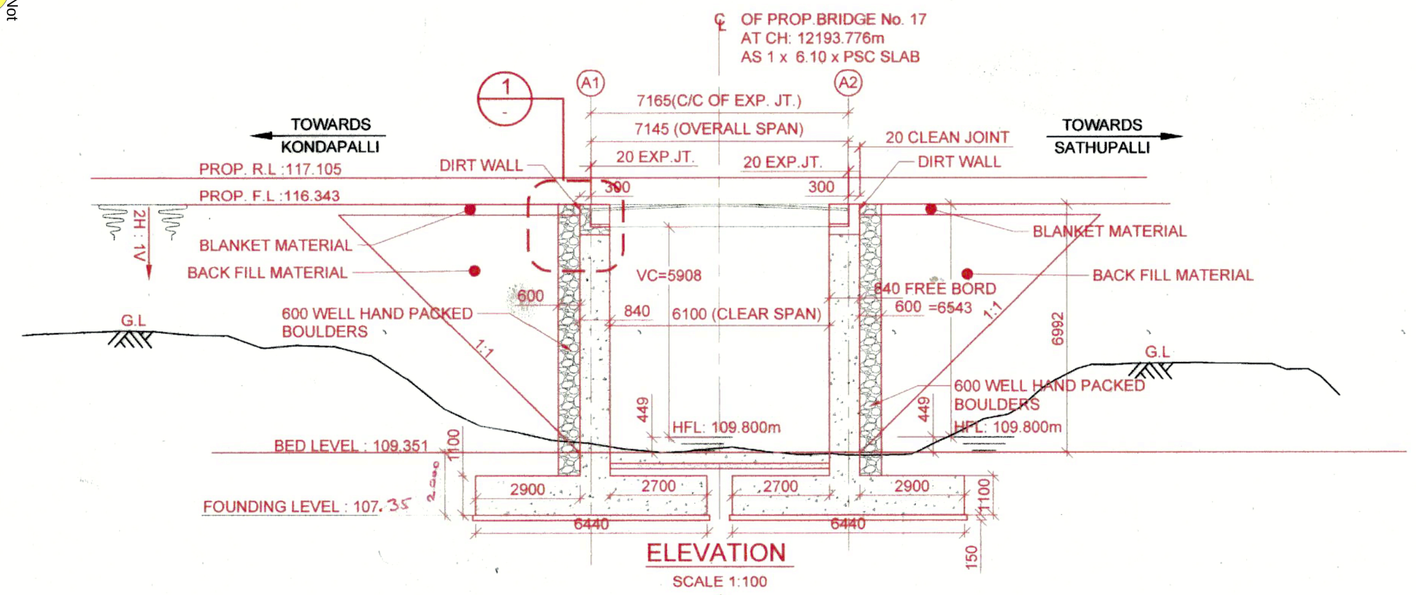
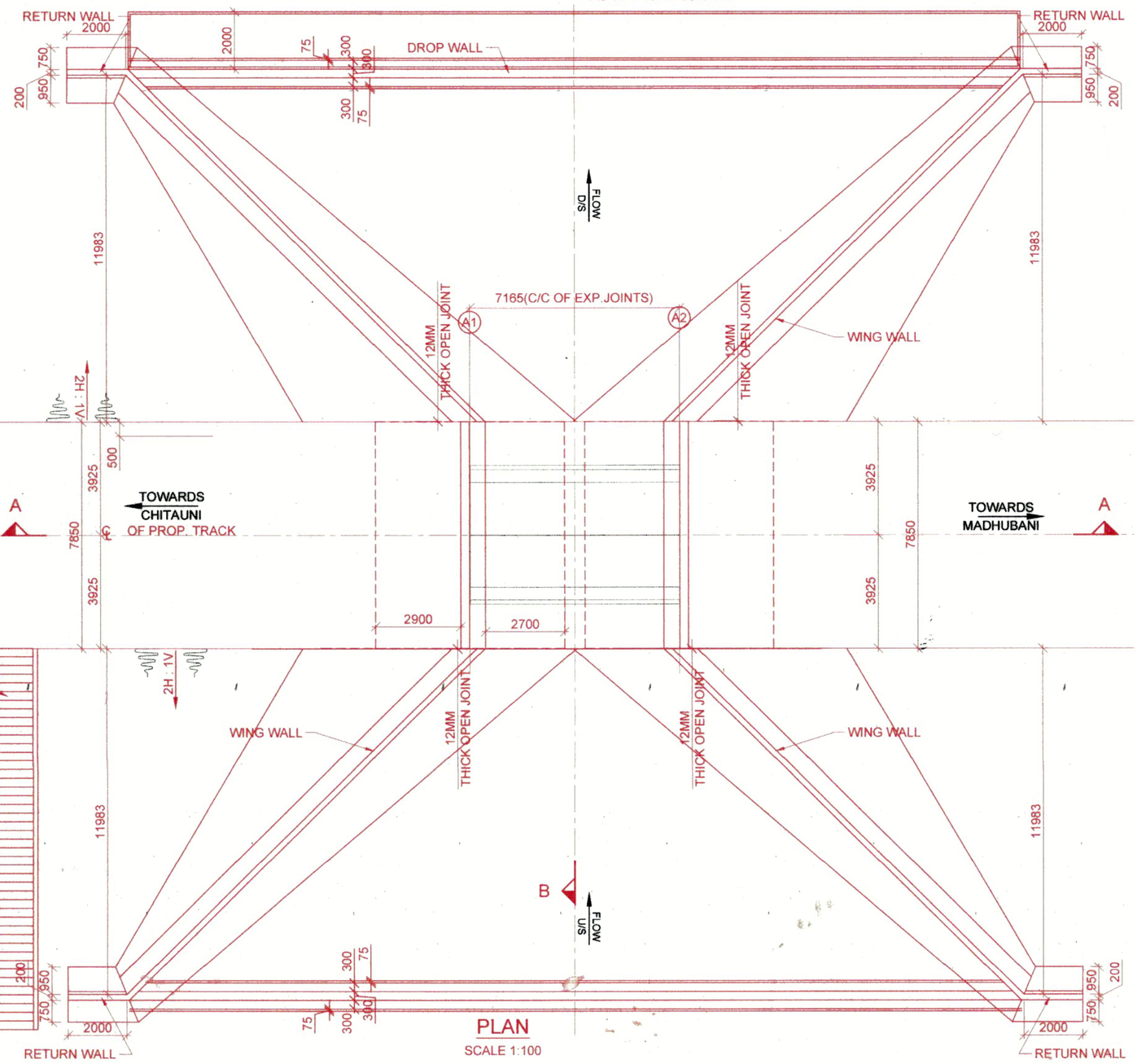


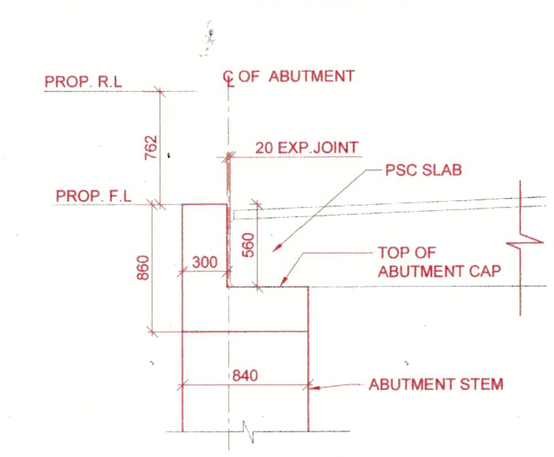
ELEVATION
SCALE 1:100

B

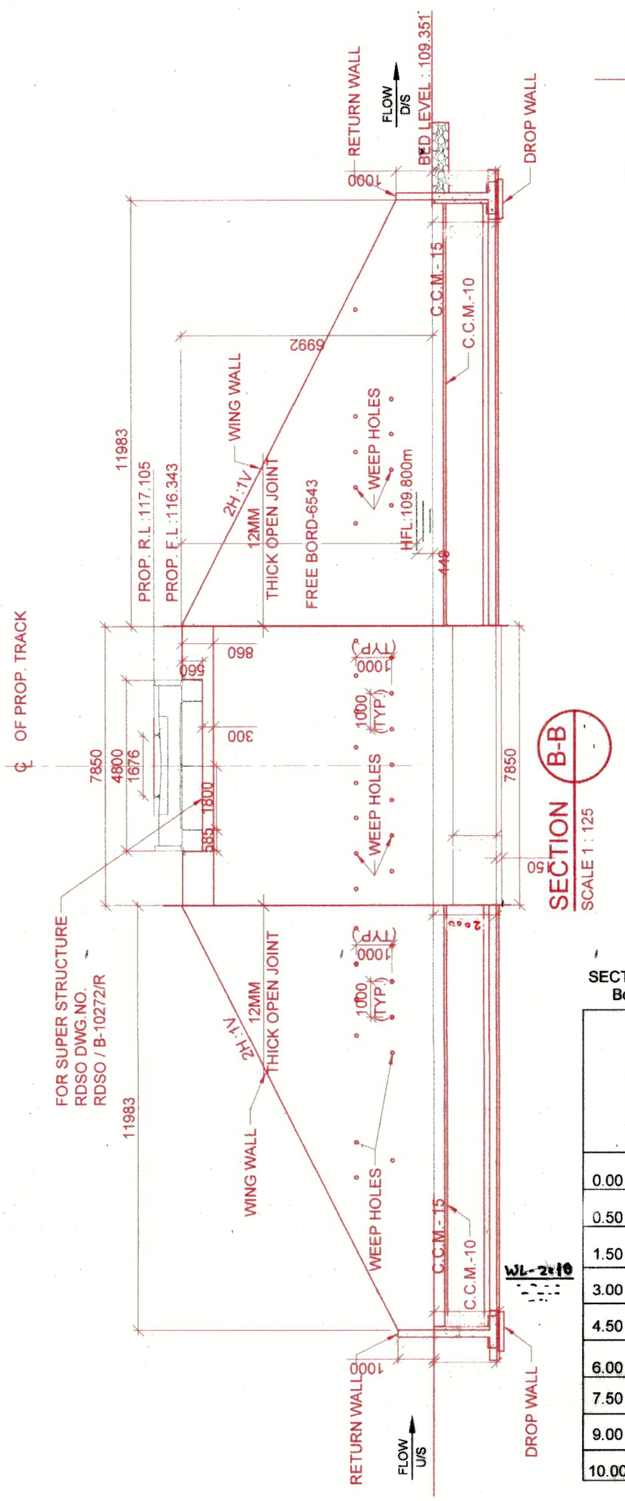
℄ OF PROP. BR. NO.31 AT CH: 18409.068 m
AS 1 x 9.15m PSC SLAB



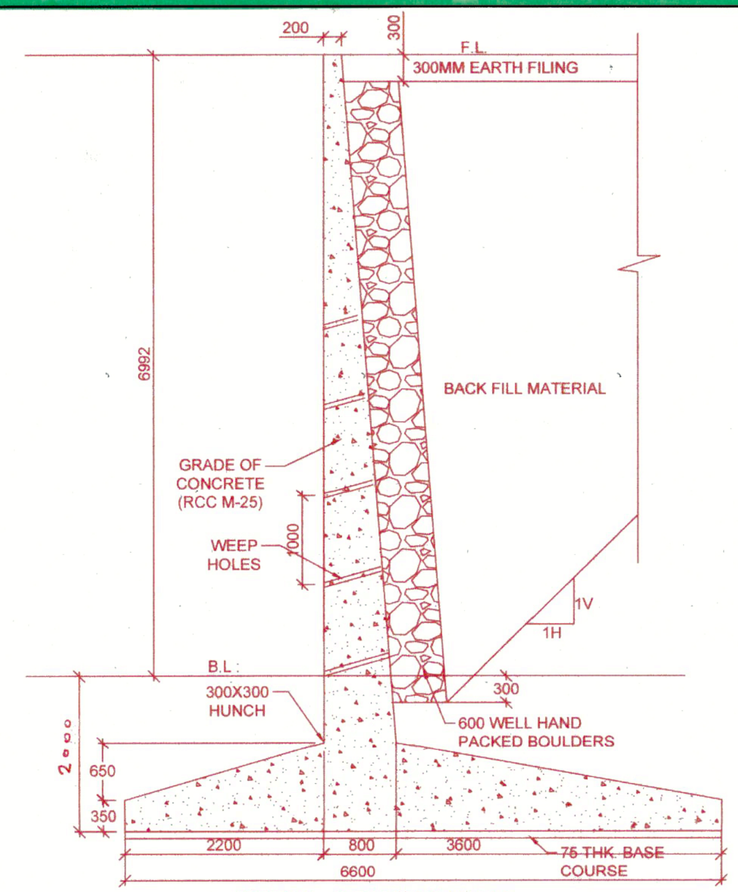
PLAN
SCALE 1:100



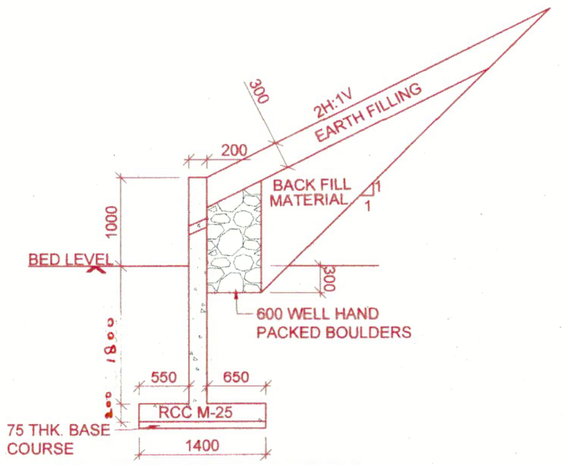
DETAIL 1
SCALE 1 : 30



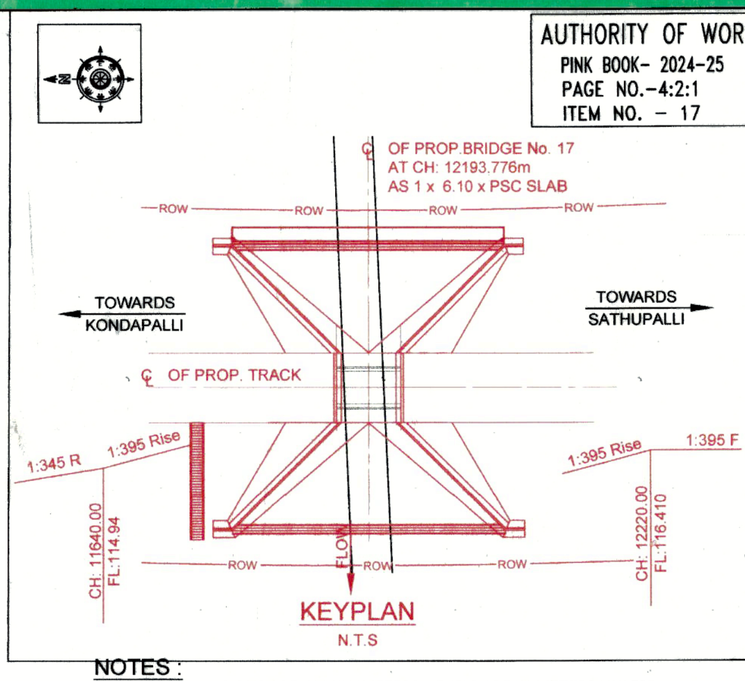
SECTION B-B
SCALE 1 : 125



DETAIL OF WING WALL
AT MAXIMUM HEIGHT (AS PER DESIGN)
SCALE 1:50



DETAIL OF RETURN WALL
SCALE 1:50



KEYPLAN
N.T.S

NOTES :

1. ALL DIMENSIONS ARE IN MILLIMETERS, LEVELS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
2. NO DIMENSIONS ARE TO BE SCALED FROM THE DRAWING (ONLY WRITTEN DIMENSIONS TO BE FOLLOWED).
3. SITE ENGINEER SHOULD VERIFY ALL THE DIMENSIONS AND LEVELS AT SITE BEFORE EXECUTION OF WORK IN THE FIELD.
4. ABUTMENT AND STRUCTURE DETAILS ARE AS PER DESIGN.
5. FOR REINFORCEMENT DETAIL OF SUPER STRUCTURE (PSC SLAB) SEE DRAWING NUMBER RDSO/B-10274.
6. WING/RETURN WALL AS PER CE/CON PLAN NO-B/14/02-11.
7. DROP WALL/ CURTAIN WALL AS PER DESIGN.
8. AS A PRECAUTIONARY MEASURE PROPER DROP WALL WITH BOULDER PITCHING AND CC FLOORING WILL BE PROVIDED AS PER THIS PLAN.
9. FOR MASS CONCRETE CC M-15 AND FOR ABUTMENT M-35 WILL BE USED EXCEPT OTHERWISE MENTIONED. ALL CONCRETING SHALL BE DONE CONFORMING TO IRS CONCRETE BRIDGE CODE.
10. ALL REINFORCEMENT SHALL BE HIGH YIELD STRENGTH DEFORMED BARS OF GRADE (FE-415 & CONFORMING TO IS: 1786).
11. THE BACKFILL BEHIND ABUTMENT, WING WALL AND RETURN WALL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE WITH UP TO DATE ALL CORRECTION SLIPS.
12. CIRCULAR WEEP HOLES OF 10 MM PVC PIPE SHALL BE PROVIDED IN THE WING WALL AND RETURN WALL ABOVE HFL AT INTERVALS OF 1000MM HORIZOTALLY AND VERTICALLY IN A STAGGERED POSITION.
13. THE MAXIMUM DESIGN FOUNDATION PRESSURE IS 20.0 T/m² SITE ENGINEER SHOULD GET THE SOIL CLASSIFICATION AND BEARING CAPACITY TESTED AND APPROVAL LEVEL SHOULD BE ENSURED.
14. ORDINARY PORTLAND CEMENT (OPC) GRADE 43 / 53 CONFIRMING I.S:811/I.S.12269 CAPABLE OF ACHIEVING THE REQUIRED DESIGED CONCRETE STRENGTH SHALL BE TAKEN IN CASE OF LOWER BEARING CAPACITY OR BAD SOIL.
15. ONLY ONE TYPE OF CEMENT AND STELL SHALL BE USED ON A PARTICULAR BRIDGE AND BRAND OF CEMENT AND STEEL SHOULD BE APPROVED BY SITE ENGINEER.
16. THE LOCATION AND PROVISION OF CONSTRUCTION JPOINTS SHALL BE DECIDED BY THE SITE ENGINEER. CONSTRUCTION JOINTS SHALL BE TESTED AS PER THE RELEVENT SPECIFICATION.
17. CONCRETE SHALL BE PRODUCED IN MECHANICAL MIXTURE OF CAPACITY NOT LESS THAN 200 LITERS HAVING INTEGRAL WEIGH BATCHING FACILITY AND AUTOMATIC WATER MEASURING AND DISPENSING.
18. PROPER COMPACTION OF CONCRETE SHALL BE ENSURED BY USE FORM AND/ OR NEEDLE VIBRATORS.
19. SHARP EDGES OF CONCRETE SHALL BE CHAMBERED.
20. THIS BRIDGE LIES IN SEISMIC ZONE IV.
21. PROVISION OF INSPECTION STAIRCASE SHOULD BE MADE ON SITE.
22. A MINIMUM DEPTH BELOW FLOOR LEVEL OF CURAIN WALL SHOULD BE 3M ON UPSTREAM SIDE AND 2.5M ON DOWNSTREAM SIDE AS PER IRC:89" AND SHOW DROP AND CURTAIN WALL WITH THESE DIMENSIONS.
23. FLEXIBLE APRON 1M THICK COMPRISING OF LOOSE STONE BOULDER (WEIGHING NOT LESS THAN 40KG) SHOULD BE PROVIDED BEYOND THE CURTAIN WALLS FOR A MINIMUM DISTANCE OF 3M ON UP STREAM SIDE AND 6M ON DOWNSTREAM AS PER IRC SP13.
24. FOOTPATH T-SLAB AS PER RDSO DRAWING NO. B-10294 MUST BE PROVIDED ON SITE.
25. TRANSITION SYSTEM AS PER RDSO DRG. NO: GE/SWGN/912A/ REV-0/2024

LOADING STANDARD
25T-AXLE LOAD-2008

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

DEPTH (M)		SPT N-VALUE	DESCRIPTION OF SOIL	IS CLASSIFICATION
0.00	0.50	_	ML	LOOSE TO MEDIUM DENSE LITE BROWN SANDY SILT (ML)
0.50	0.95	7		
1.50	1.95	10		
3.00	3.45	14		
4.50	4.95	14		
6.00	6.45	15	SM	MEDIUM DENSE LITE GRAY,SILTY SAND (SM)
7.50	7.95	16		
9.00	9.45	16		
10.00	10.45	17		

RL=109.351
FL=107.610

BRIDGE NO.: 17
BOREHOLE NO.: 01

COLOR CODE LEGEND

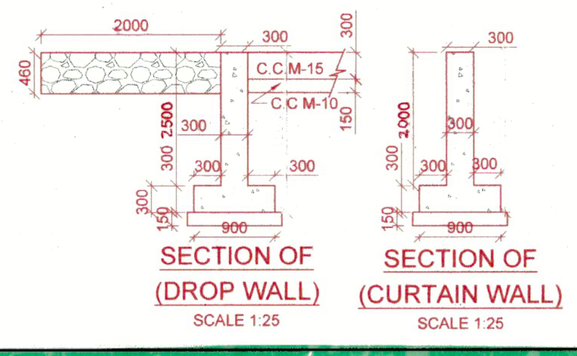
RED	-	PROPOSED
CONTINUOUS	-	VISIBLE
BLACK	-	EXISTING
DOTTED	-	INVISIBLE

FOR EPC TENDER ONLY

LEGEND

R.L	RAIL LEVEL
F.L	FORMATION LEVEL
T.O.F	TOP OF FOOTING
B.O.F	BOTTOM OF FOOTING
PROP.	PROPOSED
EXG.	EXISTING
THK.	THICKNESS
EXP. JT.	EXPANSION JOINT
C.C	CEMENT CONCRETE
A.C.T.L.	ABUTMENT CAP TOP LEVEL
P.C.T.L.	PIER CAP TOP LEVEL
GL	GROUND LEVEL
BL	BED LEVEL
CH	CHAINAGE
HFL	HIGH FLOOD LEVEL
FB	FREE BOARD
VC	VERTICAL CLEARANCE

HFL IN (M)	FLOOR LEVEL IN (M)	PROPOSED FORMATION LEVEL (M)	PROPOSED RAIL LEVEL (M)	DISCHARGE IN CUMECS	VERTICAL CLEARANCE IN MM		FREE BOARD IN MM	
					PROVIDED	REQUIRED	PROVIDED	REQUIRED
109.800	108.573	116.343	117.105	4.156	5908	NIL	6543	1000



SECTION OF (DROP WALL)
SCALE 1:25

SECTION OF (CURTAIN WALL)
SCALE 1:25

CONSTRUCTION DEPTH AT BRIDGE APPROACH

	PROP. LINE
1) RAIL	172 mm
2) RUBBER PAD	10 mm
3) PSC SLEEPER	230 mm
4) BALLAST	350 mm
TOTAL	762 mm

(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

		CE / CON / I/GKP	(SANJAY RANJAN)
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. 17 (1X6.1M) PSC SLAB (MINOR) KM 12/1-2

BETWEEN STATION :-CHITAUNI-MADHUBANI | KM : 12/1-2CH:- 12193.776M

TYPE OF MAP : GENERAL ARRANGEMENT DRAWING

FILE NO. AAV/2644/STR/BR.NO. 17/GAD/001

CONSULTANT: aarvee associates, architects engineers & consultants pvt. ltd.

CE/CON./ Plan No. B/RDSO/CTE-TOI/207/07 2025 | SCALE AS SHOWN

Date: 21/07/2025 | SHEET : 1/1