

P-5027  
2015-01-14

detail symbol	A	C	A. detail number
	A	C	B. cross reference to drawing where detail taken or shown.
	B	C	C. drawing description

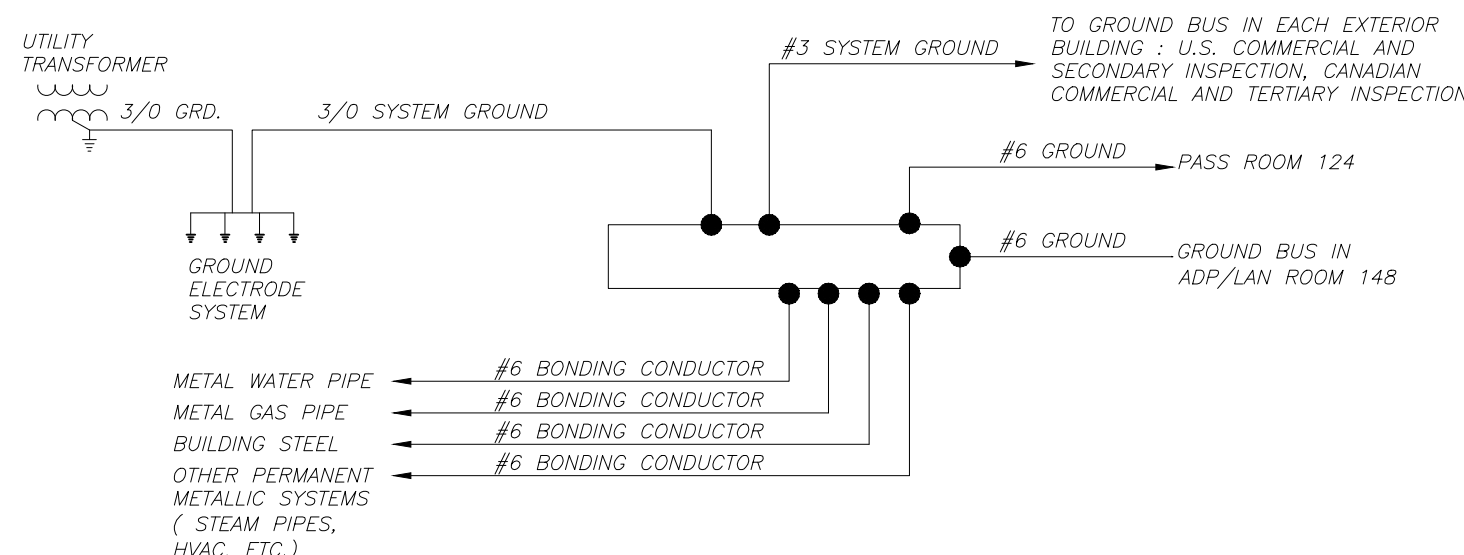
No.	Date	Revision	By	App.
5.	14/01/15	ISSUED FOR TENDER	BD	MA
4.	03/09/14	ISSUED FOR TENDER	JK	MA
3.	30/05/14	ISSUED FOR CLIENT REVIEW	JK	MA
2.	04/25/14	ISSUED FOR REVIEW	JK	MA
1.	03/02/14	ISSUED FOR PRELIMINARY REVIEW	JT	MA

Project  
COUTTS ELECTRICAL  
SYSTEM UPGRADE  
R.058241.002

Drawing  
SINGLE LINE DIAGRAM

Designed	Project No.	Scale
MA	140101	N.T.S.
Drawn	Date	Plot Scale
AW	2014-04-21	1:1
Checked	DWG. No.	Rev.
MA	E3.01	5
Approved		

- LEGEND:**
- ① #500MCM IN 100mmC
  - ② SPARE 100mmC
  - ③ #500MCM+1#4 BONDING CONDUCTOR IN 75mmC
  - ④ #500MCM+1#3 BONDING CONDUCTOR IN 75mmC
  - ⑤ #4+1#8 BONDING CONDUCTOR IN 32mmC
  - ⑥ #4+1#10 BONDING CONDUCTOR IN 32mmC
  - ⑦ #4+1#4 BONDING CONDUCTOR IN 63mmC
  - ⑧ #4+1#6 BONDING CONDUCTOR IN 38mmC
  - ⑨ #4+1#6 BONDING CONDUCTOR IN 50mmC
  - ⑩ #4+1#12 BONDING CONDUCTOR IN 19mmC
  - ⑪ #4+1#10 BONDING CONDUCTOR IN 25mmC
  - ⑫ #4+1#6 BONDING CONDUCTOR IN 39mmC
  - ⑬ #4+1#3 SYSTEM GROUND CONDUCTOR IN 32mmC
  - ⑭ #4+1#6 BONDING CONDUCTOR IN 32mmC
  - ⑮ #4+1#3 SYSTEM GROUND IN 50mmC
  - ⑯ #4+1#3 SYSTEM GROUND IN 32mmC
  - ⑰ #4+1#10 BONDING IN 32mmC
  - ⑱ #4+1#10 SYSTEM GROUND IN 19mmC
  - ⑲ #4+1#12 BONDING IN 19mmC
  - ⑳ #4+1#10 BONDING IN 19mmC
  - ㉑ #4+1#10 BONDING IN 19mmC



- KEY NOTES:**
- EXISTING LUGS AT THE SPLITTER MAY NEED TO BE REPLACED TO ACCOMMODATE THE NEW CABLES FROM THE ATS.
  - CONTRACTOR TO PROVIDE FIRE RATED CABLE ASSEMBLIES (ULC-ST-30 RATED IN CABLE OR EQUIVALENT) BETWEEN THE GENERATOR SPLITTER AND THE ATS, AND FROM THE ATS TO THE EMERGENCY PANEL. ALTERNATELY, CONDUITS CAN BE ENCASED IN 1 IN. FIRE RATED CONCRETE OR GYPSUM BOARD STRUCTURE TO ACHIEVE REQUIRED FIRE RATING.
  - CONTRACTOR TO VERIFY EXISTENCE OF PANELS AND TRANSFORMER AND MARK ON AS-BUILT DRAWINGS.
  - PROVIDE SURGE PROTECTIVE DEVICES AS PER SPECIFICATIONS. RIPPLE-MOUNT SPD UNITS TO THE SIDE OF THE POWER PANELS WHERE PANELS ARE RECESSED INTO THE WALL, CUT INTO THE DRY WALL TO MOUNT SPD UNIT, PATCH UP AND PAINT AFFECTED WALL AREA NEATLY TO MATCH SURROUNDING.
- IN PANELS THAT DO NOT HAVE SUFFICIENT BREAKER SPACE (OX OF THE PANELS APPEAR TO BE FULL), USE TANDEN BREAKERS AND/OR RE-ARRANGE CIRCUITS TO FREE UP SPACE FOR A 3 POLE BREAKER. ALTERNATELY, REPLACE PANEL MAIN LUGS WITH CSA APPROVED DOUBLE BARREL LUGS AND INSTALL A TYPE 1 SPD UNIT. CONTRACTOR TO CARRY COST FOR MODIFICATIONS REQUIRED TO PANELS IN ORDER TO RETROFIT SPD UNITS.
- REFER TO SPECIFICATIONS FOR SPD TYPES #1 TO #3.

- GENERAL NOTES:**
- CONTRACTOR TO CARRY OUT LOAD BALANCING ON THE EMERGENCY POWER SYSTEM TO ENSURE THAT EMERGENCY GENERATOR UNBALANCE IS WITHIN 10%. REFER TO TECHNICAL SPECIFICATIONS.
  - ELECTRICAL CONTRACTOR IS TO TRACE AND IDENTIFY ALL FEEDERS AND CIRCUITS THAT ARE PART OF THE MODIFICATIONS. KEEP AN UPDATED AS-BUILT DRAWINGS.

