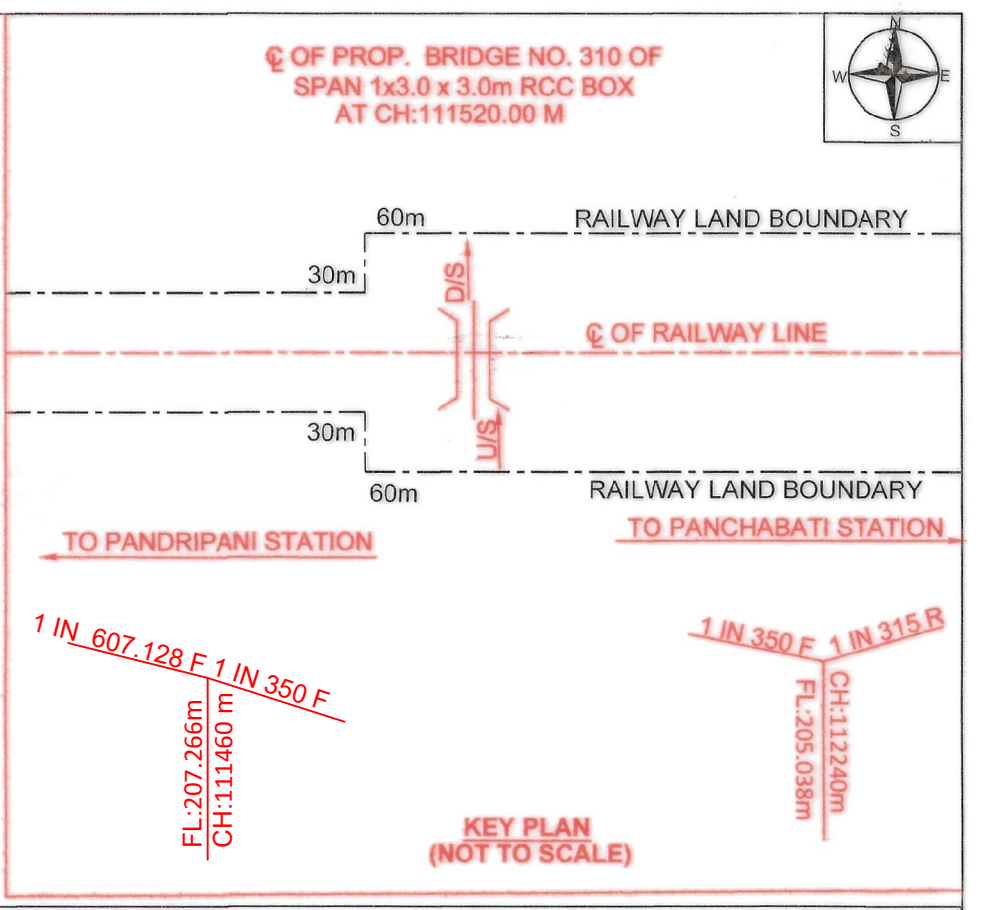
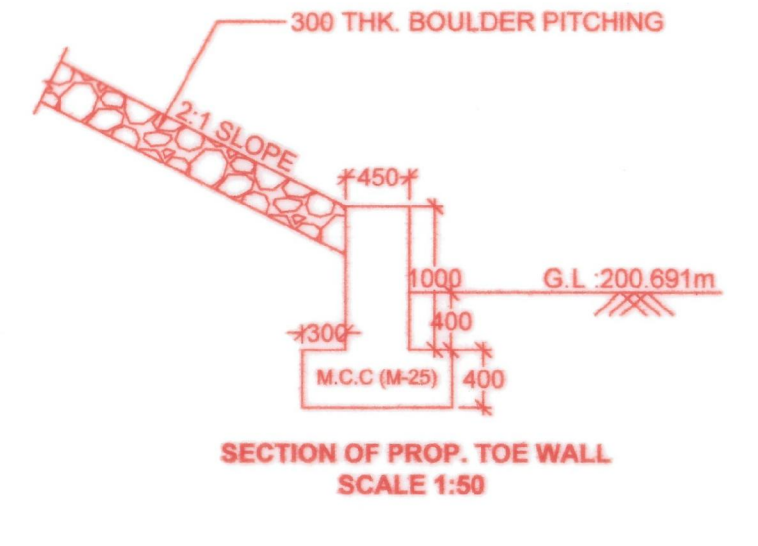
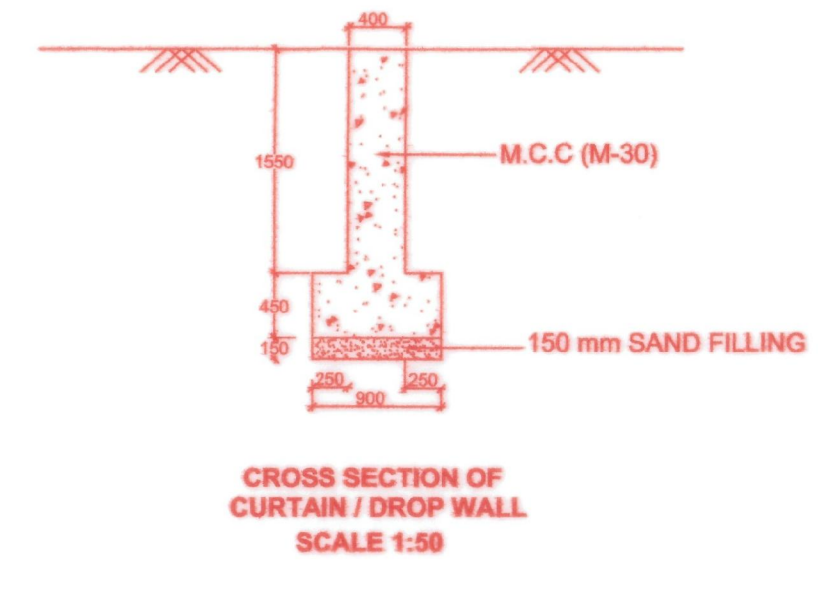


- MODUS OPERANDI:-**
- EXISTING WATER BODY (FLOW) TO BE TRAINED / DIVERTED SUITABLY.
 - EXCAVATE THE FOUNDATIONS FOR THE PROPOSED RCC BOX, RETURN WALLS, ETC., TO THE REQUIRED DEPTH BY USING SUITABLE EQUIPMENT, TOOLS AND PLANTS.
 - PREPARE THE GROUND WELL (BY RAMMING ETC AS NECESSARY AS PER SITE REQUIREMENTS) LAY SAND FILLING PCC BASE COURSE ETC. IF NECESSARY AND LEVELING COURSE ETC AND ALLOW
 - CAST THE RCC BOX, RETURNS "IN SITU" CURE AND ALLOW TO SET AS PER CODAL PROVISIONS AND COMPLETE THE WORK.
 - FILL EARTH AS PER CODAL PROVISIONS IN LAYERS OF 300mm AND CONSOLIDATE / RAM WELL TO REQUIRED PROFILE AND FORMATION LEVEL AS PER RDSO SPECIFICATIONS OVER THIS LAY BALLAST TO REQUIRED DEPTH.
 - LAY 150 mm THICK WEARING COURSE OVER THE FLOOR OF THE RCC BOX.
 - LAY & LINK THE PROPOSED LINE, COMPLETE THE REMAINING WORKS IN ALL RESPECTS.
 - ALLOW THE TRAINED / DIVERTED WATER BODY THROUGH THE BRIDGE.
- REFERENCES:-**
- REINFORCEMENT DETAILS OF RCC BOX SIMILAR TO DRG. NO: RDSO/B-10155/5. OF SIZE 1 X 3.00 X 3.00m (WITH 4m FILL).
 - THIS DRAWING IS BASED ON APPROVED DETAILED PLAN AND SECTION- GE/CON/IV/SKP/JEYEP/ORE-MALKANGIRI/18 OF 18.



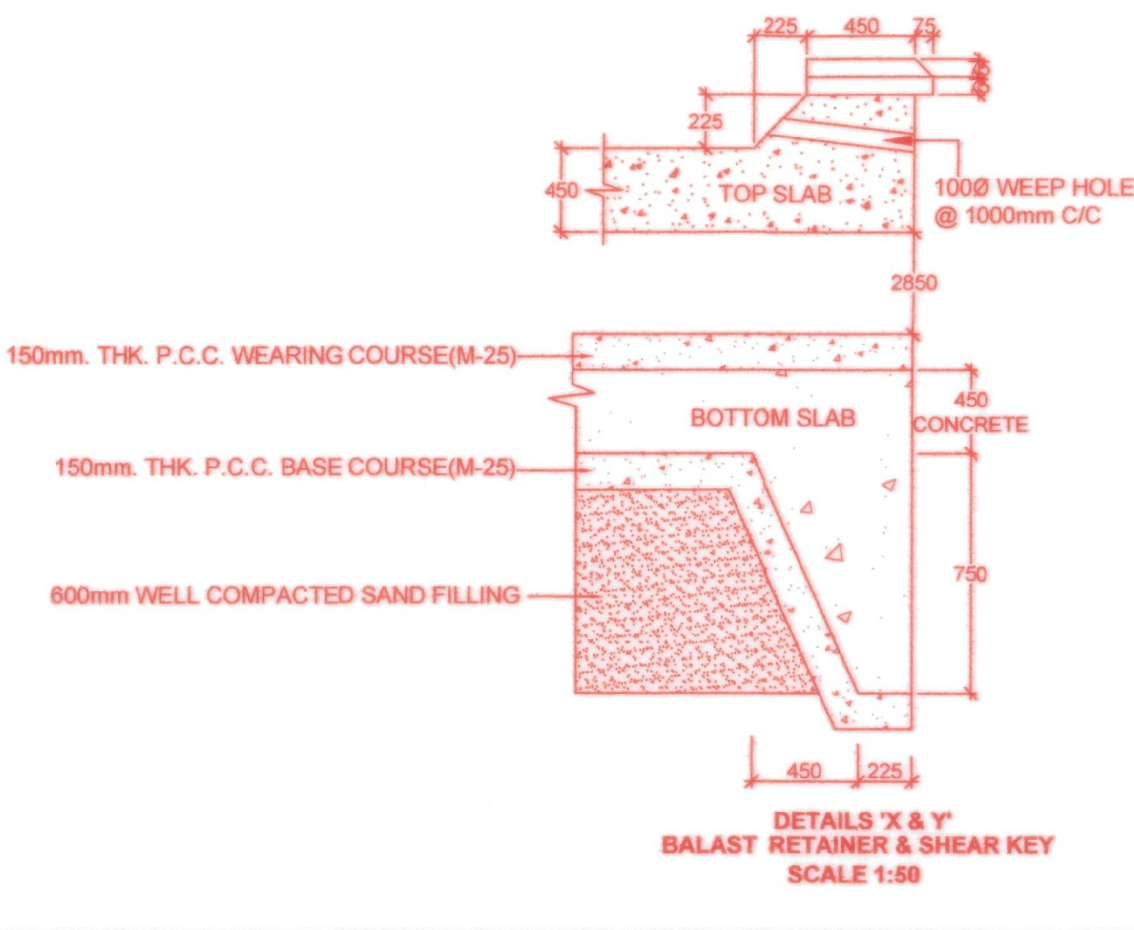
- NOTES :-**
- ALL DIMENSIONS SHOWN IN THIS GAD ARE IN MM AND REDUCED LEVELS ARE IN M UNLESS OTHERWISE SPECIFIED.
 - DO NOT SCALE THE DRAWING. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
 - EXPOSURE CONDITION - SEVERE
 - SEISMIC ZONE IS ZONE - II
 - PROPOSED BRIDGE IS DESIGNED FOR 25T LOADING 2008 STANDARD.
 - THIS GAD IS SUBJECT TO MAINTAINING SAME LEVELS, ALIGNMENT, GRADE AS THAT OF APPROVED WORKING SECTION/ WORKING PLAN AND YARD PLANS IF ANY.
 - BACK FILL MATERIAL SHALL CONFORM TO CL. 7.5 OF IRS SUBSTRUCTURE 2013 (REVISED) & FOUNDATION CODE, WITH LATEST CORRIGENDUM & ADDENDUM SLIPS.
 - DEPTH OF FOUNDATION SHOWN IN THIS DRAWING IS TENTATIVE THE ACTUAL DEPTH SHALL BE DECIDED BY ENGINEER-IN-CHARGE.
 - BOX SHALL BE PLACED ON NON ERODIBLE STRATA.
 - THE DETAILS OF ITEMS SUCH AS BOULDER/SAND FILLING, GRADES OF CONCRETE, PITCHING, FLOORING, TOE WALL ETC., ARE SHOWN IN THE DRAWING.
 - CALCULATED SSC OF THE SOIL AS PER REPORT IS 13.78 t/m².
- CODES / MANUALS TO BE FOLLOWED:-**
- I.R.S CONCRETE BRIDGE CODE 2014 (REVISED) INCLUDING LATEST ACS READ IN CONJUNCTION WITH RELEVANT I.S. SPECIFICATIONS MENTIONED THEREIN.
 - I.R.S BRIDGE SUB STRUCTURE CODE - 2013 (REVISED) INCLUDING LATEST A&C SLIPS.
 - I.R.S BRIDGE RULES - 2014 INCLUDING LATEST A&C SLIPS.
 - I.R. BRIDGE MANUAL - 1998 INCLUDING LATEST A&C SLIPS.
 - INDIAN RAILWAYS UNIFIED STANDARD SPECIFICATION FOR MATERIALS AND WORKS (2018/2019)
- MATERIAL SPECIFICATIONS:-**
- GRADE OF CONCRETE FOR VARIOUS RCC/MASS CONCRETE WORK SHALL BE IN ACCORDANCE WITH IRS BRIDGE CODE 1997 WHERE IRS CONCRETE BRIDGE CODE IS SILENT, IRC CODE & IS 456 MAY BE REFERRED TO.
 - ALL WORKS ARE TO BE CARRIED OUT AS PER THE FOLLOWING:
i) INDIAN RAILWAYS UNIFIED STANDARD SPECIFICATION FOR MATERIALS & WORKS OF 2010 WITH UP TO LATEST CORRECTION SLIPS.
ii) I.R.S CONCRETE BRIDGES CODE 2014 (REVISED) INCLUDING LATEST A&C CORRECTION SLIPS READ IN CONJUNCTION WITH RELEVANT I.S. SPECIFICATIONS MENTIONED THEREIN.
iii) I.R.S BRIDGE SUB STRUCTURE CODE 2013 (REVISED) INCLUDING LATEST A&C SLIPS
iv) I.R.S BRIDGE RULES INCLUDING LATEST A&C SLIPS - 2014.
v) I.R. BRIDGE MANUAL 1998 INCLUDING LATEST A & C SLIPS.
vi) I.R.S CONCRETE BRIDGES CODE 2014 (REVISED).
 - FOUNDATION & SUB-STRUCTURE OF RETAINING WALLS:- RCC GRADE M-35 USING 20mm MAXIMUM SIZE GRADED HARD STONE AGGREGATE OF APPROVED QUALITY.
 - RCC BOX:- MINIMUM CONTROLLED RCC GRADE M35 USING 20mm MAXIMUM SIZE GRADED HARD STONE AGGREGATE OF APPROVED QUALITY AS PER RDSO DRG NO B-10155.
 - PITCHING:- HAND PACKED ROUGH STONE PITCHING 300mm THICK OVER GRAVEL BACKING AS PER ANNEXURE 2/3 (PARA 205) OF IRBM. THE FACE STONE MUST BE IN GENERAL OF WEIGHT AT LEAST 35KG AND BE WELL BEDDED AND HAND SET.
 - COPING / PARAPET WALL :- CONTROLLED C.C. M25 GRADE USING 20mm MAXIMUM SIZE WELL GRADED HARD STONE AGGREGATE OF APPROVED QUALITY.
 - CC LEVELING COURSE:- CC M25 GRADE USING 20mm MAXIMUM SIZE WELL GRADED HARD STONE AGGREGATE OF APPROVED QUALITY.
 - CC WEARING COURSE:- CC M25 GRADE USING 20mm MAXIMUM SIZE WELL GRADED HARD STONE AGGREGATE OF APPROVED QUALITY.
 - FLOORING:- AS PER PARA NO. 403.2 AND AS SHOWN IN ANNEXURE 4/4 OF IRBM.
 - TOE WALL:- FR MASONRY IN CM 1:5 OVER CC M20 FOUNDATION USING MAX. SIZE WELL GRADED HARD STONE AGGREGATE OF 40mm APPROVED QUALITY IN FOUNDATION. REINFORCEMENT BAR SHALL BE OF HYSD BARS CONFORMING TO IS 1786 : 2008.
 - GRADED HARD STONE AGGREGATE OF 40mm APPROVED QUALITY IN FOUNDATION. REINFORCEMENT BAR SHALL BE OF HYSD BARS CONFORMING TO IS 1786 : 2008.
 - DROP WALL / CURTAIN WALL :- IN CC M25 USING 20mm MAX. SIZE GRADED HARD STONE AGGREGATE OF APPROVED QUALITY.
 - BAR BENDING SHALL CONFORM TO 2502 - 1963.

LEGEND:
PROP. WORK SHOWN THUS: ———



CONSTRUCTION DEPTH		TRACK-DETAILS	
1) RAIL	172 mm	1) TRACK ON	AS SHOWN
2) RUBBER PAD	6 mm	2) GRADE	1 IN 350 F
3) PSC SLEEPER	210 mm	3) PROP. RAIL LEVEL	207.833 m
4) BALLAST	350 mm	4) PROP. FORMATION LEVEL	207.095 m
TOTAL	738 mm	5) BED LEVEL	200.691 m

LEGEND:	
F.L.	FORMATION LEVEL
B.L.	BED LEVEL
BOF	BOTTOM OF FOUNDATION
HFL	HIGH FLOOD LEVEL
PROP.	PROPOSED
U/S.	UP STREAM
D/S.	DOWN STREAM



R.L-200-691M

BH-111		
DEPTH	TYPE	SPTN
0.00		
1.00	SM	
1.50		8
2.50		
3.00	ML	11
4.00		
4.50		15
5.50	SM	
6.00		18

ML- INORGANIC SILTY SAND
MEDIUM PLASTICITY
SM- POORLY GRADED MEDIUM
DENSE SILTY SAND

A. S. Raw GE/CON/IV/SKP E.Co.Railway	(B.B. MOHARANA) DY. GE/CON/IV/SKP E.Co.Railway	SS/GE/CON/IV/SKP E.Co.Railway
SAIRAM PANDEY PROJECT INCHARGE	RACHITA MOHANTY CHECKED BY	SUSHANTA BARIK DRAWN BY
<input type="checkbox"/> TENDER	<input type="checkbox"/> PREPARED	<input type="checkbox"/> INFORMATION
<input checked="" type="checkbox"/> APPROVAL	<input type="checkbox"/> CONSTRUCTION	

DRG. NO. GE/CON/IV/SKP/JEYEP/ORE-MALKANGIRI/NEVBG/310/2024	
STANDARD OF LOADING : RAILWAY LOADING (25T-2008)	
EAST COAST RAILWAY (CONSTRUCTION)	
DIVISION:	WALTAIR
BR. NO. 310	PROP. BRIDGE LOCATION: 1 X 3.0 X 3.0 M RCC BOX CH:111520.00 M
PROPOSED BRIDGE NO-310(CH:111520.00M) BETWEEN PANDRIPANI - PANCHABATI	
IN WALTAIR DIVISION OF EAST COAST RAILWAY	
CONSULTANTS:	M/s SATRA SERVICES AND SOLUTIONS PVT. LTD. Corporate Office : 401, Capital Park, Image Garden Lane, Hi-Tech City, Madhapur, Hyderabad, Telangana - 500 081, India.
M/s Odra Associates Pvt. Ltd. Corporate Office : Plot No. 5841, Chakraborty, Near Mangala Mandir, Post - Manchewar, Manchewar Road, Bhubaneswar, Khurda, Odisha, India - 751010 Email: odraassociates@gmail.com / info@odraassociates.com Ph: 0989688176/0674-2552715	
SHEET NO.	ISSUE DATE
SCALE : AS SHOWN	DIVISION : R O
<input type="checkbox"/> TENDER <input type="checkbox"/> PREPARED <input type="checkbox"/> INFORMATION <input checked="" type="checkbox"/> APPROVAL <input type="checkbox"/> CONSTRUCTION	