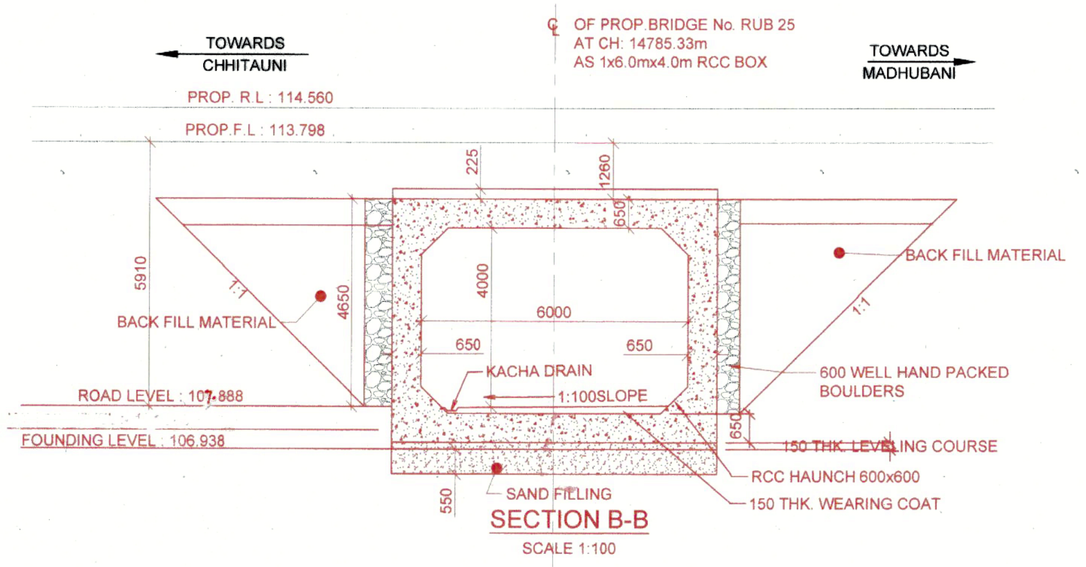
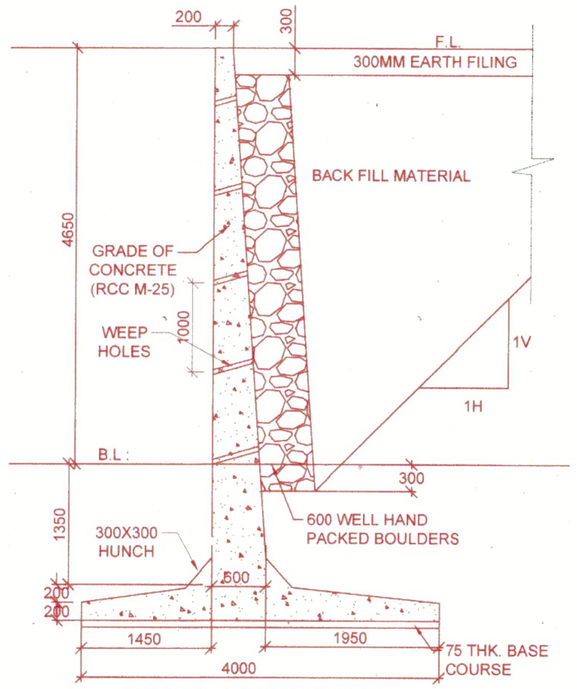
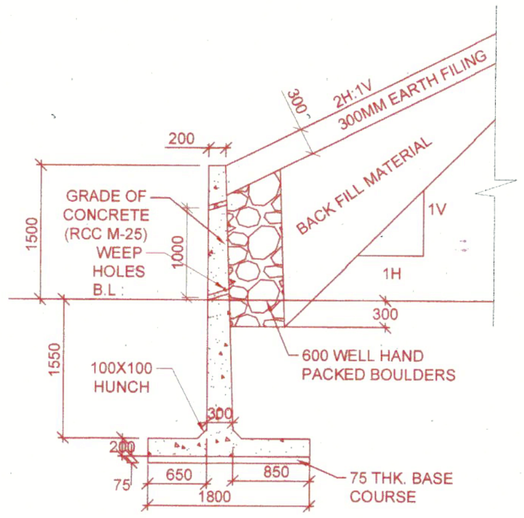
AUTHORITY OF WORK
PINK BOOK- 2024-25
PAGE NO.-4:2:1
ITEM NO. - 12



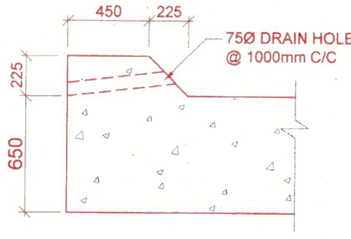
SECTION B-B
SCALE 1:100



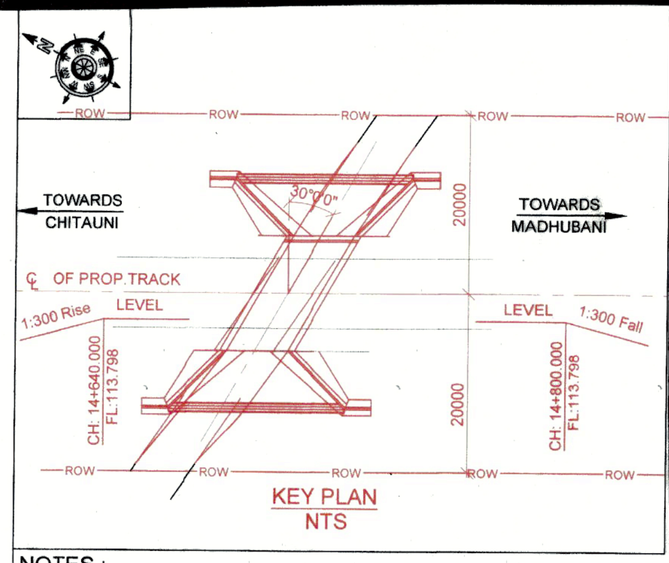
DETAIL OF WING WALL AT MAXIMUM HEIGHT
SCALE 1:50



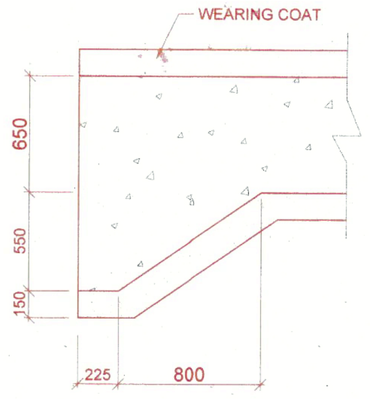
DETAILS OF RETURN WALL
SCALE 1:50



BALLAST RETAINER
SCALE 1:25



KEY PLAN
NTS



SHEAR KEY
SCALE 1:25

TRACK DETAILS

PROP.R.L	116.903
PROP.F.L	116.141
VERTICAL ALIGNMENT	LEVEL
HORIZONTAL ALIGNMENT	STRAIGHT

LEGEND

F.L	FORMATION LEVEL
R.L	RAIL LEVEL
P.R.L	PROPOSED ROAD LEVEL
BOF	BOTTOM OF FOUNDATION
PROP.	PROPOSED
EXG.	EXISTING
THK.	THICKNESS
CH.	CHAINAGE
PCC	PLAIN CEMENT CONCRETE
RCC	REINFORCED CEMENT CONCRETE
BR.	BRIDGE
PRL	PROPOSED ROAD LEVEL
ERL	EXISTING ROAD LEVEL

CONSTRUCTION DEPTH

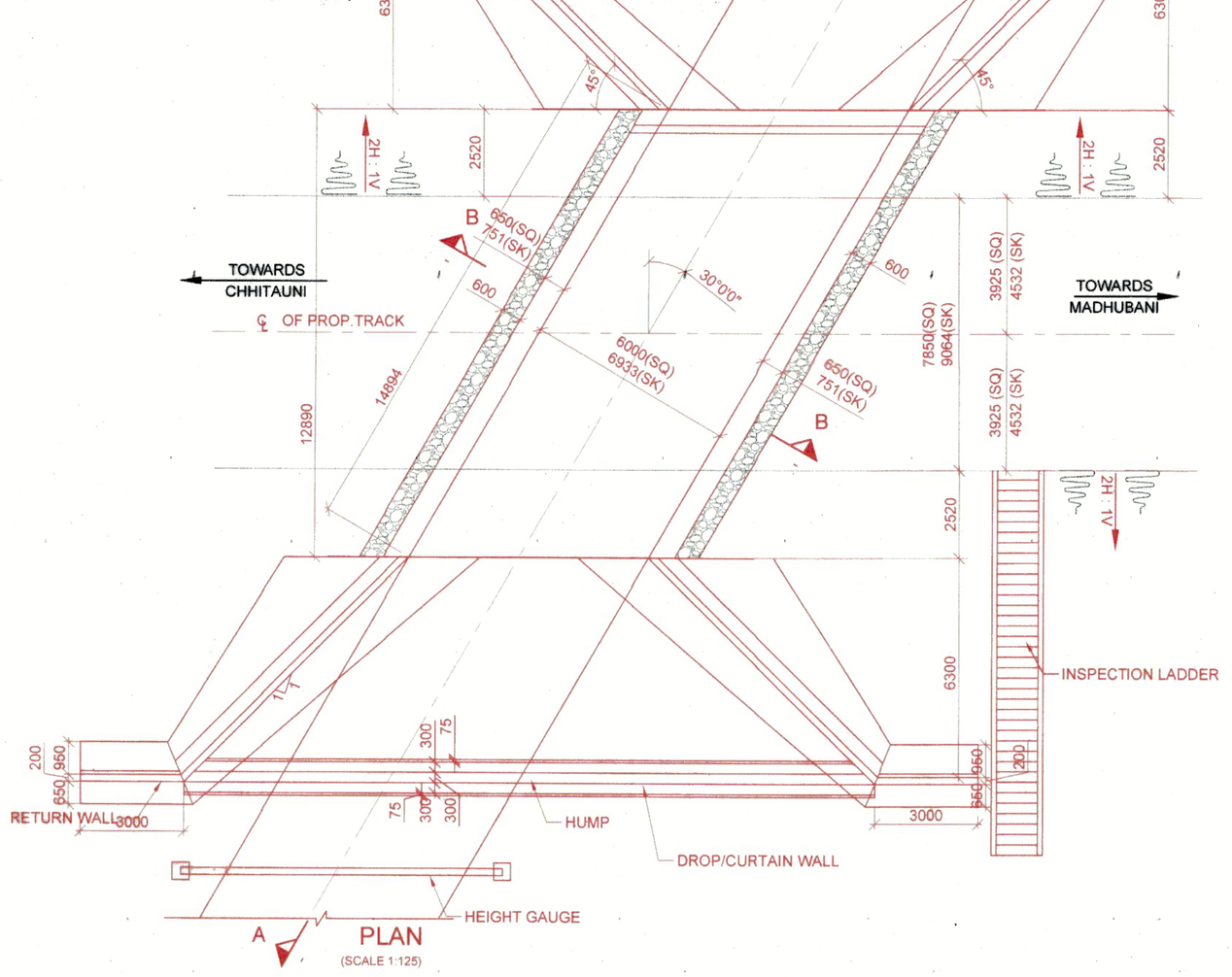
1) RAIL (60kg)	172 mm
2) RUBBER PAD	10 mm
3) WIDER PSC SLEEPER HEIGHT AT RAIL SEAT	230 mm
4) MINIMUM BALLAST THK.	350 mm
TOTAL	762 mm

COLOR CODE LEGEND

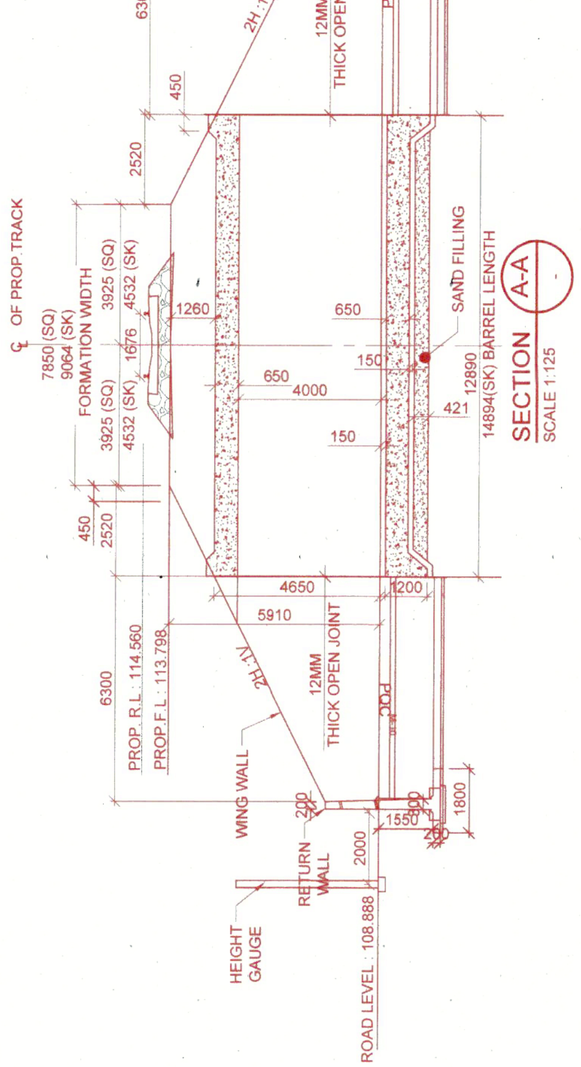
RED ——— - PROPOSED
CONTINUOUS ——— - VISIBLE
DOTTED - - - - - - - INVISIBLE

NOTES :

1. ALL DIMENSIONS ARE IN MM AND LEVELS ARE IN METERS UNLESS OTHERWISE MENTIONED.
2. DIMENSIONS ARE NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. ALL REINFORCEMENT SHALL BE HIGH YIELD STRENGTH DEFORMED BARS (GRADE DESIGNATION FE-415) CONFORMING TO IS: 1786.
4. MINIMUM LAP LENGTH OF REINFORCEMENT FOR M 35 SHALL BE AS PER IS 456:2000 .
5. THE BRIDGE LIES IN SEISMIC ZONE IV.
6. ENSURE PROPER COMPACTION OF SOIL BEHIND RETAINING WALLS.
7. BEHIND RCC BOX WELL HAND PACKED BOULDERS/COBBLES TO A THICKNESS NOT LESS THAN 600 MM WITH SMALLER SIZE TOWARD, SHELL BE PROVIDED AS PER DRAWING & AS PER CLAUSE 7.5 OF IRC BRIDGES SUB STRUCTURE AND FOUNDATION CODE.
8. MAXIMUM DESIGN FOUNDATION PRESSURE COME OUT 22 t/m².
9. FOR REINFORCEMENT DETAIL OF RCC BOX SEE DRAWING NUMBER RDSO/B-10162/R & RDSO/B-10162/1R.
10. RCC BOX WITH KEY CONSTRUCTION AS PER DRAWING NUMBER RDSO/B-10161/1R & RDSO/B-10162/1R.
11. EPOXY GROUTING WITH GI SHEET ON BOTTOM OF JOINTS TO BE PROVIDED TO PREVENT ANY LEAKAGES AT JOINT. IF REQUIRED.
12. SUITABLE GRANULAR MATERIALS TO BE PROVIDED BELOW RCC BOX TO IMPROVE BEARING CAPACITY OF SOIL, IF REQUIRED.
13. FOR RCC WORK DESIGN MIXED M35 WILL BE USED EXPECT UNLESS OTHERWISE SPECIFIED.
14. WATERPROOFING COMPOUND MIX WITH CONCRETE FOR WATERPROOFING
15. ON BOTH APPROACHES SHED WILL BE AS PER DRAWING & DESIGN IF REQUIRED.
16. BEHIND RCC BOX WELL HAND PACKED BOULDERS/COBBLES TO A THICKNESS NOT LESS THEN 600MM WITH SMALLER SIZE TOWARDS BACK FILL, SHALL BE PROVIDED AS PER DRAWING & AS PER CLAUSE 7.5 OF IRC BRIDGE SUB STRUCTURE & FOUNDATION CODE.
17. TOP OF RETAINING WALL SHALL BE KEPT MINIMUM 500 MM ABOVE THE EXISTING GROUND LEVEL AT ALL LOCATIONS IN APPROACH.
18. BEFORE EXECUTION OF WORK FEASIBILITY WILL BE CHECKED BY SITE ENGINEER.
19. LAYOUT SHOULD BE CHECKED BY AXEN/XEN/CON & ALL REFERENCE, PILLARS & LINE SHOULD BE KEPT INTACT TILL THE ENTIRE WORK IS COMPLETED.
20. HEIGHT GAUGE, SPEED BREAKER WARNING BOARD ETC. SHOULD BE PROVIDED ON BOTH END OF THE SUBWAY.
21. RCC WATER COLLECTION CHAMBER FOR THE RAINWATER, INFILTRATING INTO THE APPROACH ROAD AND LHS SHOULD BE CAST MONOLITHICALLY WITH RCC FLOOR AND WALL SO THAT NO INGRESS OF GROUND WATER IN IT.
22. AS THE GROUND WATER LEVEL IS HIGH ALL THE NECESSARY PRECAUTIONS TO BE TAKEN TO PROTECT THE LHS FROM WATER LOGGING ETC.
23. RECOMMENDATION GIVEN IN RLY BD'S LETTER NO. 2017/CE-IV/RUB/88DT.22/04/2020 SHOULD BE FOLLOWED AS PER SITE CONDITION.
24. LAND WILL BE ACQUIRED AS PER SITE CONDITION.
25. WING/RETURN WALL AS PER CE/CON. PLAN NO. B/14/02-11 DT.- 11.02.11
26. CURTAIN/DROP WALL TO BE PROVIDED AND DESIGNED PER SCOUR REQUIREMENTS.
27. TYPE OF ROAD IS ' VILLAGE ROAD '.
28. SHARP CURVE IN THE APPROACH ROAD TO BE AVOIDED.
29. HEIGHT GAUGE AS PER RDSO DRG. RDSO/M-0001.
30. SOIL BEARING CAPACITY AFTER STRENGTHENING OF SOIL AND CONFIRMED BY PLATE LOAD TEST SHOULD BE MENTION IN COMPLETION PLAN.
31. HUMP AS PER RDSO DRAWING NO. B-10161.
32. BOULDER PACKING BEHIND WING AND RETURN WALL MUST BE AS SHOWN IN SECTION.
33. FIELD UNIT MUST PRE-VALIDATE ALL DATA AND LEVELS BEFORE STARTING EXECUTION OF WORK.



PLAN
(SCALE 1:125)



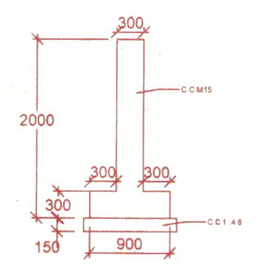
SECTION A-A
SCALE 1:125

SECTION: CHITAUNI TO MADHUBANI
Bore Hole Terminated at : 10.45M.

DEPTH (M)		SPT N-VALUE	DESCRIPTION OF SOIL	IS CLASSIFICATION
0.00	1.00	--	SM	LOOSE MEDIUM DENSE LITE GREY SILTY SAND (SM)
1.50	1.95	6		
3.00	3.45	9		
4.50	4.95	11		
6.00	6.45	13		
7.00	7.95	16		
9.00	9.45	19	SP	MEDIUM LITE GRAY POORLY GRADED SAND (SP)
10.00	10.95	23		
12.00	12.45	22		

W.L=1.10M
RL=108.888
FL=106.938
SBC=18.76 t/m² >12.99 t/m² (safe)

BRIDGE NO.: 25
BOREHOLE NO.: 01
AT CH:-14763.71



DROP/CURTAIN WALL
(TO BE DESIGNED AS PER SCOUR REQUIREMENTS).
SCALE 1:50

S.NO.	BR.NO.	CHAINAGE	SIZE OF STRUCTURE NO.XSPAN (M)XHT.(M)	SKEW ANGLE DEGREE	R.L RAIL LEVEL	F.L FORMATION LEVEL	G.L GROUNDLEVEL /EXISTING ROAD LEVEL	P.R.L PROP. ROAD LEVEL	F.L FOUNDING LEVEL
1	25	14785.33	1X6.0X4.0	30°	114.560	113.798	107.888	107.888	106.938

FOR EPC TENDER ONLY

(G.K.MISHRA) SSE/W/CON/GKP	RANJEET KUMAR SINGH (R.K.SINGH) SSE/DRG./CON/CPR	JE/DES/CON/GKP	(BILAL AHMAD) SSE/DESI/CON/GKP	DRAWN	CHK. BY

LOADING STANDARD
25T-AXLE LOAD-2008

		CE / CON / I/GKP	(SANJAY KANOJIA)
DY. CE / CON /BSB	(PANKAJ PANDEY)	DY. CE / CON. / P&D	(SHAILENDRA SINGH)
XEN / CON / GKP.	(S.K.SINGH)	XEN / C / DESIGN	(R.K.SINGH)

CONST. & HQ. OFFICER'S SIGNATURE

CLIENT : NORTH EASTERN RAILWAY

PROJECT : CHITAUNI-TAMKUHI ROAD NEW LINE PART-1

TITLE : GENERAL ARRANGEMENT DRAWING FOR PROPOSED BR. NO.25 (1X6.0MX4.0M) (RUB) KM 14/7-8

BETWEEN STATION :-CHITAUNI-MADHUBANI | KM : 14/7-8 CH:- 14785.33 M

TYPE OF MAP : GENERAL ARRANGEMENT DRAWING

FILE NO. AAA/2644/STR/BR.NO. 25/GAD/001

CONSULTANT aarvee associates architects engineers & consultants pvt. ltd.

CE/CON/ Plan No. B/RUB/CTE-TOI /2410/ -2025 | SCALE AS SHOWN

Date 21/3/2025 | SHEET 1/1