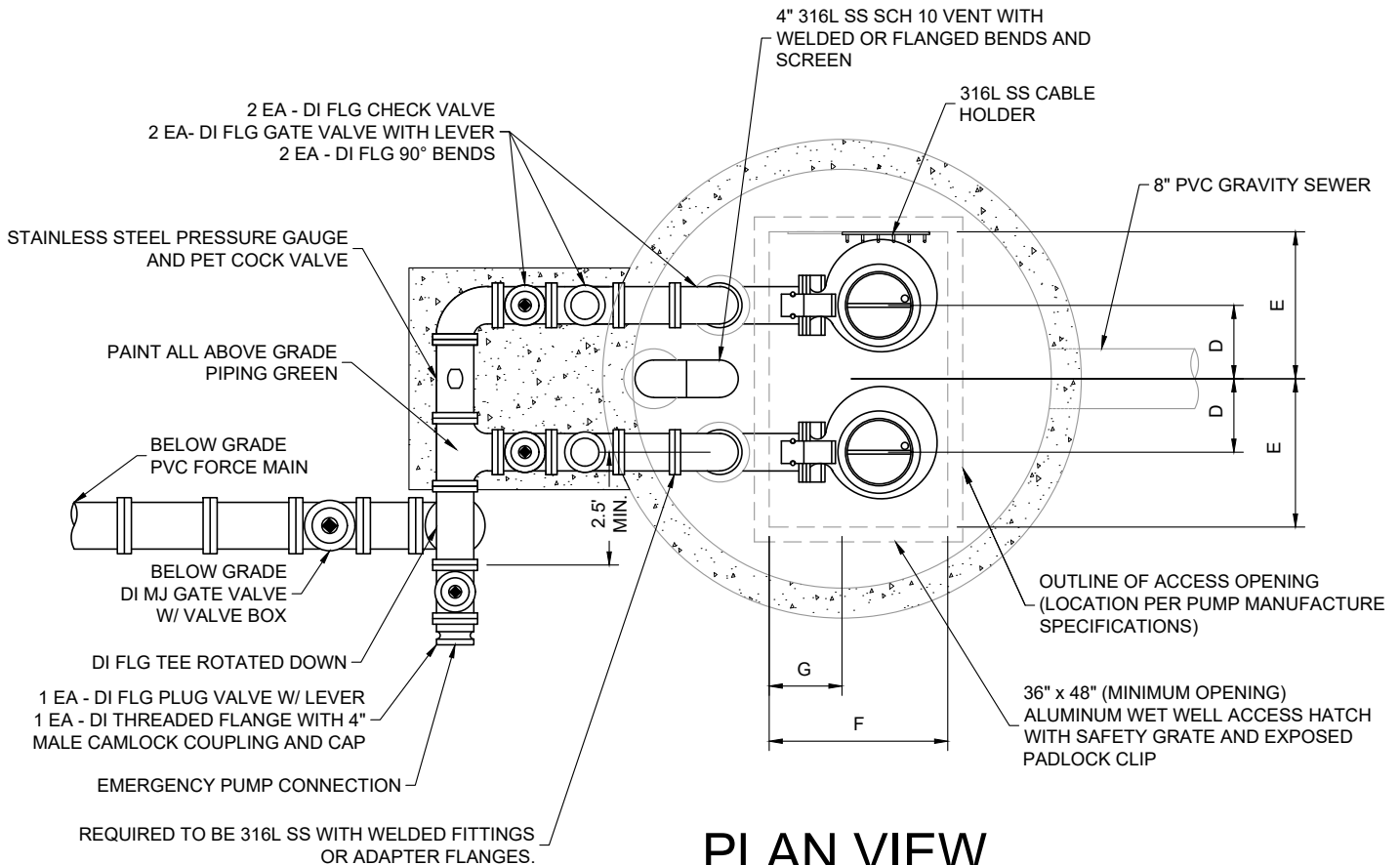
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**GENERAL NOTES:**

1. ALL EXPOSED NON STAINLESS STEEL METAL SHALL BE PAINTED WITH 2 COATS OF EXTERIOR ENAMEL PAINT.(COLOR TO BE DETERMINED PER JOB)
2. EXTERIOR WET WELL SHALL BE COATED WITH COAL TAR.OUTSIDE CONCRETE SURFACES SHALL BE LEFT BARE. (ONE COAT(9 MILS) COAL TAR EPOXY TO BE FIELD APPLIED AFTER INSTALLATION.) INTERIOR WET WELL SHALL BE HDPE LINER WITH WELDED JOINTS.
3. BASE AND FIRST RISERS TO BE CAST MONOLITHIC.
4. ALL LOCATIONS WHERE PIPES ENTER OR LEAVE THE WET WELL OR VALVE VAULT SHALL BE MADE WATERTIGHT WITH WALL SLEEVE, LINK SEAL, OR EQUIVALENT.
5. THERE SHALL BE NO VALVES OR ELECTRICAL JUNCTION BOXES IN WET WELL.
6. WET WELL COVERS SHALL BE ALUMINUM WITH 316L S.S. HARDWARE AND LOCK BRACKET. SIZE AS REQUIRED BY PUMP MANUFACTURE AND APPROVED BY THE CITY. INSTALL "SAFE-HATCH" ACCESS COVER (MANUFACTURED BY FLYGT OR EQUIVALENT.
7. WET WELL GROUT CIRCLE SHOULD BE PLACED AND FORMED AS SHOWN IN PUMP MANUFACTURES SHOP DRAWINGS AND TROWELED SMOOTH TO PREVENT SOLIDS BUILD-UP.
8. PUMPS (2 EACH) SHALL BE SUBMERSIBLE:  
 MANUFACTURER: \_\_\_\_\_; MODEL: \_\_\_\_\_; IMP: \_\_\_\_\_; DIA: \_\_\_\_\_;  
 MM, SPEED: \_\_\_\_\_ RPM; DISCHARGE SIZE: \_\_\_\_\_ IN.; VOLTAGE: \_\_\_\_\_;  
 HZ.: \_\_\_\_\_; PHASE: \_\_\_\_\_; H.P.: \_\_\_\_\_;  
 MIN. SOLID SIZE: \_\_\_\_\_ IN.; CURVE: \_\_\_\_\_.
9. ALL HARDWARE IN WET WELL AND VALVE BOX TO BE STAINLESS STEEL.
10. CONTRACTOR TO VERIFY THAT 240V / 3 PHASE POWER IS AVAILABLE BEFORE ORDERING EQUIPMENT.
11. PROVIDE MOTOR OVERLOAD AND PHASE PROTECTION.
12. PROVIDE LIGHTNING PROTECTION.
13. PROVIDE A FLUSH VALVE TO AUTOMATICALLY FLUSH THE SUMP DURING INITIAL OPERATION OF THE PUMP.
14. CHECK VALVES TO BE MUELLER OR CLOW, KENNEDY, MH.
15. WET WELL SHALL HAVE HDPE PROTECTIVE LINER WITH WELDED SEAMS(AGRULINER OR EQUIVALENT
16. DUCTILE IRON FORCEMAIN PIPE AND FITTINGS TO BE LINED WITH PROTECTO 401 CERAMIC EPOXY IN ACCORDANCE WITH ASTM A716/A746.
17. TOP OF WET WELL ELEVATION "Y" SHALL BE WHICHEVER IS HIGHEST:
  - 12" ABOVE FEMA 100 YEAR FLOOD ELEVATION
  - 12" ABOVE ADJACENT ROAD
  - 12" ABOVE SITE FINISH GRADE

※	L/S
DIM A	8" MIN.
DIM B	— ' — "
DIM C	※
DIM D	※
DIM E	※
DIM F	※
DIM G	※
DIM H	※
DIM K	※
ELEV T	0.00
ELEV U	0.00
ELEV V	0.00
ELEV W	0.00
ELEV X	0.00
ELEV Y	0.00
ELEV Z-1	NE = —
	E = —
GPM@TDH	— @ — '

※ PER PUMP MANUFACTURERS REQUIREMENT



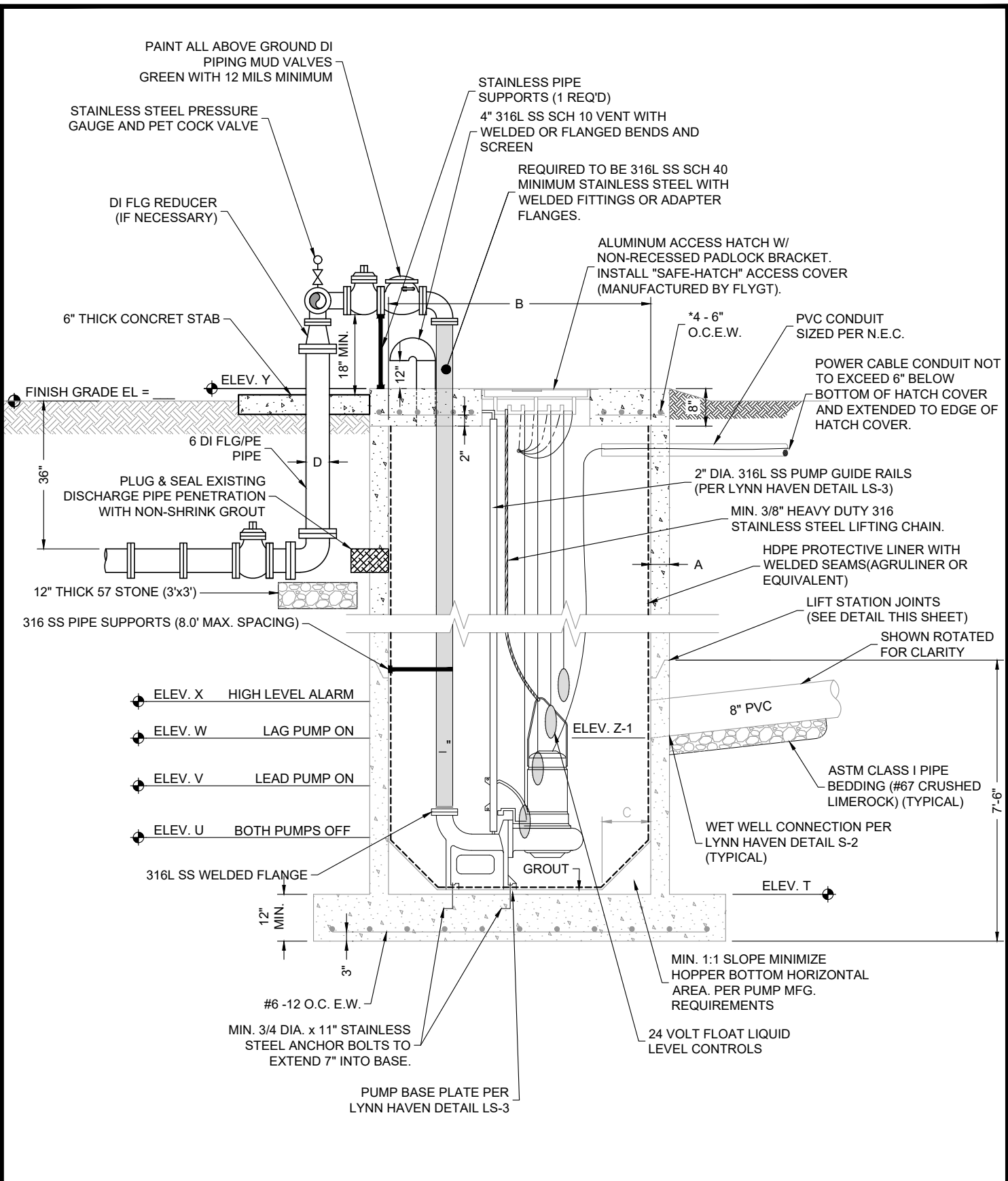
**PLAN VIEW**  
N.T.S.



**TECHNICAL STANDARDS MANUAL**

**PUMP STATION DETAILS  
PLANS, SECTION AND NOTES  
TECHNICAL STANDARDS MANUAL  
CITY OF LYNN HAVEN FLORIDA**

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**SECTION VIEW**  
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**PUMP STATION DETAILS**  
PLANS, SECTION AND NOTES  
TECHNICAL STANDARDS MANUAL  
CITY OF LYNN HAVEN FLORIDA

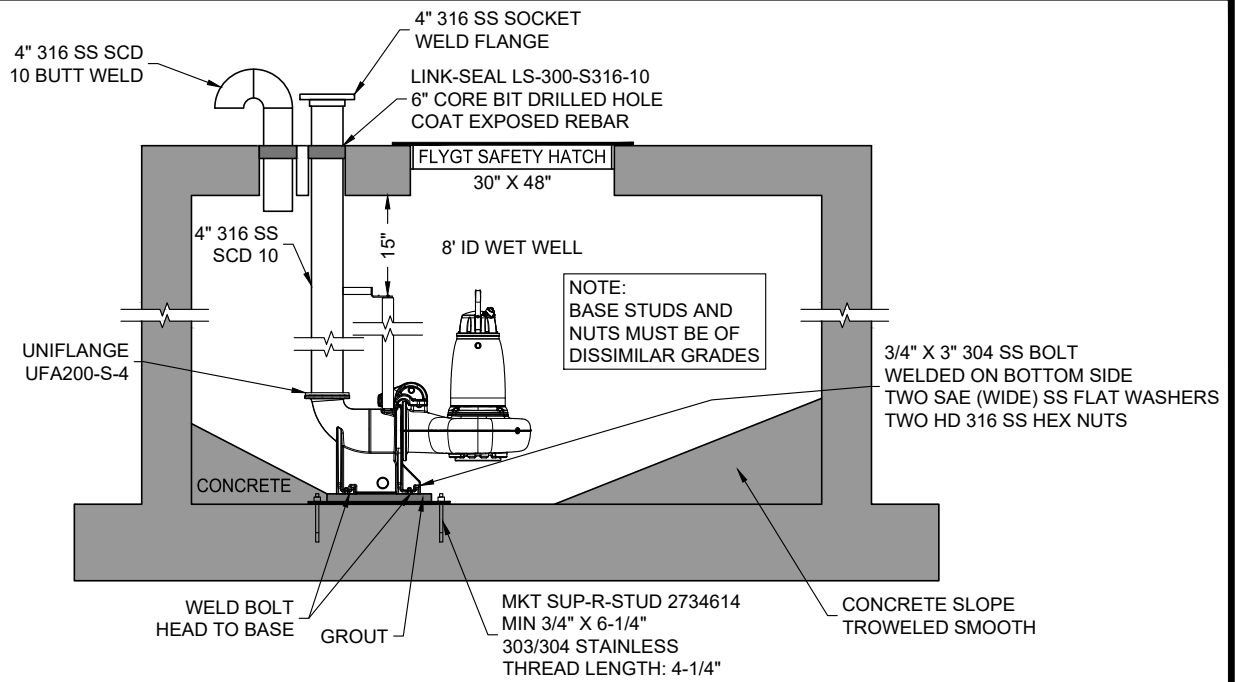
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# City of Lynn Haven Lift Stations Pump Selection Standards

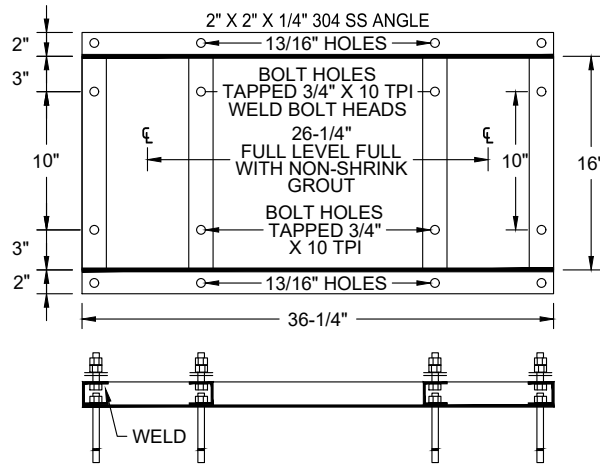
1. THE PUMP DISCHARGE CONNECTION SHALL BE ACCOMPLISHED BY A MACHINED METAL-TO-MACHINED METAL WATERTIGHT CONTACT. SEALING OF THE DISCHARGE INTERFACE WITH A DIAPHRAGM, "O" RING, OR PROFILE GASKET OF ANY MATERIAL WILL NOT BE ACCEPTED.
2. ALL POWER CONDUCTORS, LEAKAGE SENSOR CONDUCTORS, AND THERMAL PROTECTION CONDUCTORS SHALL BE ENCASED IN A SINGLE CABLE JACKET. THE CONNECTION OF THIS SINGLE MULTI-CONDUCTOR CABLE AT THE PUMP END SHALL BE A SERVICEABLE WATERTIGHT GLAND STYLE. CABLE TO PUMP CONNECTIONS UTILIZING A HARDENED EPOXY SEALING METHODS WILL NOT BE CONSIDERED.
3. PUMP IMPELLERS SHALL BE EASY TO REMOVE, ADJUSTED, AND FIELD SERVICEABLE WITHOUT THREAT OF DAMAGE TO THE SHAFT OR MECHANICAL SEAL. IMPELLERS SHALL BE REMOVABLE WITH THE USE OF A PRESS TOOL OR AN ADJUSTABLE CONICAL SLEEVE HUB.
4. CLEARANCE OF THE IMPELLER TO WEAR RING OR PLATE SHALL BE MADE ADJUSTABLE USING READILY AVAILABLE SHIMS OR BY WAY OF A GLAND SCREW.
5. IMPELLERS ON PUMPS UTILIZED IN THE COMMON FORCE MAIN AND SANITARY COLLECTION SYSTEM SHALL NOT BE OF THE SINGLE VEIN OR OPEN VEIN STYLE. DEPENDENT ON THE SPECIFIC NEEDS AND APPLICATION A MULTI VEIN, VORTEX, CHOPPER, OR GRINDER STYLE OF IMPELLER WILL BE SELECTED.
6. PUMP MOTORS WILL BE AIR FILLED AND EXPLOSION PROOF. THE USE OF DIELECTRIC FLUIDS IN THE MOTOR COMPARTMENT OF A PUMP SHALL BE CONSIDERED UNACCEPTABLE DUE TO ITS POSSIBLE ENVIRONMENTAL IMPACT. PUMPS CAN HAVE AN EXTERNAL LIQUID COOLANT FILLED COOLING JACKET AS LONG AS AN ENVIRONMENTALLY SAFE COOLANT IS USED.
7. PUMPS SHALL BE EQUIPPED TO ACCEPT AN AUTOMATIC FLUSH VALVE SHOULD THE APPLICATION TO INSTALL ONE BE DETERMINED NECESSARY.
8. 5 YEAR COMPLETE WRITTEN LABOR AND MATERIALS/EQUIPMENT WARRANTY.

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 <b>TECHNICAL STANDARDS MANUAL</b>	<b>TECHNICAL STANDARDS MANUAL</b> PLANS, SECTION AND NOTES PUMP STATION DETAILS LS-2C	CAD FILE: 150034e1.dwg
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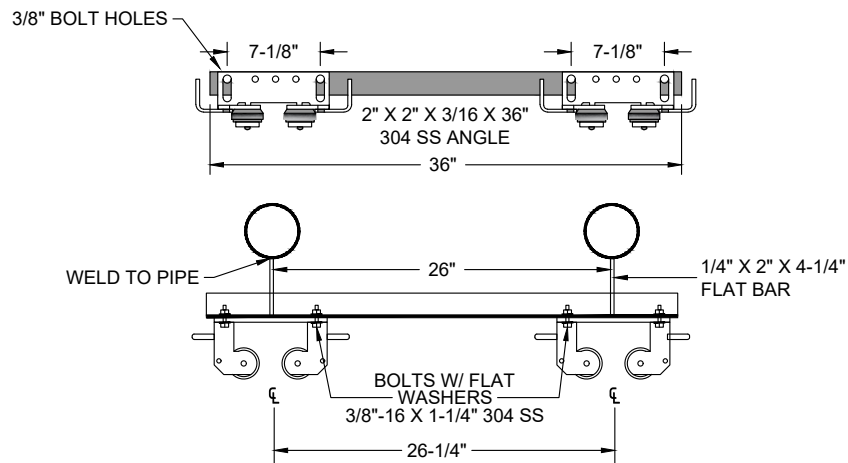


EXAMPLE FOR FLYGT 3127 PUMP MOUNTING FRAME FOR 8' ID WET WELL AND 4" DISCHARGE PIPE



FLYGT 2" UPPER GUIDE BAR BRACKET

613 68 04 316 STAINLESS STEEL



TECHNICAL  
STANDARDS  
MANUAL

PUMP STATION  
PUMP BASE PLATE AND MOUNTING  
TECHNICAL STANDARDS MANUAL  
CITY OF LYNN HAVEN FLORIDA

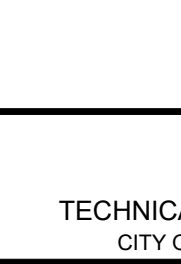
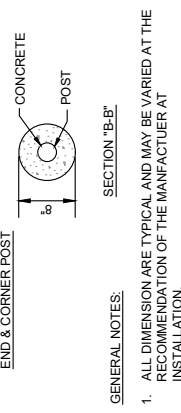
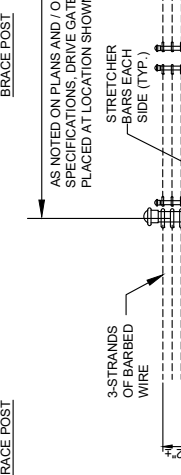
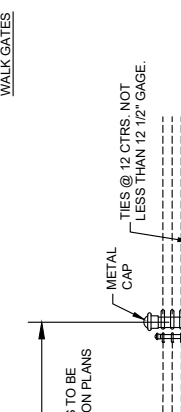
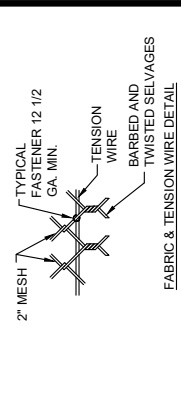
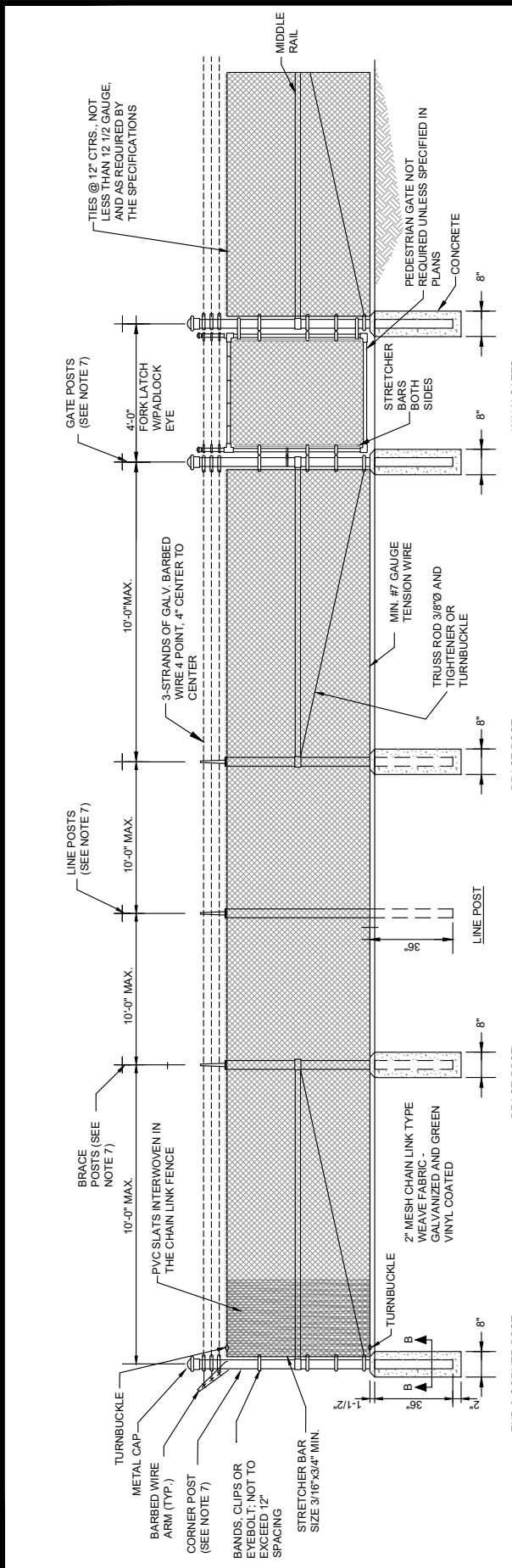
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**TECHNICAL STANDARDS MANUAL**

**CHAIN LINK FENCE DETAIL**  
**TECHNICAL STANDARDS MANUAL**  
 CITY OF LYNN HAVEN FLORIDA

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**GENERAL NOTES:**

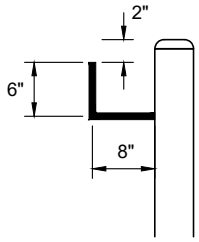
- ALL DIMENSION ARE TYPICAL AND MAY BE VARIED AT THE RECOMMENDATION OF THE MANUFACTURER AT INSTALLATION.
- PVC SLATS SHALL BE WOVEN INTO THE CHAIN LINK FENCE.
- HOG RINGS SHALL BE GALVANIZED OR ALUMINUM ALLOY.
- THE TENSION WIRE SHALL BE EITHER NO. 7 GAUGE STEEL WIRE GALVANIZED AT THE RATE OF 0.7 OZ. PER SQ. FT. MIN. OR ALUMINUM WIRE OF ALLOY ALCLAD 5066-H38 OR EQUAL WITH A WIRE DIAMETER OF 0.1975 IN. OR LARGER.
- TENSION WIRE SHALL BE TIGHTENED TO SINGING TAUTNESS.
- ALL TUBULAR POSTS TO HAVE A METAL CAP.
- POSTS SHALL BE MADE OF STEEL PIPE (SCHEDULE 40) OF THE SIZES AND WEIGHTS GIVEN BELOW OR OF OTHER APPROVED EQUIVALENT SECTION. POSTS SHALL COMPLY WITH STANDARD SPECIFICATION FOR PIPE, STEEL, HOT-DIPPED ZINC-COATED (GALVANIZED) WELDED, FOR FENCE STRUCTURES (ASTM F1083) AND SHALL BE COATED TO MATCH THE FENCE FABRIC.
- LINE POSTS SHALL HAVE A 2-3/8 INCH OUTSIDE DIAMETER AND WEIGH 3.65 LB. PER LINEAR FOOT.
- END, CORNER AND PULL POSTS SHALL HAVE A 2-7/8 INCH OUTSIDE DIAMETER AND WEIGH 5.79 LB. PER LINEAR FOOT.
- GATE POST FOR SINGLE-SWING GATES UP TO 6 FT. AND DOUBLE-SWING GATE OPENINGS UP TO 12 FT. SHALL BE 2-7/8 IN. OUTSIDE DIAMETER AND WEIGH 5.79 LB. PER LINEAR FOOT.
- GATE POSTS FOR DOUBLE-SWING GATE OPENINGS WIDER THAN 12 FT. SHALL BE 4-IN. OUTSIDE DIAMETER AND WEIGH 9.10 LB. PER LINEAR FOOT.

**NOTES:**

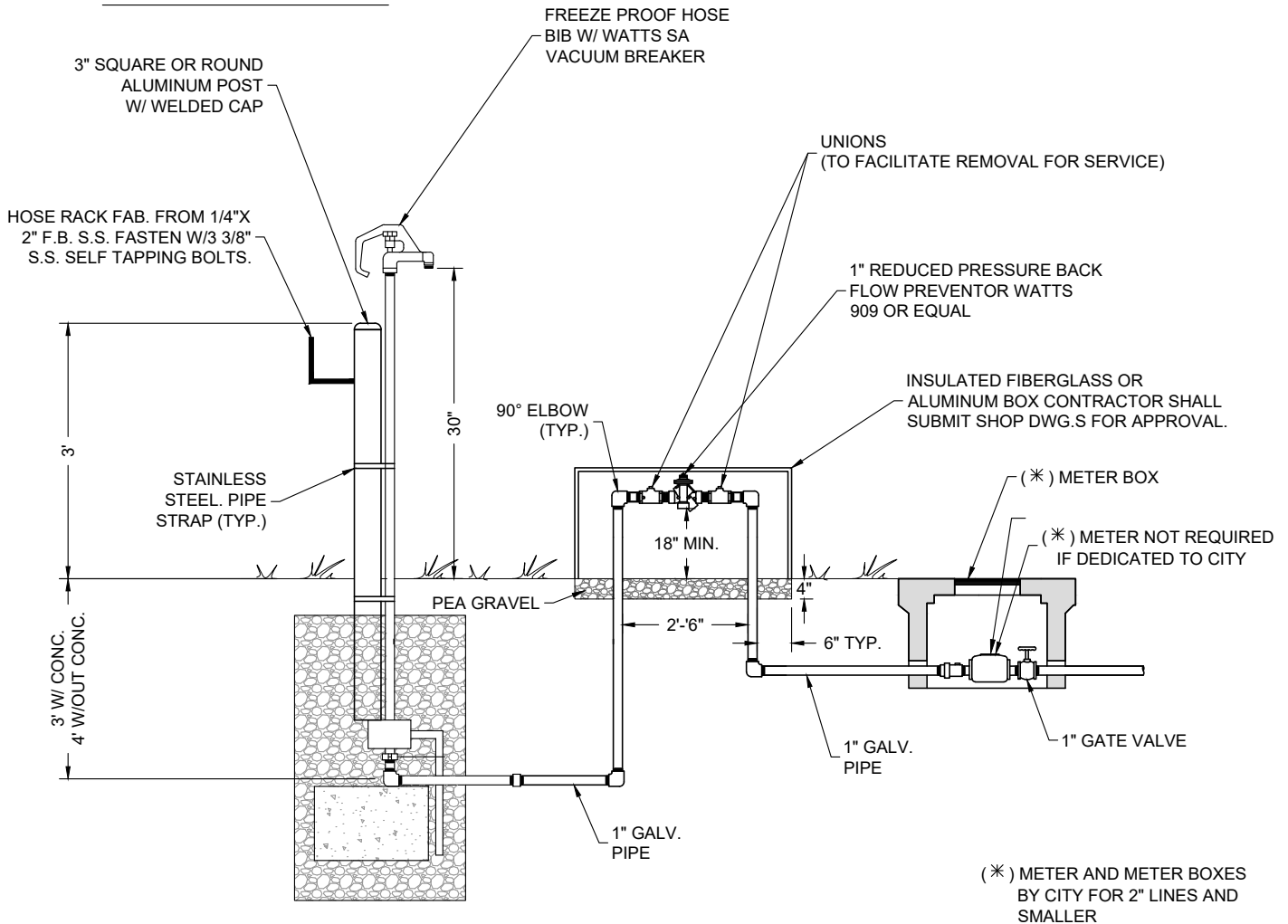
- THE CONTRACTOR SHALL PROVIDE A SUITABLE METHOD TO VISUALLY ASSURE OBTAINING TWO (2) INCHES CLEARANCE BETWEEN POST AND BOTTOM OF CONCRETE AS SHOWN IN THE DETAIL DRAWING.
- STRETCHER BARS FOR GATES ARE REQUIRED ON BOTH SIDES OF EACH GATE. STRETCHER BARS (SIZE 3/16"x3/4") MINIMUM ANCHOR WITH BANDS NOT EXCEEDING 12" SPACING OR OTHER APPROVED ANCHOR.
- FENCE FABRIC SHALL BE WOVEN IN 2-INCH MESH FROM NO. 9 GAUGE STEEL CONFORMING TO THE "STANDARD SPECIFICATION FOR ZINC-COATED STEEL CHAIN-LINK FENCE FABRIC" (ASTM A392) AND SHALL BE GREEN VINYL COATED. SLATS SHALL BE WOVEN INTO THE FENCE FABRIC AND SHALL BE BOTTOM LOCKING. SLATS SHALL BE FOREST GREEN IN COLOR.

**CHAIN LINK FENCE**  
 N.T.S.

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# HOSE RACK



NOTE:  
INSULATE ALL ABOVE GROUND PIPING.  
PIPE INSULATION TO BE CERTIANTEED  
500 SNAP ON W/ AWS OR EQUAL.

## LIFT STATION WATER SERVICE DETAIL

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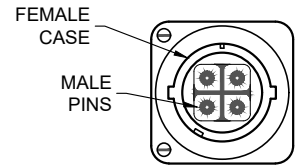
TECHNICAL  
STANDARDS  
MANUAL

LIFT STATION  
WATER SERVICE DETAIL  
TECHNICAL STANDARDS MANUAL  
CITY OF LYNN HAVEN FLORIDA

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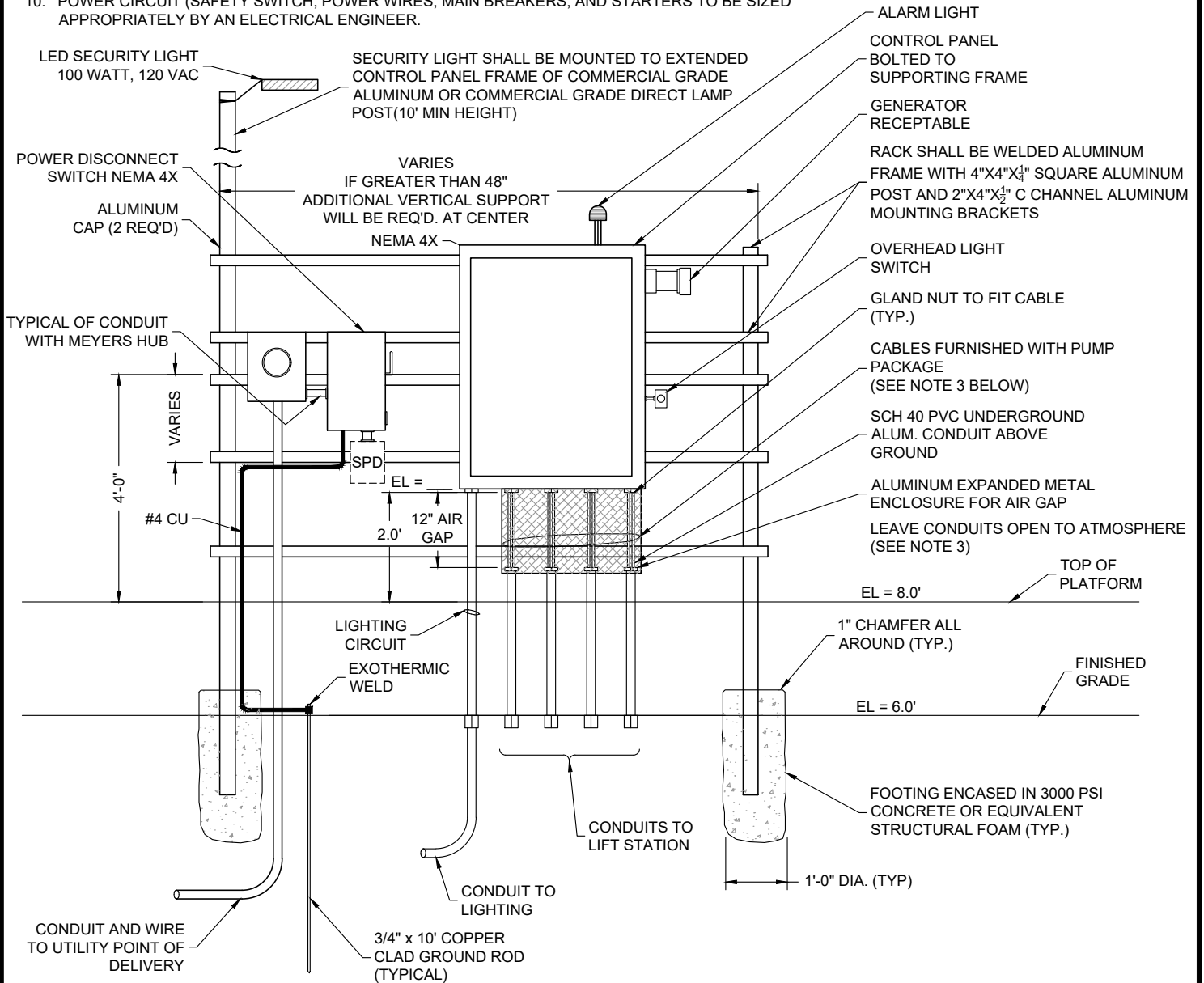
1. PROVIDE CONCRETE PAD FOR ANY FREESTANDING EQUIPMENT. ANCHOR FREESTANDING EQUIPMENT PER MANUFACTURER'S RECOMMENDATION.
2. PROVIDE 12" AIR GAP BETWEEN CONDUITS FROM WET WELL & CONTROL PANEL. AIR GAP SHALL BE SCREENED OR CAGED TO PREVENT INTRUSION OF PESTS.
3. COORDINATE WITH CITY OF LYNN HAVEN FOR GENERATOR RECEPTACLE CATALOG # TO MATCH THEIR EXISTING EQUIPMENT.
4. DRAWING IS SHOWN FOR 230 VOLT POWER SUPPLY. THE LOCATION OF METER AND MAIN POWER DISCONNECT SHALL BE REVERSED FOR 480 VOLT SUPPLY.
5. WHEN TWO (2) SEPARATE CONDUCTOR-TYPE MOTORS ARE USED, CONDUIT SHALL BE INCREASED TO 3".
6. POWER SUPPLY SHALL BE UNDERGROUND ON THE LIFT STATION SITE AND SHALL BE 3 PHASE FROM A 3 PHASE SOURCE ONLY.
7. CONTRACTOR TO VERIFY AVAILABILITY OF 3 PHASE POWER BEFORE ORDERING EQUIPMENT.
8. PROVIDE 2" CONDUITS FOR FLOAT LEADS AND EACH MOTOR LEAD.
9. CONDUIT SHALL BE SCHEDULE 80 PVC.
10. POWER CIRCUIT (SAFETY SWITCH, POWER WIRES, MAIN BREAKERS, AND STARTERS TO BE SIZED APPROPRIATELY BY AN ELECTRICAL ENGINEER.



**GENERATOR RECEPTACLE**

MANUFACTURE: RUSSELL STOLL  
MODEL: #JRSB1044FR (OR EQUAL)

100 AMP PANEL MOUNTED WITH  
20 DEGREE ANGLE, 4 WIRE, 4  
POLES WITH REVERSE SERVICE



**EQUIPMENT INSTALLATION DETAIL**

N.T.S.



**TECHNICAL  
STANDARDS  
MANUAL**

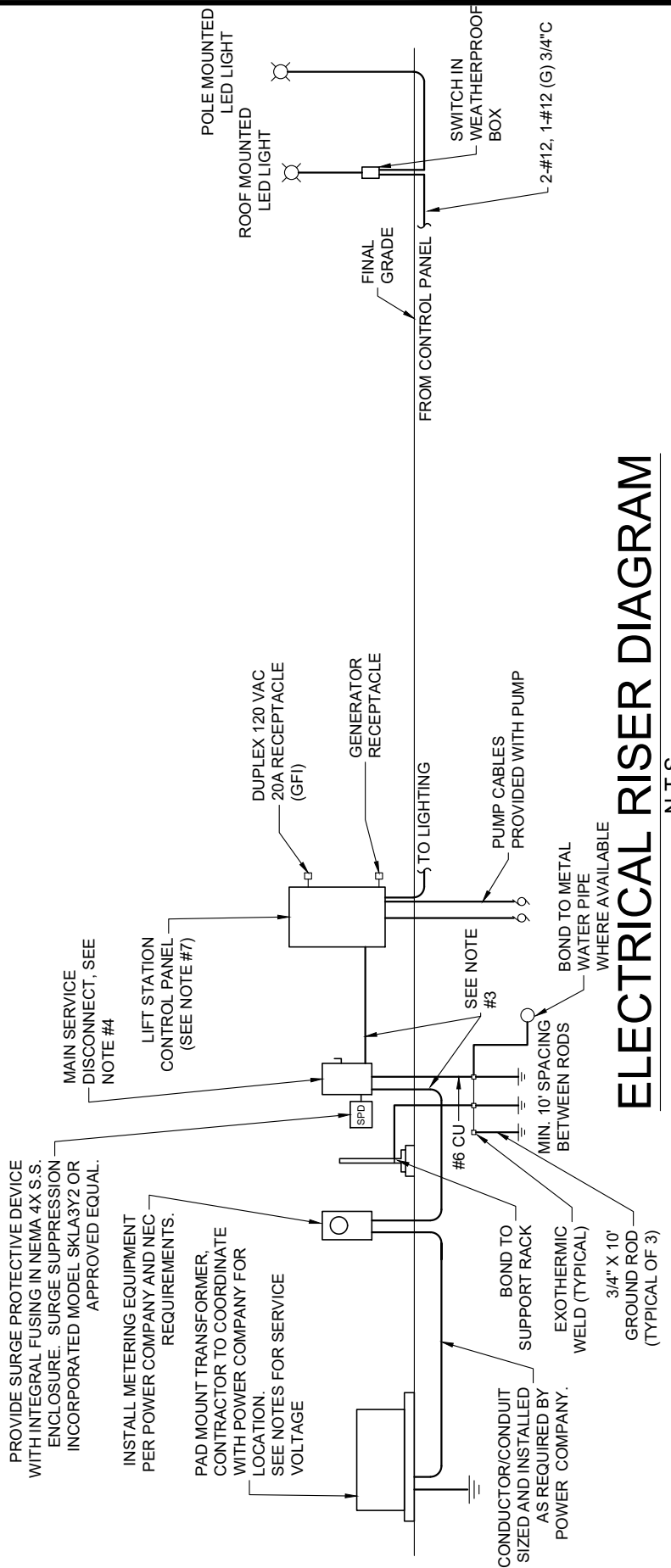
**PUMP STATION CONTROL  
PANEL INSTALLATION DEAIL  
TECHNICAL STANDARDS MANUAL  
CITY OF LYNN HAVEN FLORIDA**

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NOTES:

1. CONTRACTOR SHALL COORDINATE AND INSTALL THE ELECTRICAL SERVICE IN ACCORDANCE WITH THE SERVING UTILITY REQUIREMENTS, LOCAL ORDINANCES, AND THE NATIONAL ELECTRICAL CODE (NEC).
2. SERVICE VOLTAGE RATINGS SHALL BE 480Y/277VAC, 3-PHASE, 4-WIRE, WYE SOLIDLY GROUNDED. EXCEPT FOR MOTOR LOADS LESS THAN 7-1/2HP, 240/120VAC, 3-PHASE, 4-WIRE, MID-TAP WITH HIGH LEG MAY BE ALLOWED, OR AS DETERMINED BY THE STATION DESIGN AND UTILITY REQUIREMENTS (NO SINGLE-PHASE SERVICE IS ALLOWED).
3. ELECTRICAL SERVICE CONDUCTOR AMPACITY SHALL BE SIZED SUITABLE FOR THE TOTAL LOAD REQUIREMENTS WITH A MINIMUM OF 125% OF THE MAIN SERVICE DISCONNECT RATING PLUS ANY INCREASE DUE TO VOLTAGE DROP ISSUES. CONDUIT SHALL BE SIZED FOR THE CONDUCTORS PER NEC, SCH 80 PVC, 1-1/2" MINIMUM.
4. THE MAIN SERVICE DISCONNECT RATING SHALL BE SIZED TO PROTECT THE SERVICE CONDUCTORS WITH A MINIMUM OF 100% OF THE PUMP CONTROL PANEL MAIN BREAKER AND ANY OTHER LOADS. THE AMPERE INTERRUPTING CURRENT DUTY SHALL BE GREATER THAN THE AVAILABLE FAULT CURRENT.
5. THE PUMP CONTROL PANEL MAIN BREAKER AMPERE RATING SHALL BE SIZED PER THE LOAD AS FOLLOWS:  
 THE LARGEST PUMP BREAKER AMPS + ALL OTHER PUMP FULL LOAD AMPS + 10 AMPS FOR CONTROL + ALL OTHER LOADS SUCH AS LIGHTING, RECEPTACLES AND LOADS ASSOCIATED WITH GENERATORS OR ENGINE DRIVEN PUMPS.  
 THE PANEL MAIN BREAKER RATING SHALL BE 100A MINIMUM. WHERE THE PANEL LOAD EXCEEDS 100A, THE RATING SHALL BE 200A, 400A OR LARGER AS DETERMINED BY THE PANEL ELECTRICAL DESIGN ENGINEER.  
 THE SHORT CIRCUIT RATING OF THE PANEL SHALL BE LABELED WITH A RATING THAT EXCEEDS THE AVAILABLE SHORT CIRCUIT CURRENT.
6. THE EMERGENCY GENERATOR BREAKER RATING AND THE GENERATOR RECEPTACLE RATING SHALL MATCH THE RATING OF THE PANEL MAIN BREAKER.
7. THE STATION CONTROL PANEL SHALL INCLUDE COMPLETE MOTOR STARTERS, SOFT STARTERS OR VFD'S, INTEGRAL OVERCURRENT PROTECTION, SURGE PROTECTION, BATTERY BACKUP, CHARGER, ETC... REFERENCE SPECIFICATION 02570.



# ELECTRICAL RISER DIAGRAM

N.T.S.



## TECHNICAL STANDARDS MANUAL

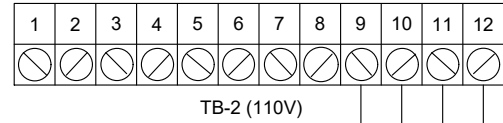
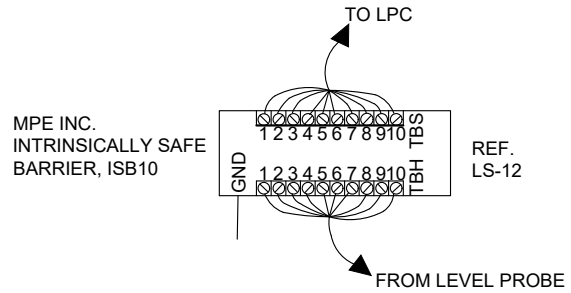
## ELECTRICAL RISER DIAGRAM

TECHNICAL STANDARDS MANUAL  
CITY OF LYNN HAVEN FLORIDA

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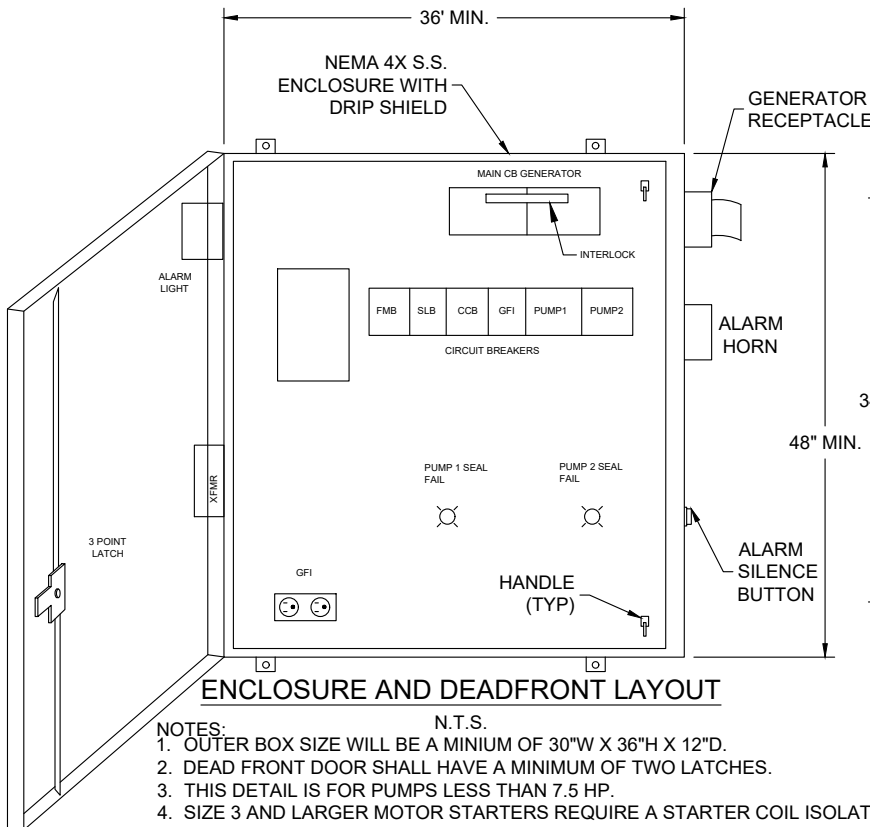
# PANEL COMPONENTS

ENC	ENCLOSURE	HOFFMAN, A-48H3612SSLP
MCB	MAIN CIRCUIT BREAKER	SQ-D, FAL
GCB	GENERATOR CIRCUIT BREAKER	SQ-D, FAL
PCB	PUMP CIRCUIT BREAKER	SQ-D, FAL
CCB	CONTROL CIRCUIT BREAKER	SQ-D, QOU115
GFICB	GFI CIRCUIT BREAKER	SQ-D, QOU115
MS1,2	STARTER	FURNAS ESP-100
GR	GENERATOR RECEPTACLE	MELTRIC, DS200, 37-28043
AH	ALARM HORN	FEDERAL, 350-WB-120
AL	ALARM LIGHT	INGRAM, LRXB-40
F	FLASHER	INGRAM, FL-120-60
ASB	ALARM SILENCE BUTTON	SQ-D, 9001 SKR1BH5
GF1	CONVENIENCE RECEPTACLE	LEVITON, 6598-I
XFMR	TRANSFORMER	SQ-D, 7410 3S1F
F1,2	FUSES	BUSS, FNQ10
PM	PHASE MONITOR	DIVERSIFIED, SLA-440-ASA
TCU	TELEMETRY CONTROL UNIT	DATA FLOW, DFS TCU001
CB	CIRCUIT BREAKER	E-T-A, ETA-42-01
F4-7	FUSE AND HOLDER	WAGO, DFS-00271-003-9, 1AMP5B
47K	RESISTOR BLOCK	WAGO, DFS-00271-003-1
TFS	TRANSIENT FILTER SHIELD	DATA FLOW TFS001-02
12VDC	BATTERY BACKUP	YUASA, NP2.6-12 12 VDC @ 2.6AM
SS1	480V SURGE SUPPRESSOR (TPS001)	DITEK, DTK-480-3CM
SS2	120V SURGE SUPPRESSOR (SPS001)	DITEK, DFS PN# 005-0061
TB1	TERMINAL BLOCK (24V)	IDEAL, 89-212
TB2	TERMINAL BLOCK (ALL OTHERS)	IDEAL, 89-212
SLB	SITE LIGHTING CIRCUIT BREAKER	SQ-D, QOU120
FMB	FLOW METER CIRCUIT BREAKER (RE-PUMP LIFT STATIONS ONLY)	SQ-D, QOU120
SL	SITE LIGHT	
LPC	LEVEL PROBE CONVERTER WITH RELAYS	MPE LPC420R
ISB	INTRINSICALLY SAFE BARRIER	MPE ISB10
SFR	SEAL FAIL RELAY	PER PUMP SUPPLIER
MTS	MOTOR THERMAL SWITCH	PER PUMP SUPPLIER



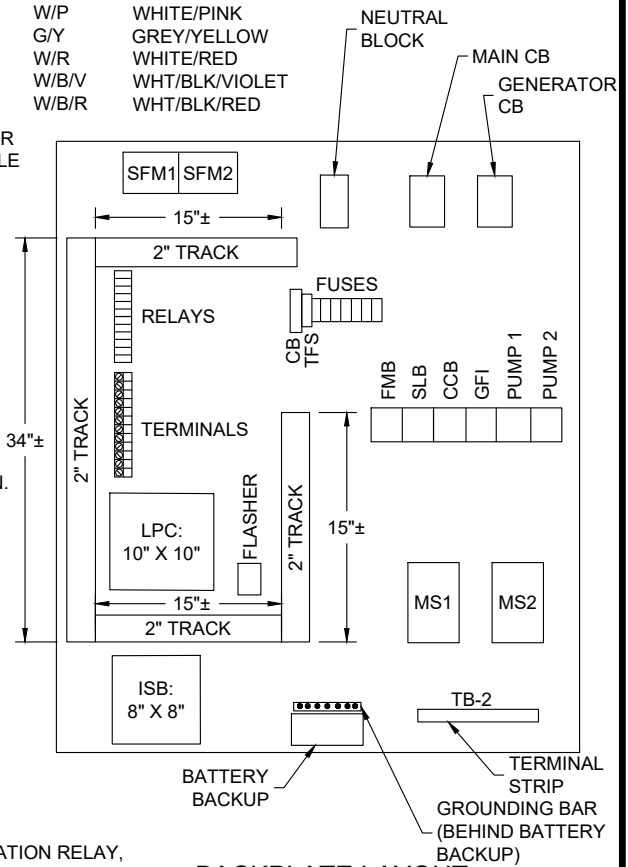
**COLOR CODE**

SYMBOL	COLOR
B	BLACK
W	WHITE
G	GREEN
BL	BLUE
R	RED
P	PINK
V	VIOLET
BR	BROWN
B/Y	BLACK/YELLOW
B/O	BLACK/ORANGE
B/R	BLACK/RED
B/V	BLACK/VIOLET
G/LP	GREY/LIGHT PINK
G/R	GREY/RED
G/BL	GREY/BLUE
G/BR	GREY/BROWN
W/P	WHITE/PINK
G/Y	GREY/YELLOW
W/R	WHITE/RED
W/B/V	WHT/BLK/VIOLET
W/B/R	WHT/BLK/RED



**ENCLOSURE AND DEADFRONT LAYOUT**

- NOTES:
1. OUTER BOX SIZE WILL BE A MINIMUM OF 30"W X 36"H X 12"D.
  2. DEAD FRONT DOOR SHALL HAVE A MINIMUM OF TWO LATCHES.
  3. THIS DETAIL IS FOR PUMPS LESS THAN 7.5 HP.
  4. SIZE 3 AND LARGER MOTOR STARTERS REQUIRE A STARTER COIL ISOLATION RELAY, SOFT START, OR VFD, PER FLOWRATE REQUIREMENTS.
  5. THE CONTROL TRANSFORMER SHALL BE MOUNTED ON THE EXTERIOR OF THE PANEL.
  6. THIS DRAWING IS DIAGRAMMATIC IN NATURE TO SHOW CONCEPT. SUPPLIER SHALL PROVIDE DETAILED SHOP DRAWINGS.



**BACKPLATE LAYOUT**

N.T.S.  
\* IDENTIFY INTRINSICALLY SAFE WIRING AND TERMINALS



**TECHNICAL STANDARDS MANUAL**

**DUPLEX CONTROL PANEL ENCLOSURE DEAD FRONT LAYOUT TECHNICAL STANDARDS MANUAL**  
CITY OF LYNN HAVEN FLORIDA

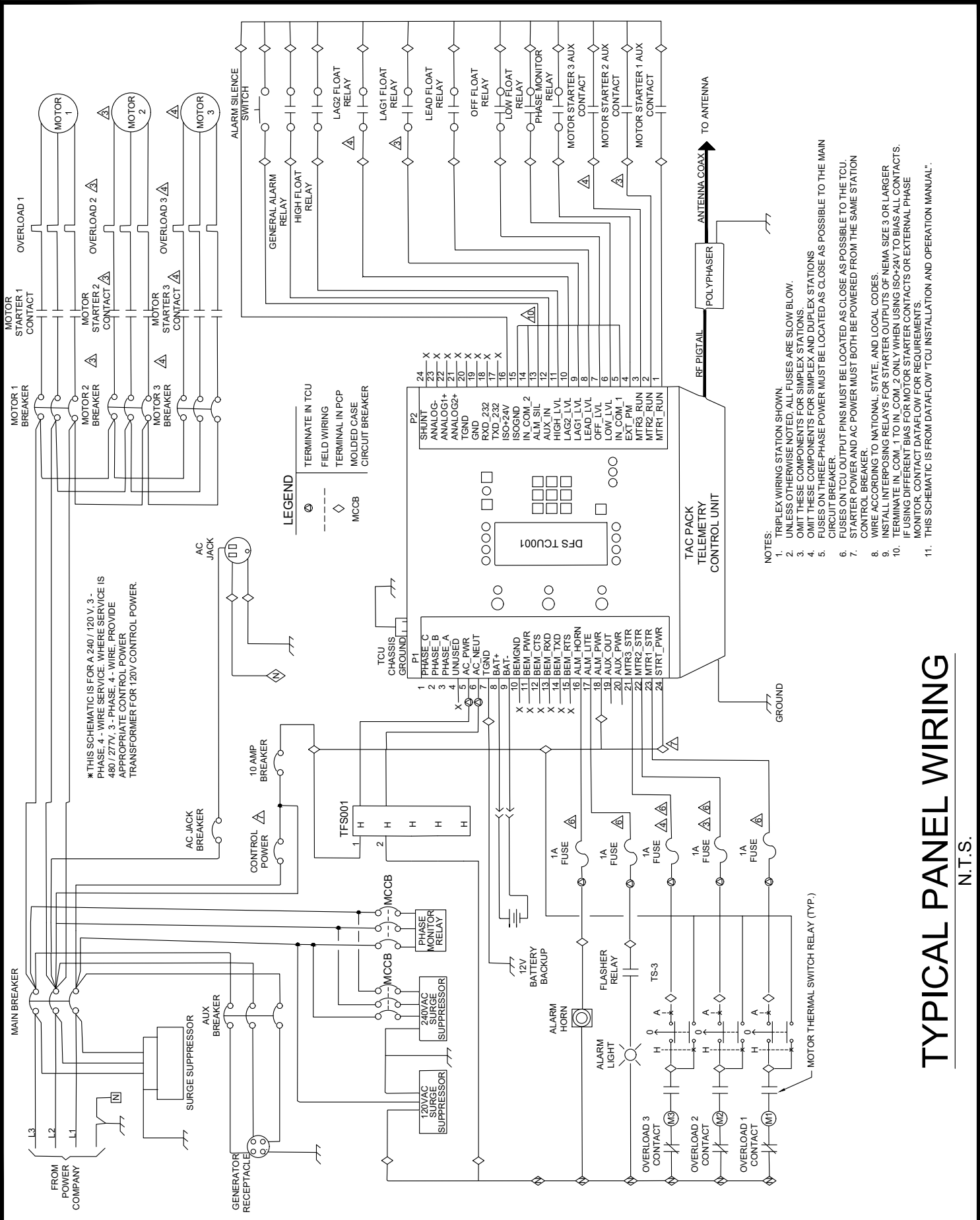
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<b>LS-8</b>



**TECHNICAL STANDARDS MANUAL**

**DUPLEX CONTROL PANEL  
ENCLOSURE DEAD FRONT LAYOUT  
TECHNICAL STANDARDS MANUAL  
CITY OF LYNN HAVEN FLORIDA**

CAD FILE: 150034e1.dwg
DWN BY: CAK
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**TYPICAL PANEL WIRING**

N.T.S.

- NOTES:**
1. TRIPLEX WIRING STATION SHOWN UNLESS OTHERWISE NOTED. ALL FUSES ARE SLOW BLOW.
  2. OMIT THESE COMPONENTS FOR SIMPLEX STATIONS.
  3. OMIT THESE COMPONENTS FOR SIMPLEX AND DUPLEX STATIONS.
  4. FUSES ON THREE-PHASE POWER MUST BE LOCATED AS CLOSE AS POSSIBLE TO THE MAIN CIRCUIT BREAKER.
  5. FUSES ON TCU OUTPUT PINS MUST BE LOCATED AS CLOSE AS POSSIBLE TO THE TCU CONTROL BREAKER.
  6. WIRE ACCORDING TO NATIONAL, STATE, AND LOCAL CODES.
  7. INSTALL INTERPOSING RELAYS FOR STARTER OUTPUTS OF NEMA SIZE 3 OR LARGER IF USING DIFFERENT BIAS FOR MOTOR STARTER CONTACTS OR EXTERNAL PHASE MONITOR. CONTACT DATA FLOW FOR REQUIREMENTS.
  8. THIS SCHEMATIC IS FROM DATAFLOW TCU INSTALLATION AND OPERATION MANUAL.