



CONSTRUCTION DEPTH	
1) RAIL (60g)	172 mm
2) RUBBER PAD	10 mm
3) WIDER PSC SLEEPER	210 mm
HEIGHT AT RAIL SEAT	
4) MINIMUM BALLAST THK.	350 mm
TOTAL	742 mm
TRACK DETAILS	
PROP R.L.	252.128 M
PROP F.L.	251.386 M
VERTICAL ALIGNMENT	LEVEL
HORIZONTAL ALIGNMENT	4° CURVE

LEGEND	
PRL	PROPOSED RAIL LEVEL
PFL	PROPOSED FORMATION LEVEL
GL	GROUND LEVEL
PRL	PROPOSED ROAD LEVEL
CL	CENTER LINE
THK	THICKNESS
ERL	EXISTING ROAD LEVEL

- NOTES :
- A) GENERAL NOTES
- ALL DIMENSIONS ARE IN MILLIMETERS EXCEPT LEVELS WHICH ARE IN METER.
 - PROPOSED WORK IS SHOWN IN RED.
 - LOCAL CH 0.00 EACH RECKONED FROM C/L OF PROP. HORC. MANESAR STATION BUILDING.
 - FOR RAIL LEVELS, FORMATION LEVEL, GRADES ETC. REFER I-SECTION SHEET.
 - THE EXISTING DETAILS ARE AS PER SITE SURVEY RECORDED BY THE CONSULTANT AND VERIFIED BY RAILWAY OFFICIAL.
 - ENGINEER IN CHARGE/ SITE ENGINEER SHOULD VERIFY THE RAIL LEVEL, FORMATION LEVEL, BED LEVEL & TRACK CENTER AT SITE BEFORE COMMENCEMENT OF WORK.
 - ENGINEER IN CHARGE/SITE ENGINEER SHALL ENSURE THE SAFETY OF TRACK AT ALL THE TIME AND SHALL TAKE NECESSARY PRECAUTION TO PREVENT DAMAGE OF S&T CABLE /GEARS DURING EXECUTION OF WORK CONCERNED SSE/SIG & ADSTE SHALL BE INFORMED WELL IN ADVANCE BEFORE EXECUTION OF WORK.
- B) TECHNICAL NOTES :
- PROTECTION WORK SUCH AS PITCHING ON SLOPE FOR APPROACHES SHALL BE PROVIDED AS PER SITE CONDITION & IT SHALL BE DECIDED BY EXECUTIVE ENGINEER.
 - FLOORING RCC RETAINING WALL SHALL BE PROVIDED DEPENDING UPON THE SITE CONDITION (ERODIBLE/ NON- ERODIBLE SOILS) AND IT SHALL BE DECIDED BY DY. C/IC. IF FLOORING IS NECESSARY AS PER SITE CONDITION FOR ERODIBLE SOIL. THE RDSO DRG. NO.B /10154 SHALL BE REFERRED FOR ARRANGEMENT OF FLOORING.
 - FOR DETAILS OF RCC BOX REFER RDSO DRG. NO: B - 10158 & B - 10158/1A. (FOR 5.0 X 6.0 M SPAN)
 - BALLAST CUSHION ABOVE BOX SHALL BE 350mm.
 - DIMENSIONS OF RETAINING WALL SHOWN IN THIS DRAWING ARE TENTATIVE .
 - DESIGN CRITERIA IS BASED ON FOLLOWING IRS CODES :
 - (i) IRS BRIDGE RULE
 - (ii) IRS CONCRETE BRIDGE CODE
 - (iii) IRS BRIDGE SUB-STRUCTURE & FOUNDATION CODE
 - SEISMIC ZONES IS IV AS PER IRS BRIDGE RULES APPENDIX - IV (REVISED) & EXPOSURE CONDITION IS MODERATE
 - THE BACK FILL MATERIAL SHALL BE CONFORMING TO CLAUSE 7.5 OF IRS SUB- STRUCTURE AND FOUNDATION CODE.
 - WEEP HOLES SHALL BE OF 75/100 MM DIA PVC/AC PIPES STAGGERED @ 1000 MM C/C HORIZONTALLY AND VERTICALLY ABOVE LOW WATER LEVEL IN RETAINING WALL.
 - REINFORCEMENT SHALL BE FE 500D (TMT) CONFORMING TO IS 1786 - 2008.
 - FOR CONCRETE SPECIFICATION REFER IRS CONCRETE BRIDGE CODE.
 - GRADE OF CONCRETE :
 - (i) RCC BOX = M.35
 - (ii) RETAINING WALL = M.35
 - (iii) WEARING COURSE = M.20
 - LAP LENGTH SHALL BE 50 X DIA OF BAR LAPPING OF BAR SHALL BE STAGGERED AND NOT MORE THAN 50% AT A SECTION.
 - MAXIMUM FOUNDATION PRESSURE UNDER RCC BOX IS 16.20 N/m^2 AS PER RDSO DRG. NO B-10158/1A.
 - HEIGHT GAUGE SHALL BE PROVIDED AS PER RDSO STANDARD DRW. NO. RDSO/M0001.

HYDRAULIC DATA		
SR.No	DESCRIPTION	LEVEL (IN M)
		PROPOSED
1	RAIL LEVEL	252.128 m
2	FORMATION LEVEL	251.386 m
3	EARTH CUSHION (mm)	0.00 m
4	BOTTOM OF TOP SLAB	250.886 m
5	EXIST. ROAD LEVEL	249.209 m
6	GRADE	LEVEL
7	LOADING STANDARD	25 T LOADING
8	BRIDGE ALIGNMENT	4° CURVE

STANDARD OF LOADING: 25 T LOADING

DRAWING SUBMITTED BY: ELITE CONSULTANT

1446 / 4, 35 CIVIL LINES
BEHIND ROADS, ROORKEE
HARIDWAR

Drawn by: _____ Checked by: _____

CONDUCTING OUT DETAILS ENGINEERING SURVEY INCLUDING
LEVELLING, ALIGNMENT DESIGN, GAD OF BRIDGES, BUILDING ETC.
SURVEY OF ELECTRICAL AND UNDERGROUND UTILITIES, PREPARATION
OF YARD PLAN (ESP) BILL OF QUANTITIES AND OTHER ANCILLARY
WORKS IN CONNECTION WITH DEVELOPMENT OF RAILWAY YARD IN
MARUTI PLANT AT MANESAR INCLUDING PROPOSED SIDING FROM
MANESAR STATION OF HORC.

TITLE:- **BRIDGE NO. 01 (RUB)**
PROP.SPAN - 1 X 4.0 X 3.0 + 2 X 5.0 m X 5.5 + 1 X 4.0 X 3.0 R.C.C.BOX
CH: 1243.175 BETWEEN STATIONS : MANESAR - MARUTI PLANT

SIGNATURE BLOCK	
HRIDC	
GM/HRIDC	
DGM/Civil/HRIDC	
Exec./Civil/HRIDC	
DWG Section/HRIDC/GGN	
CONSULTANT	
ELITE CONSULTANT	

NO : ANNEXURE-4

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