CHITAUNI

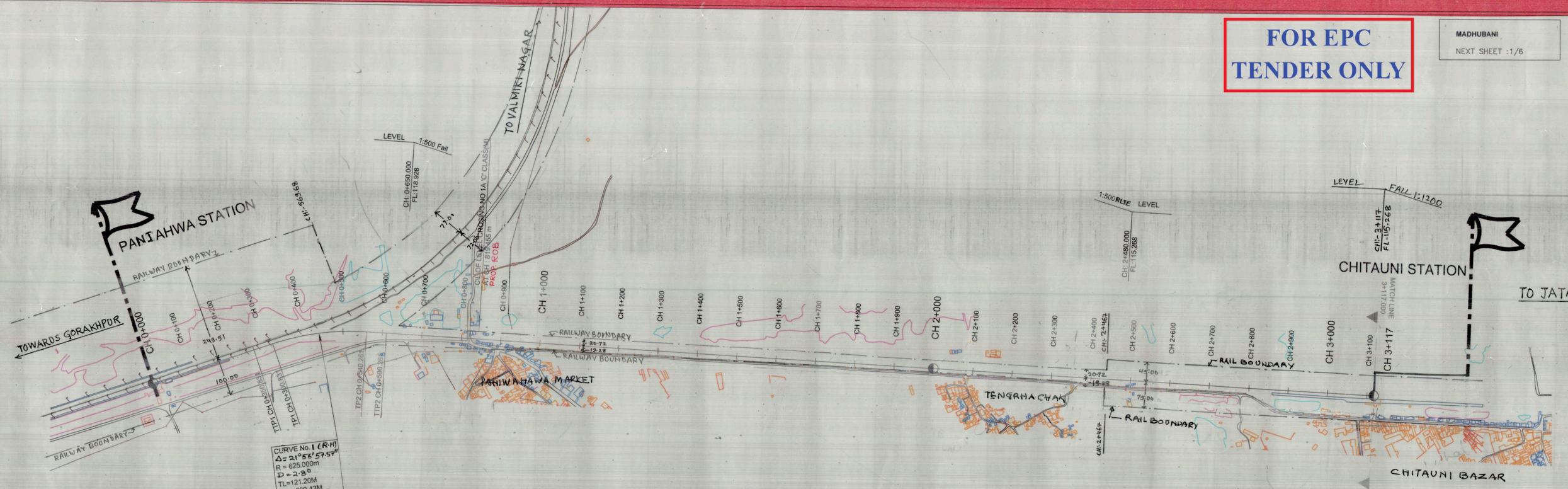
FOR EPC TENDER ONLY

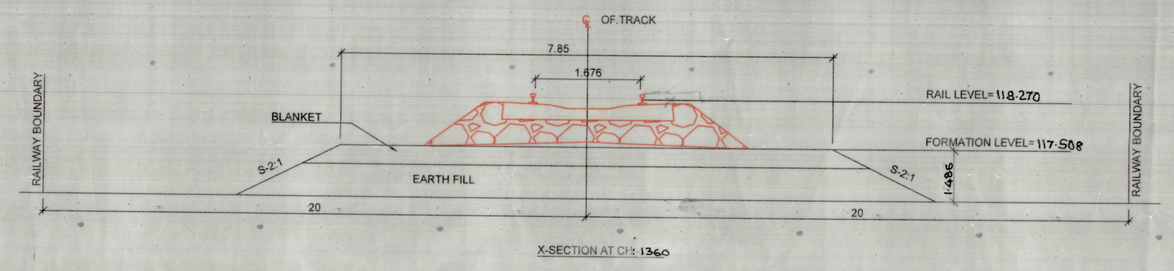
MADHUBANI

NEXT SHEET :1/6

AUTHORITY OF WORK
PINK BOOK YEAR:-2024-2025
ITEM NO. :- 5
PAGE NO. :-4.2.1

SHEET NO: 1/1





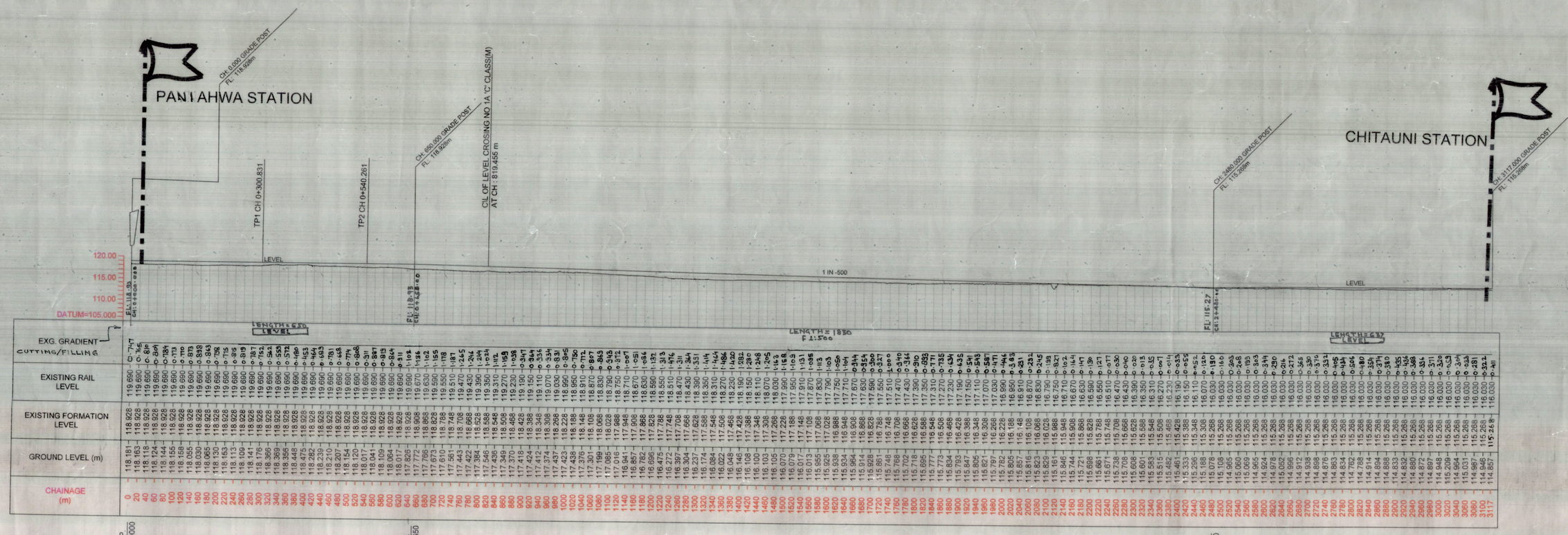
X-SECTION AT CH:1360

Curve Details

S. No.	Curve No.	Degree	Radius R (m)	Direction	Delta Angle	Tangent Length	Curve length	TP1 CH.	TP2 CH.	Tr. Length	Cant
1	1	2.8	625	Right	21 56' 57.57"	121.2006	239.430	300.831	540.261	100	125

Level crossing Details

S. No.	LC No.	Chainage (m)	Formation Level (m)	Remarks
1	1 A 'C' CLASS (M)	819.455	118.588	-



NOTES:-

1. ALL DIMENSION ARE IN METERS.
2. ALL COORDINATES ARE BASED ON UTM PROJECTION, WGS 84 DATUM~~, ZONE 45N~~ AT CH:-14750 BESIDE TAMPLE CHABOTRA.
3. ALL HEIGHTS ARE BASED ON GTS BENCH MARK ABOVE MEAN SEA LEVEL.
4. KILOMETERS SHOWN ARE RECKONED FROM CENTRE LINE OF CHITAUNI STATION BUILDING.
5. THIS PREPARED DRAWING IS BASED ON AERIAL LIDAR SURVEY DONE DURING THE MONTH OF MAY/APRIL 2024.
6. GROUND PROFILE OF MAJOR WATER BODIES ARE BASED ON BATHYMETRIC SURVEY.
7. THE EXISTING LEVELS AND GRADES SHOWN ARE AS PER SITE SURVEY.
8. THE RULING GRADIENT OF CHITAUNI-MADHUBANI SECTION IS 1 IN 300.
9. ALL THE CURVES IN THE DIAGRAM HAVE BEEN SHOWN BY INCORPORATING GRADE COMPENSATION.
10. TRANSITION LENGTH OF ALL PROPOSED CURVES HAVE BEEN DESIGNED FOR 160 KMPH EXCEPT CURVE NO. 1
11. DESIGN SPEED OF CURVES IS SHOWN IN TABLE (A).
12. SECTIONAL SPEED = 160 KMPH
13. TRACK STRUCTURE SHALL BE AS FOLLOWS:
    - RAIL : 60 KG/M
    - SLEEPER : WIDER BASE PSC SLEEPERS
    - BALLAST CUSHION: 350 MM
    - RUBBER PAD : 10 MM
    - SLEEPER HEIGHT : 230 MM
    - RAIL HEIGHT : 172 MM

"CERTIFIED THAT THE RAILWAY LAND BOUNDARY HAS BEEN VERIFIED FROM THE AVAILABLE LAND PLANS"

SSE/WORK/CON/CKP — XEN/CON/CKP

Gradient Details

FROM CH	TO CH	LENGTH	FROM FL	TO FL	GRADE	RISE/FALL
000	650	410	115.422	116.46	LEVEL	
650	2480	220	116.46	116.46	500	FALL
2480	3117.344	600	116.46	114.941	LEVEL	

THIS DRAWING SUPERCEDES CE PLAN NO.- L/PANIAHWA-CHHITAUNI/12/12-13 ~~CH-2448~~

GMLI-2025/1-906175

ABBREVIATIONS:-

S.NO.	ITEM	SYMBOL	S.NO.	ITEM	SYMBOL
1.	R	RADIUS	12.	HFL	HIGHEST FLOOD LEVEL
2.	Δ	DEFLECTION ANGLE	13.	BL	BED LEVEL
3.	TRL	TRANSITION LENGTH	14.	ROB	ROAD OVER BRIDGE
4.	TL	TANGENT LENGTH	15.	RUB	ROAD UNDER BRIDGE
5.	SL	STRAIGHT LINE LENGTH	16.	PI	POINT OF INTERSECTION
6.	CL	CURVE LENGTH	17.	TTP1	TANGENT TO TRANSITION POINT-1
7.	CCL	CIRCULAR CURVE LENGTH	18.	TP1	TANGENT POINT-1
8.	PVI	POINT OF VERTICAL INTERSECTION	19.	TP2	TANGENT POINT-2
9.	Ca	ACTUAL CANT	20.	TTP2	TANGENT TO TRANSITION POINT-2
10.	Cd	CANT DEFICIENCY	21.	BVC	BEGINNING OF VERTICAL CURVE
11.	Vmax	MAXIMUM PERMISSIBLE SPEED	22.	EVC	END OF VERTICAL CURVE

LEGEND:-

PROPOSED WORKS SHOWN THUS	
EXISTING WORKS SHOWN THUS	
DISMANTLED WORKS SHOWN THUS	
BRIDGES SHOWN THUS	
PROPOSED RAILWAY LAND BOUNDARY SHOWN THUS	ROW ROW
CULTIVATION LANDS SHOWN THUS	
OPEN LANDS SHOWN THUS	
WATER BODIES SHOWN THUS	
ROADS SHOWN THUS	
BUILDINGS SHOWN THUS	
HIGH TRANSMISSION TOWERS SHOWN THUS	
ELECTRIC LINES SHOWN THUS	

HEADQUARTER'S OFFICER'S

DESIGNATION	SIGNATURE	DESIGNATION	SIGNATURE
CE/CON./I/GKP	(SANJAY KANOJIA)	CE/P&D/NER	20.6.25
DY.CE/CON./P&D	(SHAILENDRA SINGH)	DY.CE/P&D/NER	20.6.2025
XEN/CON./PLG	(MFH MARUFI)		

DIVISIONAL OFFICER'S

DESIGNATION	SIGNATURE	DESIGNATION	SIGNATURE
DY CE/CON/BSB	(PANKAJ ANANDE)	Sr.DEN/CO/BSB	(JAGDISH RATAN)
XEN/CON/GKP	SHASHI KANT SINGH (S.K. SINGH) Digitally signed by SHASHI KANT SINGH Date: 2025.06.04 18:23:44 +05'30'	Sr.DEN/II/BSB	(VINEET KUMAR)

CLIENT: NORTH EASTERN RAILWAY, NEW DELHI

YEAR OF SURVEY: 2024

CONSULTANT : ARVEE ASSOCIATES, www.arvee.co.in, Revela Residency, Srinagar Colony Main Rd., Hyderabad-82, India, Tel: 040-65731631, Fax: +91-40-23734677, E-mail: railways@arvee.net; web:www.arvee.net

PROJECT : **CONSTRUCTION OF NEW B.G. LINE BETWEEN PANIAHWA TO CHITAUNI (3.117 km).**

TITLE : **ALIGNMENT PLAN AND L- SECTION**
PANIAHWA-CHHITAUNI 00+000 - 03+117 KM

Ref.code:	HORIZONTAL	SCALE:	1: 5000
	VERTICAL		1: 500
DRG.No:		REV:	
		DATE:	R1

SSE/~~P.WAY~~/CON./GKP — SSE/~~DRG.~~/CON./GKP — SSE/P.WAY/CON./GKP