
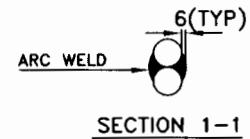
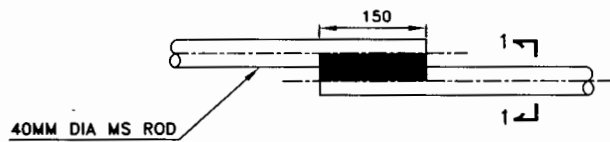
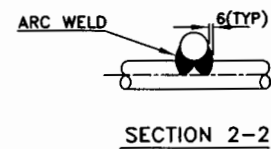
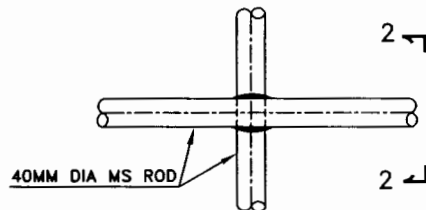


TYPICAL BELOW GROUND EARTHING DETAILS

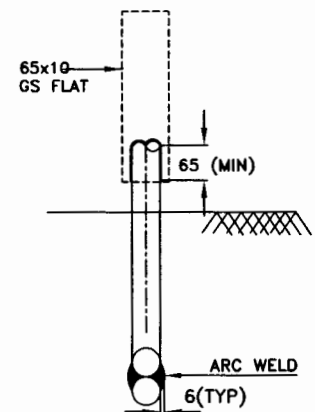
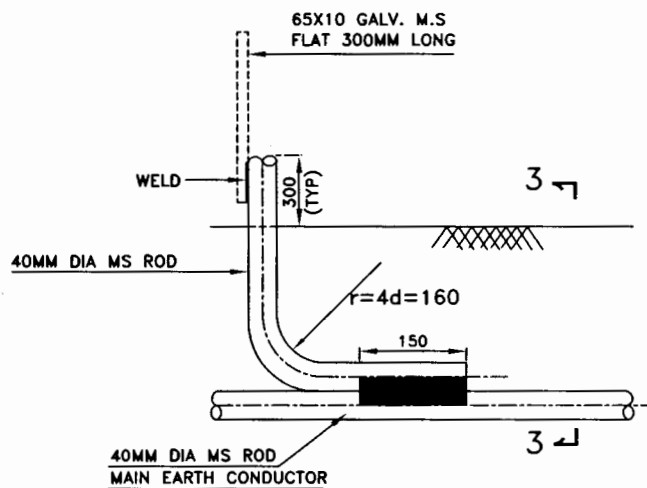
REV. 01	DATE 21.07.08	ALTD <i>Amended</i>	CHD <i>Amended</i>	APPD <i>Amended</i>	CONSULTANT: FICHTNER Consulting Engineers (india) Private Limited							
•Revised in line with M/S GESG comments dated. 19.05.08					GUJARAT STATE ENERGY GENERATION LIMITED (GESG) 350 MW CCPP HAZIRA, GUJARAT							
293						BHARAT HEAVY ELECTRICALS LTD.		DEPT CODE	DRN	NAME DDJ	SIGN -sd-	DATE 26.04.08
CONTRACT						POWER SECTOR		E	DSGN	AKR	-sd-	28.04.08
DISTRIBUTION						PROJECT ENGINEERING MANAGEMENT NOIDA			CHD	RN	-sd-	28.04.08
								APPD	KKK	-sd-	28.04.08	
					TITLE		TYPICAL BELOW GROUND		DRAWING NO.			
					EARTHING DEATAILS		PE-DG-293-509-E003		SHEET 1 OF 7			
									REV. 01			



LAP JOINT



CROSS JOINT



SECTION 3-3

LAP JOINT FOR RISER/
COLUMN EARTHING

WELDED JOINTS

NOTE:-

ALL DIMENSIONS ARE IN MM.

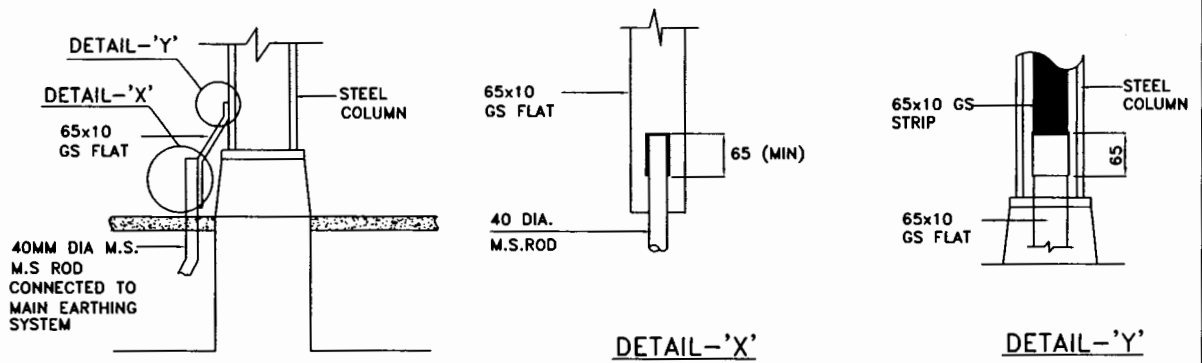


TYPICAL BELOW GROUND
EARTHING DETAILS

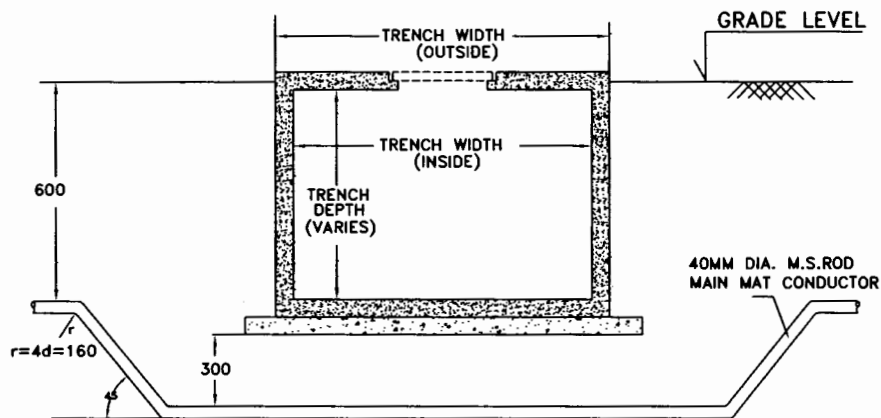
BHEL DRAWING NO.

PE-DG-293-509-E003

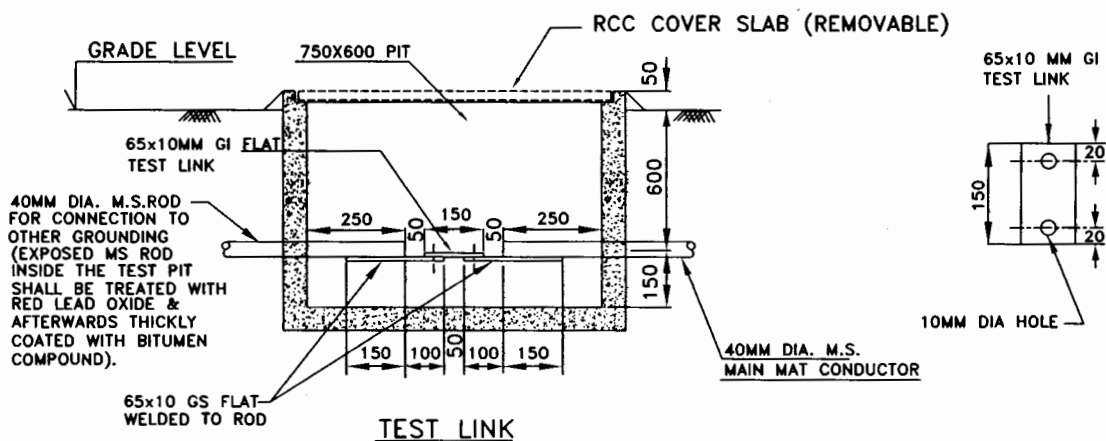
SH 2 OF 7



COLUMN EARTHING



TRENCH CROSSING



(PROVIDED FOR CONNECTION BETWEEN
VARIOUS GROUNDING SYSTEMS)

NOTES:-
ALL DIMENSIONS ARE IN MM.

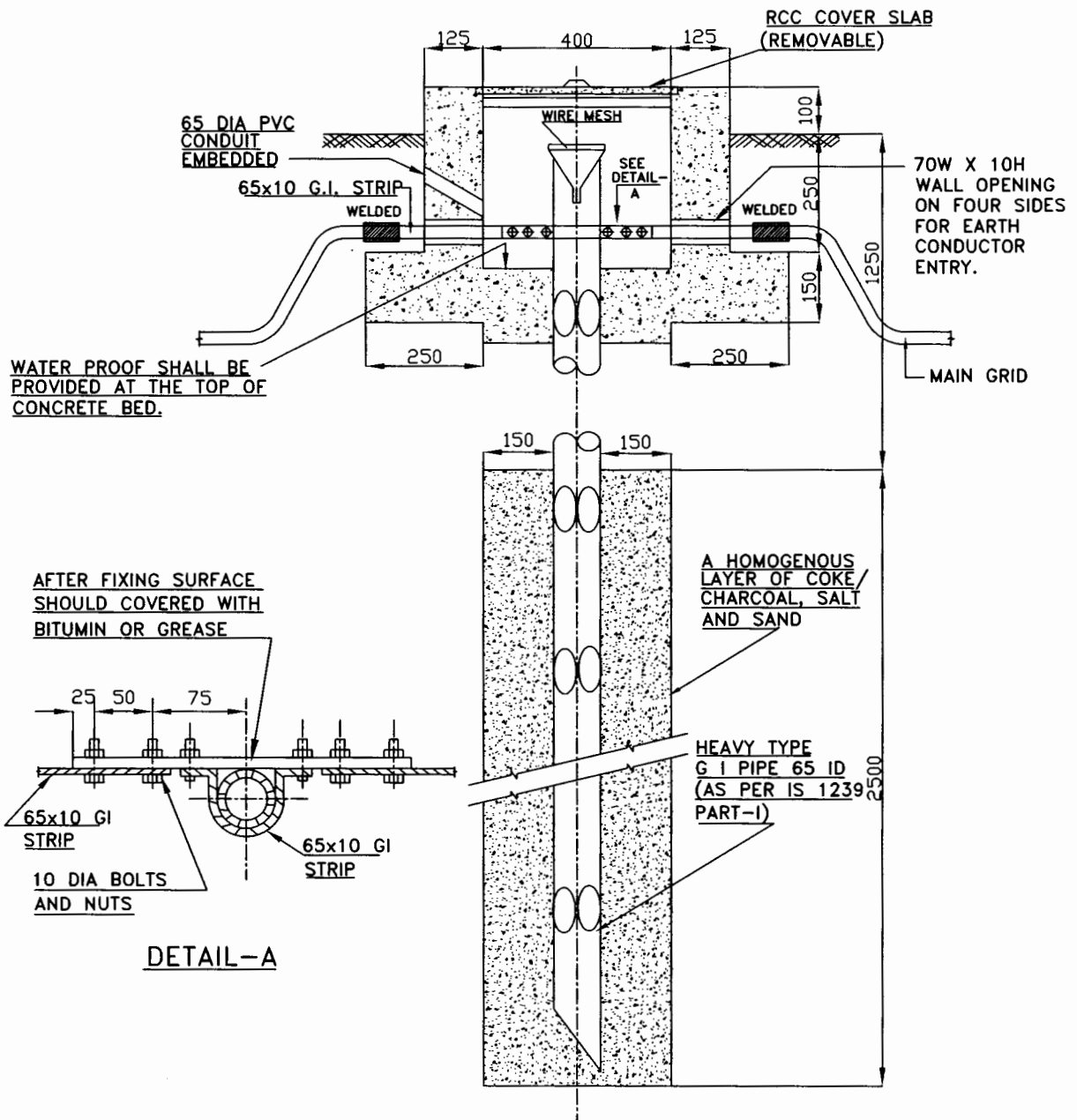


TYPICAL BELOW GROUND
EARTHING DETAILS

BHEL DRAWING NO.

PE-DG-293-509-E003

SH 3 OF 7



TYPICAL ARRANGEMENT OF PIPE ELECTRODE

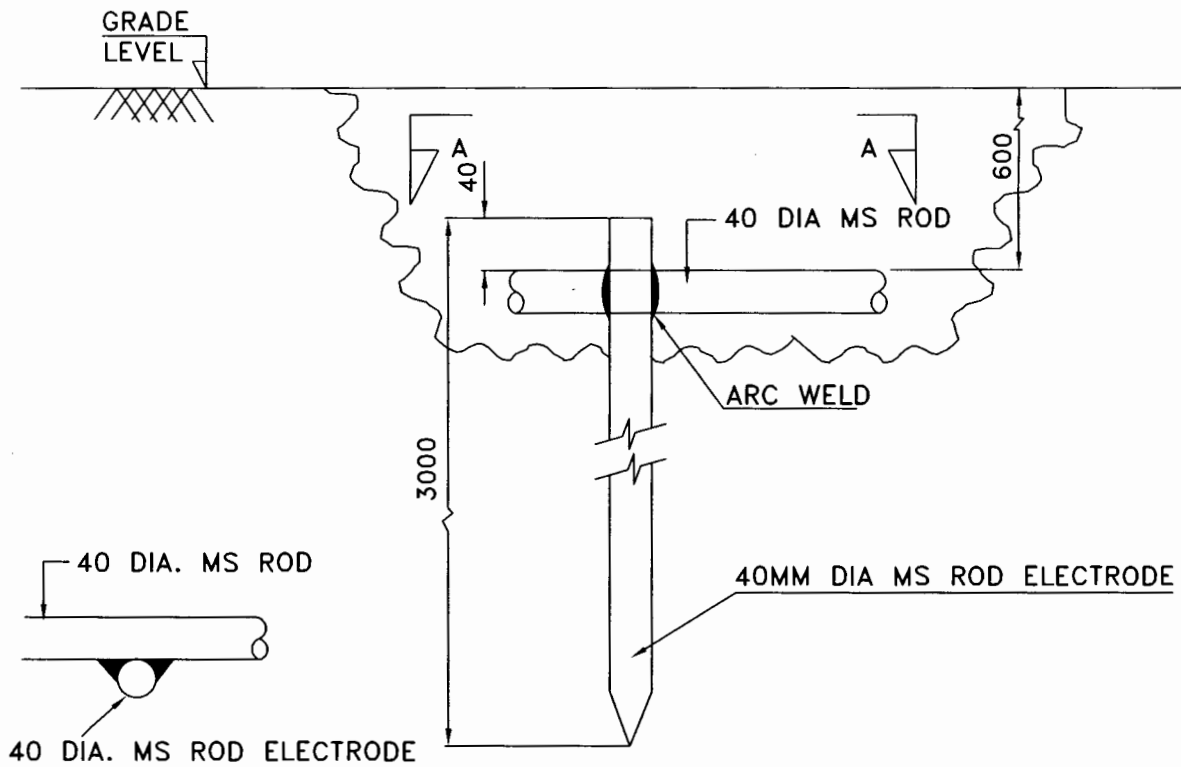


TYPICAL BELOW GROUND
EARTHING DETAILS

BHEL DRAWING NO.

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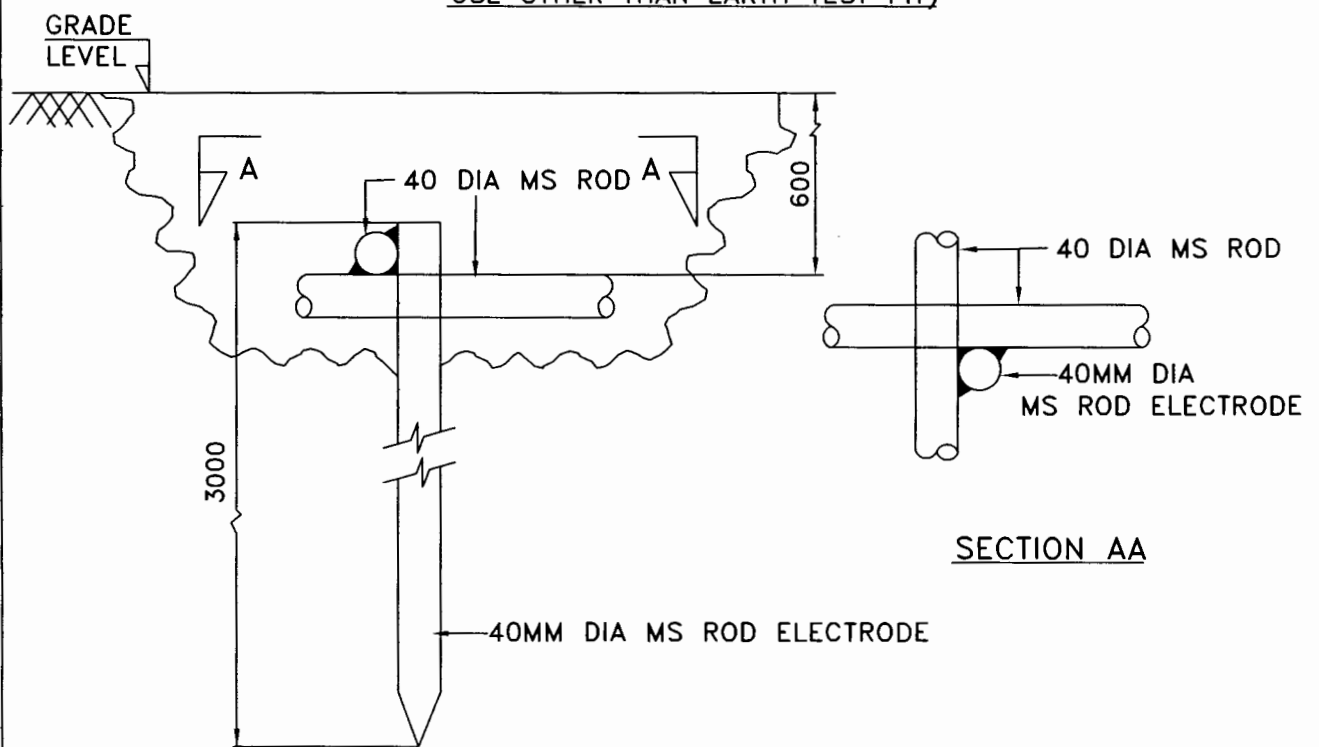
SH 4 OF 7



SECTION AA

VERTICAL GROUND ELECTRODE

(LOCATED ALONG PERIPHERY OF EARTHING GRID FOR USE OTHER THAN EARTH TEST PIT)



SECTION AA

VERTICAL GROUND ELECTRODE

(LOCATED AT JUNCTION OF EARTH CONDUCTOR)

NOTES:-

1. ALL DIMENSIONS ARE IN M.M..

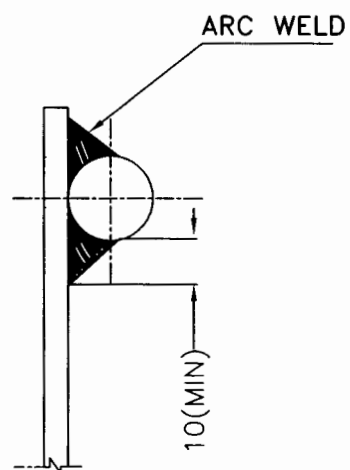
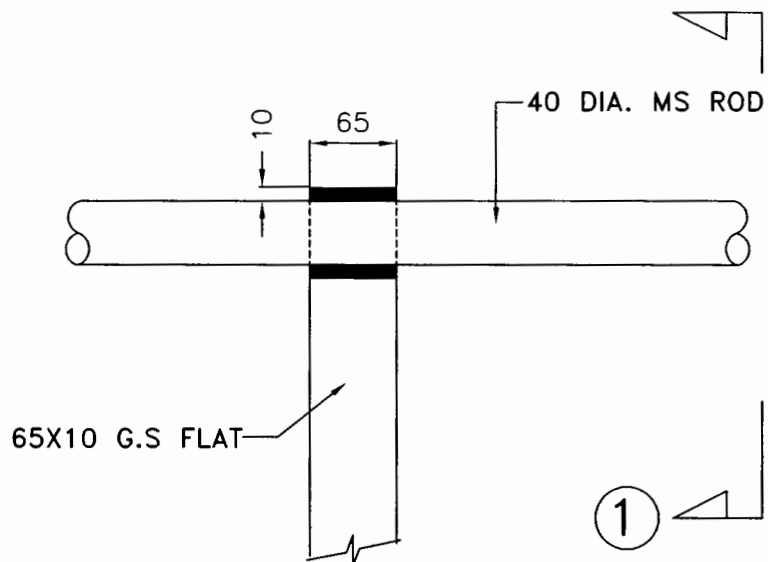


TYPICAL BELOW GROUND
EARTHING DETAILS

BHEL DRAWING NO.

PE-DG-293-509-E003

SH 5 OF 7



SECTION - ①

CROSS JOINT
BETWEEN M.S ROD & G.S FLAT

NOTES:-

1. ALL DIMENSIONS ARE IN M.M



TYPICAL BELOW GROUND
EARTHING DETAILS

BHEL DRAWING NO.

PE-DG-293-509-E003

SH 6 OF 7

NOTES:-

1. WELDING OF GALVANISED FLAT/ MS ROD SHALL BE CARRIED OUT AS FOLLOWS:-
 - a) CLEANING OF WELD AREA WITH WIRE BRUSH.
 - b) REMOVAL OF GALVANISATION COATING IN THE WELD AREA.
 - c) WELDING OF THE CONDUCTOR SHALL BE AS PER IS : 816.
 - d) NATURAL COOLING OF WELDING JOINTS.
2. EARTH CONDUCTOR SHALL BE ROUTED BELOW ROADS/ TRENCHES WITH MINIMUM CLEARANCE OF 300MM.
3. DETAILS OF EARTH TEST PIT / TEST LINK PIT ARE INDICATIVE. ACTUAL DETAILS SHALL BE SHOWN IN CIVIL DRAWINGS & IS IN CIVIL SCOPE.
4. DRG. FOR DEPTH OF BURIAL OF MAIN CONDUCTOR SHALL BE FURNISHED. HOWEVER THE DEPTH OF BURIAL SHALL BE 600MM.



TYPICAL BELOW GROUND
EARTHING DETAILS

BHEL DRAWING NO.

PE-DG-293-509-E003

SH 7 OF 7