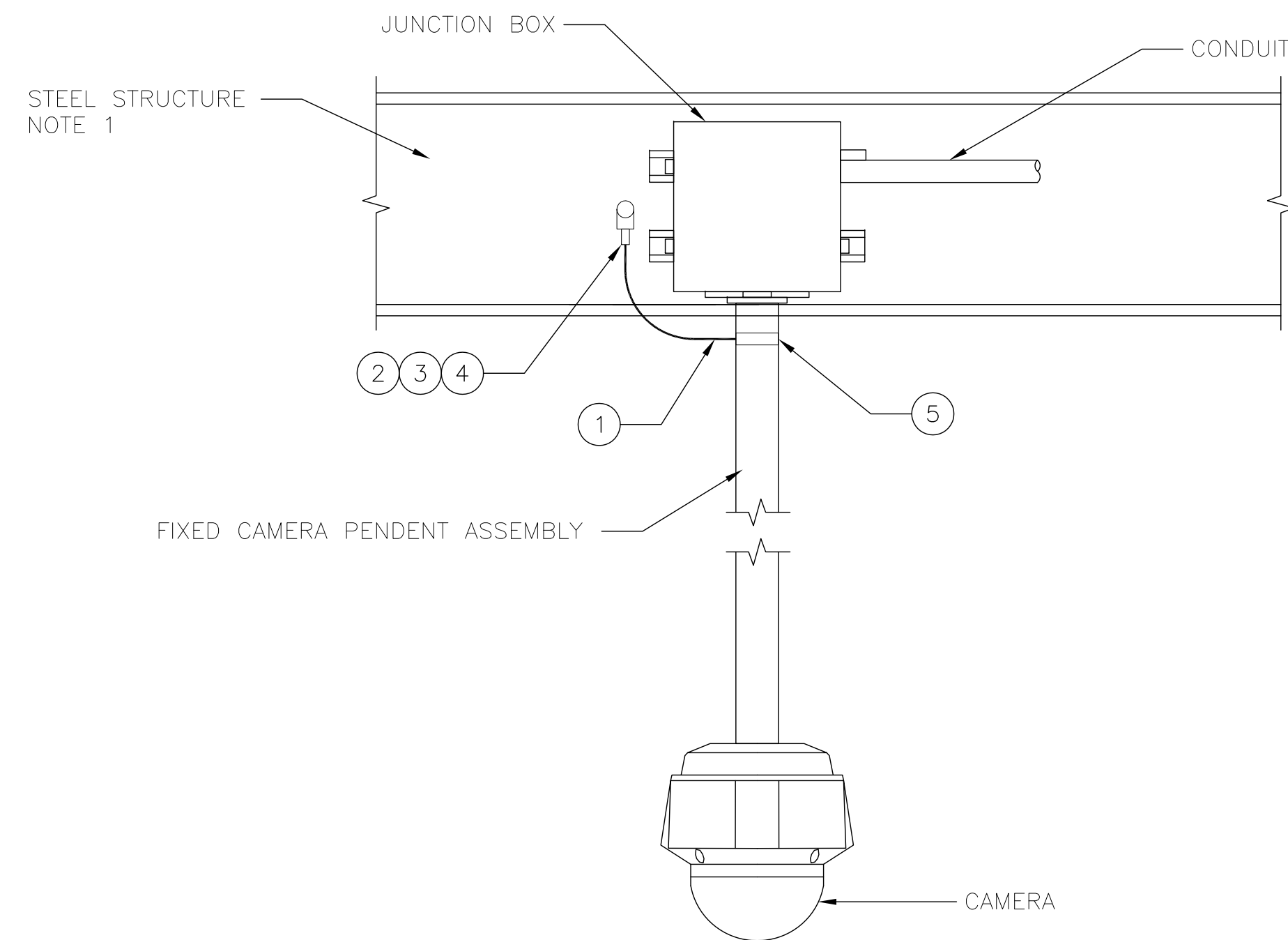


NOTES:

1. STEEL STRUCTURE MUST BE CONNECTED TO THE GROUNDING SYSTEM. THIS CONNECTION WILL BE MADE IN A COMMENT LOCATION AS DETERMINED BY THE CONTRACTOR ON SITE.

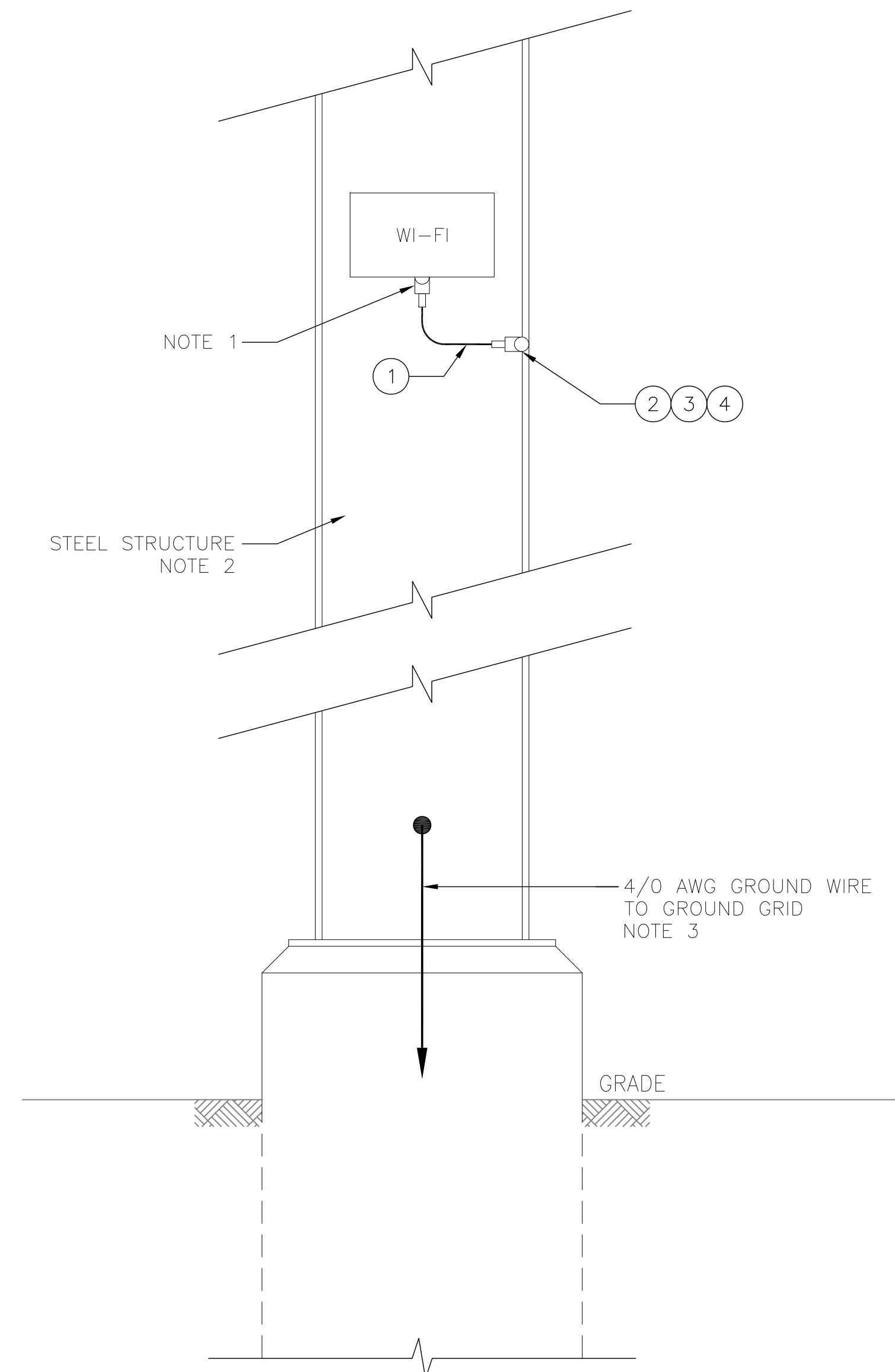


NOTE:  
THIS DRAWING IS PROVIDED FOR INSTRUCTIONAL DESIGN PURPOSES ONLY BASED ON METROLINX GO TRANSIT DESIGN GUIDELINES AND REQUIREMENTS. THE CONSULTANT SHALL VERIFY FOR LOCAL CODE COMPLIANCE, EXISTING SITE CONDITIONS AND INTER DISCIPLINARY DRAWING COORDINATION. ALL DIMENSIONS AND SPECIFICATIONS SHOULD BE VERIFIED BY CONSULTANT AND/OR CONTRACTOR BEFORE ACTUAL CONSTRUCTION BEGINS.

DETAIL 1 – GROUNDING CONNECTION TO CCTV CAMERAS

NOTES:

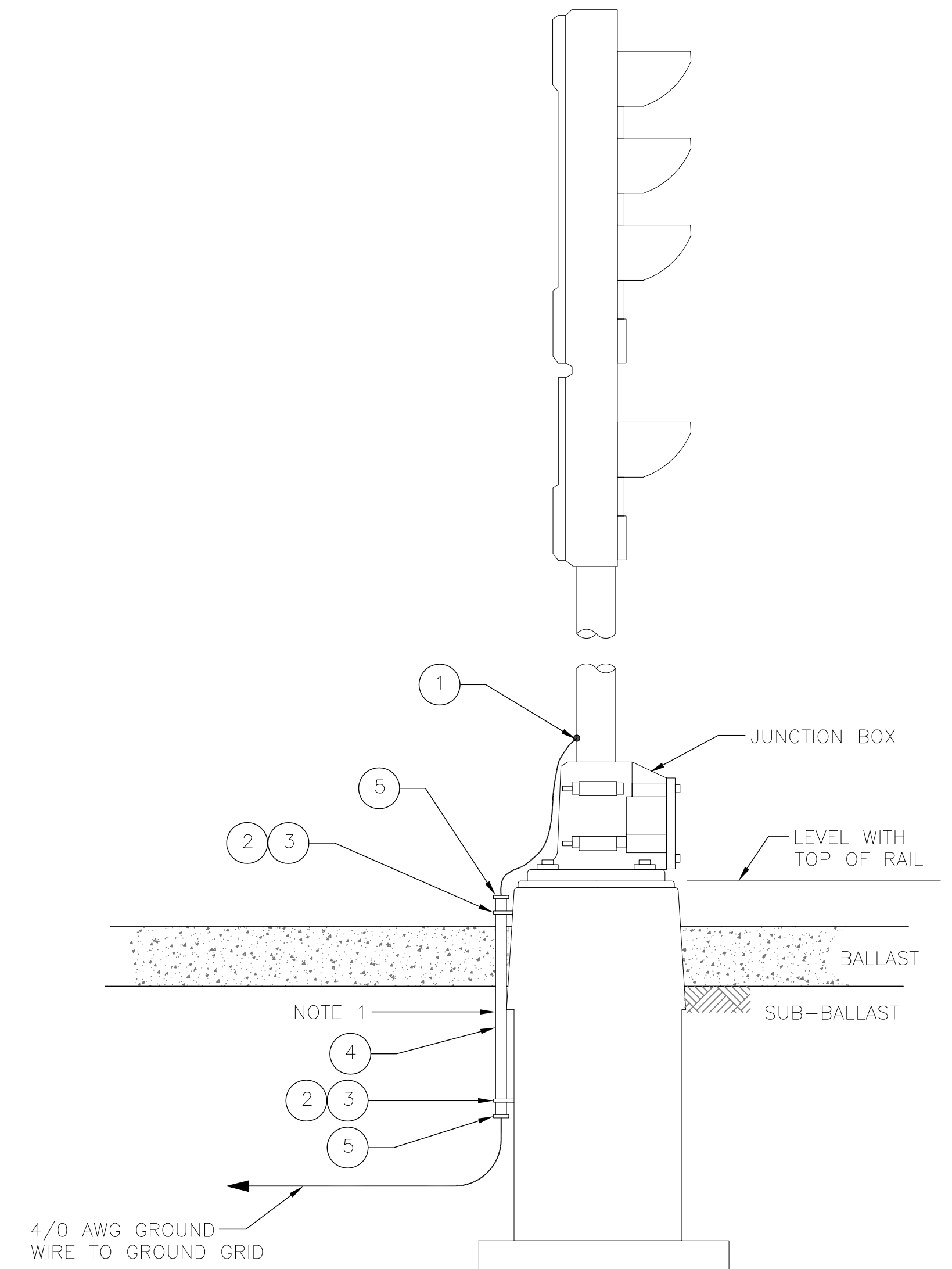
1. GROUNDING EQUIPMENT CONNECTED TO WI-FI ROUTERS AND ANTENNAS PER MANUFACTURERS SPECIFICATION.
2. STEEL STRUCTURE MUST BE CONNECTED TO THE GROUNDING SYSTEM. THIS CONNECTION WILL BE MADE IN A COMMENT LOCATION AS DETERMINED BY THE CONTRACTOR ON SITE.
3. THE CONNECTION TO THE GROUND GRID SHALL BE MADE PER MXS-100-002.



DETAIL 2 – GROUNDING CONNECTION TO WIFI ROUTERS AND ANTENNAS (ACCESS POINTS)

NOTES:

1. CONDUITS SHALL BE TERMINATED SAME LEVEL AS FOUNDATION ABOVE GRADE. CONDUIT DEPTH SHALL BE SUCH THAT THE GROUND WIRES PROTECTED FROM DAMAGE AND CAN BE CONNECTED TO THE GROUND GRID. THE DEPTH WILL BE DETERMINED BASED ON LOCAL SITE CONDITIONS. CONDUIT SHALL BE CAPPED UNTIL GROUNDING CONDUCTOR IS INSTALLED.



DETAIL 3 – GROUNDING CONNECTION TO SIGNALING AND COMMUNICATION EQUIPMENT

ITEM	QTY	UNIT	MATERIAL DESCRIPTION	MANUFACTURER & CAT. NO.
1	1	EA	FLEXIBLE COPPER BRAID	BURNDY: BD12 OR EQUIVALENT
2	1	EA	BOLT, HEX, SS, 3/8"-16 x 1", A304/A316 W/NUT	(GENERIC)
3	1	EA	WASHER, SPRING (LOCK), STAINLESS, 3/8, A304/A316	
4	1	EA	WASHER, FLAT, SS, 3/8", A304/A316	
5	1	EA	WIRE TO 2" PIPE CONNECTION	BURNDY: GAR1829 OR EQUIVALENT

ITEM	QTY	UNIT	MATERIAL DESCRIPTION	MANUFACTURER & CAT. NO.
1	1	EA	FLEXIBLE COPPER BRAID	BURNDY: BD12 OR EQUIVALENT
2	1	EA	BOLT, HEX, SS, 3/8"-16 x 1", A304/A316 W/NUT	(GENERIC)
3	1	EA	WASHER, SPRING (LOCK), STAINLESS, 3/8, A304/A316	
4	1	EA	WASHER, FLAT, SS, 3/8", A304/A316	

ITEM	QTY	UNIT	MATERIAL DESCRIPTION	MANUFACTURER & CAT. NO.
1	1	EA	VERTICAL CABLE TO VERTICAL STEEL SURFACE EXOTHERMIC CONNECTION	BURNDY: B-8718 OR EQUIVALENT
2	2	EA	ANCHOR, SS 304,316	HILTI: KB3 1/4" X 2-1/4" OR EQUIVALENT
3	2	EA	27mm (1") CONDUIT CLAMP 1-HOLE	T&B: 1278 OR EQUIVALENT
4	PER DESIGN	N/A	27mm (1") CONDUIT	(GENERIC)
5	2	EA	BUSHING	

PLOTTED BY: PAULRI PLOTTED DATE: 2015/04/21 PAPER SIZE AT FULL: ANSI D (22.00 x 34.00 INCHES) FILE: \\FILE-RGDC01\DEPT\GOIC\07 PROGRAM MANAGEMENT & STANDARD\RD\PMPS DESIGN STANDARDS\7 REFERENCE MATERIAL\24 ELECTRIFICATION\GROUNDING AND BONDING STANDARD DRAWINGS\MXS-200-012 REV 1.DWG

REFERENCE DRAWINGS		ISSUE		REVISIONS	
DWG NO.	TITLE	NO.	DATE	ISSUED FOR	REV. DATE
		3	15/04/06	FINAL DESIGN	
		2	15/03/06	100% DESIGN	
		1	15/02/09	90% DESIGN	
		0	15/01/16	60% DESIGN	
		1	15/04/15	REVISED NOTE 1 DETAIL 3	

DRAWN BY: RCW 14/12/11	DESIGNED BY: SXF 14/12/11
CHECKED BY: CTG 15/01/16	APPROVED BY: ZBT 15/01/16
SCALE: NTS FULL SIZE ONLY	

**PARSONS  
BRINCKERHOFF**

**METROLINX**

TRACTION ELECTRIFICATION  
GROUNDING AND BONDING  
STANDARD INSTALLATION DESIGN DETAILS  
ELECTRONIC EQUIPMENT NOT ACCESSIBLE TO THE PUBLIC

CONTRACT NO. RQ-2011-PP-032	DWG. NO. MXS-200-012	REV. 1	SHEET 20/26
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