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REVISIONS  
Number Date Description  
1 03/11/2020 PERMIT COMMENTS

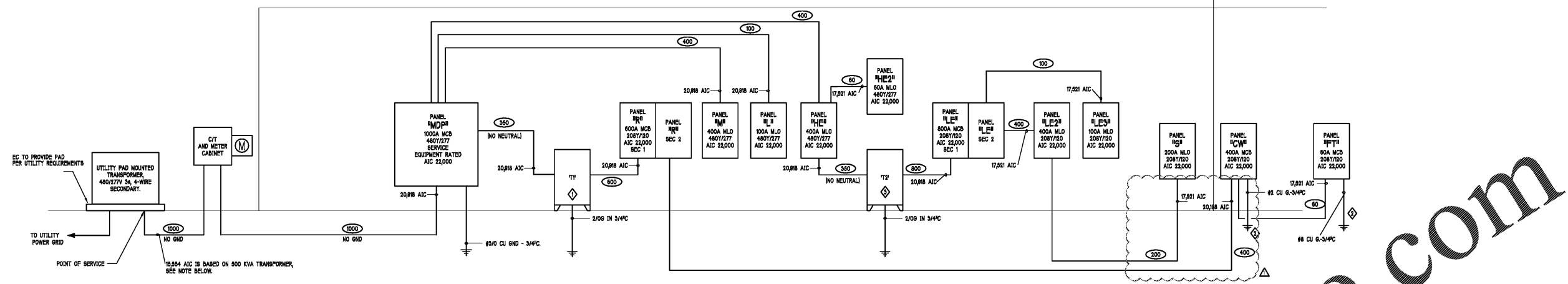
Project Title:  
SOUTH CHARLOTTE HYUNDAI

Project No: 4802.00

Drawing Title:  
ELECTRICAL LEGEND, NOTES & SCHEDULES

SET ISSUE DATE  
MAR 4, 2020

Sheet:  
E10

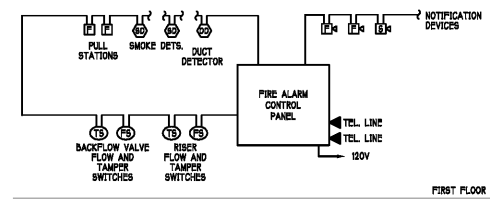


1 POWER RISER DIAGRAM  
N.T.S.

AIC NOTE:  
E.C. SHALL COORDINATE WITH UTILITY COMPANY AND DETERMINE THE MAXIMUM FAULT CURRENT OF THE TRANSFORMER SERVING THIS EQUIPMENT. IF MAXIMUM FAULT CURRENT IS GREATER THAN THE RATING OF THE EQUIPMENT SHOWN ON THE PLANS, THE E.C. SHALL CONTACT THE ENGINEER IMMEDIATELY FOR DIRECTION.

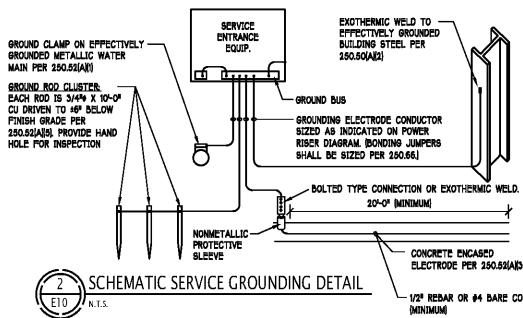
- NOTES:
- T1 SHALL BE 225 KVA, 480V PRIMARY TO 130/208 VOLTS SECONDARY TRANSFORMERS ON 4" CONCRETE PAD.
  - PANEL SHALL BE GROUNDED TO MEET NEC 250.52(A) AND (B).
  - T2 SHALL BE 225 KVA, 480V PRIMARY TO 130/208 VOLTS SECONDARY TRANSFORMERS ON 4" CONCRETE PAD.
  - E.C. TO PROVIDE AND INSTALL NPPA 30A MARKING.

NOTE:  
IF CONSTRUCTION REQUIRES POWER FOR LIFTS TO BE SURFACE MOUNTED AND FED UNDERGROUND, THE BOXES MUST BE SET AT 30" A.F.F. TO BE ADV. TRANSITION AT 40" A.F.F. WINDOW SILL HEIGHTS IN SHOP NEED TO BE SET AT 3'-10" A.F.F.



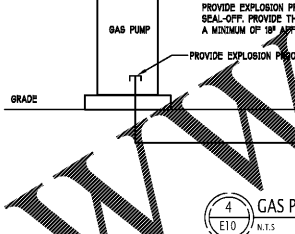
FIRST FLOOR

- GENERAL FIRE ALARM SYSTEM NOTES:
- THE FIRE ALARM SYSTEM DEPICTED ON ELECTRICAL PLANS IS SCHEMATIC ONLY AND DOES NOT REPRESENT THE FINAL ENGINEERED SYSTEM. FIRE ALARM CONTRACTOR SHALL COORDINATE DEVICE QUANTITIES AND LOCATIONS WITH FIRE MARSHALL AND FIELD CONDITIONS. AS A RESULT OF FIELD CONDITIONS, THE FIRE MARSHALL MAY REQUIRE THE INSTALLATION OF ADDITIONAL DEVICES. THE FIRE ALARM CONTRACTOR SHALL PROVIDE ALL FIRE ALARM PLANS, WIRING DIAGRAMS, VOLTAGE DROP CALCULATIONS, BATTERY CALCULATIONS, SHOP DRAWINGS, ETC. WHICH MAY BE REQUIRED BY THE FIRE MARSHALL FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPATION.
  - FIRE ALARM SYSTEM SHALL BE ADDRESSABLE 24V DC POWER LIMITED FULLY SUPPLIED WITH 24 HOUR STANDBY BATTERY, SIMPLEX 4010 SERIES OR EQUAL, PANEL TO BE SURFACE MOUNTED. SYSTEM SHALL BE MONITORED BY A UL LISTED MONITORING STATION WHICH IS OPEN 24/7.
  - DEVICES SHALL BE 5-BEAT TEMPORAL.
  - FIRE ALARM DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH NFPA 72 AND 104M.
  - ALL FIRE ALARM WIRING SHALL BE IN CONDUIT. PLENUM RATED CABLES MAY BE USED IF ACCEPTABLE TO THE LOCAL AUTHORITY HAVING JURISDICTION.
  - PROVIDE TAMPER PROOF COVERS FOR PULLSTATIONS IF REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION. TAMPER PROOF COVERS FOR PULLSTATIONS WITH AUDIBLE ALARMS SHALL ONLY BE PROVIDED IF ALLOWED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
  - DUCT DETECTORS ARE FURNISHED AND WIRED BY E.C. AND INSTALLED, PER CODE, BY M.C.
  - THE DAC SHALL REQUIRE TWO PHONE LINES.

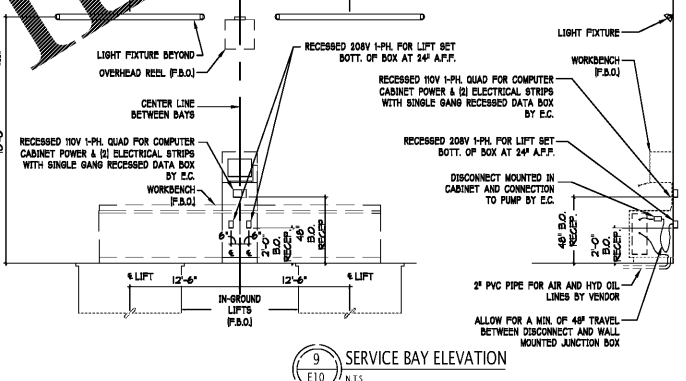


2 SCHEMATIC SERVICE GROUNDING DETAIL  
N.T.S.

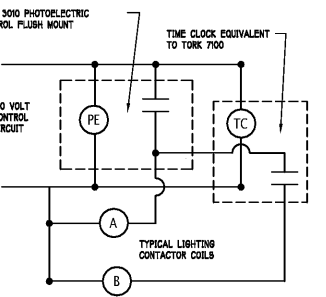
- GROUNDING DETAIL NOTES:
- GROUNDING ELECTRODES SHALL BE PROVIDED IN ACCORDANCE WITH NEC 250.52(A).
  - GROUNDING ELECTRODES SHALL BE INSTALLED IN ACCORDANCE WITH NEC 250.52(A).
- NOT ALL ELECTRODES MAY BE PRESENT ON-SITE, THEREFORE NOT ALL ELECTRODES ON THE SCHEMATIC DIAGRAM MAY APPLY.



4 GAS PUMP SEAL OFFS  
N.T.S.



9 SERVICE BAY ELEVATION  
N.T.S.

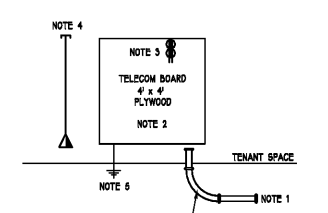


5 SEQUENCE OF OPERATION  
N.T.S.

	FIRE ALARM SYSTEM MATRIX				BUILDING SYSTEM INPUTS				CENTRAL COMM				
MANUAL FIRE ALARM PULL STATION	X	X	X	X	X	X	X	X	X	X	X	X	X
BUILD SMOKE DETECTOR	X	X	X	X	X	X	X	X	X	X	X	X	X
DUCT SMOKE DETECTOR	X	X	X	X	X	X	X	X	X	X	X	X	X
FIRE ALARM SYSTEM FAILURE	X	X	X	X	X	X	X	X	X	X	X	X	X
FIRE ALARM SYSTEM LOW BATTERY	X	X	X	X	X	X	X	X	X	X	X	X	X
TRIP CIRCUIT	X	X	X	X	X	X	X	X	X	X	X	X	X
GROUND FAULT	X	X	X	X	X	X	X	X	X	X	X	X	X
NOTIFICATION APPLIANCE CIRCUIT SHORT	X	X	X	X	X	X	X	X	X	X	X	X	X
SPRINKLER WATER FLOW	X	X	X	X	X	X	X	X	X	X	X	X	X
SPRINKLER TAMPER	X	X	X	X	X	X	X	X	X	X	X	X	X

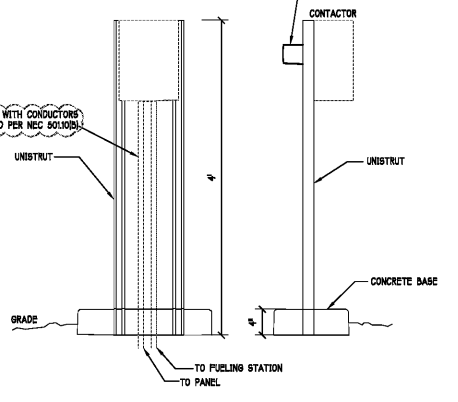
LIGHTING CONTACTORS			
NO.	MAXIMUM CIRCUIT VOLTAGE	POLES	CIRCUIT SWITCHED
A	120	AS REQUIRED	REFER TO NOTE 3
B	120	AS REQUIRED	REFER TO NOTE 3

5 LIGHTING CONTROL DIAGRAM  
N.T.S.

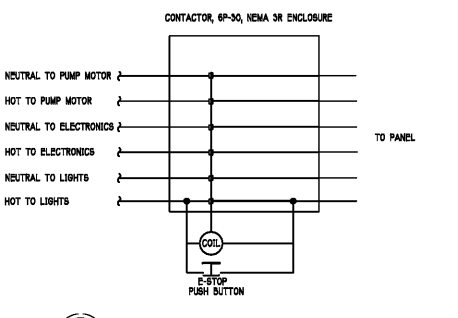


8 TELECOM RISER DIAGRAM  
N.T.S.

- TELECOM RISER NOTES:
- NEW 2" CONDUIT RUN UNDERGROUND TO BUILDING TELECOM BOARD.
  - 3/4" FINISH GRADE PLYWOOD BACKBOARD PAINTED WITH FLAME RETARDANT PAINT. MOUNT 24" A.F.F. TO BOTTOM OF BOARD.
  - PROVIDE QUAD RECEPTACLE ON A DEDICATED CIRCUIT FOR TELEPHONE AND OTHER COMMUNICATION EQUIPMENT.
  - TELEPHONE/DATA OUTLET, 18" A.F.F. TO CENTER, W/ 3/4" CONDUIT STUBBED OUT ABOVE ACCESSIBLE CEILING.
  - PROVIDE #4 CU GROUND TO SERVICE GROUND BAR WITH ACCURATE BLACK FOR GROUNDING OF TELECOM EQUIPMENT.



6 CONTRACTOR WITH E-STOP MOUNTING DETAIL  
N.T.S.



7 CONTRACTOR WITH E-STOP DETAIL  
N.T.S.

STANDARD PIPING OR CONDUIT SIZE	FEEDER SCHEDULE - 3 PHASE			
	FEEDER WIRE - #SETS (COND. SIZE, SOIL COND. COND. SIZE) CONDUCTOR TYPE: THHN - DRY, THWN - WET			
	COPPER WIRE	SEG	ALUMINUM WIRE	SEG
30	1 (4 #10, #100 3/4")	1 (4 #8, #80 3/4")		
35	1 (4 #8, #100 3/4")	1 (4 #6, #80 3/4")		
40	1 (4 #8, #100 3/4")	1 (4 #6, #80 3/4")		
45	1 (4 #8, #100 3/4")	1 (4 #4, #80 1-1/4")		
50	1 (4 #8, #100 3/4")	1 (4 #4, #80 1-1/4")		
55	1 (4 #8, #100 3/4")	1 (4 #5, #80 1-1/4")		
60	1 (4 #8, #100 3/4")	1 (4 #2, #80 1-1/4")		
65	1 (4 #8, #100 3/4")	1 (4 #1, #80 1-1/2")		
70	1 (4 #8, #100 3/4")	1 (4 #1, #80 2")		
75	1 (4 #1, #80 1-1/2")	1 (4 #1, #80 2")		
80	1 (4 #1, #80 1-1/2")	1 (4 #1, #80 2")		
85	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
90	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
95	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
100	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
105	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
110	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
115	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
120	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
125	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
130	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
135	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
140	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
145	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
150	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
155	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
160	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
165	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
170	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
175	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
180	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
185	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
190	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
195	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
200	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
205	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
210	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
215	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
220	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
225	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
230	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
235	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
240	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
245	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
250	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
255	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
260	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
265	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
270	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
275	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
280	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
285	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
290	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
295	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
300	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
305	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
310	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
315	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
320	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
325	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
330	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
335	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
340	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
345	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
350	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
355	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
360	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
365	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
370	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
375	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
380	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
385	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
390	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
395	1 (4 #1, #80 2")	1 (4 #1, #80 2")		
400	1 (4 #1, #80 2")	1 (4 #1, #80 2")		

- FEEDER SCHEDULE NOTES:
- ALL FEEDER SIZES LISTED MAY NOT BE USED IN PROJECT RISER DIAGRAM.
  - ELECTRICAL CONTRACTOR TO VERIFY CONDUIT SIZE REQUIRED IF WIRE TYPES OTHER THAN THOSE LISTED ABOVE ARE USED. REFER TO APPLICABLE VERSION OF THE N.E.C.
  - IF CONDUIT OTHER THAN "EMT" IS REQUIRED BASE BID ON NEXT TRADE SIZE ABOVE THAT INDICATED.
  - "NEP" DENOTES SERVICE ENTRANCE GROUND.
- \* E.C. SHALL VERIFY WITH THE AUTHORITY HAVING JURISDICTION AND THE UTILITY COMPANY THAT ALUMINUM CONDUCTORS ARE ACCEPTABLE FOR USE AS TRANSFORMER SECONDARIES AND FEEDER CIRCUITS.