

DRAWING NOTES:

- REFER TO PANEL SCHEDULE FOR BRANCH CIRCUIT FEEDER SIZES.

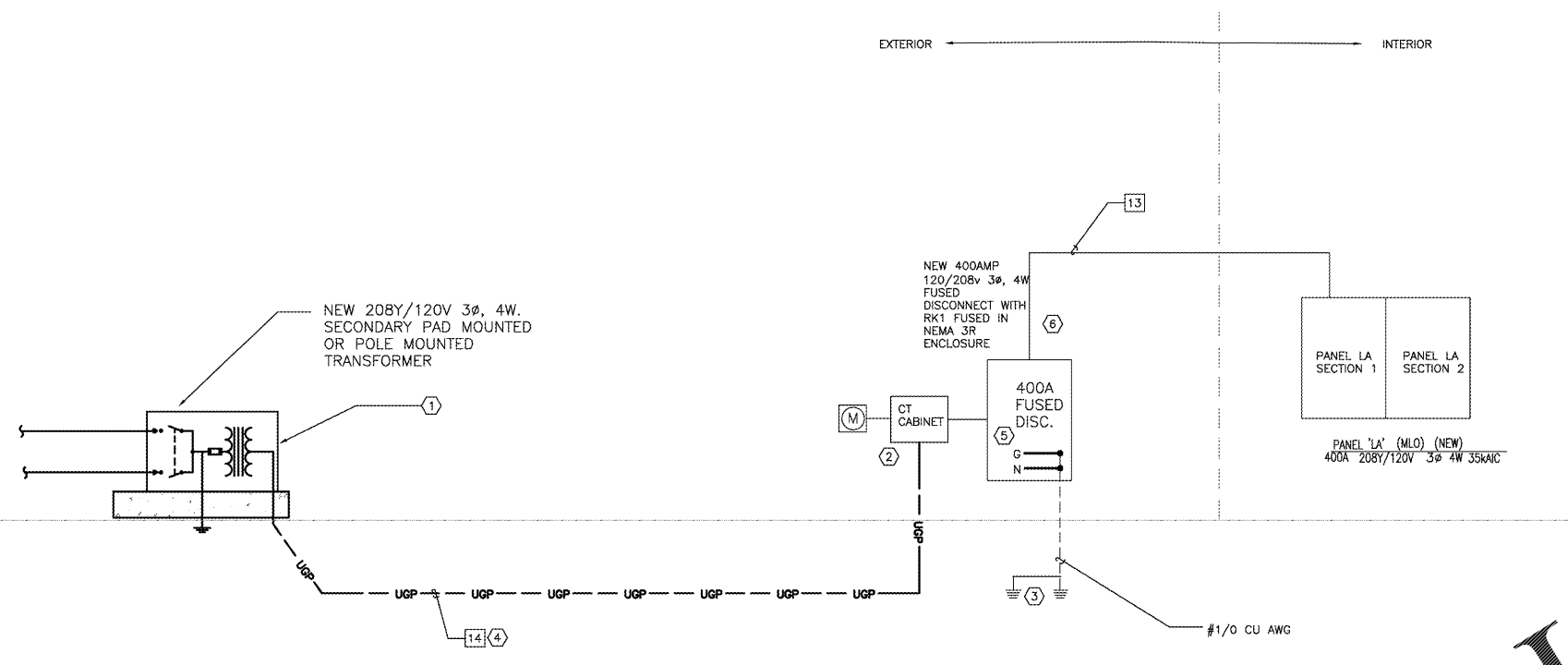
KEY NOTES:

- NEW UTILITY TRANSFORMER PAD MOUNTED OR ON THE POLE (PREFER PAD MOUNTED TRANSFORMER). COORDINATE WITH UTILITY COMPANY FOR LOCATION, PAD REQUIREMENTS, PRIMARY FEEDER CONDUIT, SERVICE TAP AND ADDITIONAL REQUIREMENTS.
- UTILITY METER CT CABINET, CONTRACTOR TO FIELD COORDINATE FOR MOUNTING LOCATION. COORDINATE WITH UTILITY COMPANY FOR MOUNTING REQUIREMENTS.
- PROVIDE (2) 5/8" DIA. 10'-0" LONG GALVANIZED STEEL CLAD GROUND ROD SPACED 10 FEET CENTER TO CENTER WITH #3/0 COPPER CONDUCTOR WITH EXOTHERMIC WELD. REFER TO DETAIL FOR SERVICE ENTRANCE DETAIL AND GROUND ROD DETAIL.
- SUPPLY AND INSTALL NEW UNDERGROUND SERVICE LATERAL. FIELD EXACT COORDINATE CONDUIT ROUTING. SUPPLY AND INSTALL FEEDER 24" BFG DIRECT BURIED AND PROVIDE RMC AFG AND RNC UNDERGROUND. CONTRACTOR TO ARRANGE AND PAY FOR UNDERGROUND UTILITY LOCATION SURVEYS FOR ALL TRENCHING. INSTALL 6" WIDE METALLIC LINED RED PLASTIC MARKER TAPE 8" ABOVE ALL BURIED CONDUIT.
- FUSED DISCONNECT SERVICE ENTRANCE RATED WITH NEMA 1 ENCLOSURE.
- FIELD MARKING THE AVAILABLE FAULT CURRENT FOR THE ELECTRICAL SERVICE. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR SERVICE EQUIPMENT SHALL BE LEGIBLY MARKED IN THE FIELD WITH THE MAXIMUM AVAILABLE FAULT CURRENT. THE FIELD MARKING(S) SHALL INCLUDE THE DATE THE FAULT CURRENT CALCULATION WAS PERFORMED AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.

REVISIONS

Date	Description
10/12/2020	

Professional Engineer Seal: Wynn L. Warner, License No. PE032226, State of Georgia.



1 ELECTRICAL ONE LINE DIAGRAM
E-5 SCALE: N.T.S.

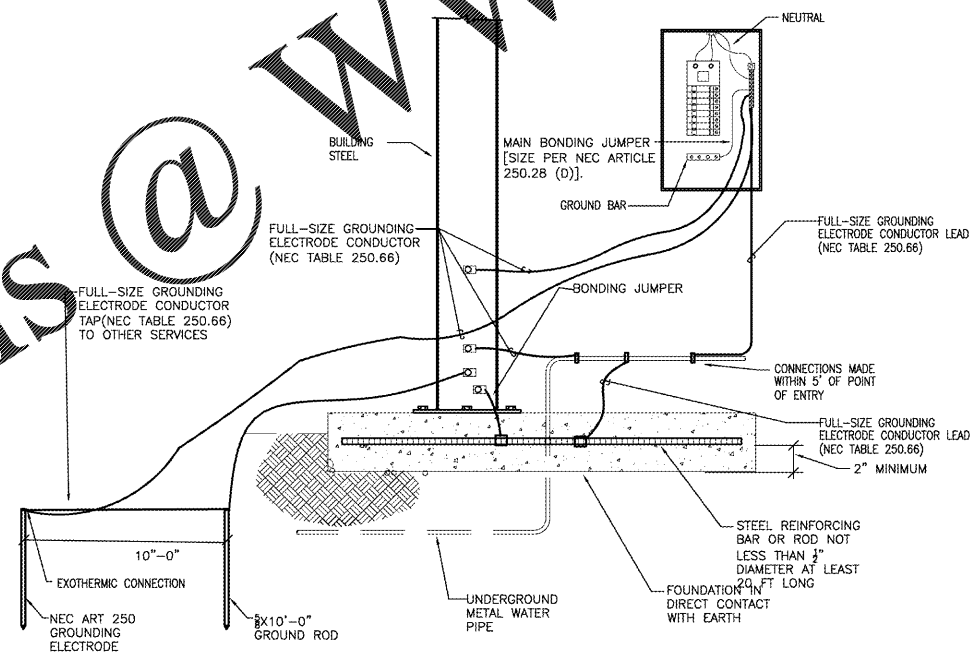
CONDUIT AND WIRE DESIGNATION SCHEDULE
(NOTE: ALL CONDUIT AND WIRE DESIGNATION SHOWN MAY NOT APPEAR ON DRAWING AND ARE USED AS APPLICABLE TO THIS PROJECT)

WIRE/BKR MAX AMPS	DESIG.	NO. OF SETS	DESCRIPTION	REMARKS
30	1	1	3#10, 1#10G, 3/4"C	
40	2	1	3#8, 1#10G, 3/4"C	
55	3	1	3#6, 1#10G, 3/4"C	
60	4	1	4#6, 1#8G, 1-1/4" RNC	
85	5	1	3#3, 1#8G, 1"C	
100	6	1	3#2, 1#8G, 1-1/4"C	
100	7	1	4#2, 1#8G, 1-1/4"C	
130	8	1	4#1, 1#6G, 1-1/2"C	
150	9	1	3#1/0, 1#6G, 1-1/2"C	
150	10	1	4#1/0, 1#6G, 2"C	
200	11	1	4#3/0, 1#6G, 2"C	
250	12	1	4#250KCMIL, 1#4G, 2-1/2"C	
400	13	1	4#500KCMIL, 1#3G, 4"C	
400	14	1	4#500KCMIL, 4"C	
600	15	2	4#350KCMIL, 1#1/0, 3"C	
800	16	2	4#500KCMIL, 3-1/2"C	
2000	17	6	4#600KCMIL, 1#400KCMIL G, 4"C	
2000	18	6	4#600KCMIL, 4"C	

CONDUIT SIZE BASED ON THIN/THWN 2 FILL CALCULATION. WIRE SIZE BASED ON NEC 110-14C WITH 60°C AMPACITY TABLES FOR 20 AMPS THRU 100 AMPS AND 75°C AMPACITY TABLES FOR VALUES > 100 AMPS.

NOTE: IN GENERAL, THE ACTUAL BREAKER OPERATING CURRENT SHALL BE EQUAL TO OR NEXT STANDARD SIZE SMALLER THAN THE MINIMUM WIRE AMPS. EXCEPTIONS SHALL BE MOTOR AND SPECIAL EQUIPMENT BREAKERS WHICH SHALL BE SIZED PER N.E.C. AND VENDOR REQUIREMENTS. OMIT GROUND CONDUCTORS ON SERVICE ENTRANCE FEEDERS (TYPICAL). USE #12 WIRE U.O.N. PRIOR TO ROUGH-IN, CONTRACTOR SHALL COORDINATE BREAKER AND WIRING WITH ACTUAL REQUIREMENTS OF EQUIPMENT BEING FURNISHED FOR THIS SPECIFIC PROJECT.

UNLESS NOTED OTHERWISE ALL 20A, 1P, BREAKERS TO UTILIZE #12 CONDUCTORS EXCEPT WHERE BRANCH CIRCUIT IS IN EXCESS OF 90 LINEAR FEET CONDUCTORS TO BE #10 AND OVER 175 FEET LINEAR FEET CONDUCTORS TO BE #8. EQUIPMENT GROUNDING CONDUCTOR SHALL BE INCREASED PROPORTIONATELY TO PHASE CONDUCTORS PER NEC 250.122(B).



- NOTES:
- THIS DETAIL IS NOT INTENDED TO SHOW THE PHYSICAL ROUTING OF THE GROUNDING ELECTRODE CONDUCTORS, BUT SIZING AS OUTLINED IN NEC ARTICLE 250.66.
 - THE MINIMUM INSIDE BEND RADIUS IS:
 - 6 INCHES (0.15M) FOR CONDUCTORS UP TO #6 GAUGE.
 - 12 INCHES (0.3M) FOR CONDUCTORS #6 TO #4/0 GAUGE.
 - 24 INCHES (0.6M) FOR CONDUCTORS #4/0 GAUGE AND UP.

2 SERVICE GROUNDING ELECTRODE DETAIL
E-5 SCALE: N.T.S.

ELECTRICAL ONE LINE AND SCHEDULE

DUNKIN DONUTS

3020 FIVE FORKS TRICKUM ROAD
LILBURN, GA 30047

Drawn By: WLV
Checked By: WLV
Date: JUNE 7, 2019
Job No.:

Drawing Number
E-5

RELEASED FOR CONSTRUCTION