



National Highways Authority of India

Construction of Four-lane "Western side spur of Rampur-Rudrapur section connecting NH-24 to NH-87 bypassing Rampur town" (Design Km 00+000 to Km13+700) on EPC Mode in the state of Uttar Pradesh.

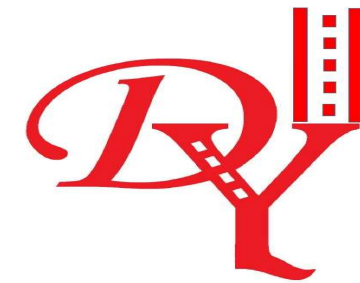
INTERCHANGE DRAWINGS

DESIGN CONSULTANT



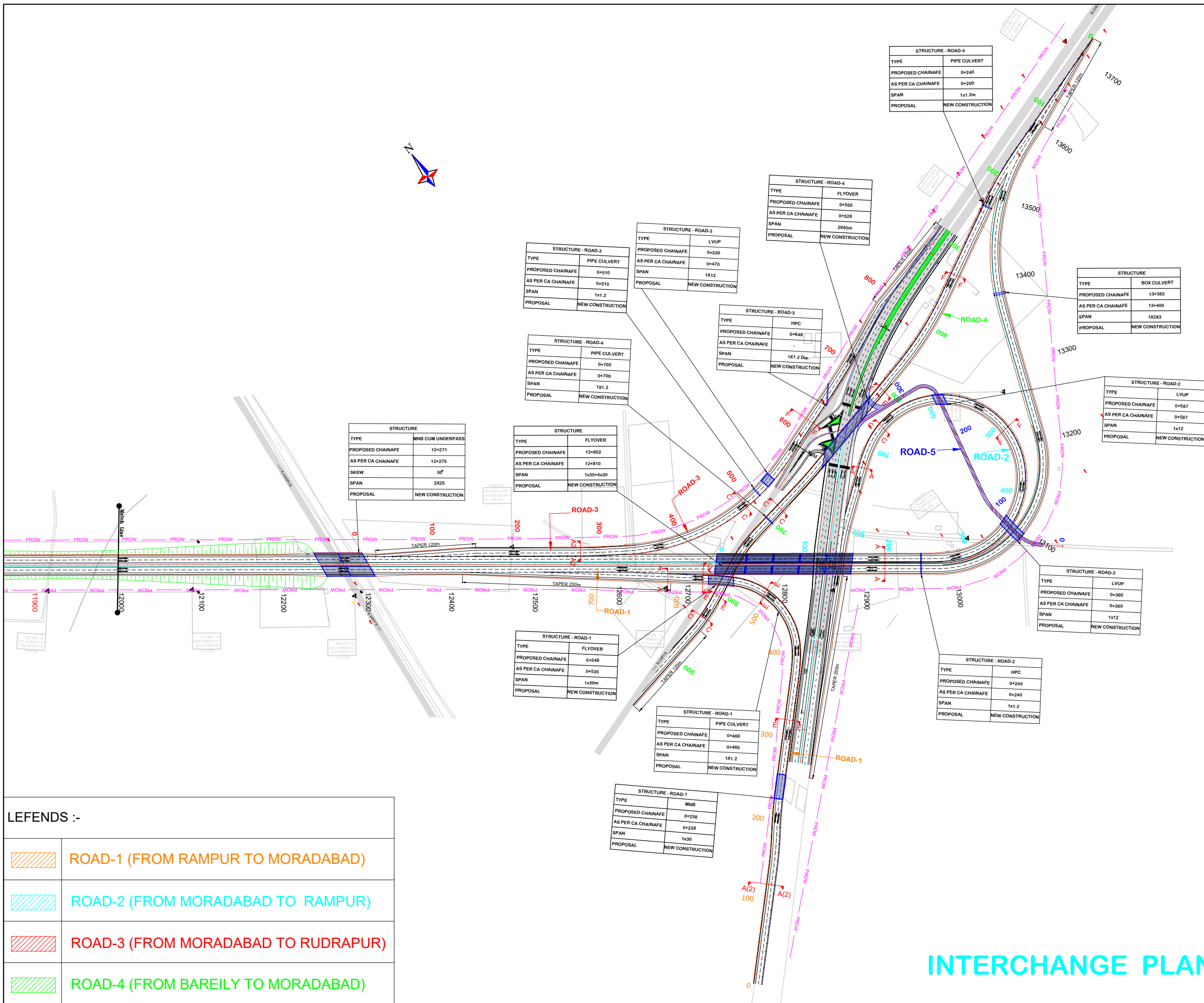
CIVILMANTRA INFRACON PVT.LTD

EPC CONTRACTOR



**DEV YASH PROJECTS &
INFRASTRUCTURE PVT. LTD.**

INTERCHANGE AT CH. 12+700



LEFENDS :-	
	ROAD-1 (FROM RAMPUR TO MORADABAD)
	ROAD-2 (FROM MORADABAD TO RAMPUR)
	ROAD-3 (FROM MORADABAD TO RUDRAPUR)
	ROAD-4 (FROM BAREILY TO MORADABAD)

INTERCHANGE PLAN AT CH. 12+700

ALIGNMENT REPORT

HORIZONTAL ALIGNMENT REPORT (ROAD-1)

Intersection Point Chainage	Intersection Point X	Intersection Point Y	Arc Start Chainage	Arc End Chainage	Arc Length	Radius	Hand of Arc	Transition Start Chainage	Transition End Chainage	Transition Length	Speed (Kmph)	Superelevation (%)	EXTRA WIDENING
0+158.862	311059.053	3189263.235	0+142.054	0+175.649	33.595	400	Left	-	-	-	40	-	-
0+210.080	311090.893	3189303.379	0+192.865	0+227.273	34.408	400	Right	-	-	-	40	-	-
0+470.578	311253.556	3189504.628	0+414.968	0+514.593	99.625	90	Left	0+364.968	0+564.593	50	40	5.00	0.90
0+666.408	311104.54	3189646.671	0+657.823	0+674.990	17.166	400	Left	-	-	-	40	-	-

HORIZONTAL ALIGNMENT REPORT (ROAD-2)

Intersection Point Chainage	Intersection Point X	Intersection Point Y	Arc Start Chainage	Arc End Chainage	Arc Length	Radius	Hand of Arc	Transition Start Chainage	Transition End Chainage	Transition Length	Speed	Superelevation (%)	EXTRA WIDENING
0+512.384	311649.829	3189335.382	0+288.617	0+686.829	398.213	100	Left	0+243.617	0+731.829	45	40	5.00	0.60
0+810.428	311340.732	3189530.154	0+801.367	0+819.481	18.115	250	Left	0+781.367	0+839.481	20	40	2.84	0.6

HORIZONTAL ALIGNMENT REPORT (ROAD-3)

Intersection Point Chainage	Intersection Point X	Intersection Point Y	Arc Start Chainage	Arc End Chainage	Arc Length	Radius	Hand of Arc	Transition Start Chainage	Transition End Chainage	Transition Length	Speed	Superelevation(%)	EXTRA WIDENING
0+286.524	311082.961	3189685.527	0+271.840	0+301.203	29.363	600	Left	-	-	-	40	-	-
0+452.303	311224.781	3189599.717	0+338.949	0+551.794	212.845	250	Left	0+318.949	0+571.794	20	40	2.84	0.6
0+699.702	311471.048	3189686.806	0+654.821	0+744.524	89.703	1000	Left	-	-	-	40	-	-
0+781.394	311544.733	3189722.217	0+748.954	0+813.772	64.818	600	Right	-	-	-	40	-	-

HORIZONTAL ALIGNMENT REPORT (ROAD-4)

Intersection Point Chainage	Intersection Point X	Intersection Point Y	Arc Start Chainage	Arc End Chainage	Arc Length	Radius	Hand of Arc	Transition Start Chainage	Transition End Chainage	Transition Length	Speed	Superelevation (%)	EXTRA WIDENING
0+201.282	311747.132	3189770.519	0+163.349	0+239.036	75.687	450	Left	-	-	-	40	-	-
0+408.584	311565.769	3189669.743	0+358.430	0+458.218	99.788	400	Right	-	-	-	40	-	-
0+630.765	311350.421	3189612.984	0+614.316	0+647.203	32.887	500	Right	-	-	-	40	-	-
0+746.854	311236.798	3189589.356	0+741.641	0+752.062	10.421	150	Left	0+711.641	0+782.062	30	40	4.74	0.6
0+840.765	311151.649	3189549.83	0+822.515	0+858.950	36.435	250	Right	0+802.515	0+878.950	20	40	2.84	0.6
0+906.166	311088.243	3189533.58	0+890.169	0+922.133	31.964	300	Left	-	-	-	40	-	0.6



RD	JUN-2026	SUBMISSION OF IC ALIGNMENT REPORT			
REV	DATE	DESCRIPTION	A	B	C



PROJECT : Construction of Four-lane "Western side spur of Rampur-Rudrapur section connecting NH-24 to NH-87 bypassing Rampur town" (Design Km 00+000 to Km13+700) on EPC Mode in the state of Uttar Pradesh

DRAWING TITLE : HORIZONTAL ALIGNMENT REPORT
SCALE : AS SHOWN PAPER SIZE : A3

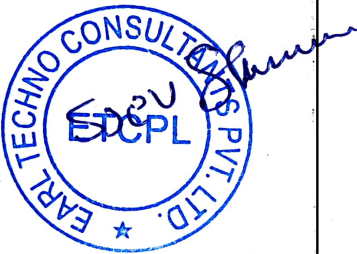
DRG.NO.CIPL/D1112/HW/DWG/IC/AR/ 001	DATE : JUN.-2026	REV: R0
DESIGNED PM	DRAWN YK	CHECKED AK
		APPROVED SM

VERTICAL ALIGNMENT REPORT (ROAD -1)											
Sr.No.	Intersection Point Chainage	Intersection Point Level	Curve Start Gradient (%)	Curve End Gradient (%)	Curve length (m)	K Value	Curve Type	Curve Start Chainage	Curve Start Level	Curve End Chainage	Curve End Level
1	0+030.310	195.849	-1.105	0.489	60	37.631	Sag	0+000.310	196.181	0+060.310	195.996
2	0+212.452	196.740	0.489	0.970	60	124.786	Sag	0+182.452	196.593	0+242.452	197.031
3	0+388.740	198.450	0.970	0.727	90	371.049	Hog	0+343.740	198.013	0+433.740	198.777
4	0+670.272	200.498	0.727	-1.065	30	16.740	Hog	0+655.272	200.389	0+685.272	200.338
5	0+746.540	199.686	-1.065	-0.510	25	45.094	Sag	0+734.040	199.819	0+759.040	199.622

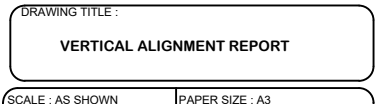
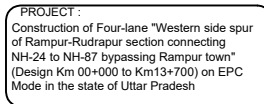
VERTICAL ALIGNMENT REPORT - ROAD 2											
Sr.No.	Intersection Point Chainage	Intersection Point Level	Curve Start Gradient	Curve End Gradient	Curve length	K Value	Curve Type	Curve Start Chainage	Curve Start Level	Curve End Chainage	Curve End Level
1	0+020.999	201.450	0.734	0.000	30	40.854	Hog	0+005.999	201.340	0+035.999	201.450
2	0+302.181	201.449	0.000	-2.156	290	134.525	Hog	0+157.181	201.450	0+447.181	198.323
3	0+762.942	191.515	-2.156	1.700	60	15.560	Sag	0+732.942	192.162	0+792.942	192.025

VERTICAL ALIGNMENT REPORT (ROAD -3)											
Sr.No.	Intersection Point Chainage	Intersection Point Level	Curve Start Gradient(%)	Curve End Gradient (%)	Curve length(m)	K Value	Curve Type	Curve Start Chainage	Curve Start Level	Curve End Chainage	Curve End Level
1	0+086.525	200.571	0.169	-0.948	150	134.304	Hog	0+011.525	200.444	0+161.525	199.860
2	0+214.843	199.355	-0.948	1.061	85	42.317	Sag	0+172.343	199.758	0+257.343	199.806
3	0+312.786	200.394	1.061	-2.147	50	15.585	Hog	0+287.786	200.129	0+337.786	199.857
4	0+792.062	190.102	-2.147	-0.531	55	34.034	Sag	0+764.562	190.693	0+819.562	189.956

VERTICAL ALIGNMENT REPORT - ROAD 4											
Sr.No.	Intersection Point Chainage	Intersection Point Level	Curve Start Gradient	Curve End Gradient	Curve length	K Value	Curve Type	Curve Start Chainage	Curve Start Level	Curve End Chainage	Curve End Level
1	0+165.882	189.314	0.129	3.364	50	15.458	Sag	0+140.882	189.282	0+190.882	190.155
2	0+480.000	199.880	3.364	0.000	60	17.838	Hog	0+450.000	198.871	0+510.000	199.880
3	0+633.000	199.880	0.000	-5.352	45	8.409	Hog	0+610.500	199.880	0+655.500	198.676
4	0+829.829	189.346	-5.352	1.135	120	18.500	Sag	0+769.829	192.557	0+889.829	190.027

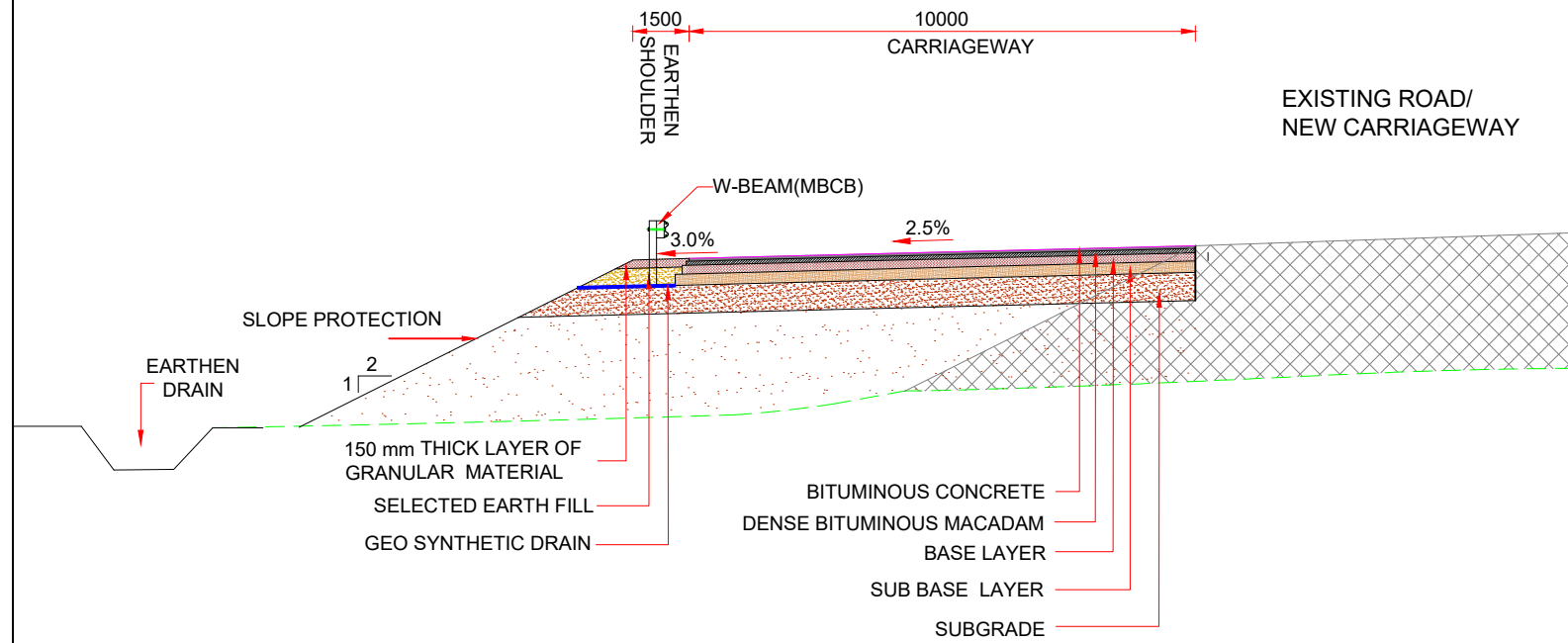


REV	DATE	DESCRIPTION	A	B	C
RD	JUN-2026	SUBMISSION OF IC ALIGNMENT REPORT			

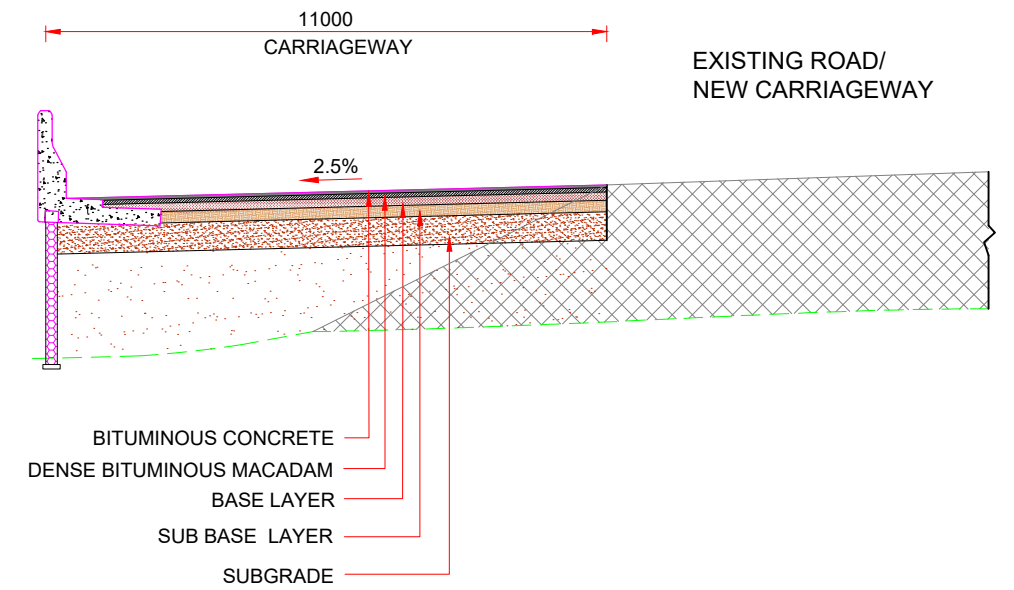


DRG.NO.CIPL/D1112/HW/DWG/IC/AR/ 002			
DATE : JUN.-2026	REV: R0		
DESIGNED PM	DRAWN YK	CHECKED AK	APPROVED SM

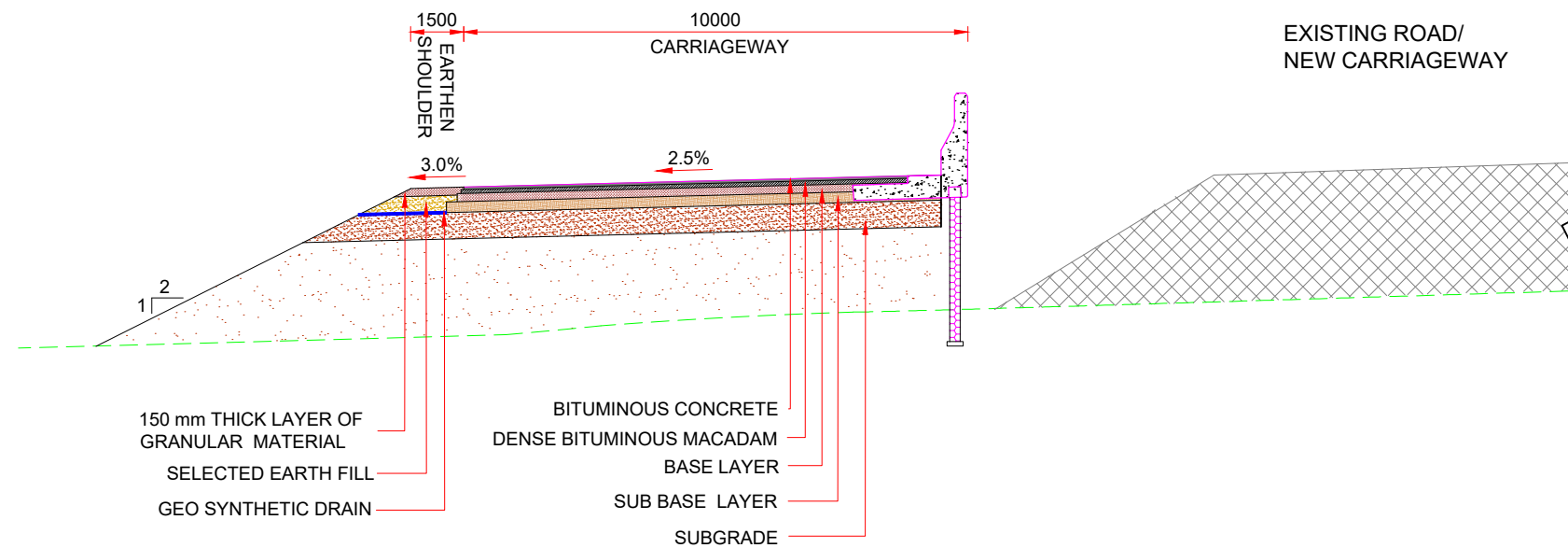
TYPICAL CROSS SECTIONS



SECTION - "A-A"



SECTION - A-A(2)



SECTION - A-A(1)



NOTE

- All dimensions are in millimeter unless otherwise specified.
- Thickness of the Layers has been shown in Pavement design report.
- Kerb Channel & Chute Drain arrangement shall be provided for Embankment height > 6m.
- Metal Beam Crash Barrier shall be provided for Embankment height > 3m.

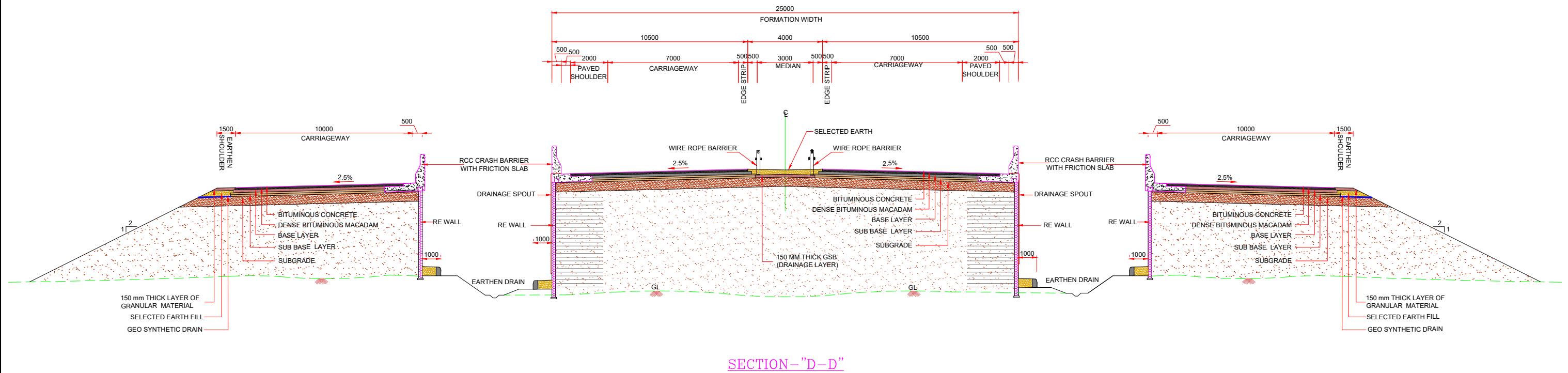
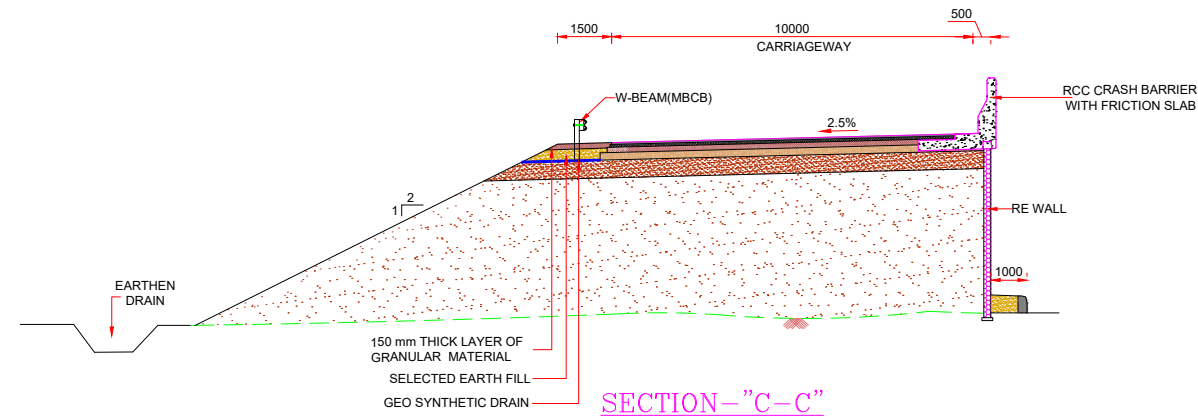
REV	DATE	DESCRIPTION	A	B	C
RD	JUN-2026	SUBMISSION OF IC TYPICAL CROSS SECTIONS			



PROJECT : Construction of Four-lane "Western side spur of Rampur-Rudrapur section connecting NH-24 to NH-87 bypassing Rampur town" (Design Km 00+000 to Km13+700) on EPC Mode in the state of Uttar Pradesh

DRAWING TITLE : TYPICAL CROSS SECTION
SCALE : AS SHOWN PAPER SIZE : A3

DRG.NO.CIPL/D-1112/HW/DWG/IC/TCS/ 001	DATE : JUN.-2026	REV: R0
DESIGNED : PM	DRAWN : YK	CHECKED : AK
		APPROVED : SM



NOTE

- All dimensions are in millimeter unless otherwise specified.
- Thickness of the Layers has been shown in Pavement design report.
- Kerb Channel & Chute Drain arrangement shall be provided for Embankment height > 6m.
- Metal Beam Crash Barrier shall be provided for Embankment height > 3m.

REV	DATE	DESCRIPTION	A	B	C
RD	JUN-2026	SUBMISSION OF IC TYPICAL CROSS SECTIONS			

CLIENT:
NATIONAL HIGHWAYS
AUTHORITY OF INDIA

AUTHORITY:
ARTEFACT PROJECTS LTD.

EPC CONTRACTOR:
DEV YASH PROJECTS &
INFRASTRUCTURE PVT LTD

PROOF CONSULTANT:
HCC
HIGHRAISE CONSTRUCTION AND
CONSULTANT PRIVATE LIMITED

SAFETY CONSULTANT:
EARL TECHNO
CONSULTANTS PVT. LTD.
EARL TECHNO CONSULTANTS PVT. LTD

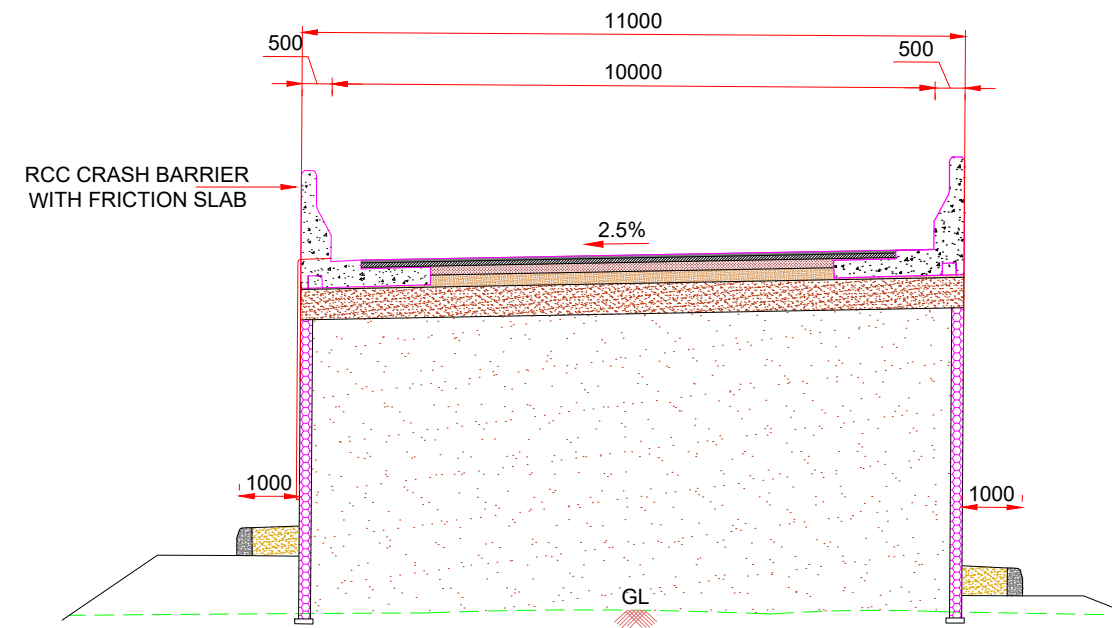
DESIGN CONSULTANT:
CIVILMANTRA
INFRACON PVT LTD

PROJECT:
Construction of Four-lane "Western side spur
of Rampur-Rudrapur section connecting
NH-24 to NH-87 bypassing Rampur town"
(Design Km 00+000 to Km13+700) on EPC
Mode in the state of Uttar Pradesh

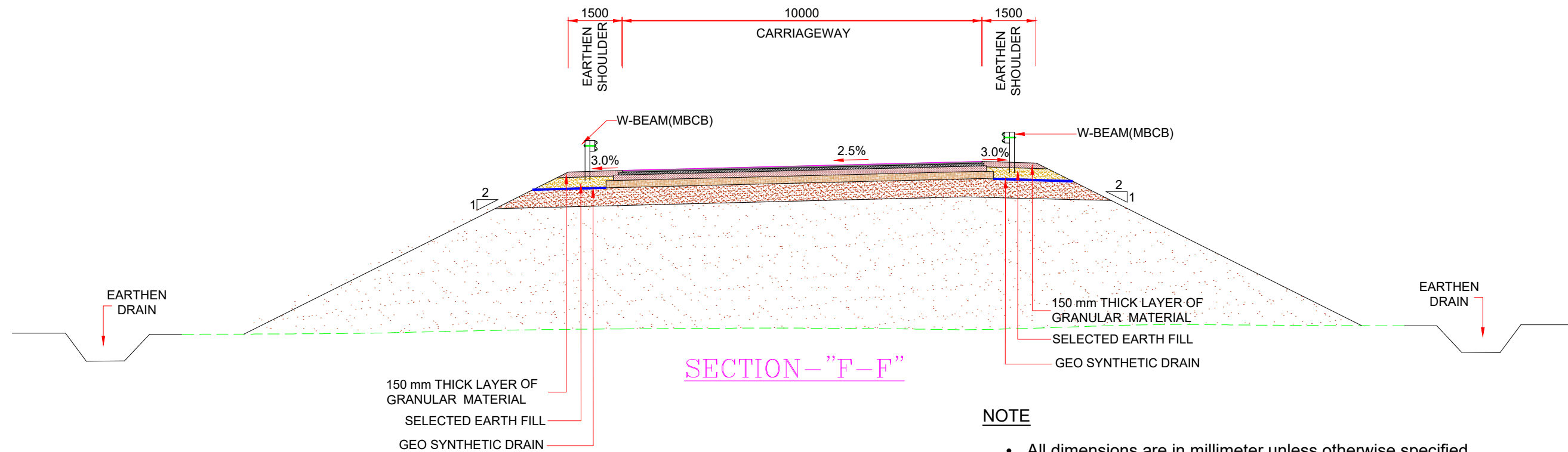
DRAWING TITLE:
TYPICAL CROSS SECTION

DRG.NO.CIPL/D-1112/HW/DWG/IC/TCS/ 003	DATE : JUN.-2026	REV: R0
DESIGNED PM	DRAWN YK	CHECKED AK
		APPROVED SM

SCALE : AS SHOWN PAPER SIZE : A3



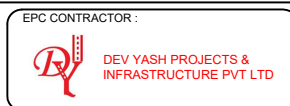
SECTION - "E-E"



NOTE

- All dimensions are in millimeter unless otherwise specified.
- Thickness of the Layers has been shown in Pavement design report.
- Kerb Channel & Chute Drain arrangement shall be provided for Embankment height > 6m.
- Metal Beam Crash Barrier shall be provided for Embankment height > 3m.

REV	DATE	DESCRIPTION	A	B	C
RD	JUN-2026	SUBMISSION OF IC TYPICAL CROSS SECTIONS			



PROJECT : Construction of Four-lane "Western side spur of Rampur-Rudrapur section connecting NH-24 to NH-87 bypassing Rampur town" (Design Km 00+000 to Km13+700) on EPC Mode in the state of Uttar Pradesh

DRAWING TITLE : TYPICAL CROSS SECTION

SCALE : AS SHOWN PAPER SIZE : A3

DRG.NO.CIPL/D-1112/HW/DWG/IC/TCS/ 004	DATE : JUN.-2026	REV: R0
DESIGNED PM	DRAWN YK	CHECKED AK
		APPROVED SM

EXISTING ROAD/
NEW CARRIAGEWAY

10000
CARRIAGEWAY

1500
EARTHEN
SHOULDER

2.5%

3.0%

2
1

BITUMINOUS CONCRETE

DENSE BITUMINOUS MACADAM

BASE LAYER

SUB BASE LAYER

SUBGRADE

150 mm THICK LAYER OF
GRANULAR MATERIAL

SELECTED EARTH FILL

GEO SYNTHETIC DRAIN

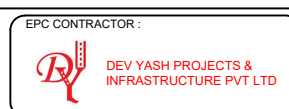
SECTION – "G – G"



NOTE

- All dimensions are in millimeter unless otherwise specified.
- Thickness of the Layers has been shown in Pavement design report.
- Kerb Channel & Chute Drain arrangement shall be provided for Embankment height > 6m.
- Metal Beam Crash Barrier shall be provided for Embankment height > 3m.

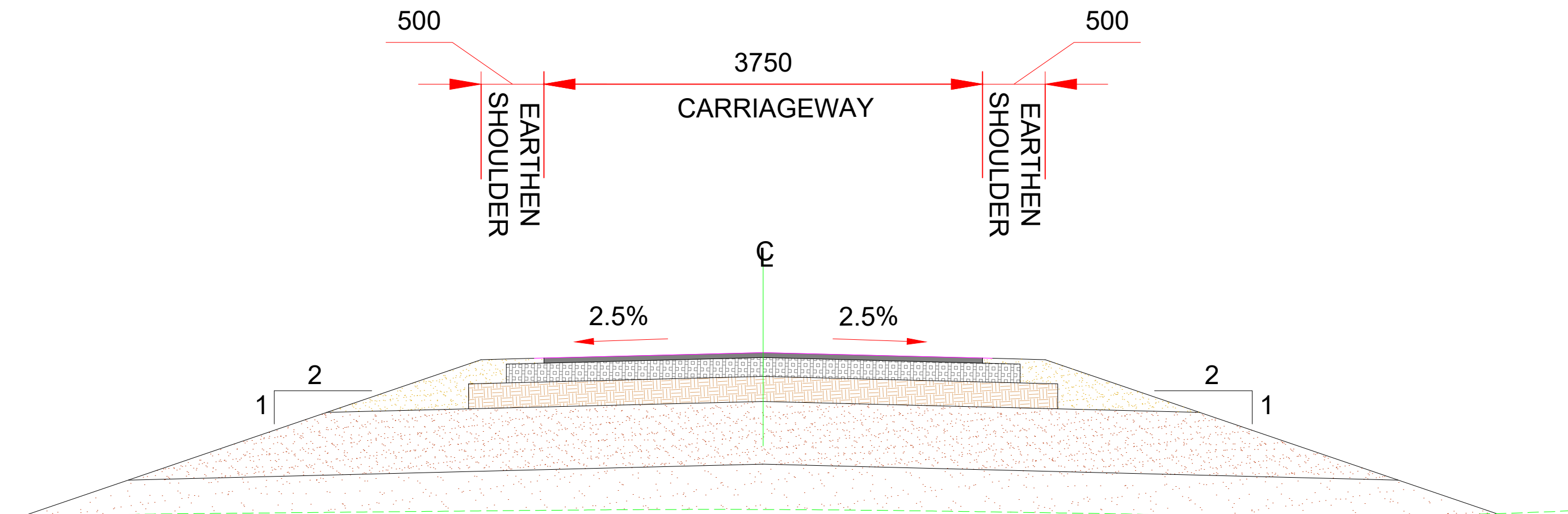
REV	DATE	DESCRIPTION	A	B	C



PROJECT :
Construction of Four-lane "Western side spur
of Rampur-Rudrapur section connecting
NH-24 to NH-87 bypassing Rampur town"
(Design Km 00+000 to Km13+700) on EPC
Mode in the state of Uttar Pradesh

DRAWING TITLE :
TYPICAL CROSS SECTION
SCALE : AS SHOWN PAPER SIZE : A3

DRG.NO.CIPL/D-1112/HW/DWG/IC/TCS/ 005	DATE : JUN.-2026	REV: R0
DESIGNED PM	DRAWN YK	CHECKED AK
APPROVED SM		



TCS FOR ROAD-5



NOTE

- All dimensions are in millimeter unless otherwise specified.
- Thickness of the Layers has been shown in Pavement design report.
- Kerb Channel & Chute Drain arrangement shall be provided for Embankment height > 6m.
- Metal Beam Crash Barrier shall be provided for Embankment height > 3m.

REV	DATE	DESCRIPTION	A	B	C

CLIENT:

NATIONAL HIGHWAYS
AUTHORITY OF INDIA

AUTHORITY :

ARTEFACT PROJECTS LTD.

EPC CONTRACTOR :

DEV YASH PROJECTS &
INFRASTRUCTURE PVT LTD

PROOF CONSULTANT :

HIGHRAISE CONSTRUCTION AND
CONSULTANT PRIVATE LIMITED

SAFETY CONSULTANT :

EARL TECHNO
CONSULTANTS PVT. LTD.

DESIGN CONSULTANT :

CIVILMANTRA
INFRACON PVT LTD.

PROJECT :
Construction of Four-lane "Western side spur
of Rampur-Rudrapur section connecting
NH-24 to NH-87 bypassing Rampur town"
(Design Km 00+000 to Km13+700) on EPC
Mode in the state of Uttar Pradesh

DRAWING TITLE :
TYPICAL CROSS SECTION
SCALE : AS SHOWN PAPER SIZE : A3

DRG.NO.CIPL/D-1112/HW/DWG/IC/TCS/ 005			
DATE : JUN.-2026			REV: R0
DESIGNED PM	DRAWN YK	CHECKED AK	APPROVED SM

INTERCHANGE 2				
TCS SCHEDULE FOR ROAD-1				
S.NO.	CHAINAGE		LENGTH (m)	TCS TYPE
	FROM	TO		
1	0	223	223	A-A(2)
2	223	253	30	C-C
3	253	530	277	E-E
4	530	600	70	C-C
5	600	761	161	A-A
	TOTAL (m)		761	
TCS SCHEDULE FOR ROAD-2				
S.NO.	CHAINAGE		LENGTH (m)	TCS TYPE
	FROM	TO		
1	0	140	140	STR
2	140	300	160	A-A
3	300	580	280	F-F
4	580	700	120	C-C
5	700	883	183	A-A
	TOTAL (m)		883	

TCS SCHEDULE FOR ROAD-3				
S.NO.	CHAINAGE		LENGTH (m)	TCS TYPE
	FROM	TO		
1	0	330	330	A-A(2)
2	330	580	250	C-C
3	580	883	303	F-F
	TOTAL (m)		883	
TCS SCHEDULE FOR ROAD-4				
S.NO.	CHAINAGE		LENGTH (m)	TCS TYPE
	FROM	TO		
1	0	480	480	F-F
2	480	670	190	E-E
3	670	730	60	C-C
4	730	820	90	E-E
5	820	933	113	C-C
	TOTAL (m)		933	



RD	JUN-2026	SUBMISSION OF IC TCS SCHEDULE			
REV	DATE	DESCRIPTION	A	B	C



PROJECT :
Construction of Four-lane "Western side spur of Rampur-Rudrapur section connecting NH-24 to NH-87 bypassing Rampur town." (Design Km 00+000 to Km13+700) on EPC Mode in the state of Uttar Pradesh

DRAWING TITLE :
INTERCHANGE TYPICAL CROSS SECTIONS SCHEDULE
SCALE : AS SHOWN
PAPER SIZE : A3

DRG.NO.CIPL/D-1112/HW/DWG/IC/TCSS/01			
DATE :JUN.-2026		REV: R0	
DESIGNED PM	DRAWN YK	CHECKED AK	APPROVED SM

PLAN & PROFILE

LEGEND:

PLAN:-

- MNB/FLYOVER
- VUP/LVUP/SVUP
- CULVERT
- PROW
- EARTH WORK
- PROPOSED CENTER LINE
- PROPOSED MEDIAN
- CARRIAGEWAY EDGE
- EARTH SHOULDER
- SEPARATOR
- CRASH BARRIER

LEGEND:

PROFILE:-

- BOX CULVERT
- UNDERPASSES/ MNB/MJB/ FLYOVER
- FINISHED ROAD LEVEL
- LEVEL BELOW PROPOSED CL

HORIZONTAL CURVE DETAILS	
CURVE NUMBER	1 000
Chainage	0+158.852
RADIUS (m)	400
CURVE LENGTH (m)	33.595
TRANSITION LEADING (m)	0
LENGTH (m) TRAILING (m)	0
Easting (X)	311059.053
Northing (Y)	3189253.2
SUPERELEVATION	40
DESIGN SPEED	40
Total Deflection	4.812

HORIZONTAL CURVE DETAILS	
CURVE NUMBER	2 000
Chainage	0+210.069
RADIUS (m)	400
CURVE LENGTH (m)	34.408
TRANSITION LEADING (m)	0
LENGTH (m) TRAILING (m)	0
Easting (X)	311090.893
Northing (Y)	3189303.4
SUPERELEVATION	40
DESIGN SPEED	40
Total Deflection	4.929

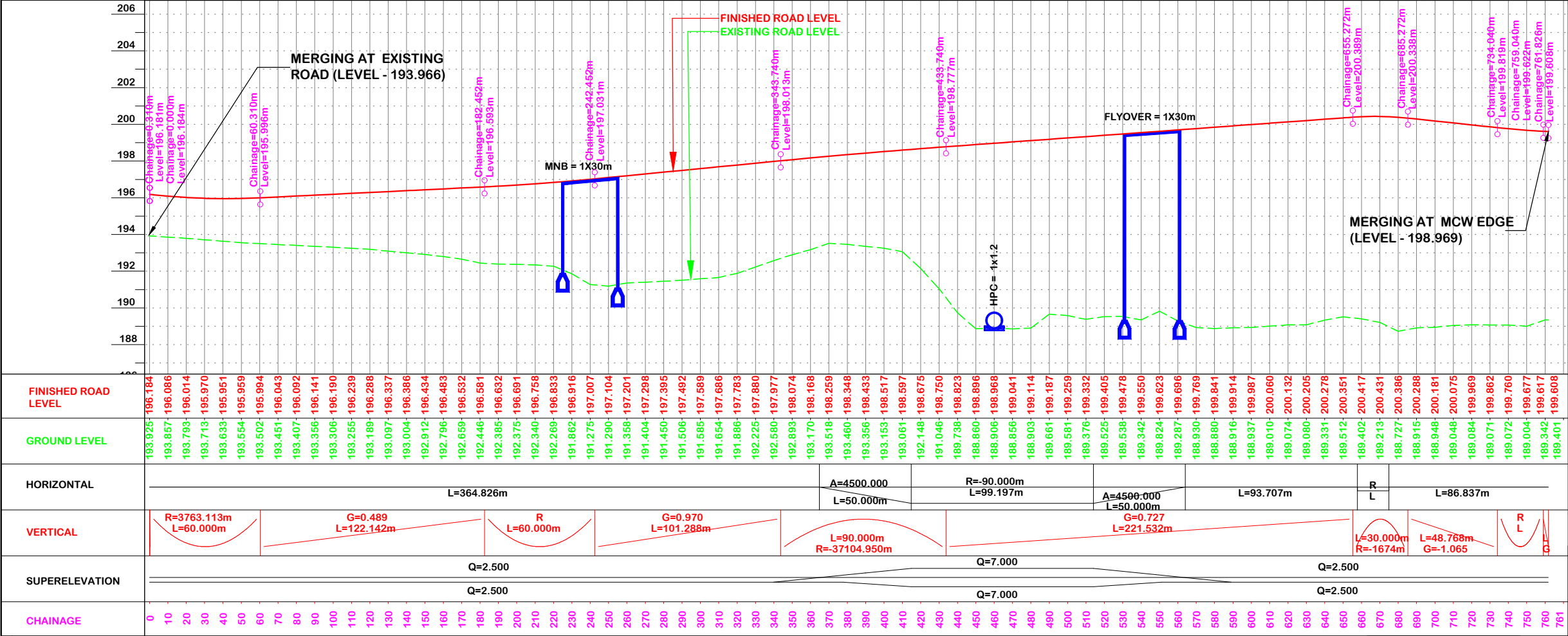
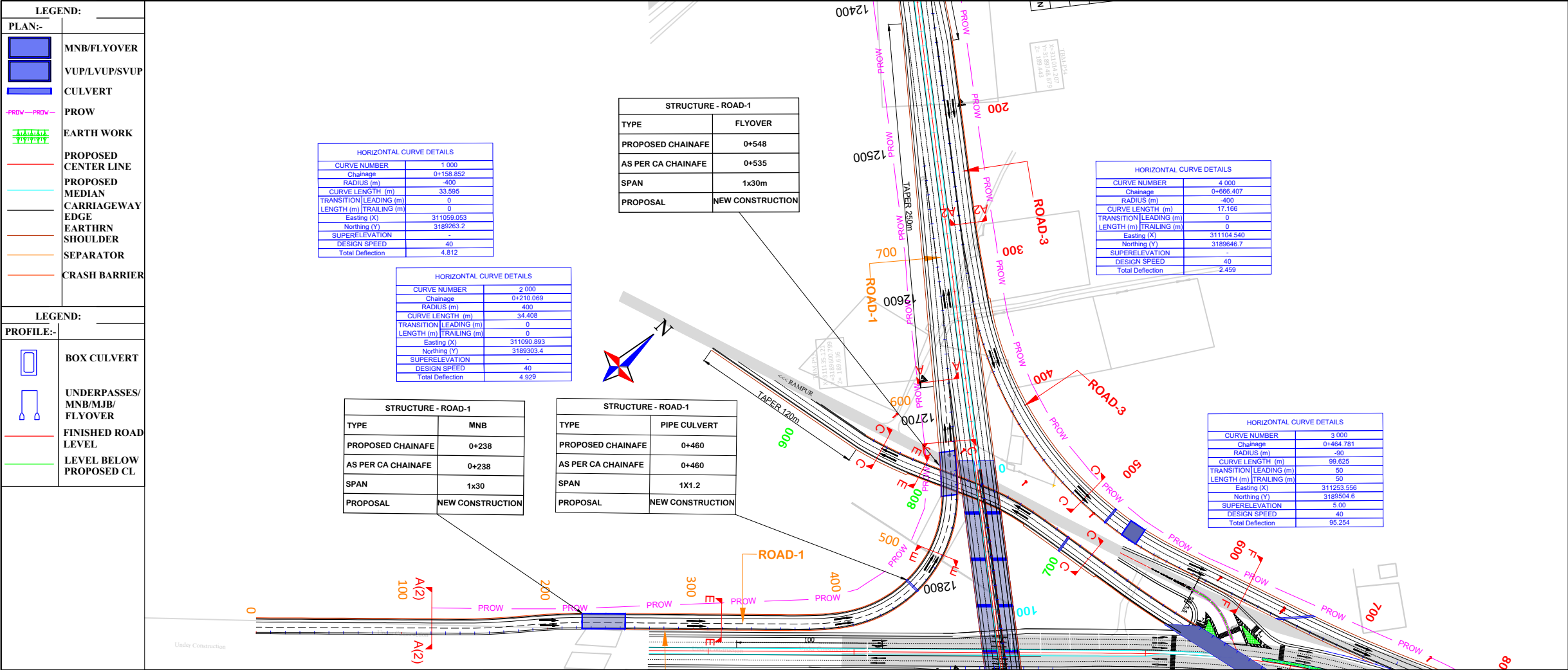
STRUCTURE - ROAD-1	
TYPE	MNB
PROPOSED CHAINAFE	0+238
AS PER CA CHAINAFE	0+238
SPAN	1x30
PROPOSAL	NEW CONSTRUCTION

STRUCTURE - ROAD-1	
TYPE	PIPE CULVERT
PROPOSED CHAINAFE	0+460
AS PER CA CHAINAFE	0+460
SPAN	1X1.2
PROPOSAL	NEW CONSTRUCTION

STRUCTURE - ROAD-1	
TYPE	FLYOVER
PROPOSED CHAINAFE	0+548
AS PER CA CHAINAFE	0+535
SPAN	1x30m
PROPOSAL	NEW CONSTRUCTION

HORIZONTAL CURVE DETAILS	
CURVE NUMBER	4 000
Chainage	0+666.407
RADIUS (m)	400
CURVE LENGTH (m)	17.166
TRANSITION LEADING (m)	0
LENGTH (m) TRAILING (m)	0
Easting (X)	311104.540
Northing (Y)	3189646.7
SUPERELEVATION	-
DESIGN SPEED	40
Total Deflection	2.459

HORIZONTAL CURVE DETAILS	
CURVE NUMBER	3 000
Chainage	0+484.781
RADIUS (m)	-90
CURVE LENGTH (m)	99.625
TRANSITION LEADING (m)	50
LENGTH (m) TRAILING (m)	50
Easting (X)	311253.556
Northing (Y)	3189504.6
SUPERELEVATION	5.00
DESIGN SPEED	40
Total Deflection	95.254



R2	JUNE-2026	AS PER A.E. OBSERVATIONS			
R1	MAR-2026	AS PER A.E. OBSERVATIONS			
R0	FEB-2026	SUBMISSION OF IC PLAN & PROFILE			
REV	DATE	DESCRIPTION	A	B	C

CLIENT:



NATIONAL HIGHWAYS
AUTHORITY OF INDIA

AUTHORITY :



ARTEFACT PROJECTS LTD.

EPC CONTRACTOR :



DEV YASH PROJECTS &
INFRASTRUCTURE PVT LTD

PROOF CONSULTANT :



HIGHRAISE CONSTRUCTION AND
CONSULTANT PRIVATE LIMITED

SAFETY CONSULTANT :



EARL TECHNO
CONSULTANTS PVT. LTD.

EARLTECHNO CONSULTANTS PVT. LTD

DESIGN CONSULTANT :



CIVILMANTRA
INFRACON PVT LTD.

PROJECT :

Construction of Four-lane "Western side spur of Rampur-Rudrapur section connecting NH-24 to NH-87 bypassing Rampur town" (Design Km 00+000 to Km13+700) on EPC Mode in the state of Uttar Pradesh

DRAWING NO. :

INTER ROAD

SCALE :

