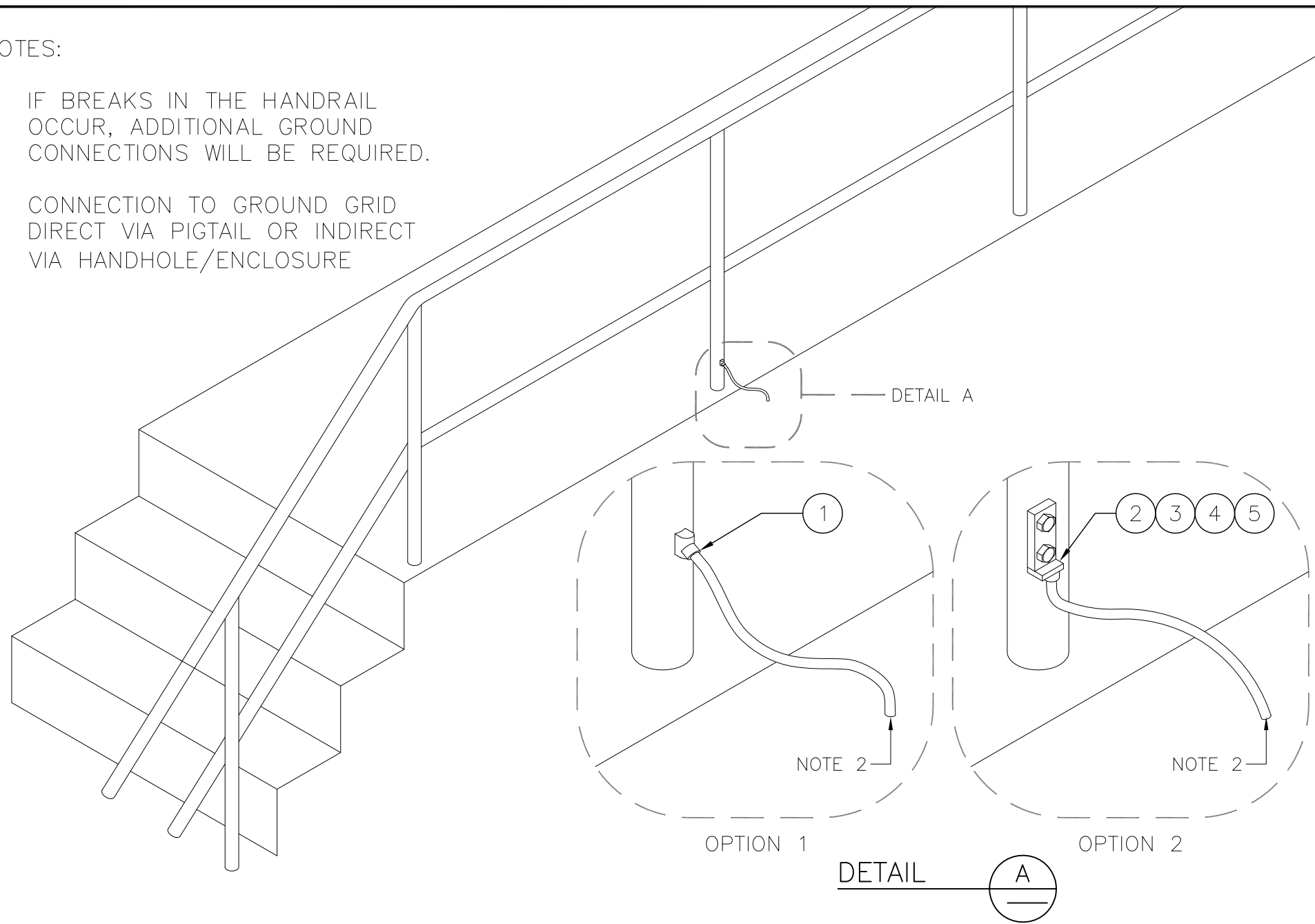


PLOTTED BY: FALLURI PLOTTED DATE: 20150402 PAPER SIZE AT FULL: ANSI D (22.00 x 34.00 INCHES)
 FILE: \\FILE-RGDC01\DEPT\GOI07 PROGRAM MANAGEMENT & STANDARDS\PMPS DESIGN STANDARDS\7 REFERENCE MATERIAL\24 ELECTRIFICATION\GROUNDING AND BONDING STANDARD DRAWINGS\MXS-200-002.DWG

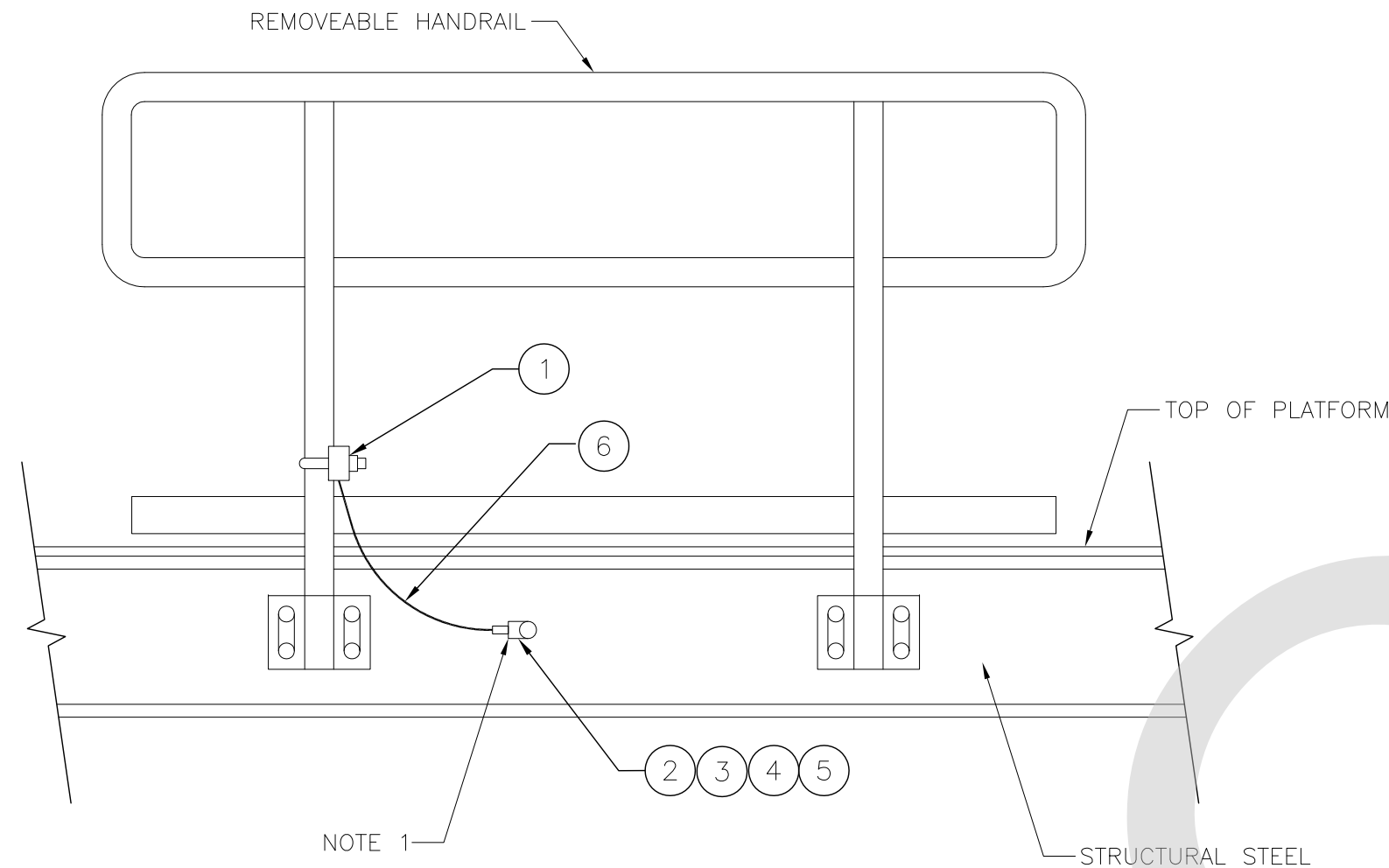
- NOTES:
- IF BREAKS IN THE HANDRAIL OCCUR, ADDITIONAL GROUND CONNECTIONS WILL BE REQUIRED.
 - CONNECTION TO GROUND GRID DIRECT VIA PIGTAIL OR INDIRECT VIA HANDHOLE/ENCLOSURE



DETAIL 1 – GROUNDING CONNECTION TO FIXED METALLIC HANDRAILS

ITEM	QTY	UNIT	DESCRIPTION	MANUFACTURER & CAT. NO.
1	1	EA	VERTICAL WIRE TO VERTICAL STEEL SURFACE EXOTHERMIC CONNECTION	BURNDY: B-2781 OR EQUIVALENT
2	6	EA	BRONZE BOLT 12MM – 13x25mm (1/2" – 13x1")	(GENERIC)
3	6	EA	WASHER, SPRING (LOCK), STAINLESS, 1/2", A304/A316	
4	6	EA	WASHER, FLAT, SS, 1/2", A304/A316	
5	1	EA	TWO HOLE LUG FOR #2 AWG WIRE	BURNDY: YGA2C-2N OR EQUIVALENT

- NOTES:
- THE STEEL STRUCTURE MUST BE CONNECTED TO THE GROUNDING SYSTEM. THIS CONNECTION WILL BE MADE IN A CONVENIENT LOCATION AS DETERMINED BY THE CONTRACTOR ON SITE.

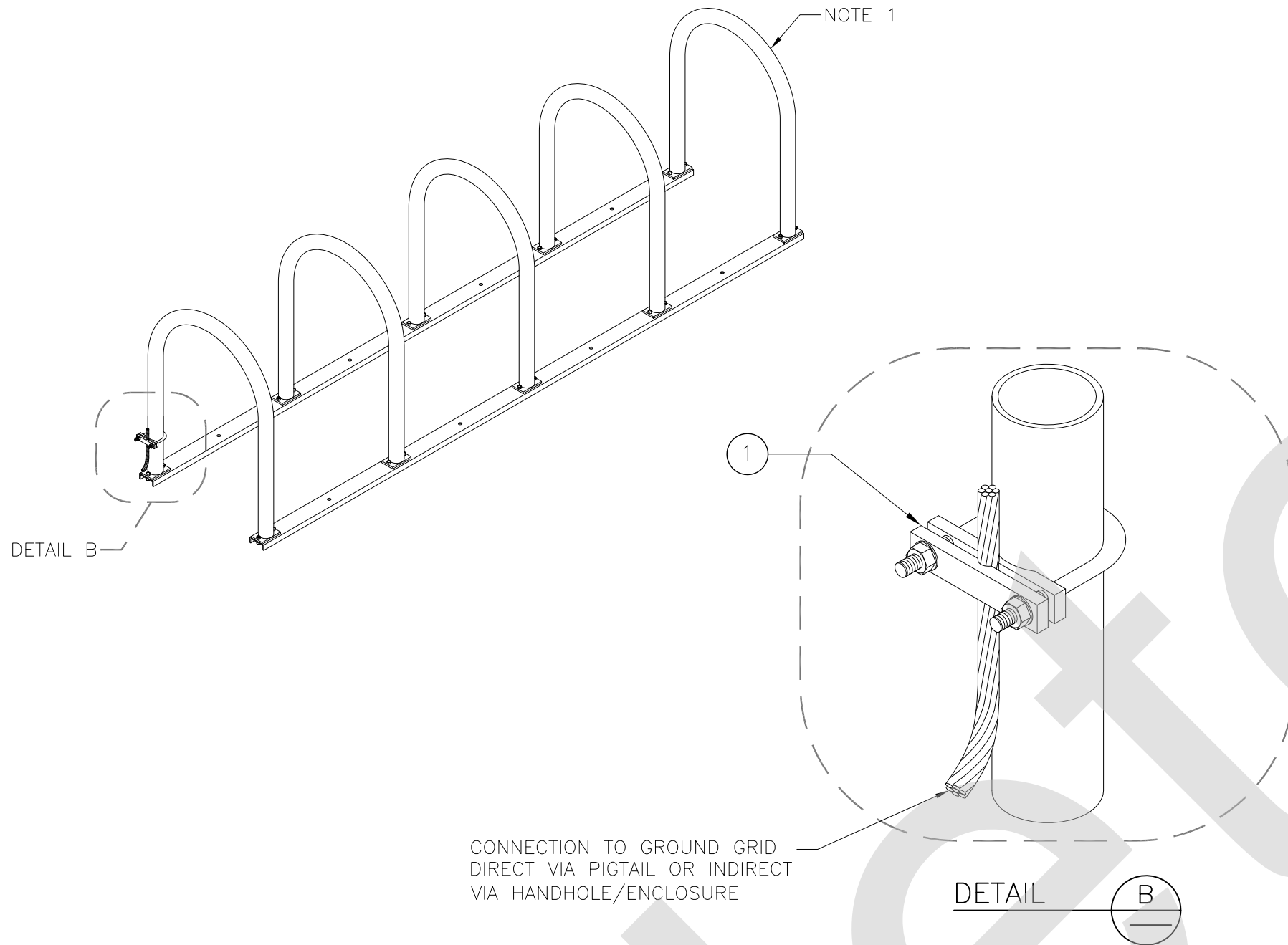


DETAIL 2 – GROUNDING CONNECTION TO REMOVABLE METALLIC HANDRAILS

ITEM	QTY	UNIT	DESCRIPTION	MANUFACTURER & CAT. NO.
1	1	EA	CONNECTOR, GROUND, CABLE TO PIPE, #4-2/0 , IPS:1-1/2", PIPE	BURNDY: GAR1726 OR EQUIVALENT
2	1	EA	TERMINAL 1 HOLE FOR #2 WIRE	BURNDY: YA26L6-BOX OR EQUIVALENT
3	1	EA	WASHER, SPRING (LOCK), STAINLESS, 1/2", A304/A316	(GENERIC)
4	2	EA	WASHER, FLAT, SS, 1/2", A304/A316	
5	1	EA	BOLT, HEX, SS, 1/2"-13 NC x 1", A304/A316)	
6	3	FT	#2 GROUND WIRE	

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			

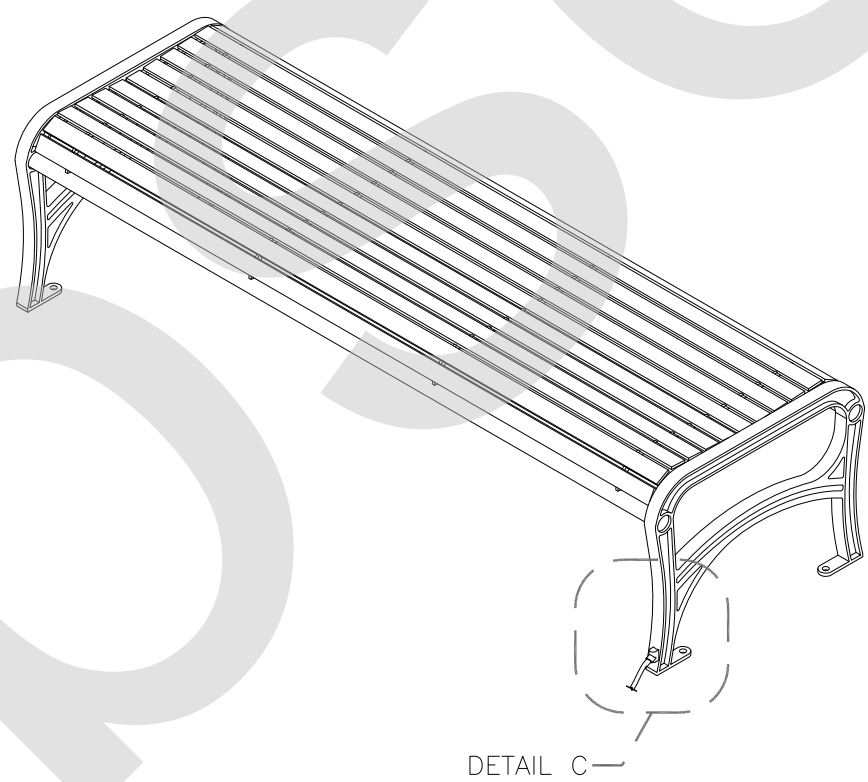
- NOTES:
- GALVANIZED STEEL BICYCLE RACK.



DETAIL 3 – GROUNDING CONNECTION TO FIXED METALLIC BIKE RACKS

ITEM	QTY	UNIT	DESCRIPTION	MANUFACTURER & CAT. NO.
1	1	EA	CONNECTOR, GROUND, CABLE TO PIPE, #4-2/0 , IPS:1-1/2", PIPE	BURNDY: GAR1726 OR EQUIVALENT

- NOTES:
- CONNECTION TO GROUND GRID DIRECT VIA PIGTAIL OR INDIRECT VIA HANDHOLE/ENCLOSURE

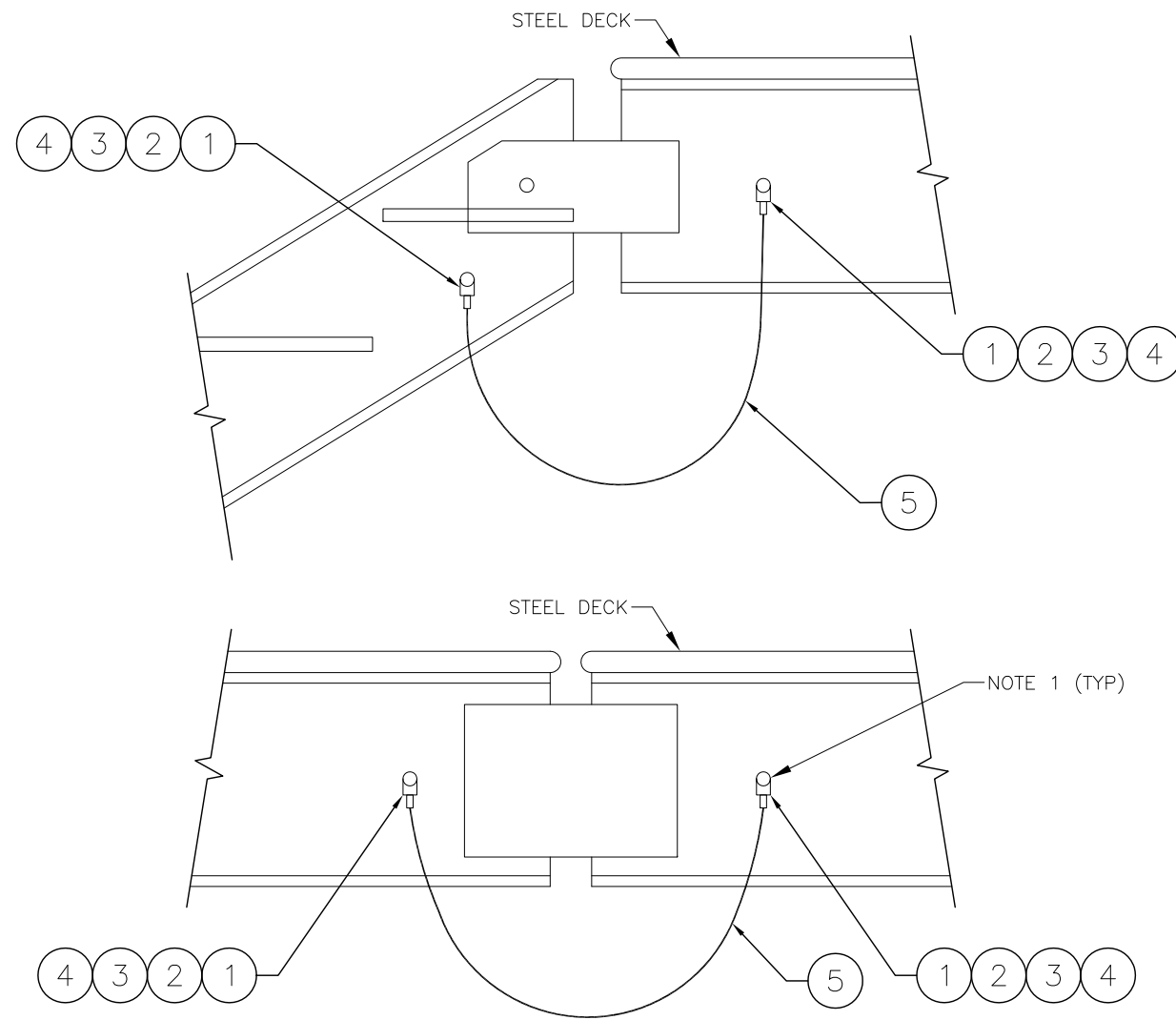


DETAIL 4 – GROUNDING CONNECTION TO FIXED METALLIC BENCH

ITEM	QTY	UNIT	DESCRIPTION	MANUFACTURER & CAT. NO.
1	1	EA	VERTICAL WIRE TO VERTICAL STEEL SURFACE EXOTHERMIC CONNECTION	BURNDY: B-2741 OR EQUIVALENT
2	6	EA	BRONZE BOLT 12MM – 13x25mm (1/2" – 13x1")	(GENERIC)
3	6	EA	WASHER, SPRING (LOCK), STAINLESS, 1/2", A304/A316	
4	6	EA	WASHER, FLAT, SS, 1/2", A304/A316	
5	1	EA	TWO HOLE LUG FOR #2 AWG WIRE	BURNDY: YGA2C-2N OR EQUIVALENT

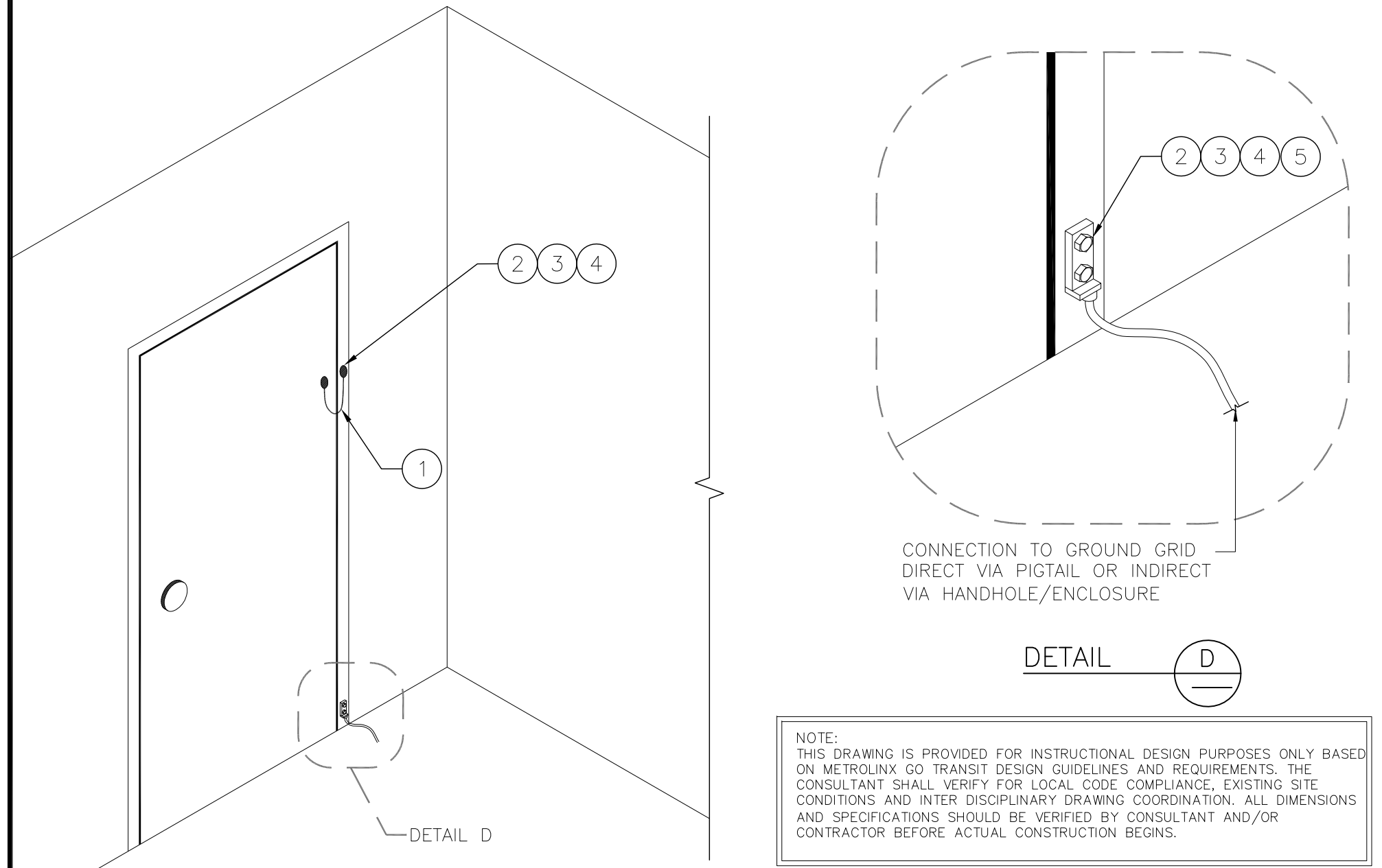
DRAWN BY: RCW 14/12/11	DESIGNED BY: SXF 14/12/11			TRACTION ELECTRIFICATION GROUNDING AND BONDING STANDARD INSTALLATION DESIGN DETAILS PASSENGER STATION FURNITURE	
CHECKED BY: CTG 15/01/16	APPROVED BY: ZBT 15/01/16				
SCALE: NTS	FULL SIZE ONLY				

- NOTES:
- THE STEEL STRUCTURE MUST BE CONNECTED TO THE GROUNDING SYSTEM. THIS CONNECTION WILL BE MADE IN A CONVENIENT LOCATION AS DETERMINED BY THE CONTRACTOR ON SITE.



DETAIL 5 – GROUNDING CONNECTION TO FIXED METALLIC STAIRS

ITEM	QTY	UNIT	DESCRIPTION	MANUFACTURER & CAT. NO.
1	2	EA	TERMINAL 1 HOLE FOR #2 WIRE	BURNDY: YA26L6-BOX OR EQUIVALENT
2	2	EA	WASHER, SPRING (LOCK), STAINLESS, 1/2", A304/A316	(GENERIC)
3	4	EA	WASHER, FLAT, SS, 1/2", A304/A316	
4	2	EA	BOLT, HEX, SS, 1/2"-13 NC x 1", A304/A316)	
5	3	FT	# 2 GROUND WIRE	



DETAIL 6 – GROUNDING CONNECTION TO METALLIC SWING DOORS

ITEM	QTY	UNIT	DESCRIPTION	MANUFACTURER
1	1	EA	FLEXIBLE COPPER BRAID	BURNDY: BD18 OR EQUIVALENT
2	8	EA	BRONZE BOLT 12MM – 13x25mm (1/2" – 13x1")	(GENERIC)
3	6	EA	WASHER, SPRING (LOCK), STAINLESS, 1/2", A304/A316	
4	6	EA	WASHER, FLAT, SS, 1/2", A304/A316	
5	1	EA	TWO HOLE LUG FOR #2 AWG WIRE	BURNDY: YGA2C-2N OR EQUIVALENT

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.