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MECHANICAL ELECTRICAL PLUMBING

**June 15, 2017**



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Revision Date

Drawn By SABER

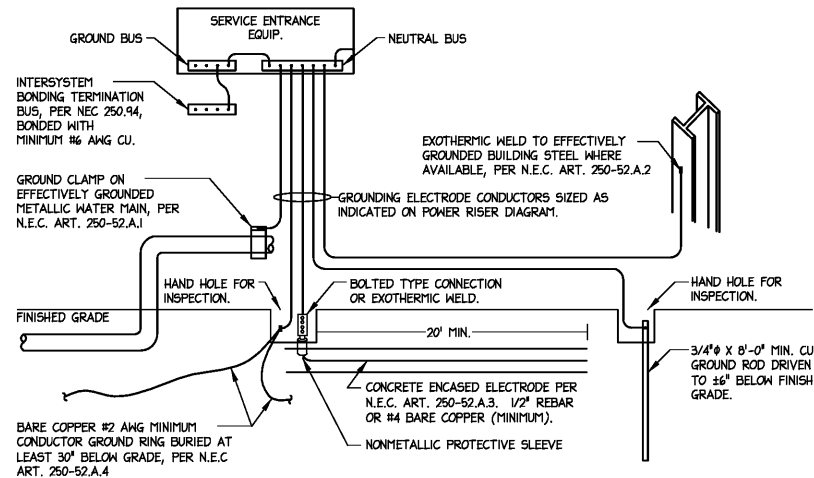
Checked By SABER

Issue Date 06.15.17

Project No 170382

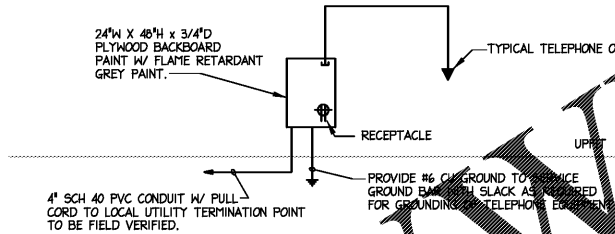
Sheet Title  
 ELECTRICAL  
 RISER DIAGRAMS

Sheet Number  
**E401**



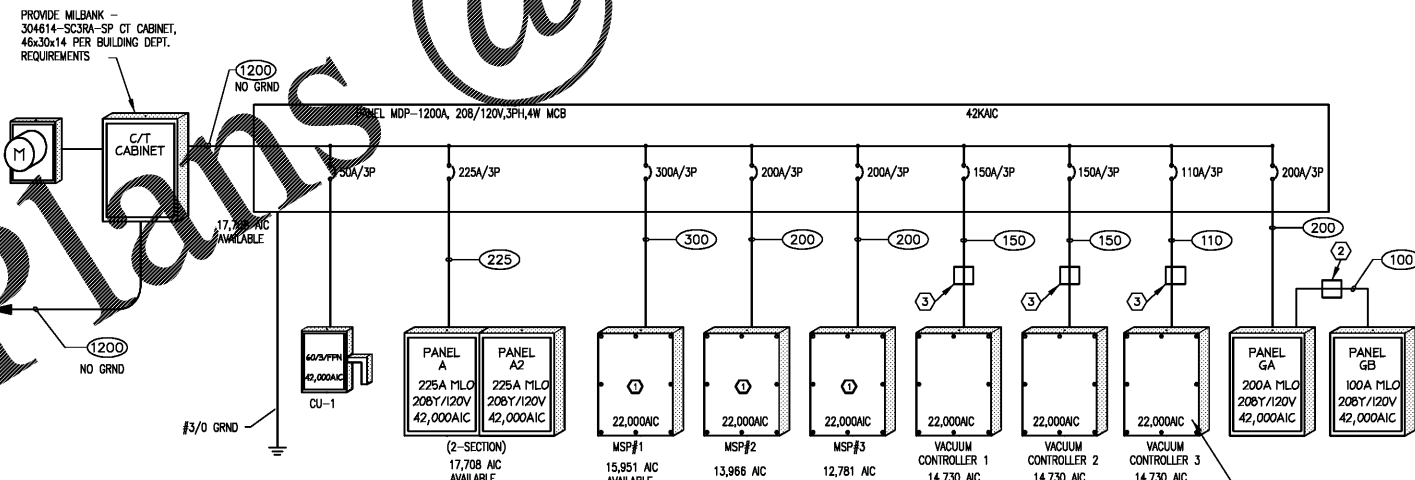
**3 GROUNDING DETAIL**  
 NTS

GROUNDING ELECTRODES SHALL BE PROVIDED IN ACCORDANCE WITH NEC SECTION 250. ALL GROUNDING ELECTRODE CONDUCTORS SIZED AS INDICATED ON POWER RISER DIAGRAM. ALL METHODS OF CREATING THE GROUNDING SYSTEM MAY NOT BE REQUIRED OR AVAILABLE.



**2 TELEPHONE RISER DIAGRAM**  
 NO SCALE

NOTES:  
 1. ALL ITEMS SHOWN LIGHT AND DASHED ARE EXISTING.



**1 RISER DIAGRAM**  
 NO SCALE

NOTES:  
 ① MOTOR STARTERS MSP#1, MSP#2 AND MSP#3 PROVIDED AND INSTALLED BY CAR WASH VENDOR. PROVIDE CONDUIT, CONDUCTORS AND BREAKERS IN MDP FOR FUTURE INSTALL BY OTHERS.  
 ② E-STOP CONTROLLED CONTACTOR.  
 ③ PROVIDE LINE MONITORING RELAYS. COORDINATE LOCATION PRIOR TO INSTALLATION.

FEEDER SCHEDULE - CU			
STD. FUSE OR C/B TRIP SIZE	# OF SETS	BUILDING WIRE QUANTITY & SIZE TYPE THIN - DRY TYPE THIN - WET	MINIMUM CONDUIT SIZE
30	1	4 #10, #10 G	1/2"
35	1	4 #8, #10 G	3/4"
40	1	4 #8, #10 G	3/4"
45	1	4 #8, #10 G	1"
50	1	4 #6, #10 G	1"
60	1	4 #6, #10 G	1"
70	1	4 #4, #8 G	1 1/4"
80	1	4 #3, #8 G	1 1/4"
90	1	4 #2, #8 G	1 1/4"
100	1	4 #2, #8 G	1 1/4"
110	1	4 #2, #8 G	1 1/2"
125	1	4 #1, #6 G	1 1/2"
150	1	4 #1/0, #6 G	2"
175	1	4 #2/0, #6 G	2"
200	1	4 #3/0, #6 G	2"
225	1	4 #4/0, #4 G	2 1/2"
250	1	4 - 250MCH, #4 G	2 1/2"
300	1	4 - 350MCH, #4 G	2 1/2"
350	2	4 #2/0, #3 G	2"
400	1	4 - 600MCH, #3 G	3"
450	2	4 #4/0, #2 G	2 1/2"
500	2	4 - 250MCH, #2 G	2 1/2"
600	2	4 - 350MCH, #1 G	3"
700	2	4 - 500MCH, #1/0 G	3"
800	2	4 - 600MCH, #1/0 G	3"
1000	3	4 - 400MCH, #2/0 G	3"
1200	4	4 - 350MCH, #3/0 G	3"
1600	5	4 - 400MCH, #4/0 G	3"

NOTES:  
 1. ALL FEEDER SIZES LISTED MAY NOT BE USED IN PROJECT RISER DIAGRAM.  
 2. ELECTRICAL CONTRACTOR TO VERIFY CONDUIT SIZE REQUIRED IF WIRE TYPES OTHER THAN THOSE LISTED ABOVE ARE USED.  
 3. REFER TO LATEST EDITION OF NEC FOR CONDUIT TYPES REQUIRED PER THEIR LOCATION. IF CONDUIT OTHER THAN "EMT" IS REQUIRED USE SIZE PER MAXIMUM FILL TABLES.  
 4. FEEDER SIZES SHOWN IN PROJECT RISER WITH A DELTA SYMBOL '∆' ARE 3Ø, 3 WIRE FEEDERS, A NEUTRAL WIRE IS NOT REQUIRED.  
 5. FEEDER SIZES SHOWN IN PROJECT RISER WITH A DELTA SYMBOL '∆' ARE 1Ø, 3 WIRE FEEDERS.  
 6. 'IG' - PROVIDE ISOLATED GROUND CONDUCTOR FOR ISOLATED GROUND BUS IN PANEL.

Order Plans @