

**\*\*ENGINEERING NOTES:**

1. TRANSFORMER POSITION OPPOSITE CROSS ARM

TITLE:

THREE TRANSFORMERS  
ON MULTI PHASE LINE

**GARLAND**  
POWER & LIGHT

DRAWN BY:	DATE:	APPROVED BY:
GL	7/27/04	CP

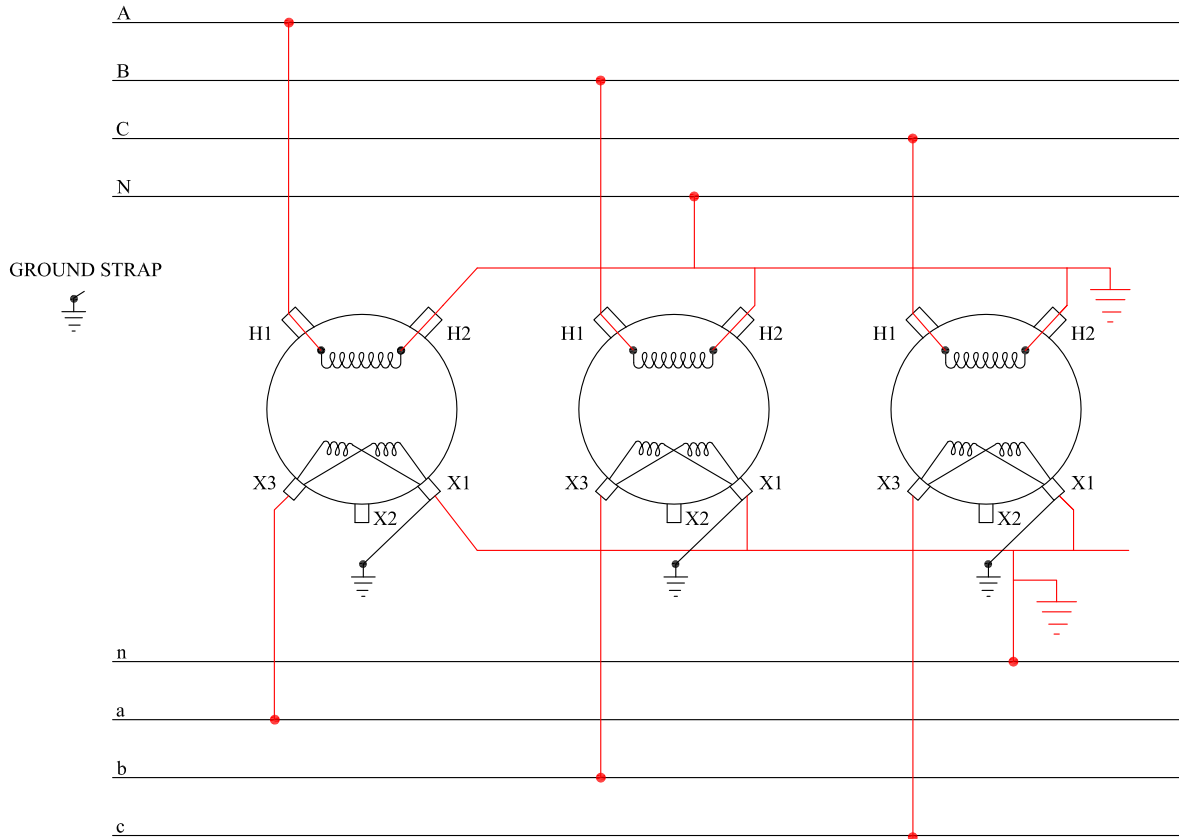
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STANDARD NO.:

OH-1110

PRIMARY--WYE EACH TRANSFORMER IS ENERGIZED BY A DIFFERENT PHASE OF THE PRIMARY CIRCUIT. USUALLY THE H1 BUSHING ARE USED FOR THE PHASE. THE H2 BUSHINGS ARE CONNECTED TOGETHER AND MUST BE GROUNDED. THEY ARE ALSO INTERCONNECTED WITH THE SECONDARY NEUTRALS. IF THE H2 BUSHINGS ARE NOT GROUNDED, DANGEROUS VOLTAGES WILL RESULT ON THE SECONDARY.

IMPEDANCE DIFFERENCE ALLOWED  
± 10%



SECONDARY--WYE THIS CONNECTION IS USED TO SERVE THREE-PHASE AND SINGLE PHASE LOADS AT A VARIETY OF VOLTAGES, 120/208 AND 277/480. IN THE 120/208 CONNECTION , THE SECONDARY COILS OF STANDARD DISTRIBUTION TRANSFORMERS ARE CONNECTED IN PARALLEL INSIDE THE TRANSFORMER TO PROVIDE FOR 120 VOLTS ONLY. IN THE 277/480 CONNECTION, SPECIAL TRANSFORMERS ARE USED WHICH HAVE ONLY ONE SECONDARY WINDING AND ONLY TWO SECONDARY BUSHINGS.

NOTE:  
MOVE X2 GROUND STRAP TO THE GROUNDED BUSHING ( X1 ABOVE) ON EACH TRANSFORMER.

TITLE:

WYE—WYE

**GARLAND**  
POWER & LIGHT

REFERENCE NO.:

OH-1110  
WYE/WYE

DRAWN BY: SJ/JC	DATE: 7/18/12	APPROVED BY:
REVISED BY:	DATE:	APPROVED BY:

