

Government of Jammu & Kashmir



JHELUM & TAWI FLOOD RECOVERY PROJECT

Kashmir Province

**Consultancy Services for Preparing Detailed Project Report for the Road
works in Jammu and Kashmir**

(Sangam-Khudwani Road in Anantnag District)

(DRAWINGS)

(Detailed Project Report)

September 2019



ROAD DRAWINGS

≡ LIST OF DRAWINGS ≡

LIST OF DRAWINGS FOR ROAD

Sl. No.	Descriptions	Drawing No.	No.of Sheet
(A)	ROAD WORKS		
1.	List of Drawings	EPTISA/JTFRP/DPR/J&K/LOD-01	01
2.	Legend, Abbreviations & General Notes	EPTISA/JTFRP/DPR/J&K/LEGEND-01	01
3.	Index Map	EPTISA/JTFRP/DPR/J&K/IM-01	01
4.	Typical Cross Section	EPTISA/JTFRP/DPR/J&K/TCS-01	01
5.	Strip Plan	EPTISA/JTFRP/DPR/J&K/SP-01	01
6.	Plan and Profile	EPTISA/JTFRP/DPR/J&K/PP-01 to 05	05
7.	Horizontal Alignment Report	EPTISA/JTFRP/DPR/J&K/HAR-01	01
8.	Vertical Alignment Report	EPTISA/JTFRP/DPR/J&K/VAR-01	01
9.	Signage Plan	EPTISA/JTFRP/DPR/J&K/SP-01 to 05	05
10.	Detailed Cross Section	EPTISA/JTFRP/DPR/J&K/DCS-01 to 07	07
11.	Utility Relocation Plan-(For Electricity Department)	EPTISA/JTFRP/DPR/J&K/URP-01 to 05	05
12.	Utility Relocation Plan-(For Telephone Department)	EPTISA/JTFRP/DPR/J&K/URP-01 to 05	05
13.	Utility Relocation Plan-(For Water Department)	EPTISA/JTFRP/DPR/J&K/URP-01 to 05	05
14.	Tree Cutting	EPTISA/JTFRP/DPR/J&K/TC-01 to 05	05
15.	<i>Miscellaneous Drawings</i>		
i.)	Road Signs & Road Delineators - (3 Sheets)	EPTISA/JTFRP/DPR/J&K/MISC-01 to 03	03
ii.)	Typical Details of Distance Stone, Boundary Stone & Guard Post	EPTISA/JTFRP/DPR/J&K/MISC-02	01
iii.)	Typical Details of Metal Beam Crash Barrier	EPTISA/JTFRP/DPR/J&K/MISC-03	01
16.	<i>GIS Mapping</i>		05
17.	<i>Culvert Drawings</i>		
i.)	Typical General Arrangement Drawing for Single Cell Pipe Culvert	EPTISA/JTFRP/DPR/J&K/PIPE/GAD/01	01

≡ LEGEND, ABBREVIATIONS & GENERAL NOTES ≡

A. PLAN

a) Existing

GENERAL NOTES

1. All angles are in degree (°) – minute (') – second (") format.
2. All chainages are in kilometres and all levels are in meters unless otherwise specified.
3. All the co-ordinates (X, Y) are with respect to GPS values (established for project road at 2 km interval).
4. Details shown in the plans are based on topographical survey carried out under the assignment.
5. The scale mentioned for all drawings is applicable for A2 sheet.

1. The pavements have been considered to be rotated about the Carriageway Center line to attain requisite amount of superelevation.

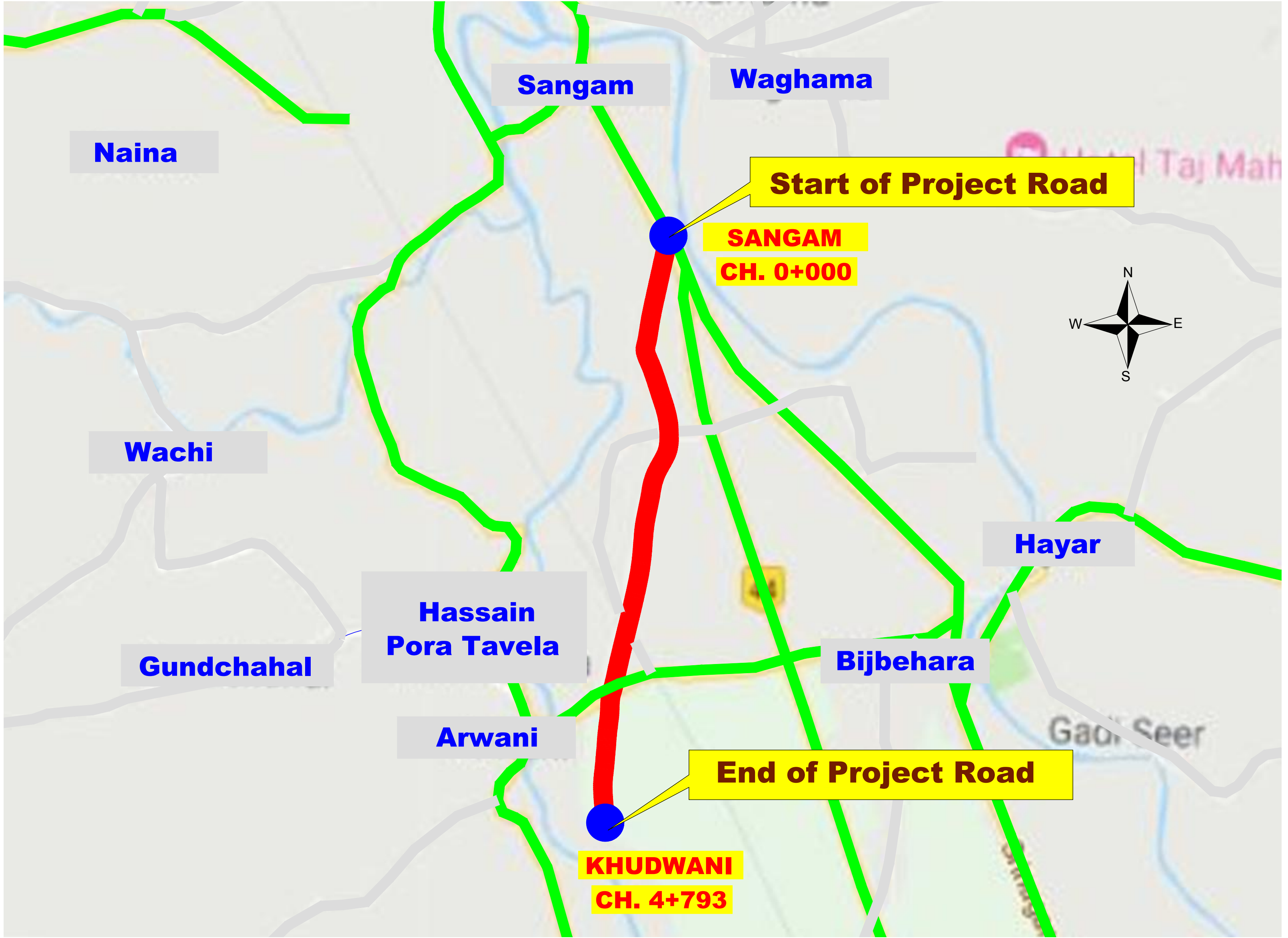
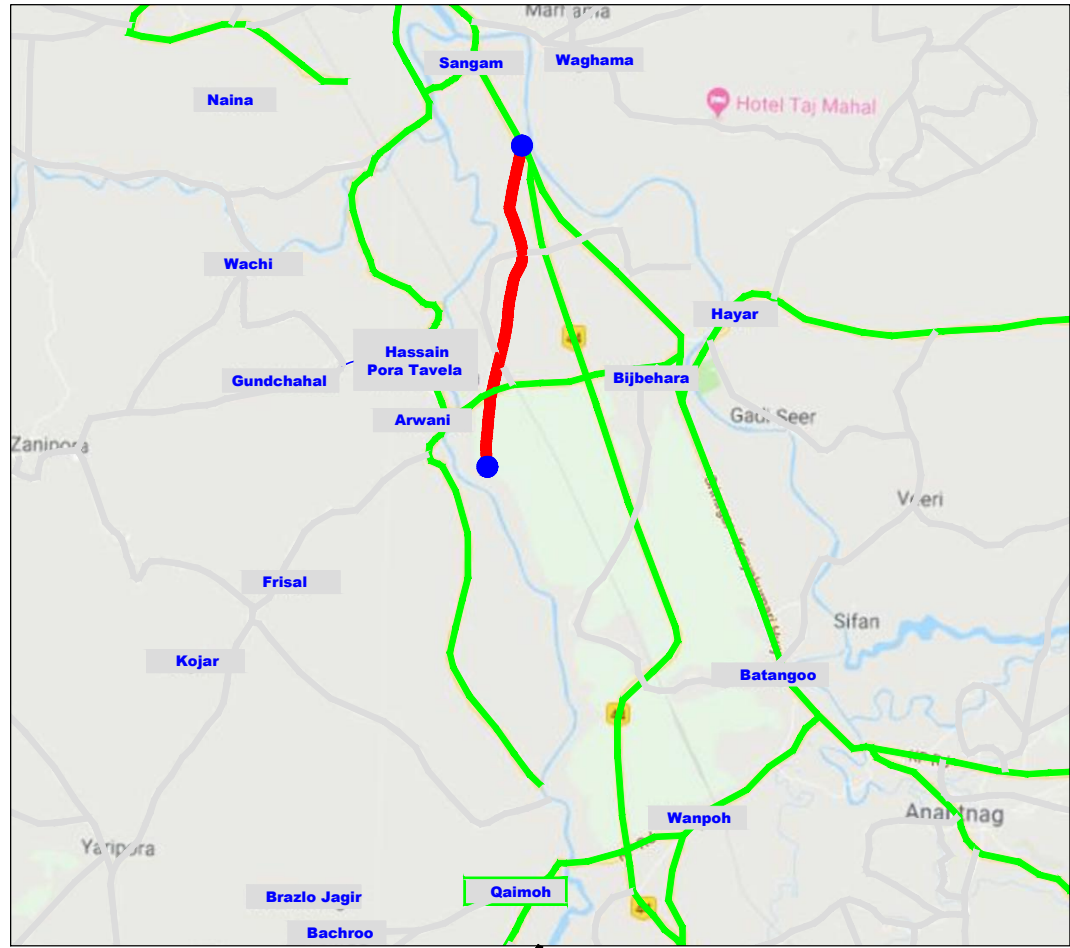
A. PLAN

B. PROFILE

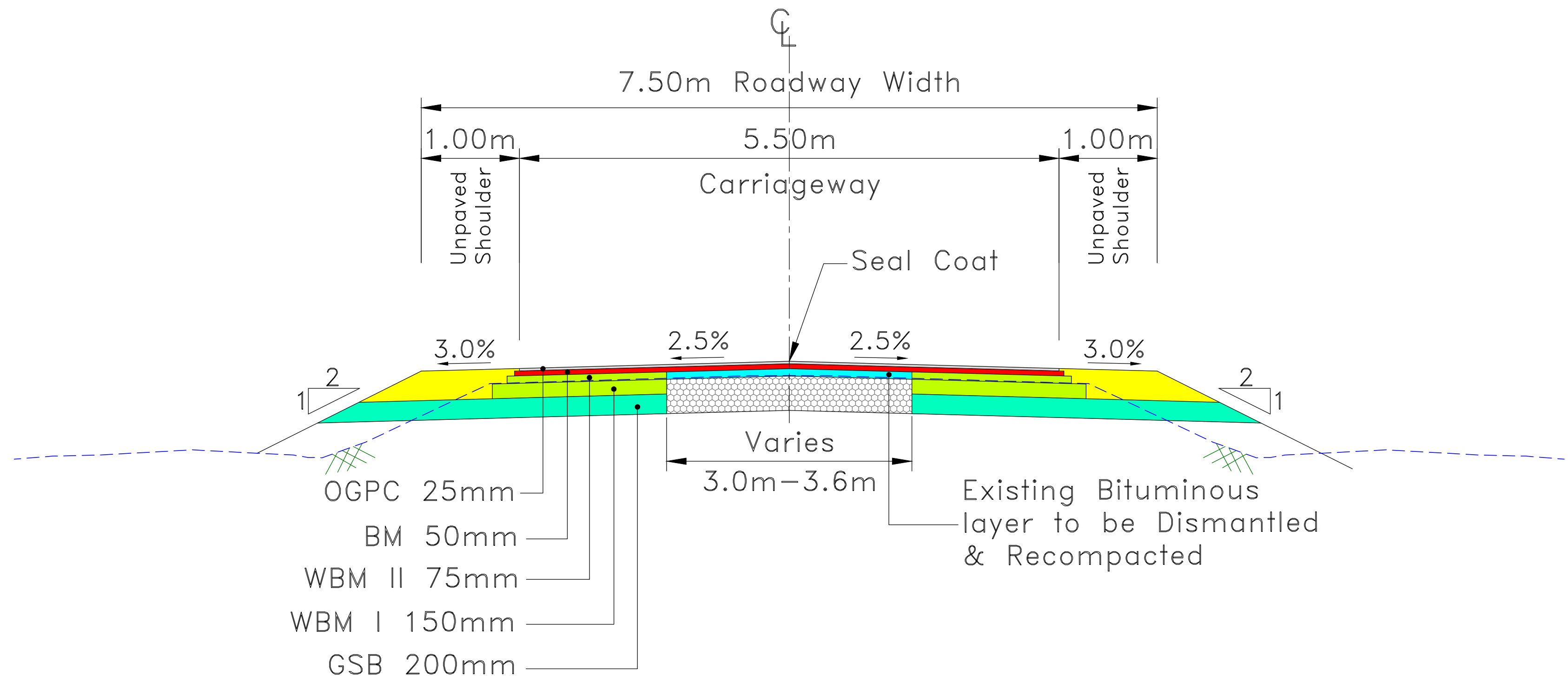
Finished Grade Line _____

Existing Grade Line _____

<div>CLIENT :</div> <div></div> <div>Jhelum Tawi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.</div>	<div>PROJECT :</div> <div>Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir <u>(Sangam-Khudwani Road in Anantnag District)</u></div>	<div>DESIGN CONSULTANT:</div> <div>Eptisa Servicios de Ingenieria S.L. Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP & GP, Sector v, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.eptisa.com</div>				DRAWN BY : SD	TITLE : LEGEND, ABBREVIATIONS & GENERAL NOTES	
						DESIGNED BY : SCK/MM		
						APPROVED BY : KG		DRG. NO. : EPTISA/JTRP/DPR/J&K/LEGEND/01
			REV.	DATE	DESCRIPTION	SCALE : N.T.S	REVISION : R-1	September 2019



≡ TYPICAL CROSS SECTIONS ≡

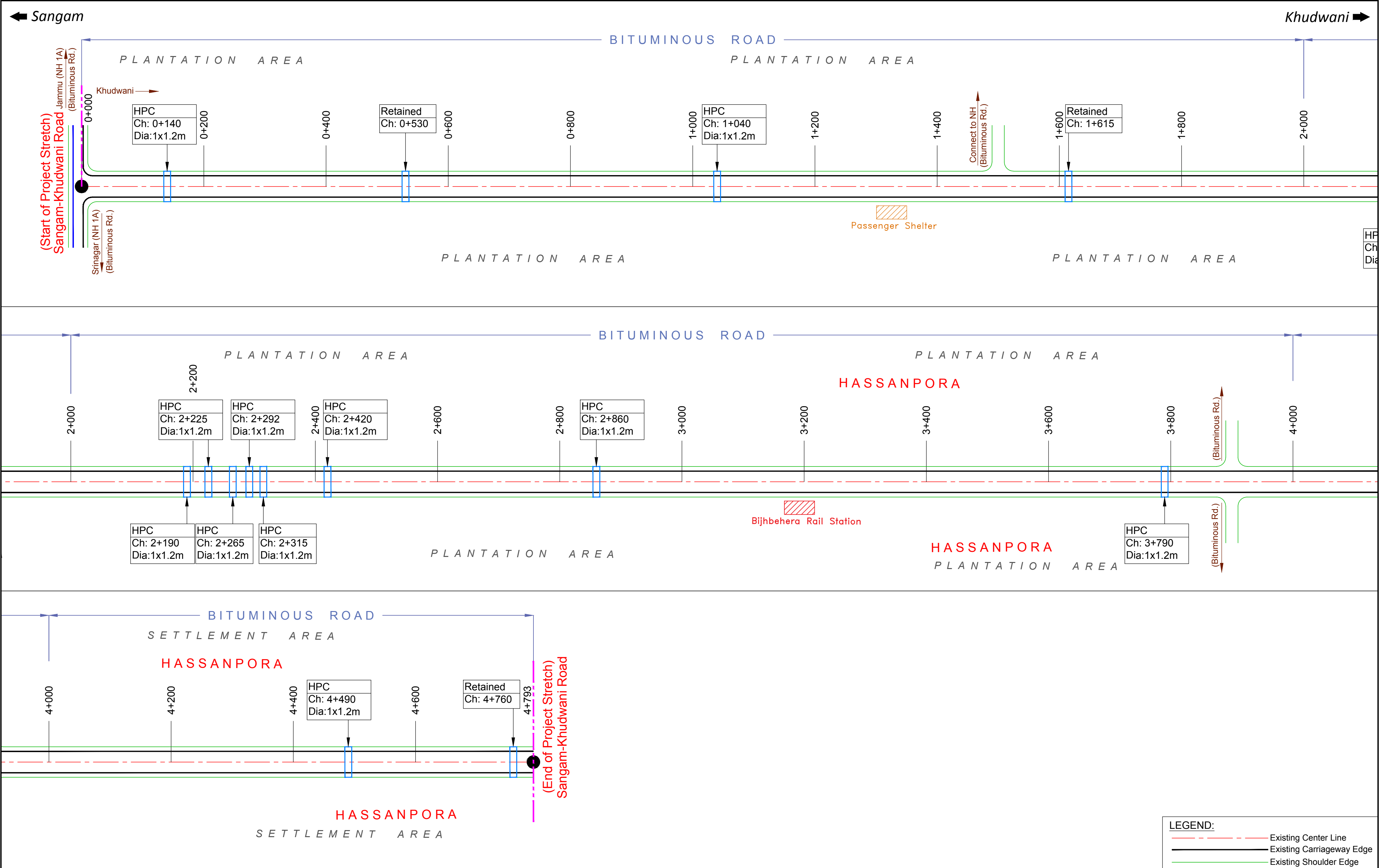


TYPE - 1: TYPICAL CROSS SECTION OF INTERMEDIATE LANE CARRIAGEWAY AT CONCENTRIC WIDENING STRETCH

Note:

- Existing Bituminous layer to dismantled and re-compacted.
- Below Bituminous Macadam, layer thickness (WBM-maximum 225mm/GSB) shall be decided based on re-compacted level and FRL of the proposed road.

<div>CLIENT :</div> <div></div> <div>Jhelum Tawi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.</div>	<div>PROJECT :</div> <div>Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir <u>(Sangam-Khudwani Road in Anantnag District)</u></div>	<div>DESIGN CONSULTANT:</div> <div><div>Eptisa Servicios de Ingenieria S.L. Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP & GP, Sector v, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.eptisa.com</div></div>	<table><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td>REV.</td><td>DATE</td><td>DESCRIPTION</td></tr></table>													REV.	DATE	DESCRIPTION	<table><tr><td>DRAWN BY :</td><td>SD</td></tr><tr><td>DESIGNED BY :</td><td>SCK/MM</td></tr><tr><td>APPROVED BY :</td><td>KG</td></tr><tr><td>SCALE :</td><td>1:50</td></tr></table>	DRAWN BY :	SD	DESIGNED BY :	SCK/MM	APPROVED BY :	KG	SCALE :	1:50	<table><tr><td colspan="2">TITLE : TYPICAL CROSS SECTION</td></tr><tr><td colspan="2">DRG. NO. : EPTISA/JTFRP/DPR/J&K/TCS/01</td></tr><tr><td>REVISION : R-1</td><td>September 2019</td></tr></table>	TITLE : TYPICAL CROSS SECTION		DRG. NO. : EPTISA/JTFRP/DPR/J&K/TCS/01		REVISION : R-1	September 2019
REV.	DATE	DESCRIPTION																																
DRAWN BY :	SD																																	
DESIGNED BY :	SCK/MM																																	
APPROVED BY :	KG																																	
SCALE :	1:50																																	
TITLE : TYPICAL CROSS SECTION																																		
DRG. NO. : EPTISA/JTFRP/DPR/J&K/TCS/01																																		
REVISION : R-1	September 2019																																	



CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



Eptisa Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY : SD

DESIGNED BY : SCK/MM

APPROVED BY : KG

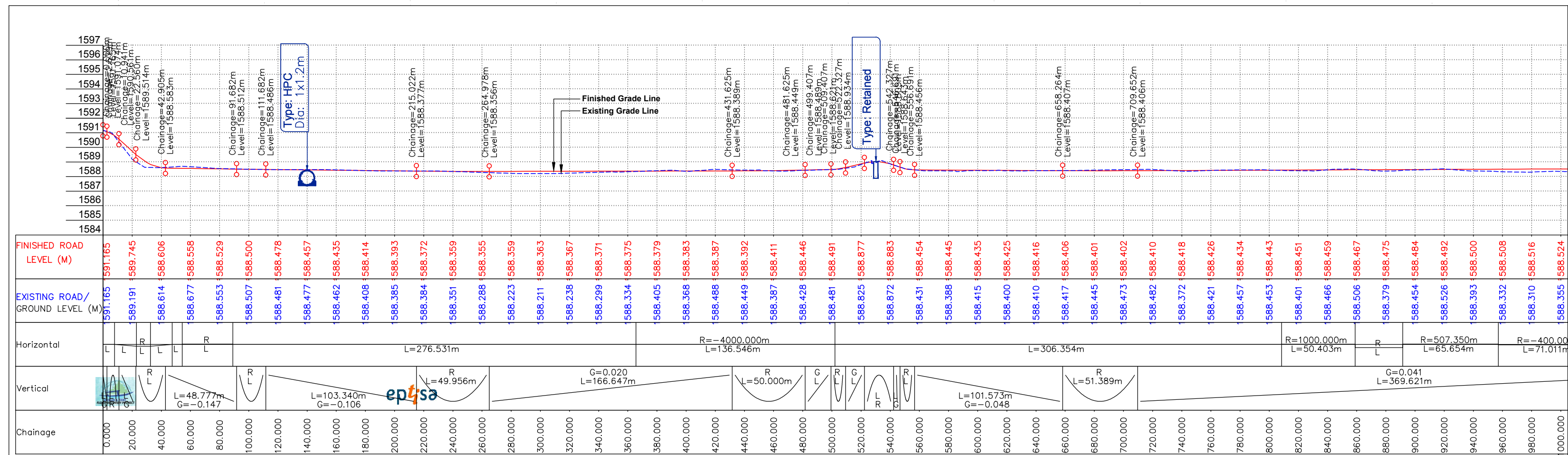
LONG SCALE: 0 25 50 75 100 (m)
TRANS SCALE: 0 7 14 21 (m)

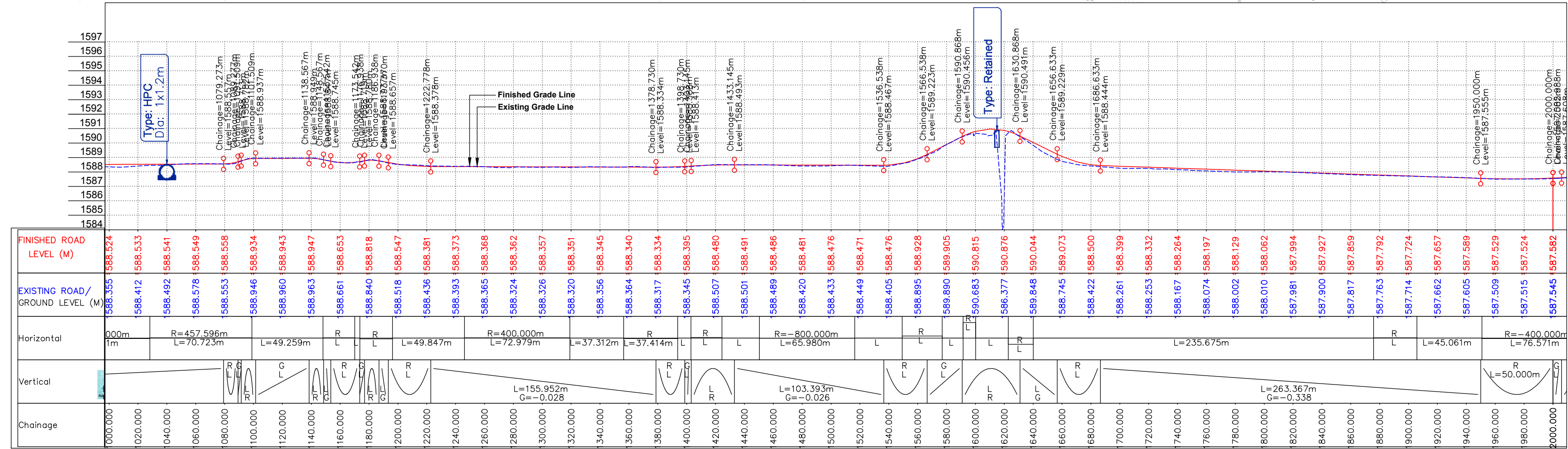
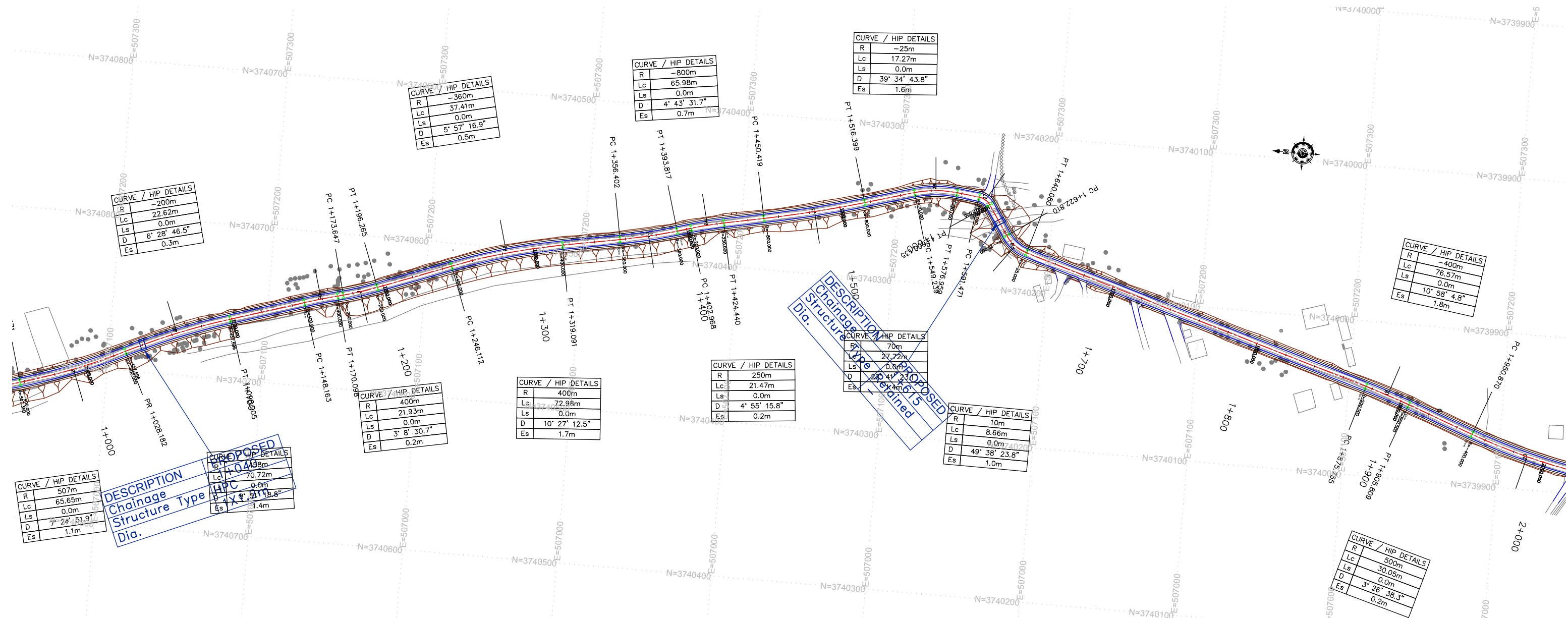
TITLE : **Strip Plan**
(Sangam-Khudwani Road)

DRG. NO. : EPTISA/JTFRP/DPR/J&K/SP/01

REVISION : R-1

September 2019





CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:

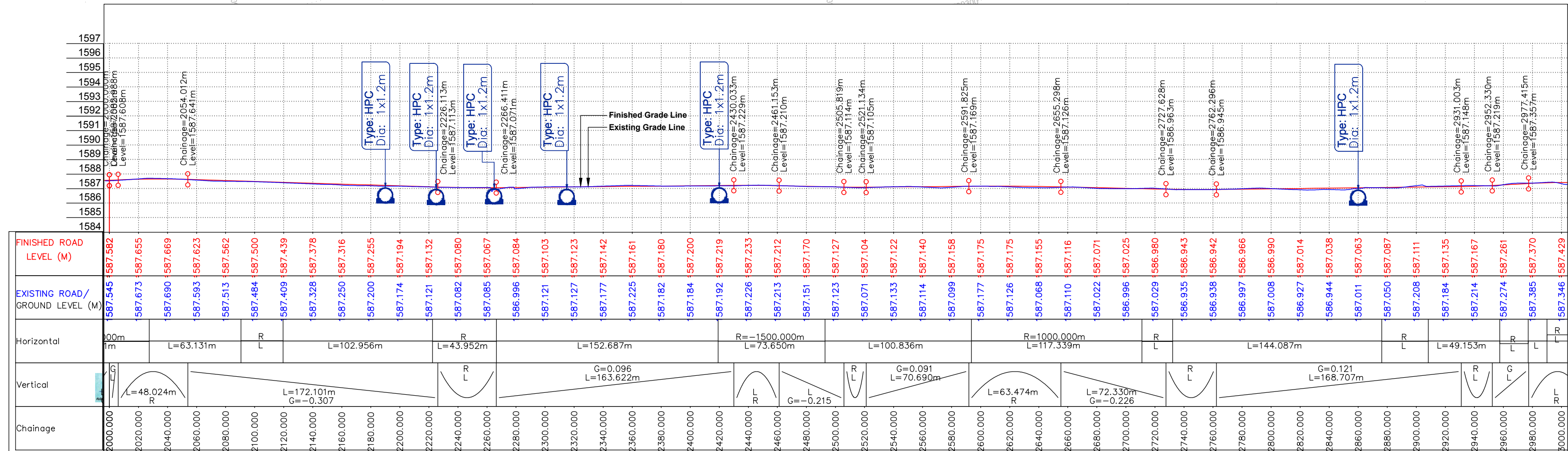


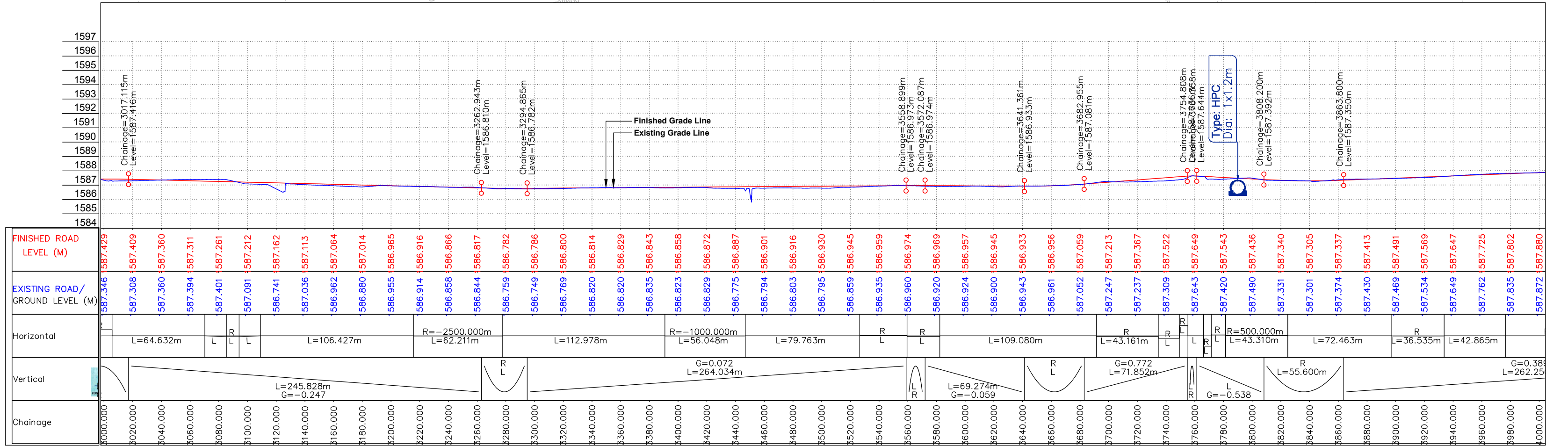
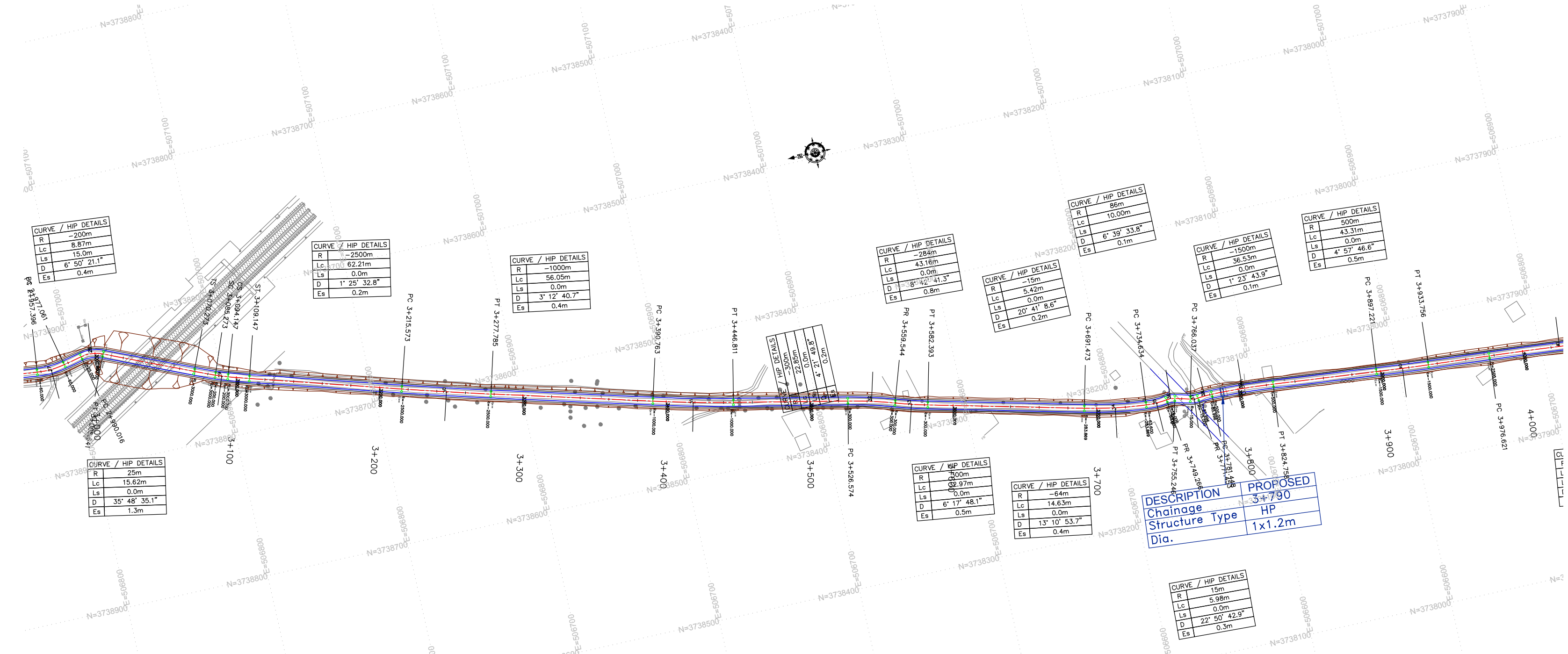
Eptisa Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	HOR 1:2500 VER 1:250

TITLE :	Plan and Profile (Ch. 1+000 Km to Ch. 2+000 Km)
DRG. NO. :	EPTISA/JTRP/DPR/J&K/PP/02
REVISION : R-1	September 2019





CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



Eptisa Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	HOR 1:2500 VER 1:250

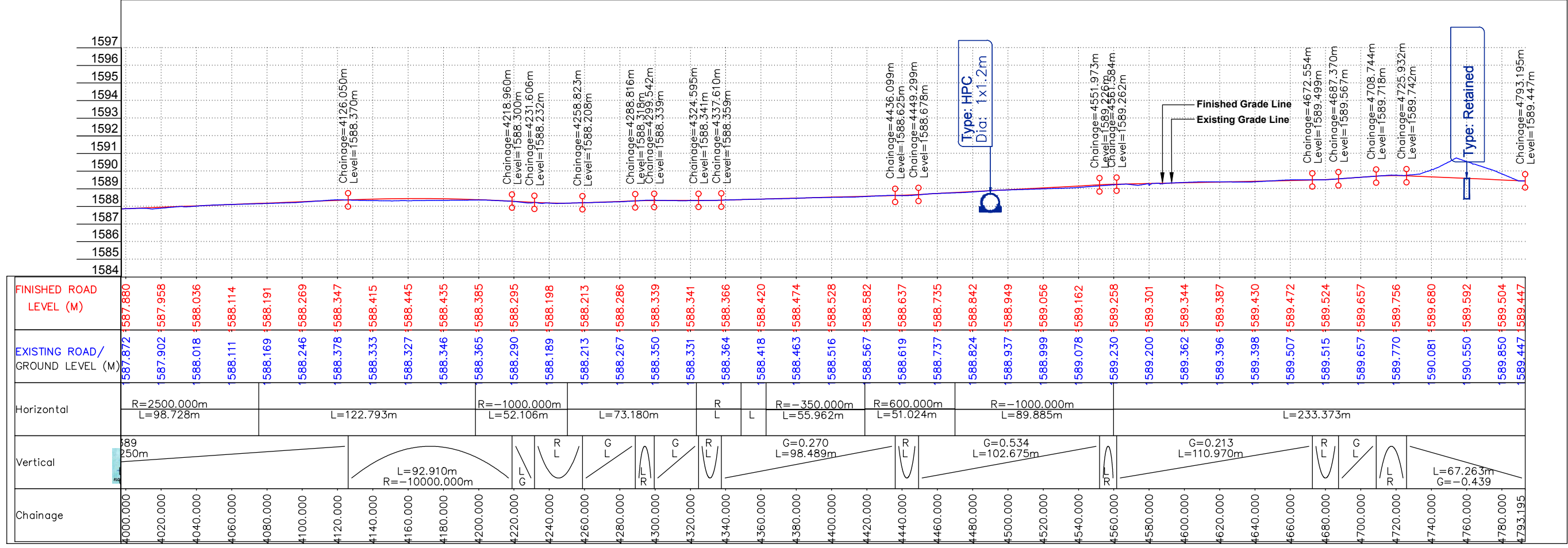
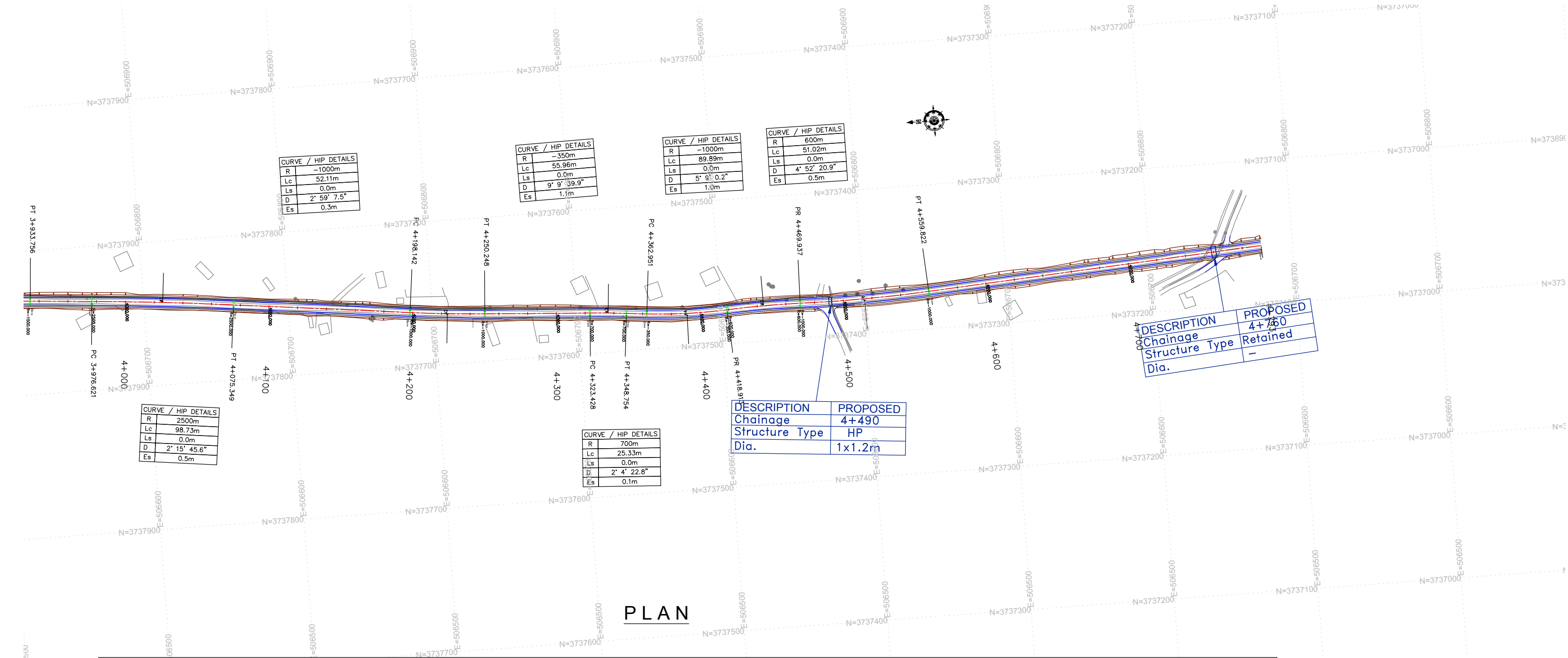
TITLE :

Plan and Profile
(Ch. 3+000 Km to Ch. 4+000 Km)

DRG. NO. : EPTISA/JTRP/DPR/J&K/PP/04

REVISION : R-1

September 2019



HORIZONTAL ALIGNMENT REPORT

Horizontal Alignment Report																								
HIP No.	Start of Transition (TS)	Start of Curve	HIP	End of Curve	End of Transition (ST)	HIP Coordinates		Radius	Design Speed (V kmph)	Transition Start Length	Transition End Length	Circular Curve Length	Shift (s)		Tangent Length (Ts)		qs (°)		Dc (°)	D (°)	Apex Distance (Es)	Hand of Curve	e%	Extra Widening
		PC / SC		CS / PT		Easting	Northing						Leading	Trailing	Leading	Trailing	Leading	Trailing						
1	0+007.912	0+022.912	0+027.792	0+032.489	0+047.489	507232.607	3741762.211	90	30	15.00	15.00	9.58	0.104	0.104	19.88	19.88	4.77	4.77	6.10	15.65	0.951	Left	4.44	0.9
2	0+054.356	0+054.356	0+071.704	0+089.043	0+089.043	507224.491	3741718.978	600	40	0.00	0.00	34.69	0.000	0.000	17.35	17.35	0.00	0.00	3.31	3.31	0.251	Right	2.50	0
3	0+365.574	0+365.574	0+433.854	0+502.120	0+502.120	507143.743	3741365.935	4000	40	0.00	0.00	136.55	0.000	0.000	68.28	68.28	0.00	0.00	1.96	1.96	0.583	Left	2.50	0
4	0+808.474	0+808.474	0+833.681	0+858.878	0+858.878	507067.949	3740973.344	1000	40	0.00	0.00	50.40	0.000	0.000	25.21	25.21	0.00	0.00	2.89	2.89	0.318	Right	2.50	0
5	0+858.878	0+858.878	0+875.803	0+891.517	0+891.517	507057.888	3740932.430	50	30	0.00	0.00	32.64	0.000	0.000	16.92	16.92	0.00	0.00	37.40	37.40	2.787	Left	7.00	1.2
6	0+891.517	0+891.517	0+924.390	0+957.171	0+957.171	507077.815	3740886.793	507.35	40	0.00	0.00	65.65	0.000	0.000	32.87	32.87	0.00	0.00	7.41	7.41	1.064	Right	2.50	0
7	0+957.171	0+957.171	0+992.770	1+028.182	1+028.182	507096.887	3740821.031	400	40	0.00	0.00	71.01	0.000	0.000	35.60	35.60	0.00	0.00	10.17	10.17	1.581	Left	2.50	0
8	1+028.182	1+028.182	1+063.614	1+098.905	1+098.905	507128.408	3740757.377	457.596	40	0.00	0.00	70.72	0.000	0.000	35.43	35.43	0.00	0.00	8.86	8.86	1.370	Right	2.50	0
9	1+148.163	1+148.163	1+159.133	1+170.098	1+170.098	507157.156	3740666.138	400	40	0.00	0.00	21.93	0.000	0.000	10.97	10.97	0.00	0.00	3.14	3.14	0.150	Right	2.50	0
10	1+173.647	1+173.647	1+184.968	1+196.265	1+196.265	507163.559	3740641.104	200	40	0.00	0.00	22.62	0.000	0.000	11.32	11.32	0.00	0.00	6.48	6.48	0.320	Left	3.56	0.6
11	1+246.112	1+246.112	1+282.703	1+319.091	1+319.091	507198.317	3740549.733	400	40	0.00	0.00	72.98	0.000	0.000	36.59	36.59	0.00	0.00	10.45	10.45	1.670	Right	2.50	0
12	1+356.402	1+356.402	1+375.126	1+393.817	1+393.817	507214.995	3740458.620	360	40	0.00	0.00	37.42	0.000	0.000	18.72	18.72	0.00	0.00	5.95	5.95	0.487	Left	2.50	0
13	1+402.968	1+402.968	1+413.711	1+424.440	1+424.440	507225.852	3740421.559	250	40	0.00	0.00	21.47	0.000	0.000	10.74	10.74	0.00	0.00	4.92	4.92	0.231	Right	2.84	0.6
14	1+450.419	1+450.419	1+483.428	1+516.399	1+516.399	507239.643	3740353.206	800	40	0.00	0.00	65.98	0.000	0.000	33.01	33.01	0.00	0.00	4.73	4.73	0.681	Left	2.50	0
15	1+549.239	1+549.239	1+563.283	1+576.959	1+576.959	507261.842	3740276.460	70	40	0.00	0.00	27.72	0.000	0.000	14.04	14.04	0.00	0.00	22.69	22.69	1.395	Right	7.00	0.9
16	1+591.471	1+591.471	1+596.096	1+600.135	1+600.135	507258.053	3740243.496	10	10	0.00	0.00	8.66	0.000	0.000	4.62	4.62	0.00	0.00	49.64	49.64	1.018	Right	4.44	1.5
17	1+622.810	1+622.810	1+631.806	1+640.080	1+640.080	507227.893	3740223.303	25	25	0.00	0.00	17.27	0.000	0.000	9.00	9.00	0.00	0.00	39.58	39.58	1.569	Left	7.00	1.5
18	1+875.755	1+875.755	1+890.787	1+905.809	1+905.809	507153.619	3739974.449	500	40	0.00	0.00	30.05	0.000	0.000	15.03	15.03	0.00	0.00	3.44	3.44	0.226	Right	2.50	0
19	1+950.870	1+950.870	1+989.273	2+027.441	2+027.441	507119.831	3739881.930	400	40	0.00	0.00	76.57	0.000	0.000	38.40	38.40	0.00	0.00	10.97	10.97	1.839	Left	2.50	0
20	2+090.572	2+090.572	2+105.079	2+119.577	2+119.577	507101.489	3739767.348	500	40	0.00	0.00	29.01	0.000	0.000	14.51	14.51	0.00	0.00	3.32	3.32	0.210	Right	2.50	0
21	2+222.533	2+222.533	2+244.518	2+266.484	2+266.484	507071.502	3739631.163	600	40	0.00	0.00	43.95	0.000	0.000	21.99	21.99	0.00	0.00	4.20	4.20	0.403	Left	2.50	0
22	2+419.172	2+419.172	2+456.004	2+492.821	2+492.821	507041.259	3739421.831	1500	40	0.00	0.00	73.65	0.000	0.000	36.83	36.83	0.00	0.00	2.81	2.81	0.452	Left	2.50	0
23	2+593.657	2+593.657	2+652.394	2+710.996	2+710.996	507022.749	3739226.301	1000	40	0.00	0.00	117.34	0.000	0.000	58.74	58.74	0.00	0.00	6.72	6.72	1.724	Right	2.50	0
24	2+710.996	2+710.996	2+721.580	2+732.160	2+732.160	507008.181	3739158.527	400	40	0.00	0.00	21.16	0.000	0.000	10.58	10.58	0.00	0.00	3.03	3.03	0.140	Left	2.50	0
25	2+876.247	2+876.247	2+892.248	2+908.243	2+908.243	506981.190	3738990.003	700	40	0.00	0.00	32.00	0.000	0.000	16.00	16.00	0.00	0.00	2.62	2.62	0.183	Left	2.50	0
26	2+957.396	2+957.396	2+967.317	2+977.061	2+977.061	506972.717	3738915.407	60	30	0.00	0.00	19.67	0.000	0.000	9.92	9.92	0.00	0.00	18.78	18.78	0.815	Left	6.67	1.2
27	2+990.016	2+990.016	2+998.093	3+005.641	3+005.641	506979.310	3738885.163	25	25	0.00	0.00	15.63	0.000	0.000	8.08	8.08	0.00	0.00	35.81	35.81	1.272	Right	7.00	1.5
28	3+070.273	3+085.273	3+089.727	3+094.147	3+109.147	506942.877	3738800.531	200	40	15.00	15.00	8.87	0.047	0.047	19.45	19.45	2.15	2.15	2.54	6.84	0.404	Left	3.56	0.6
29	3+215.574	3+215.574	3+246.681	3+277.785	3+277.785	506897.505	3738650.264	2500	40	0.00	0.00	62.21	0.000	0.000	31.11	31.11	0.00	0.00	1.43	1.43	0.194	Left	2.50	0
30	3+390.763	3+390.763	3+418.794	3+446.811	3+446.811	506852.244	3738484.205	1000	40	0.00	0.00	56.05	0.000	0.000	28.03	28.03	0.00	0.00	3.21	3.21	0.393	Left	2.50	0
31	3+526.574	3+526.574	3+543.076	3+559.544	3+559.544	506826.327	3738362.641	300	40	0.00	0.00	32.97	0.000	0.000	16.50	16.50	0.00	0.00	6.30	6.30	0.453	Right	2.50	0.6
32	3+559.544	3+559.544	3+570.974	3+582.393	3+582.393	506817.542	3738336.127	300	40	0.00	0.00	22.85	0.000	0.000	11.43	11.43	0.00	0.00	4.36	4.36	0.218	Left	2.50	0.6
33	3+691.473	3+691.473	3+713.095	3+734.634	3+734.634	506783.235	3738198.198	283.869	40	0.00	0.00	43.16	0.000	0.000	21.62	21.62	0.00	0.00	8.71	8.71	0.822	Left	2.51	0.6
34	3+734.634	3+734.634	3+741.982	3+749.266																				

≡ VERTICAL ALIGNMENT REPORT ≡

Vertical Alignment Report

PVI No.	Start		PVI Details		End		Gradient (%)		Type of Curve	Curve Lenght (m)	K-Value
	Chainage (Km)	Level(m)	Chainage (Km)	Level(m)	Chainage (Km)	Level(m)	IN	OUT			
1	0+002.679	1591.074	0+006.810	1590.933	0+010.941	1590.561	-3.411	-9.005	Hog	8	1.48
2	0+022.560	1589.514	0+032.733	1588.598	0+042.905	1588.583	-9.005	-0.147	Sag	20	2.30
3	0+091.682	1588.512	0+101.682	1588.497	0+111.682	1588.486	-0.147	-0.106	Sag	20	481.50
4	0+215.022	1588.377	0+240.000	1588.351	0+264.978	1588.356	-0.106	0.020	Sag	50	398.36
5	0+431.625	1588.389	0+456.625	1588.394	0+481.625	1588.449	0.020	0.222	Sag	50	247.54
6	0+499.407	1588.489	0+504.407	1588.500	0+509.407	1588.621	0.222	2.419	Sag	10	4.55
7	0+522.327	1588.934	0+532.327	1589.175	0+542.327	1588.805	2.419	-3.705	Hog	20	3.27
8	0+546.691	1588.643	0+551.691	1588.458	0+556.691	1588.456	-3.705	-0.048	Sag	10	2.73
9	0+658.264	1588.407	0+683.958	1588.395	0+709.652	1588.406	-0.048	0.041	Sag	51	580.02
10	1+079.273	1588.557	1+084.275	1588.559	1+089.277	1588.713	0.041	3.082	Sag	10	3.29
11	1+091.509	1588.782	1+096.509	1588.936	1+101.509	1588.937	3.082	0.030	Hog	10	3.28
12	1+138.567	1588.949	1+143.567	1588.950	1+148.567	1588.847	0.030	-2.053	Hog	10	4.80
13	1+153.542	1588.745	1+163.542	1588.540	1+173.542	1588.719	-2.053	1.794	Sag	20	5.20
14	1+176.938	1588.780	1+181.938	1588.870	1+186.938	1588.777	1.794	-1.866	Hog	10	2.73
15	1+193.370	1588.657	1+208.074	1588.382	1+222.778	1588.378	-1.866	-0.028	Sag	29	16.00
16	1+378.730	1588.334	1+388.730	1588.332	1+398.730	1588.388	-0.028	0.562	Sag	20	33.88
17	1+403.145	1588.413	1+418.145	1588.497	1+433.145	1588.493	0.562	-0.026	Hog	30	51.03
18	1+536.538	1588.467	1+551.538	1588.463	1+566.538	1589.223	-0.026	5.069	Sag	30	5.89
19	1+590.868	1590.456	1+610.868	1591.470	1+630.868	1590.491	5.069	-4.896	Hog	40	4.01
20	1+656.633	1589.229	1+671.633	1588.495	1+686.633	1588.444	-4.896	-0.338	Sag	30	6.58
21	1+950.000	1587.555	1+975.000	1587.471	2+000.000	1587.582	-0.338	0.444	Sag	50	64.01
22	2+005.988	1587.608	2+030.000	1587.715	2+054.012	1587.641	0.444	-0.307	Hog	48	64.00
23	2+226.113	1587.113	2+246.262	1587.052	2+266.411	1587.071	-0.307	0.096	Sag	40	100.00
24	2+430.033	1587.229	2+445.593	1587.244	2+461.153	1587.210	0.096	-0.215	Hog	31	100.00
25	2+505.819	1587.114	2+513.477	1587.098	2+521.134	1587.105	-0.215	0.091	Sag	15	50.00
26	2+591.825	1587.169	2+623.562	1587.198	2+655.298	1587.126	0.091	-0.226	Hog	63	200.00
27	2+727.628	1586.963	2+744.962	1586.924	2+762.296	1586.945	-0.226	0.121	Sag	35	100.00
28	2+931.003	1587.148	2+941.666	1587.161	2+952.330	1587.219	0.121	0.547	Sag	21	50.00
29	2+977.415	1587.357	2+997.265	1587.465	3+017.115	1587.416	0.547	-0.247	Hog	40	50.00
30	3+262.943	1586.810	3+278.904	1586.770	3+294.865	1586.782	-0.247	0.072	Sag	32	100.00
31	3+558.899	1586.973	3+565.493	1586.978	3+572.087	1586.974	0.072	-0.059	Hog	13	100.00
32	3+641.361	1586.933	3+662.158	1586.920	3+682.955	1587.081	-0.059	0.772	Sag	42	50.00
33	3+754.808	1587.636	3+758.083	1587.661	3+761.358	1587.644	0.772	-0.538	Hog	7	5.00
34	3+808.200	1587.392	3+836.000	1587.242	3+863.800	1587.350	-0.538	0.389	Sag	56	60.00
35	4+126.050	1588.370	4+172.505	1588.551	4+218.960	1588.300	0.389	-0.540	Hog	93	100.00
36	4+231.606	1588.232	4+245.215	1588.158	4+258.823	1588.208	-0.540	0.367	Sag	27	30.00
37	4+288.816	1588.318	4+294.179	1588.338	4+299.542	1588.339	0.367	0.010	Hog	11	30.00
38	4+324.595	1588.341	4+331.102	1588.342	4+337.610	1588.359	0.010	0.270	Sag	13	50.00
39	4+436.099	1588.625	4+442.699	1588.643	4+449.299	1588.678	0.270	0.534	Sag	13	50.00
40	4+551.973	1589.226	4+556.779	1589.252	4+561.584	1589.262	0.534	0.213	Hog	10	30.00
41	4+672.554	1589.499	4+679.962	1589.515	4+687.370	1589.567	0.213	0.707	Sag	15	30.00
42	4+708.744	1589.718	4+717.338	1589.779	4+725.932	1589.742	0.707	-0.439	Hog	17	15.00

CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



Eptisa Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.

DATE

DESCRIPTION

DRAWN BY :

SD

DESIGNED BY :

SCK/MM

APPROVED BY :

KG

SCALE :

N.T.S

TITLE :

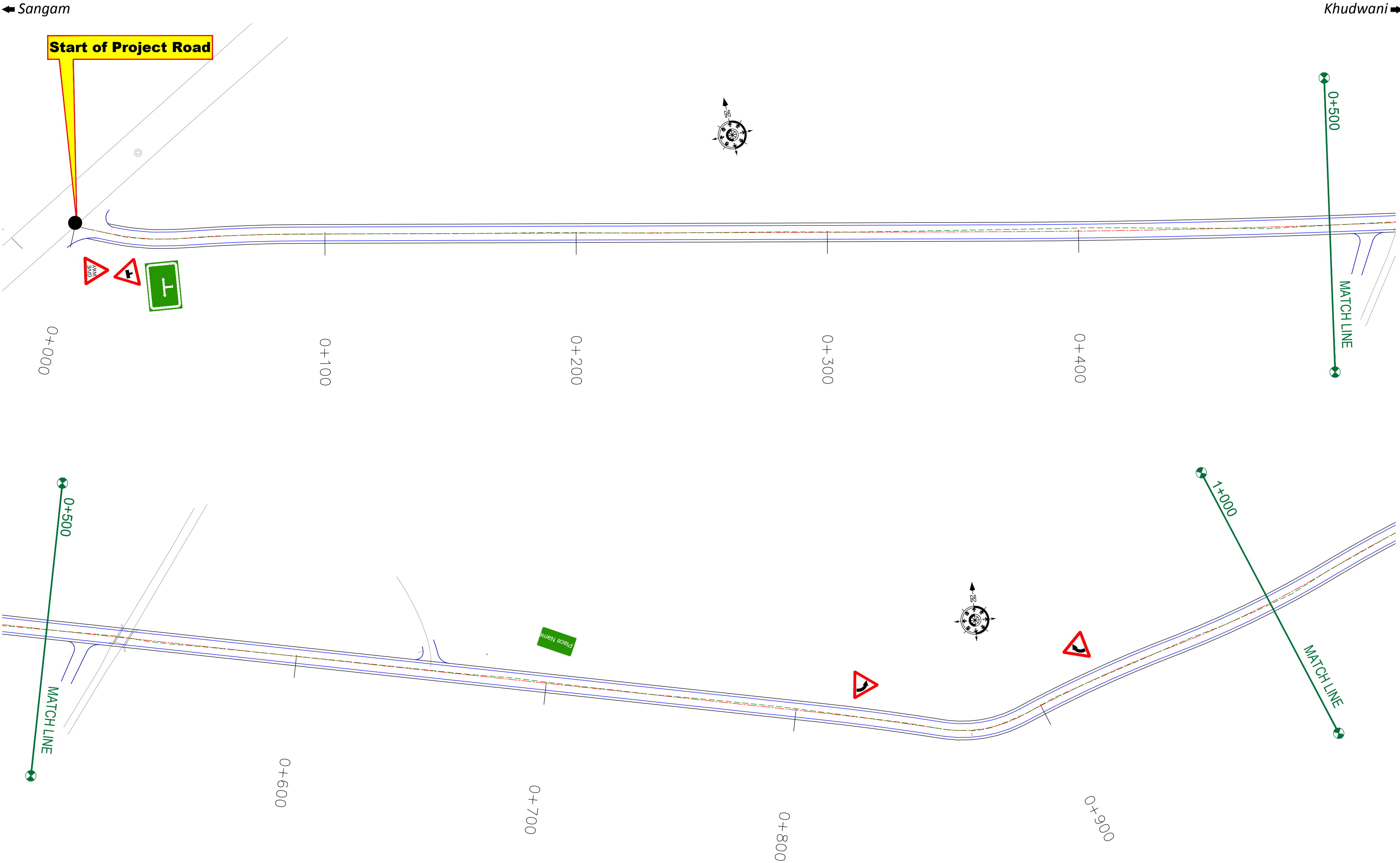
Vertical Alignment Report

DRG. NO. : EPTISA/JTFRP/DPR/J&K/VAR/01

REVISION : R-1

September 2019

≡ SIGNAGE PLAN (MAIN ROAD) ≡



CLIENT : 
Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

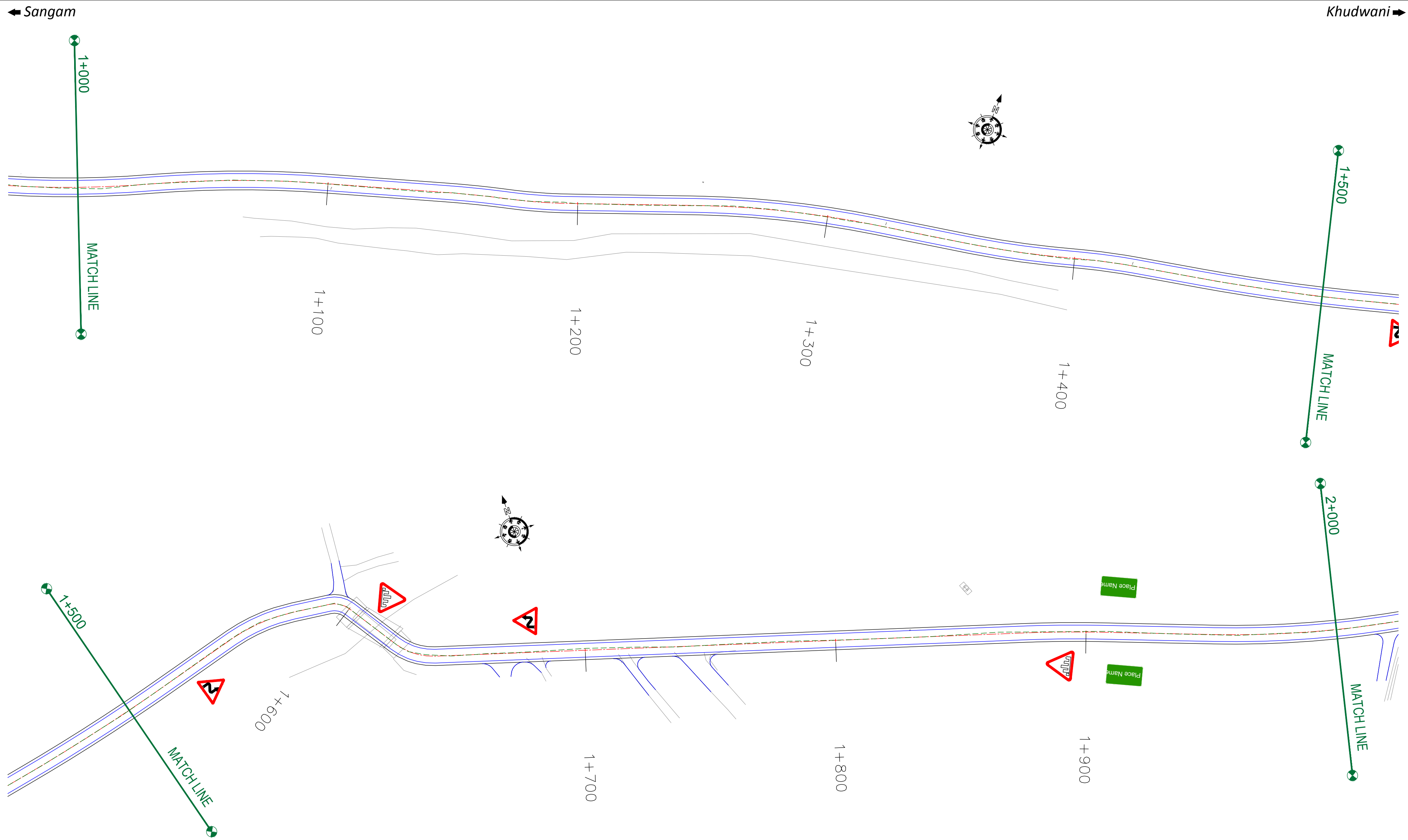
PROJECT :
Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:
 **Servicios de Ingenieria S.L.**
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

TITLE : Signage Plan (Ch. 0+000 to Ch. 1+000)	
DRG. NO. : EPTISA/JTFRP/DPR/J&K/SP/01	
REVISION : R-1	September 2019



CLIENT :

Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :
Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:
 **servicios de Ingenieria S.L.**
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

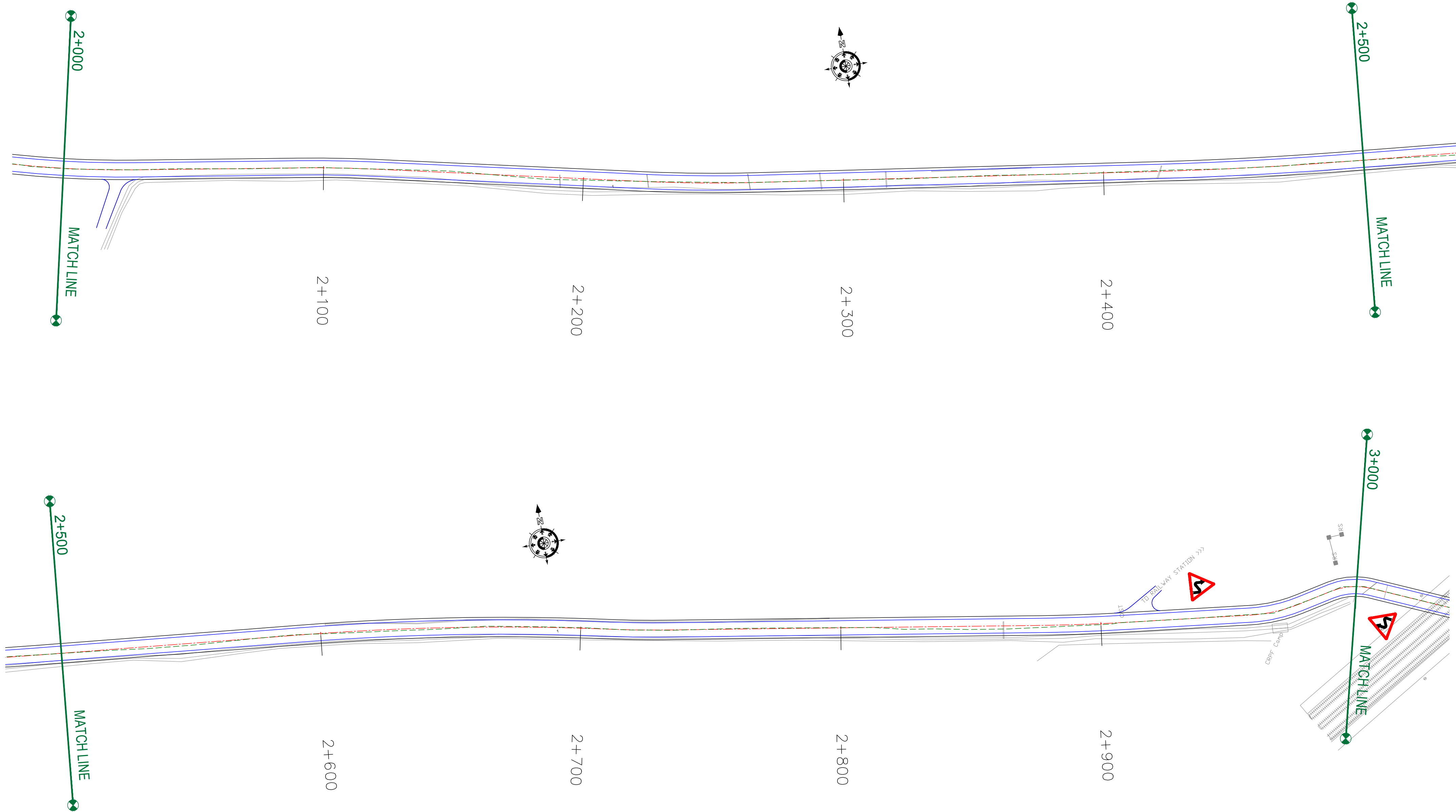
REV.	DATE	DESCRIPTION

DRAWN BY : SD
DESIGNED BY : SCK/MM
APPROVED BY : KG
SCALE : 1:1000

TITLE :
Signage Plan
(Ch. 1+000 to Ch. 2+000)
DRG. NO. : EPTISA/JTFRP/DPR/J&K/SP/02
REVISION : R-1
September 2019

← Sangam

Khudwani →



CLIENT :




Jhelum & Tawi
FLOOD RECOVERY PROJECT

Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY : SD

DESIGNED BY : SCK/MM

APPROVED BY : KG

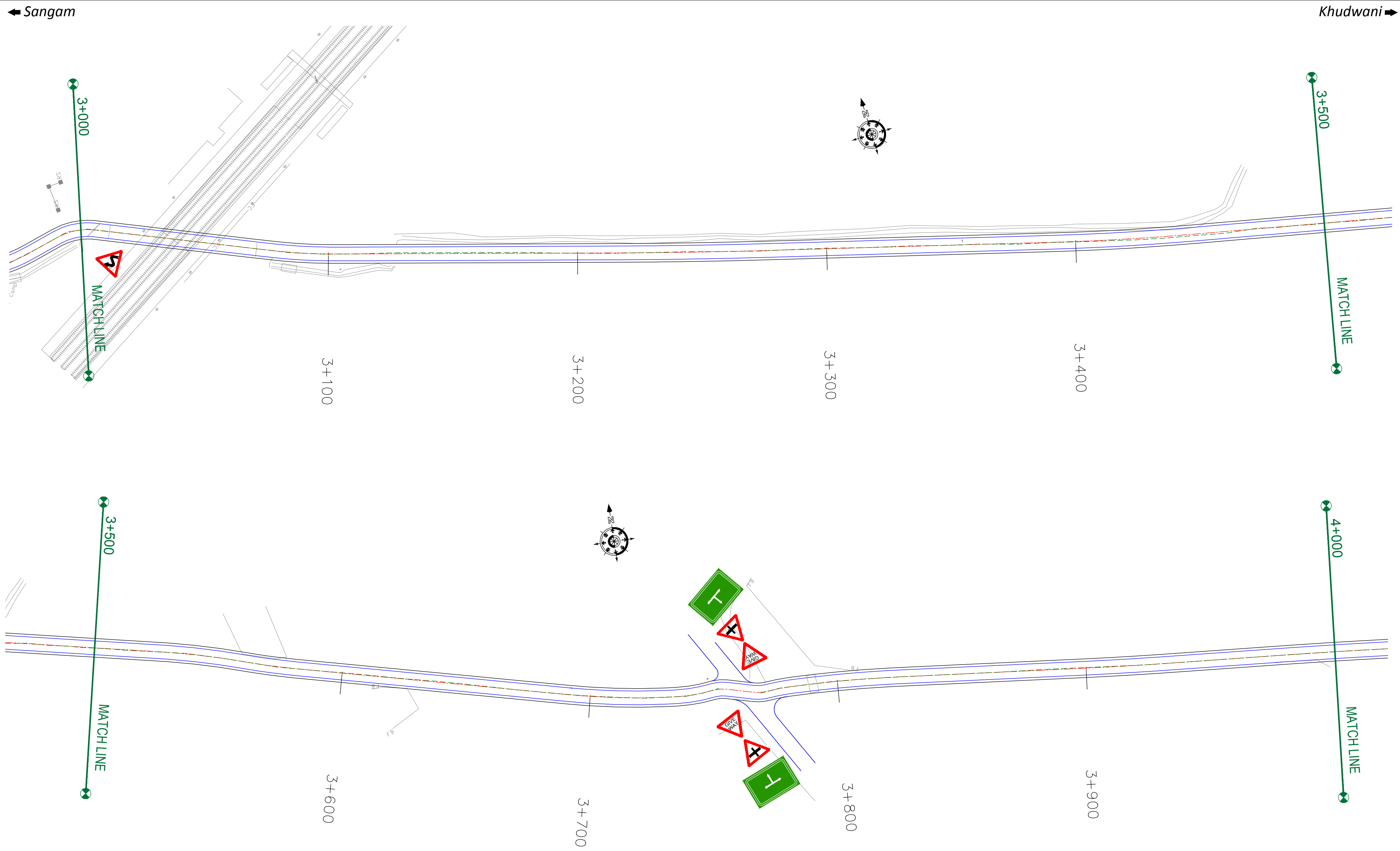
SCALE : 1:1000

TITLE :
Signage Plan
(Ch. 2+000 to Ch. 3+000)

DRG. NO. : EPTISA/JTRFP/DPR/J&K/SP/03

REVISION : R-1

September 2019



CLIENT :



Jhelum & Tawi
FLOOD RECOVERY PROJECT

Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:

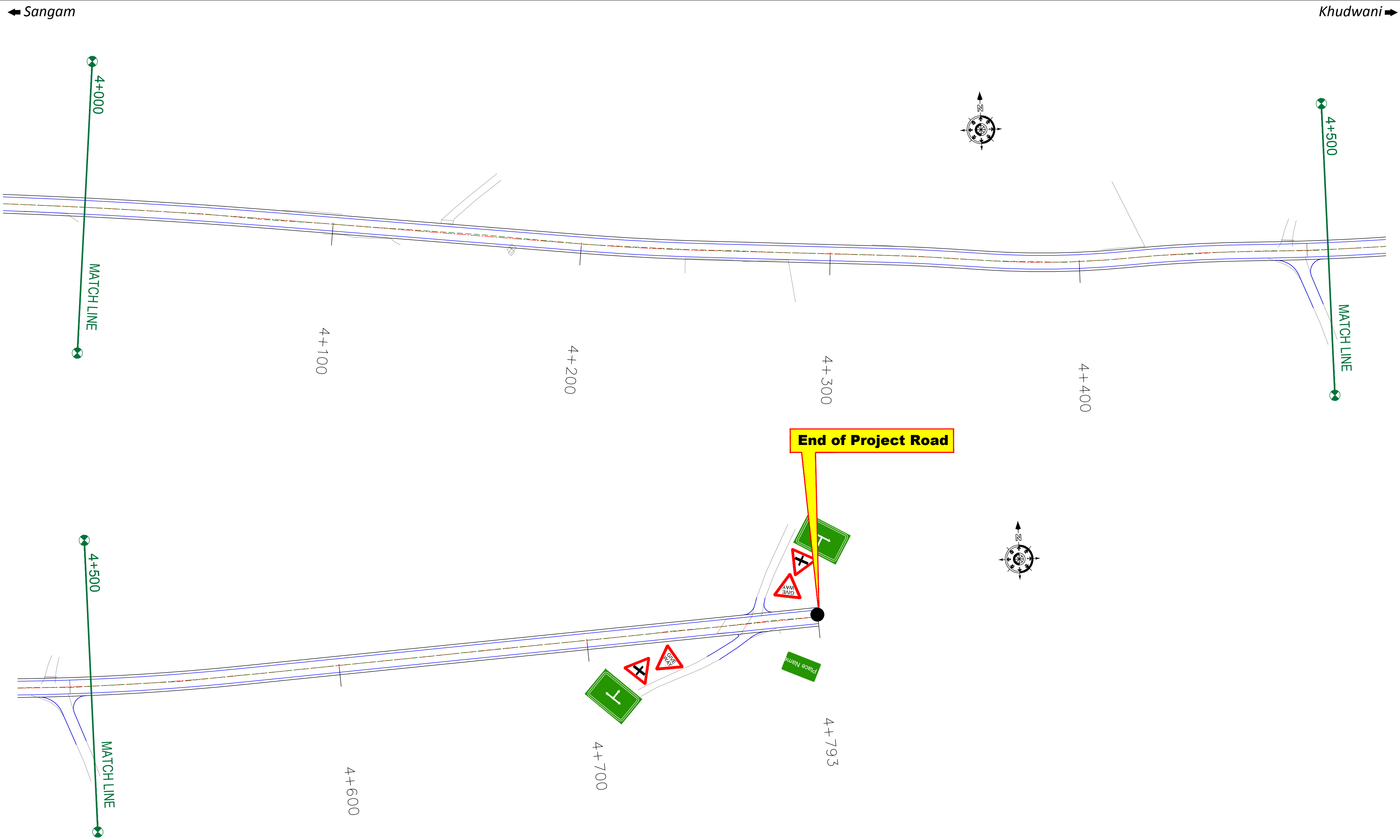


servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

TITLE : Signage Plan (Ch. 3+000 to Ch. 4+000)	
DRG. NO. : EPTISA/JTRFP/DPR/J&K/SP/04	
REVISION : R-1	September 2019



CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



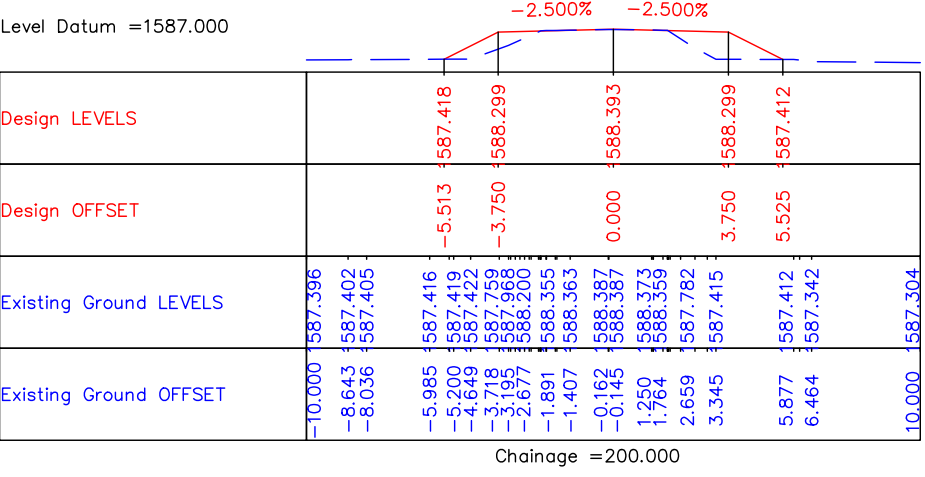
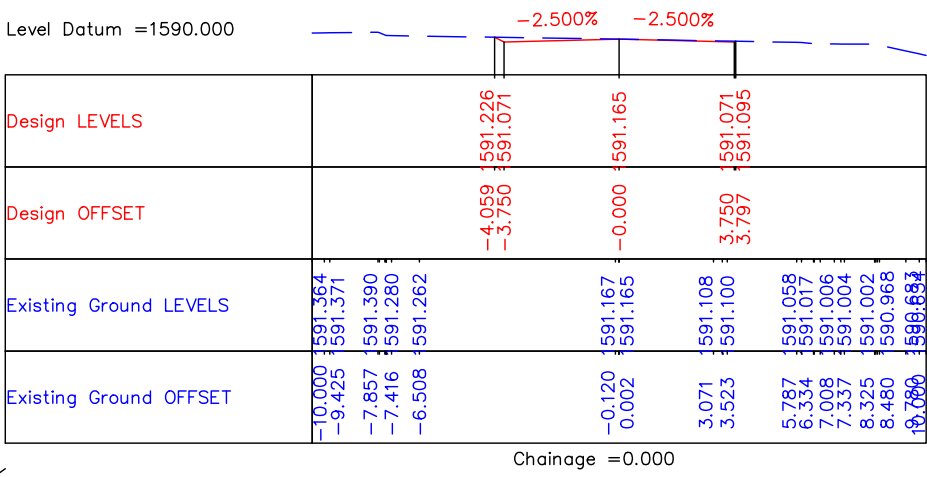
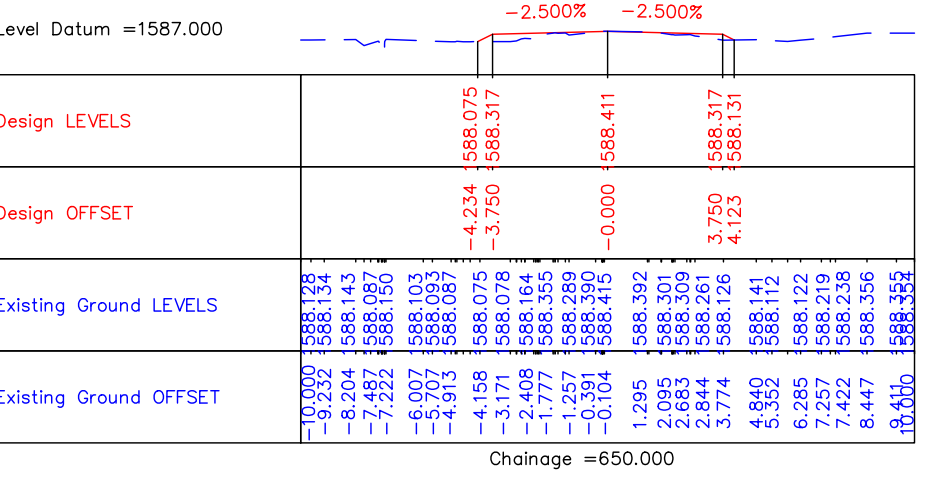
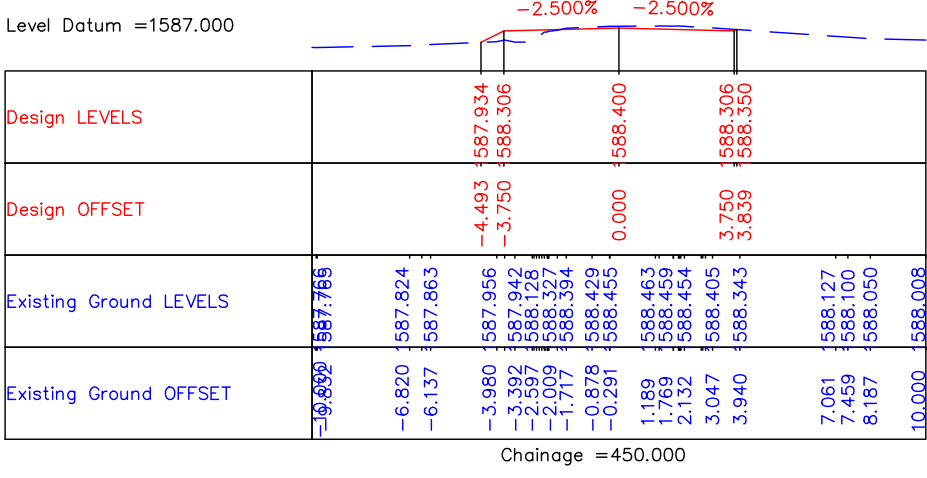
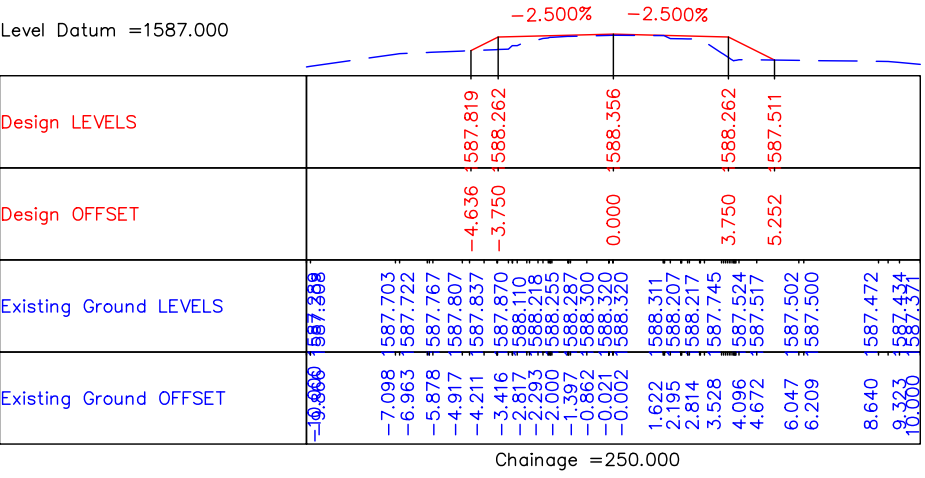
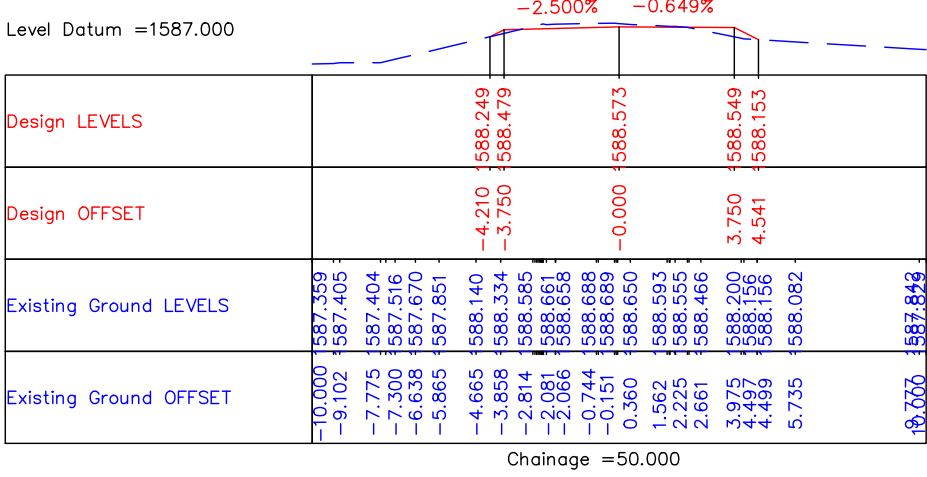
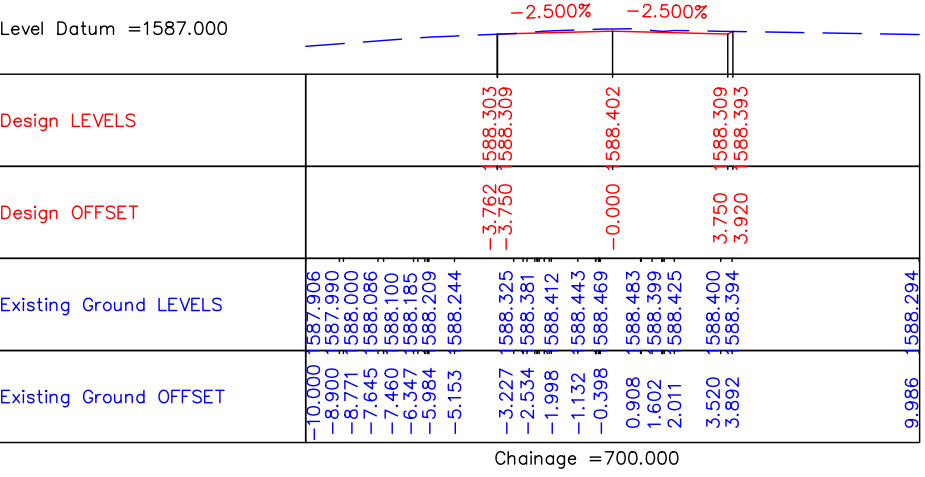
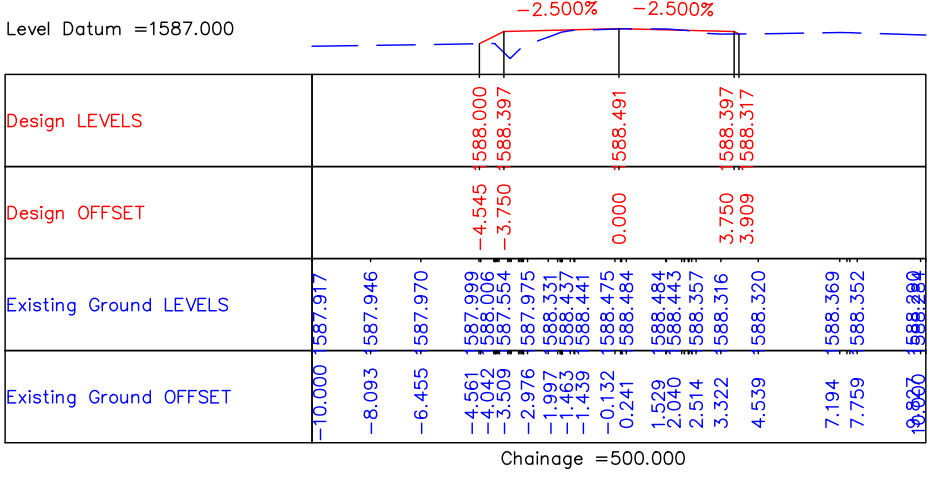
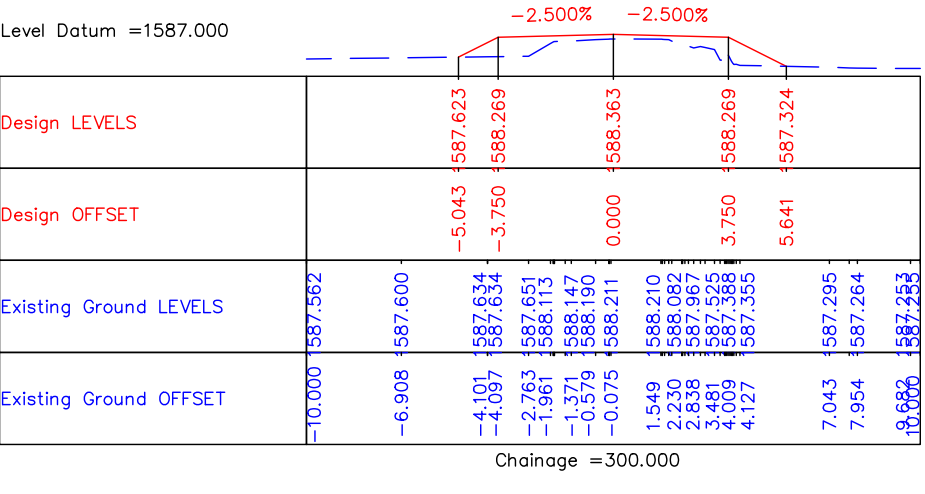
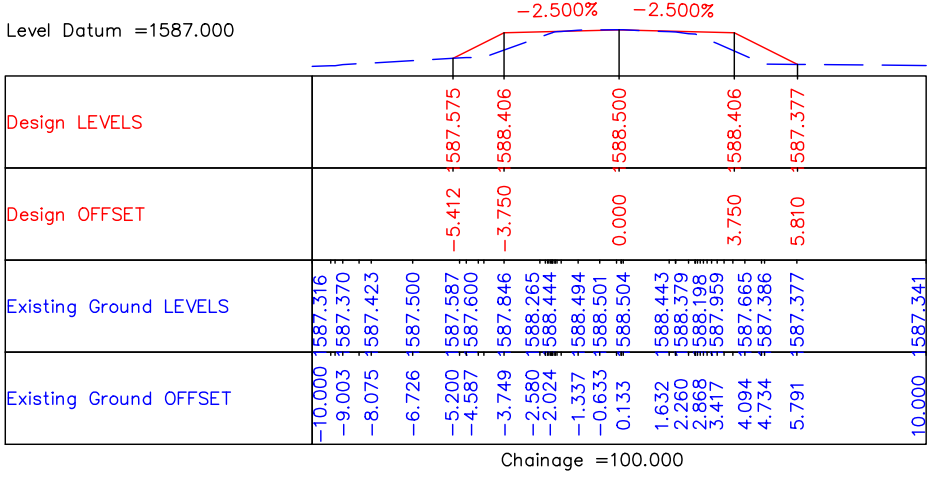
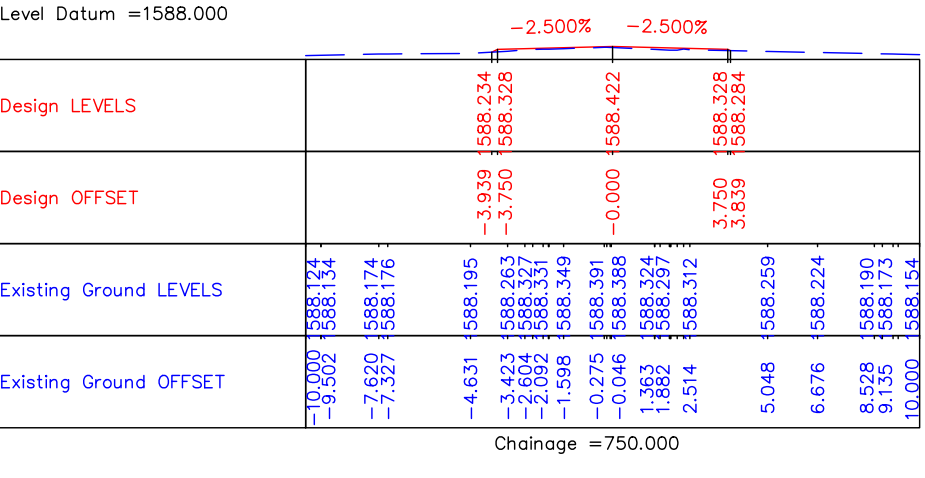
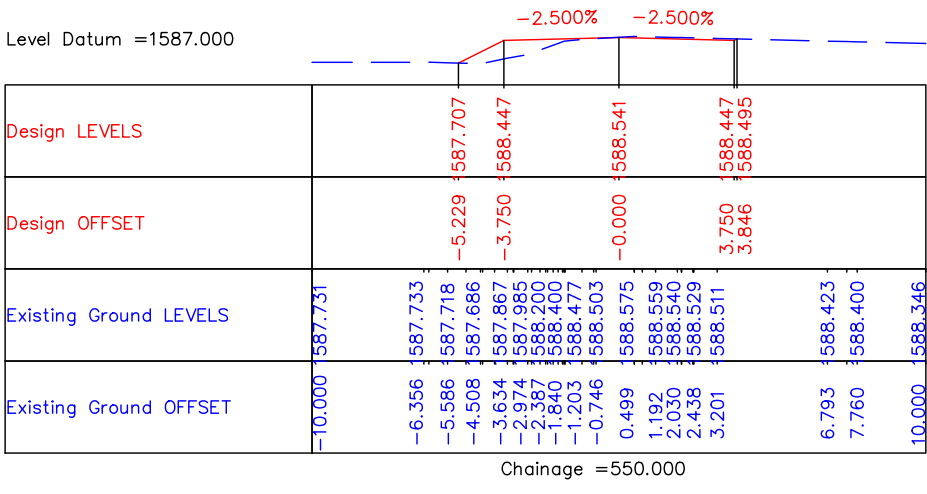
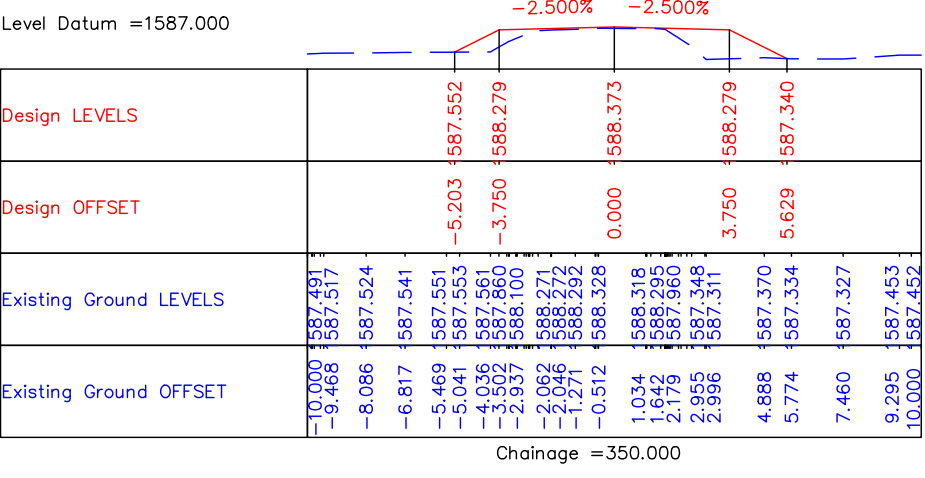
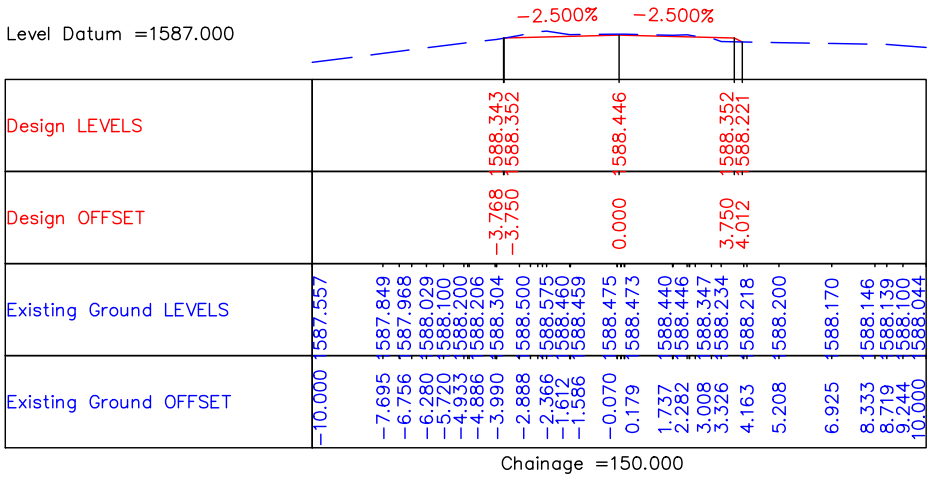
servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

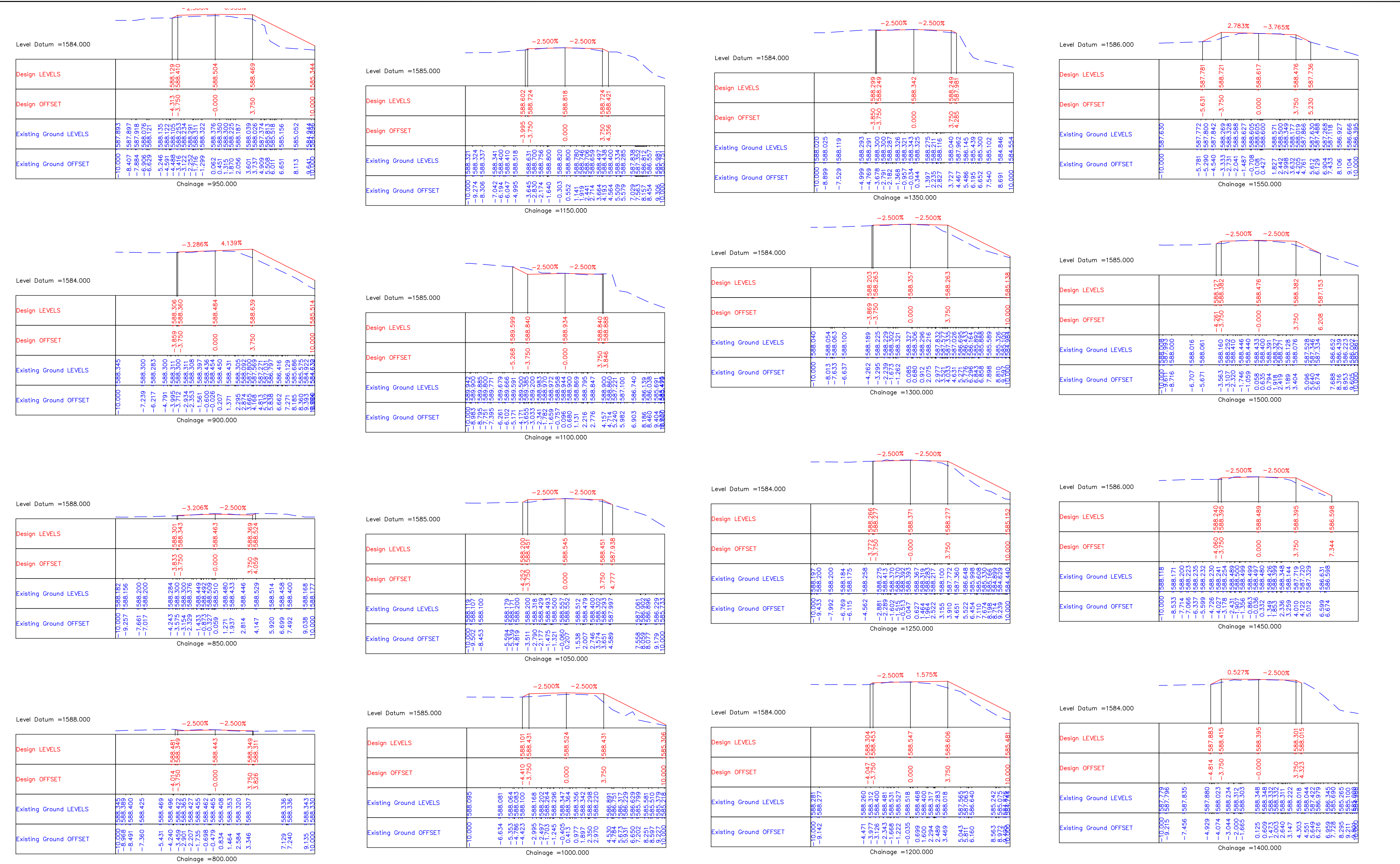
REV.	DATE	DESCRIPTION

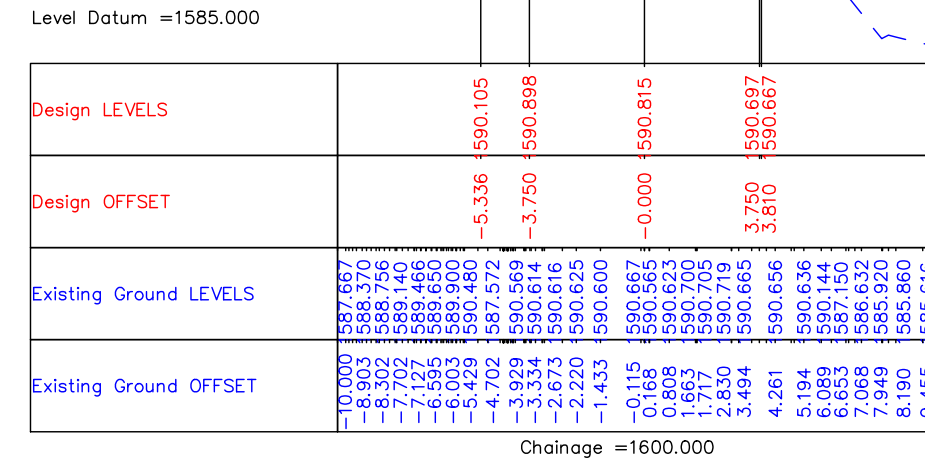
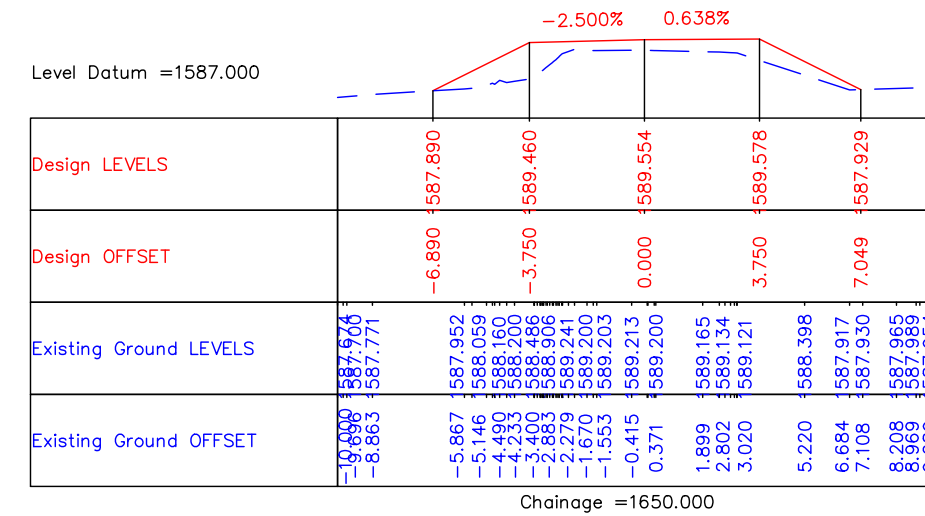
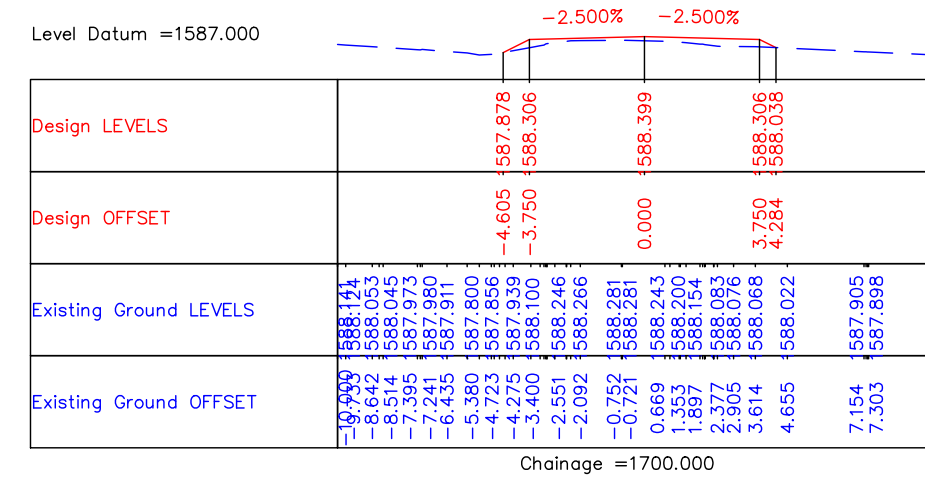
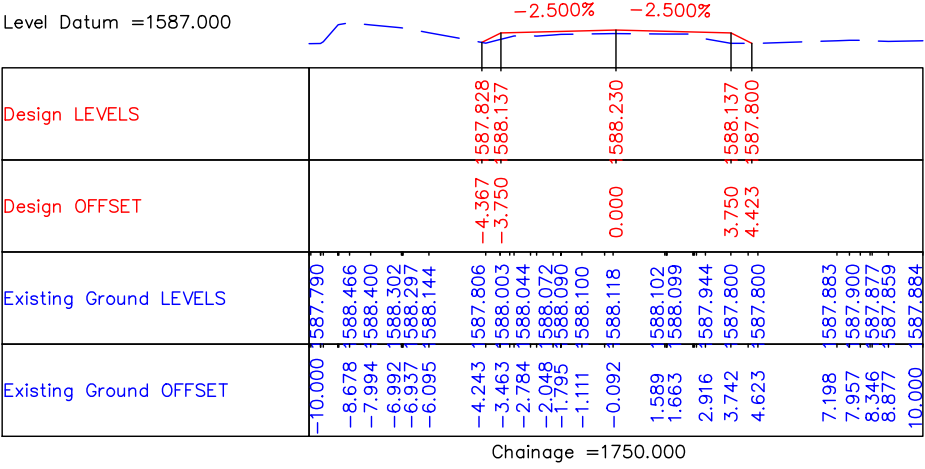
DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

TITLE :	
Signage Plan	
(Ch. 4+000 to Ch. 4+793)	
DRG. NO. : EPTISA/JTFRP/DPR/J&K/SP/05	
REVISION : R-1	September 2019

≡ DETAILED CROSS SECTION ≡







CLIENT : 
Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :
Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

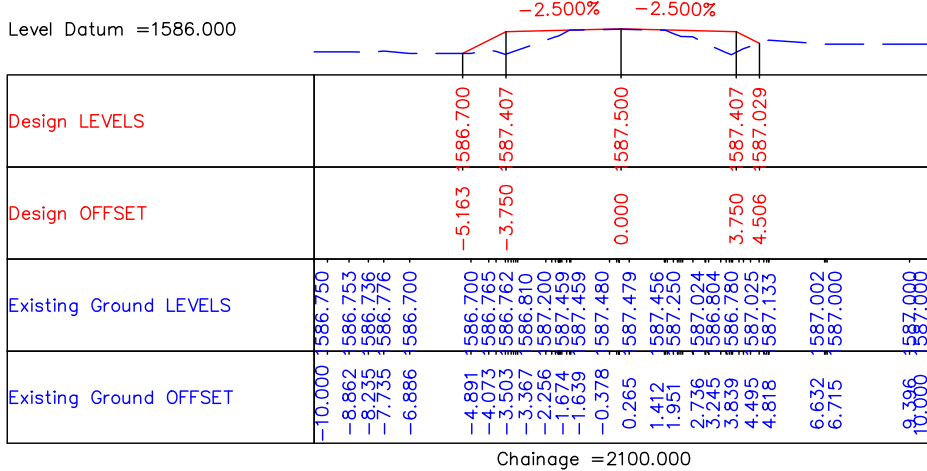
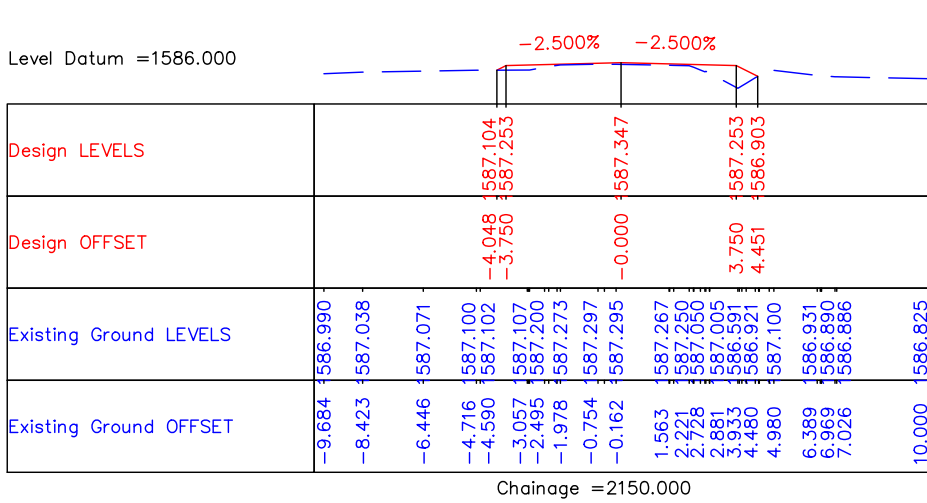
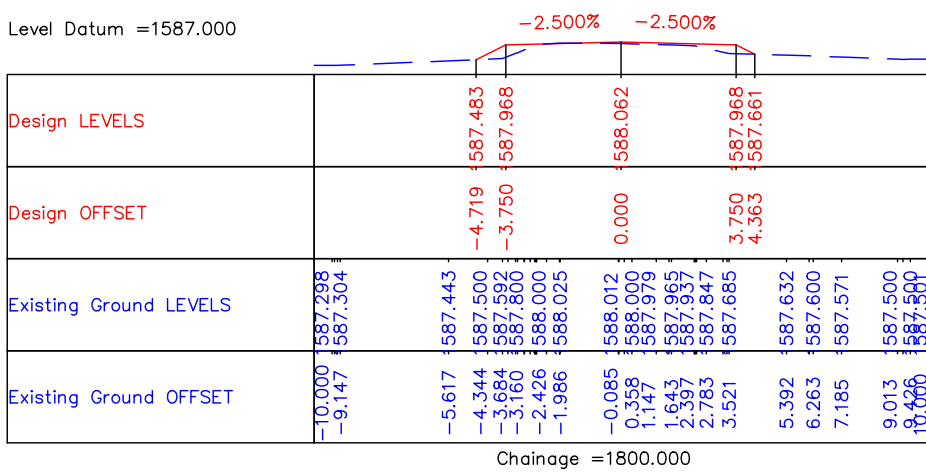
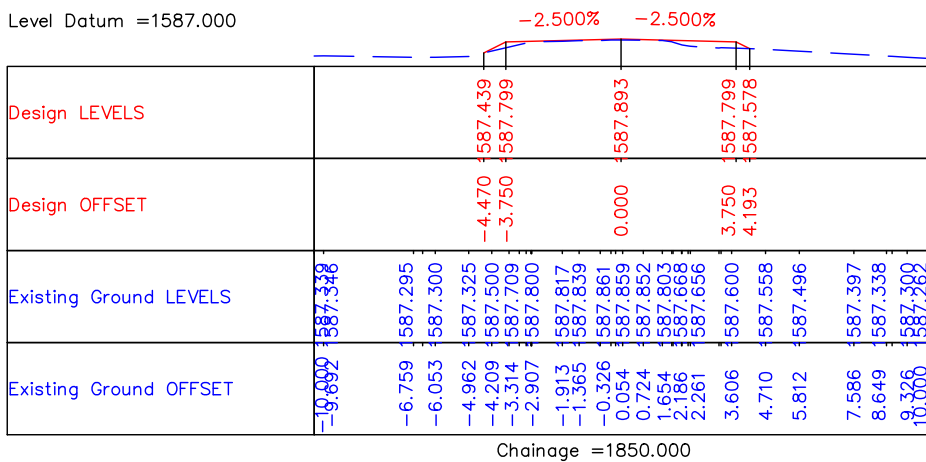
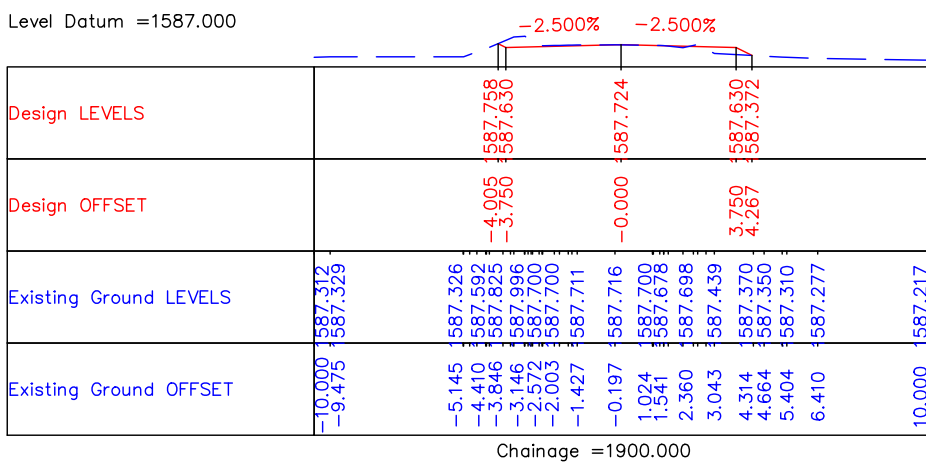
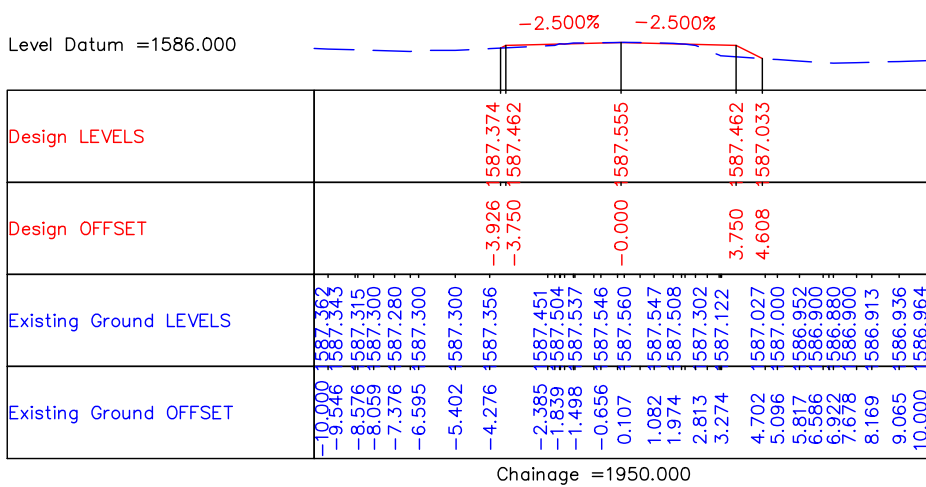
DESIGN CONSULTANT:

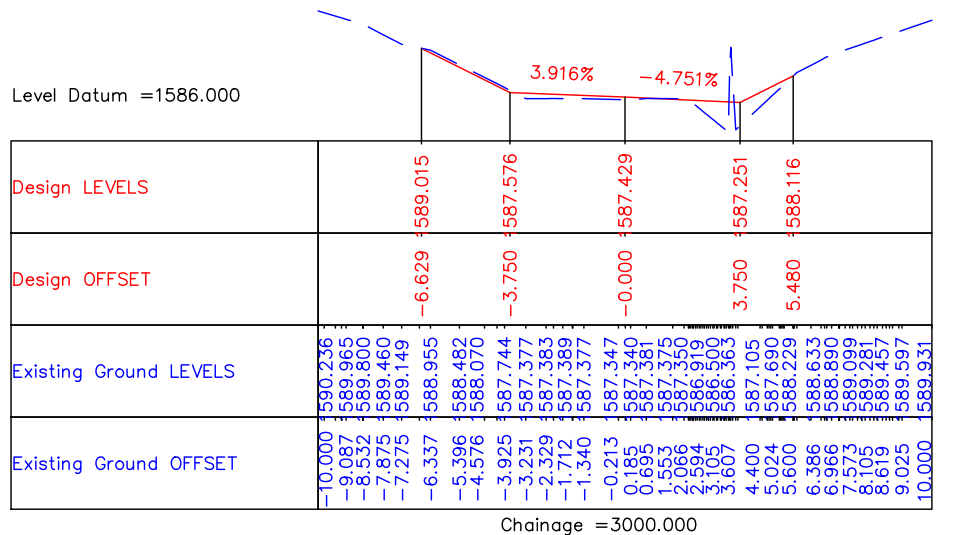
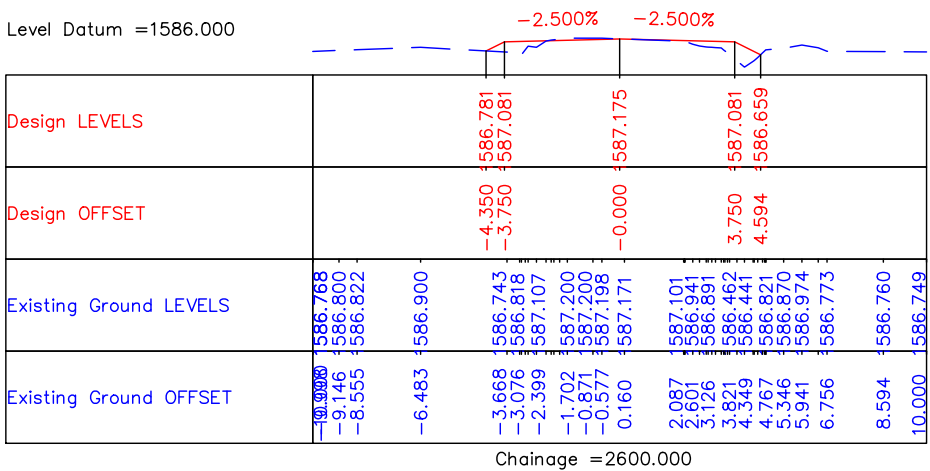
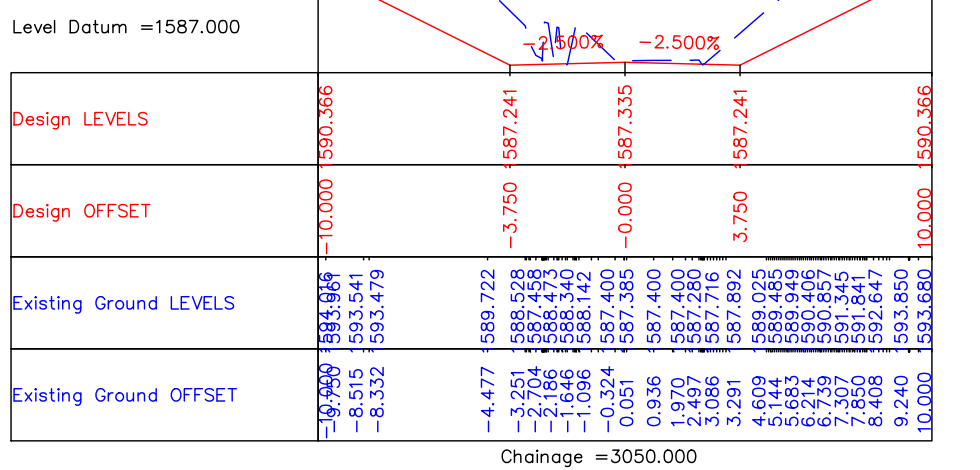
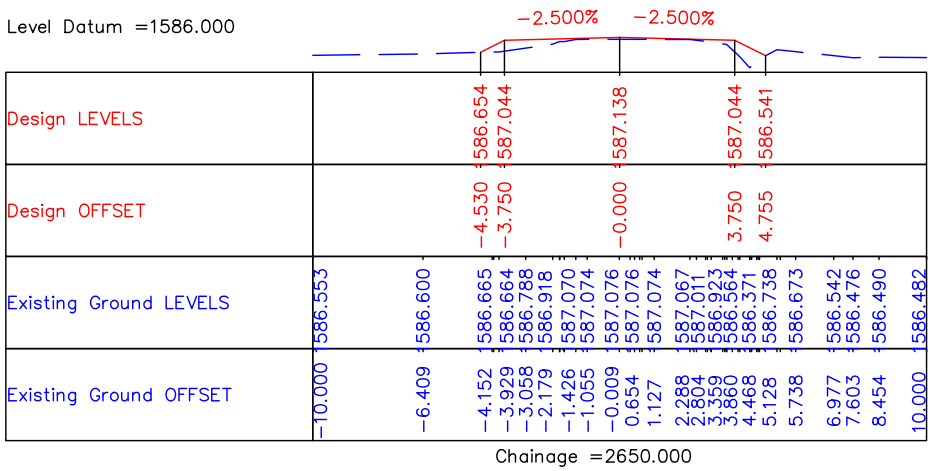
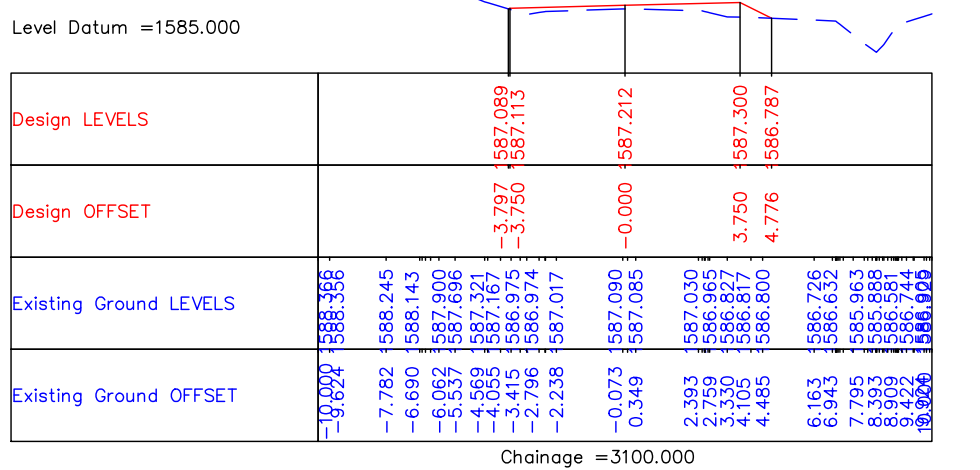
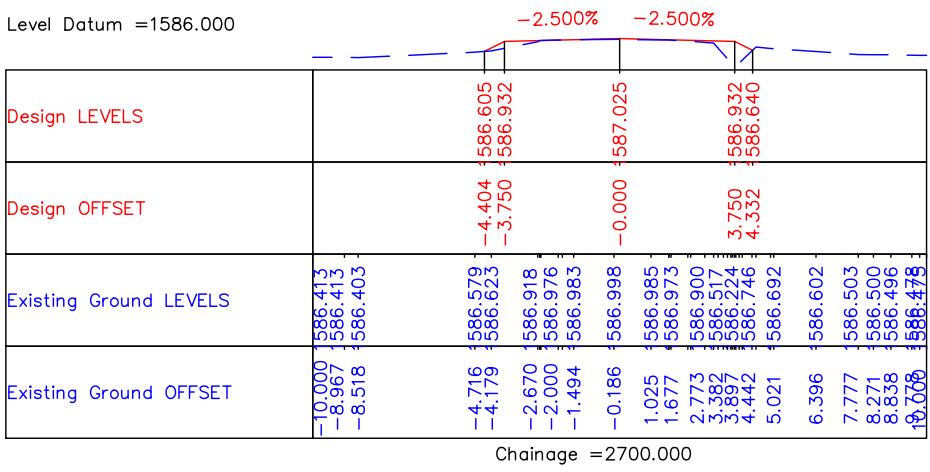
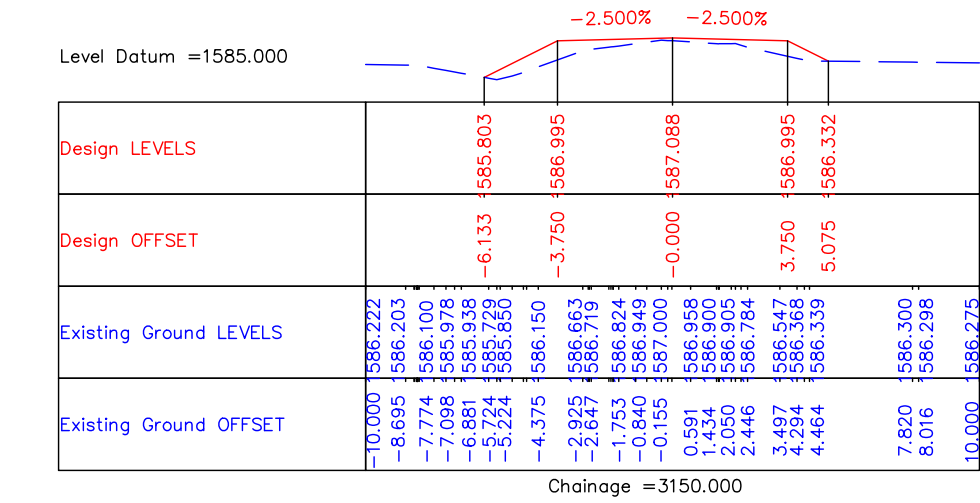
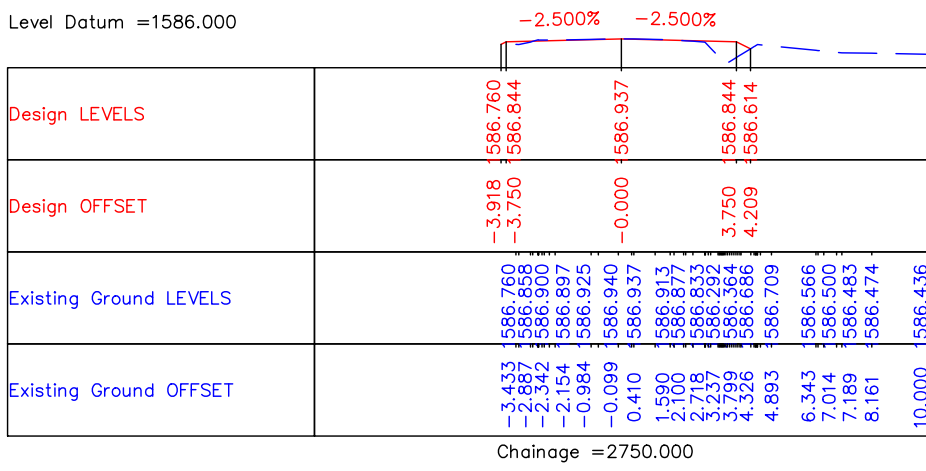
Eptisa Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

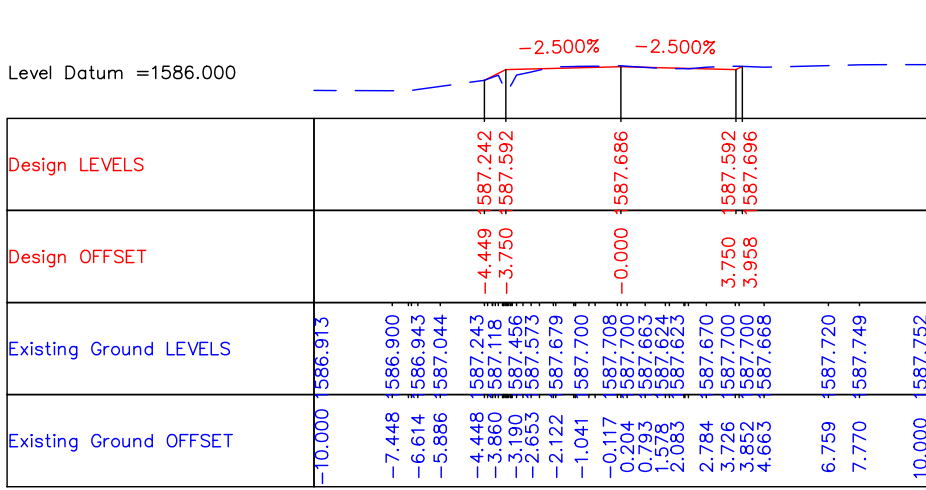
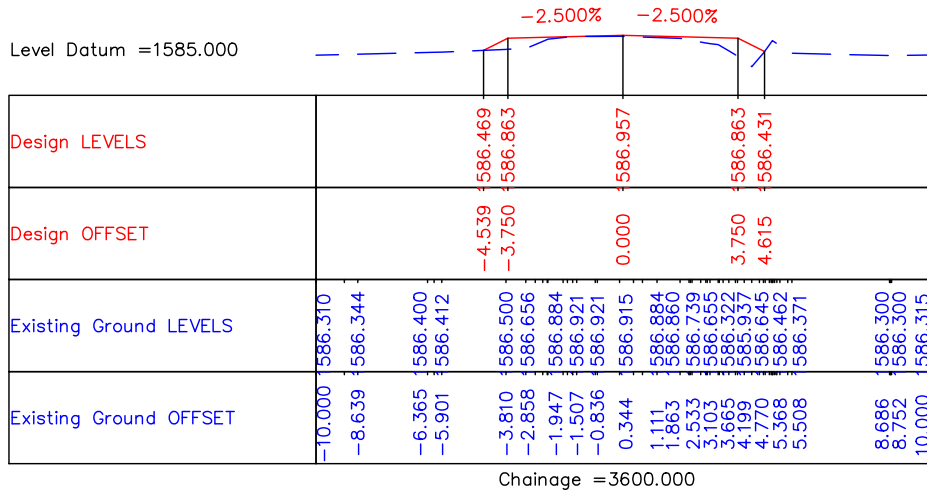
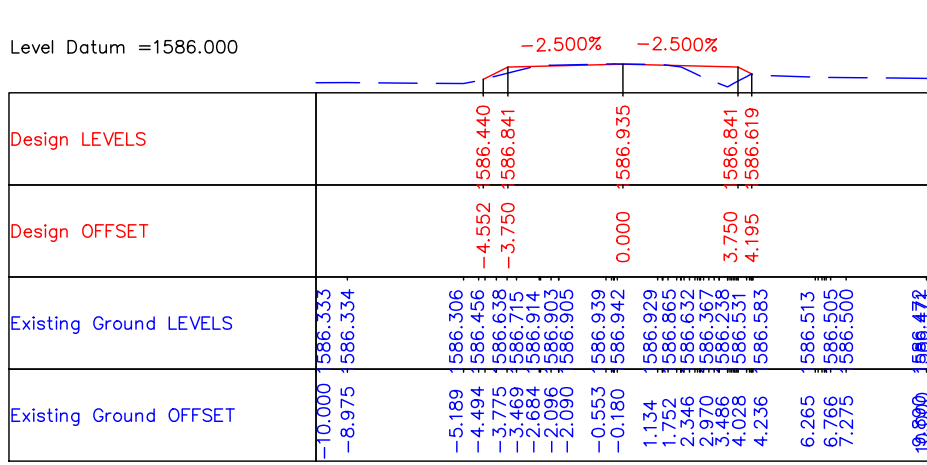
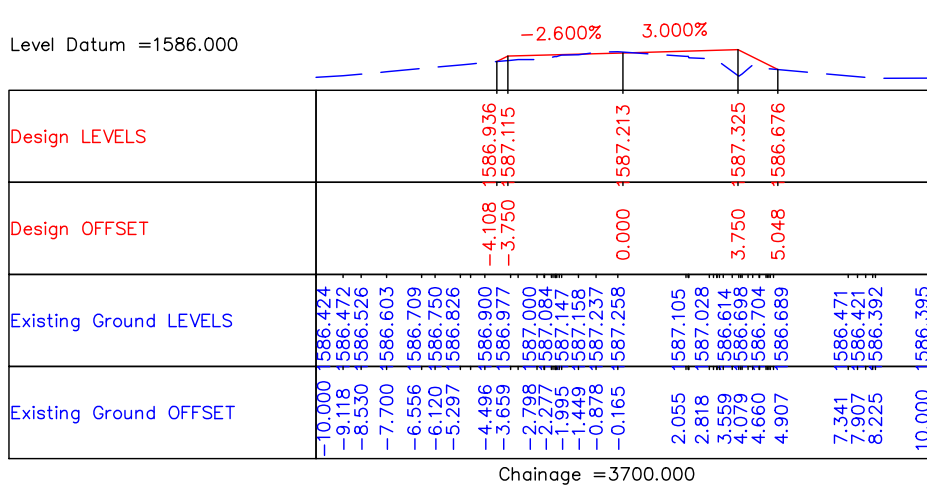
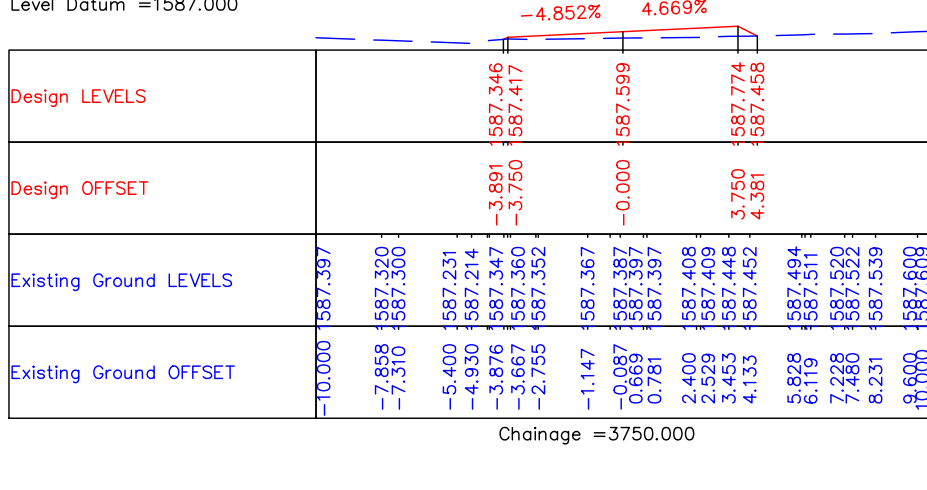
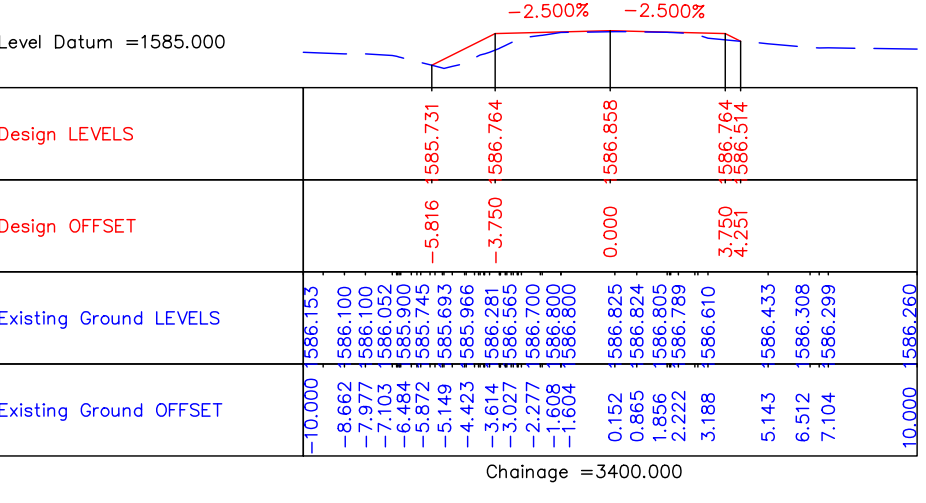
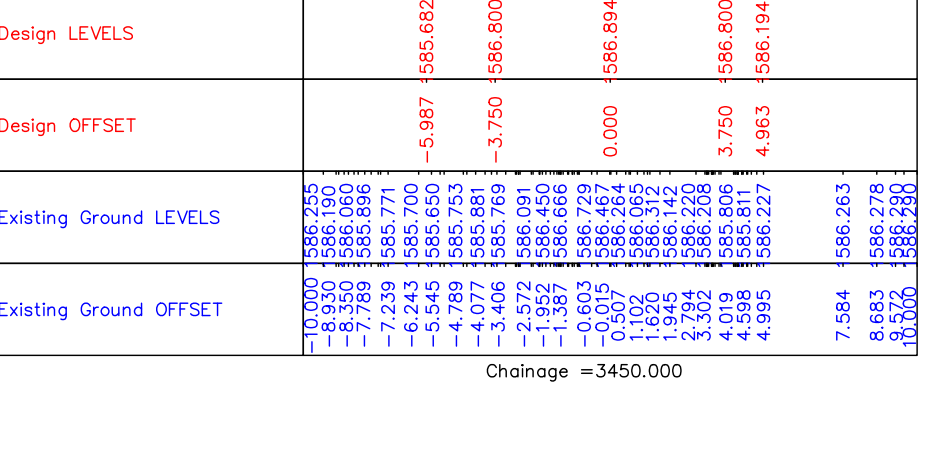
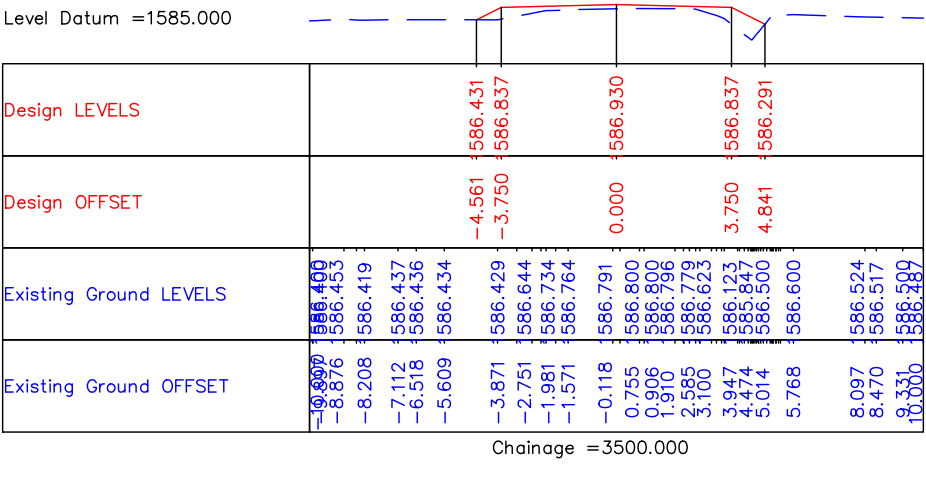
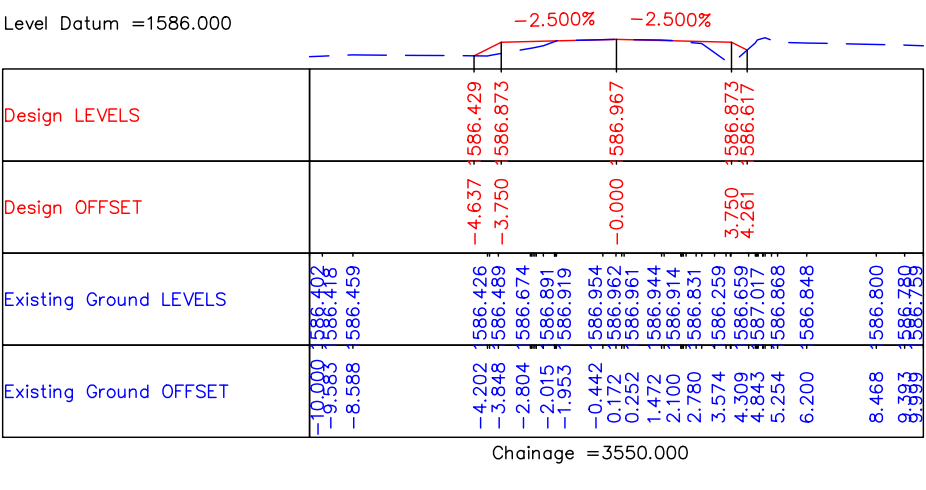
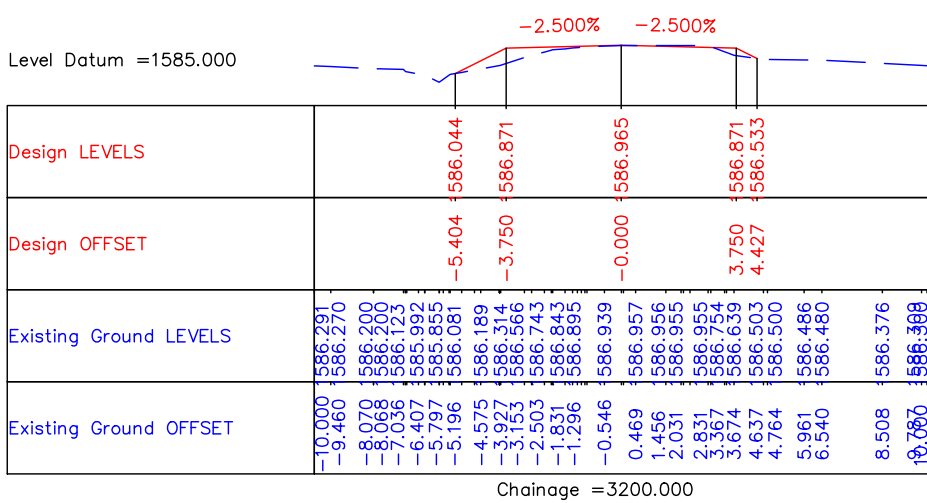
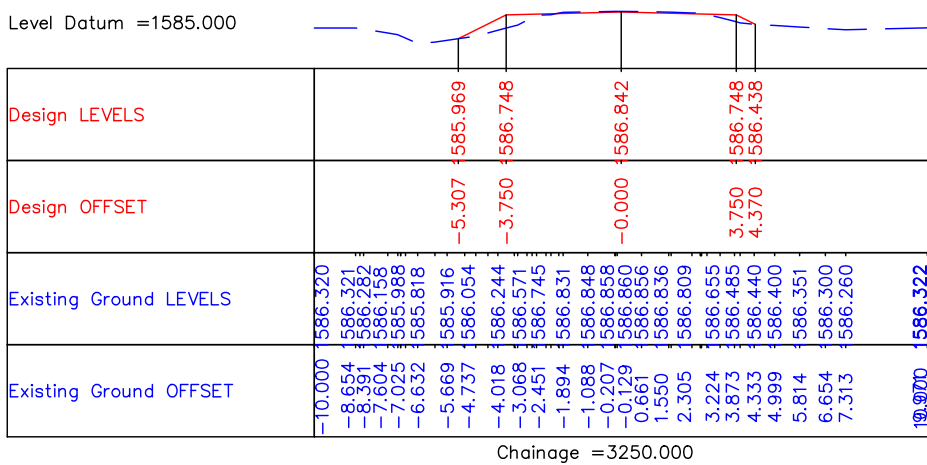
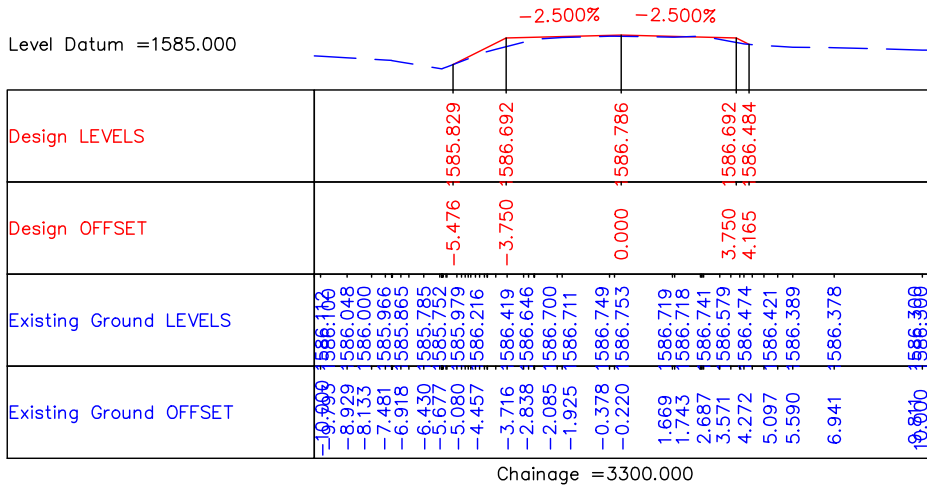
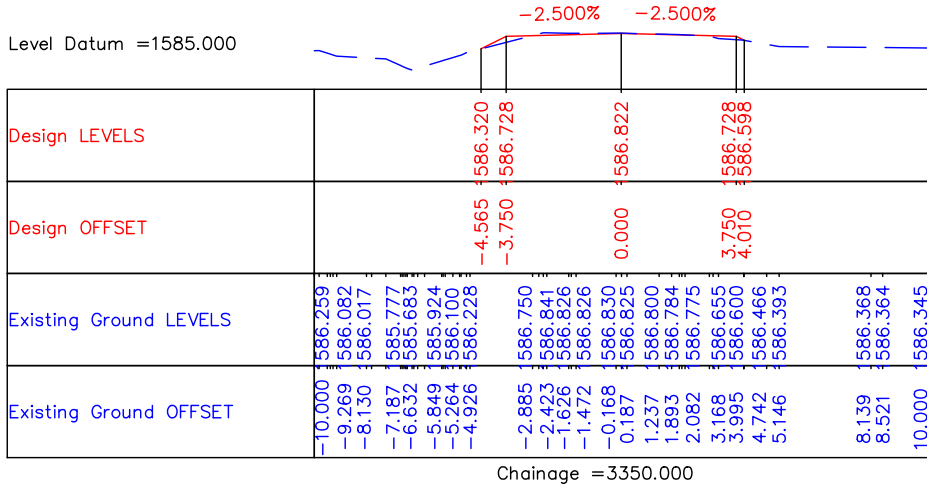
REV.	DATE	DESCRIPTION

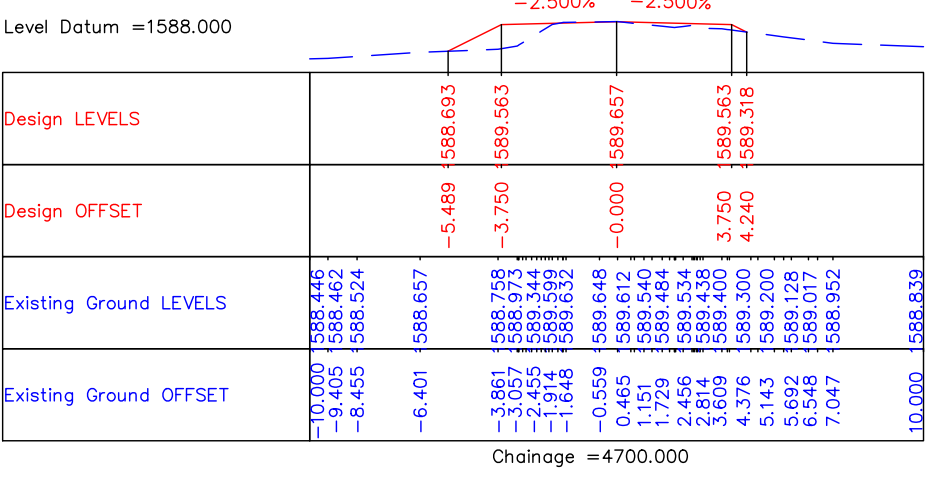
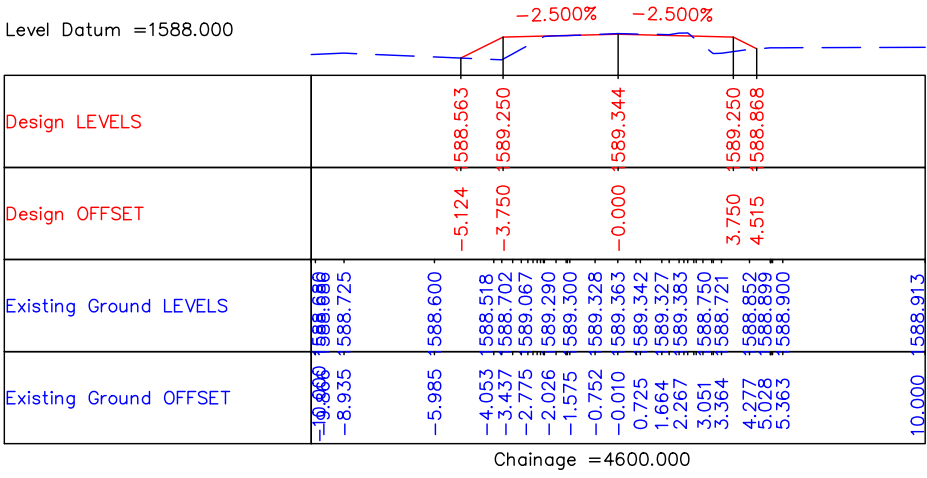
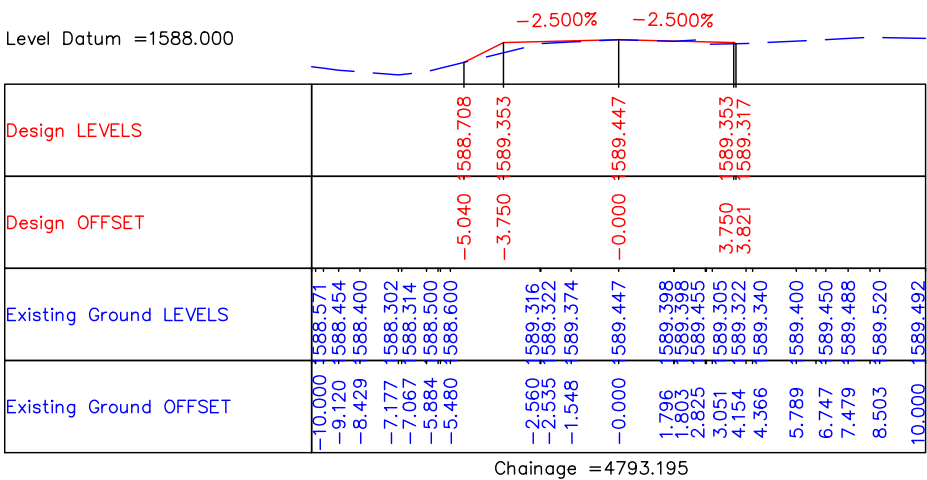
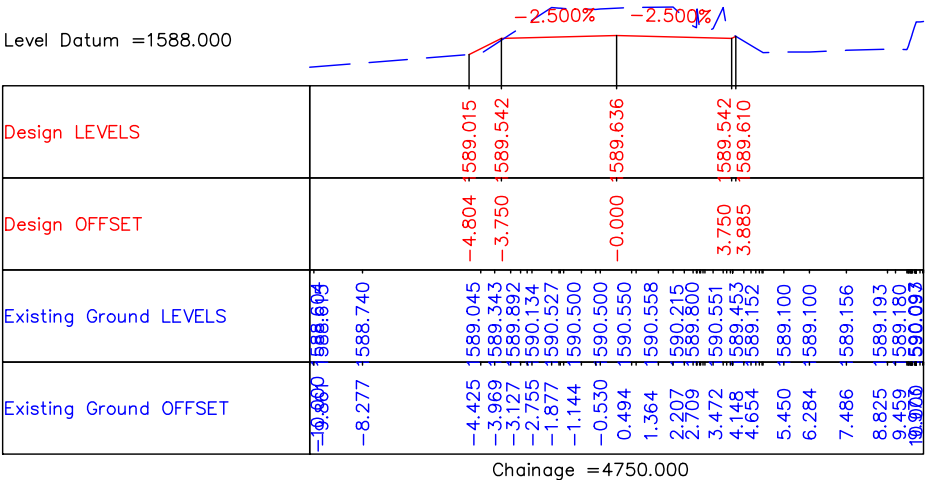
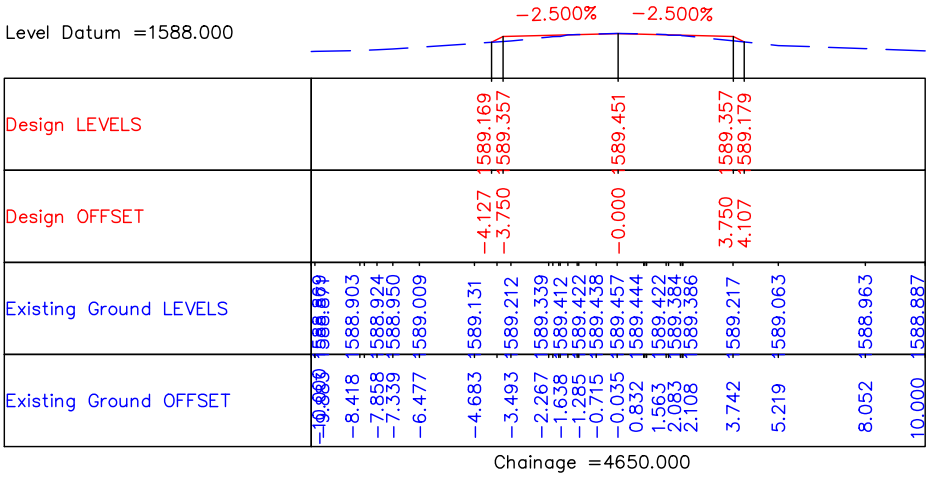
DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:250

TITLE :	Detailed Cross Sections (Ch. 1+600 Km to Ch. 2+350 Km)
DRG. NO. :	EPTISA/JTRP/DPR/J&K/DCS/03
REVISION : R-1	September 2019









CLIENT :



Jhelum & Tawi
FLOOD RECOVERY PROJECT

Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



Eptisa Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:250

TITLE : Detailed Cross Sections (Ch. 4+600 Km to Ch. 4+793 Km)	
DRG. NO. : EPTISA/JTRFP/DPR/J&K/DCS/07	
REVISION : R-1	September 2019

≡ UTILITY RELOCATION PLAN FOR MAIN ROAD (ELECTRICITY DEPARTMENT) ≡

← Sangam

Khudwani →

Start of Project Road



CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY : SD

DESIGNED BY : SCK/MM

APPROVED BY : KG

SCALE : 1:1000

TITLE : Utility Relocation Plan
(For Electricity Department)
(Ch. 0+000 to Ch. 1+000)

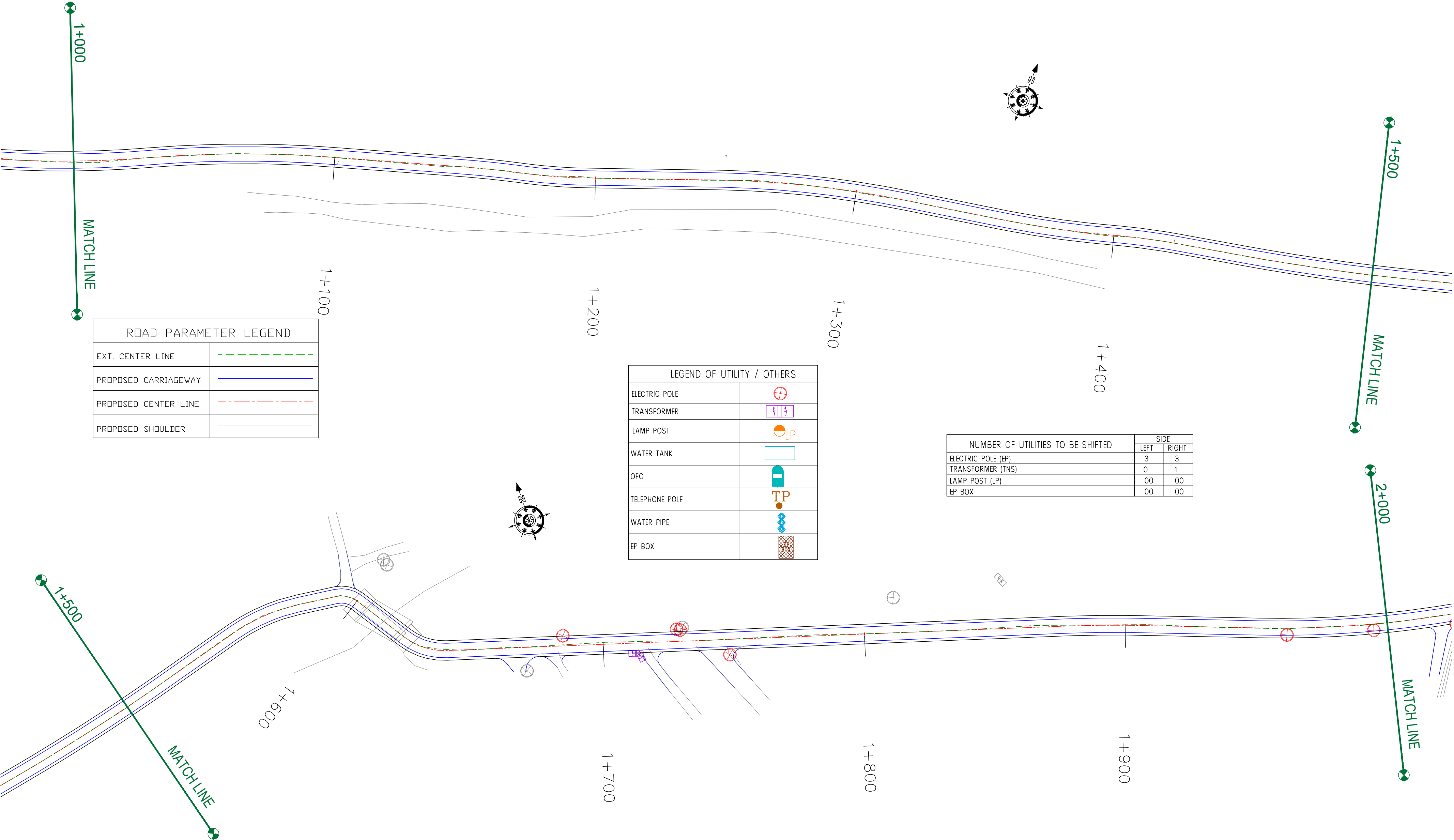
DRG. NO. : EPTISA/JTFRP/DPR/J&K/URP/01

REVISION : R-1

September 2019

← Sangam

Khudwani →



ROAD PARAMETER LEGEND	
EXT. CENTER LINE	
PROPOSED CARRIAGEWAY	
PROPOSED CENTER LINE	
PROPOSED SHOULDER	

LEGEND OF UTILITY / OTHERS	
ELECTRIC POLE	
TRANSFORMER	
LAMP POST	
WATER TANK	
OFC	
TELEPHONE POLE	
WATER PIPE	
EP BOX	

NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
ELECTRIC POLE (EP)	3	3
TRANSFORMER (TNS)	0	1
LAMP POST (LP)	00	00
EP BOX	00	00

CLIENT :




Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

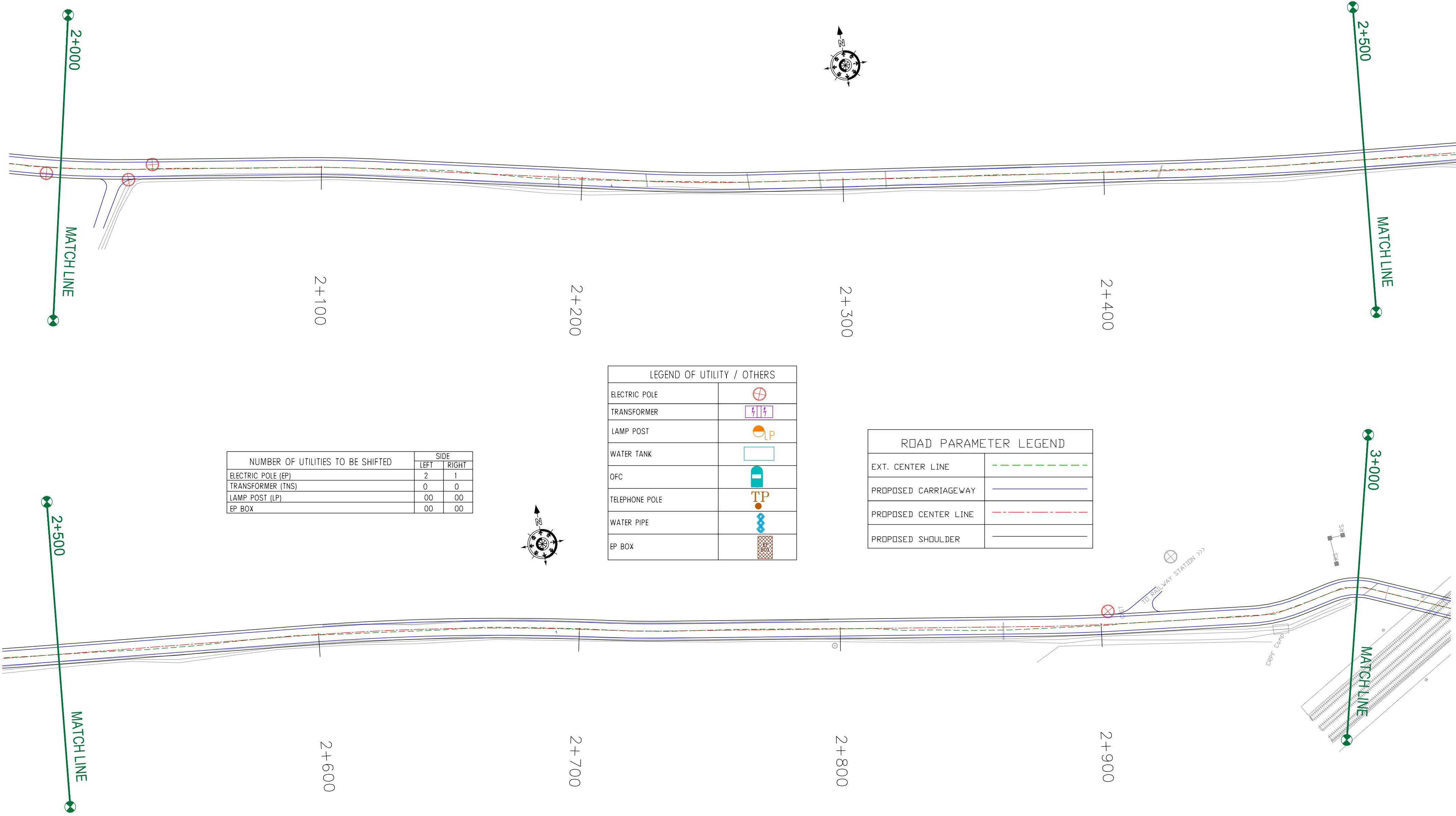
REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

TITLE : Utility Relocation Plan (For Electricity Department) (Ch. 1+000 to Ch. 2+000)	
DRG. NO. : EPTISA/JTFRP/DPR/J&K/URP/02	
REVISION : R-1	September 2019

← Sangam

Khudwani →



NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
ELECTRIC POLE (EP)	2	1
TRANSFORMER (TNS)	0	0
LAMP POST (LP)	00	00
EP BOX	00	00

LEGEND OF UTILITY / OTHERS	
ELECTRIC POLE	
TRANSFORMER	
LAMP POST	
WATER TANK	
OFC	
TELEPHONE POLE	
WATER PIPE	
EP BOX	

ROAD PARAMETER LEGEND	
EXT. CENTER LINE	
PROPOSED CARRIAGEWAY	
PROPOSED CENTER LINE	
PROPOSED SHOULDER	

CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

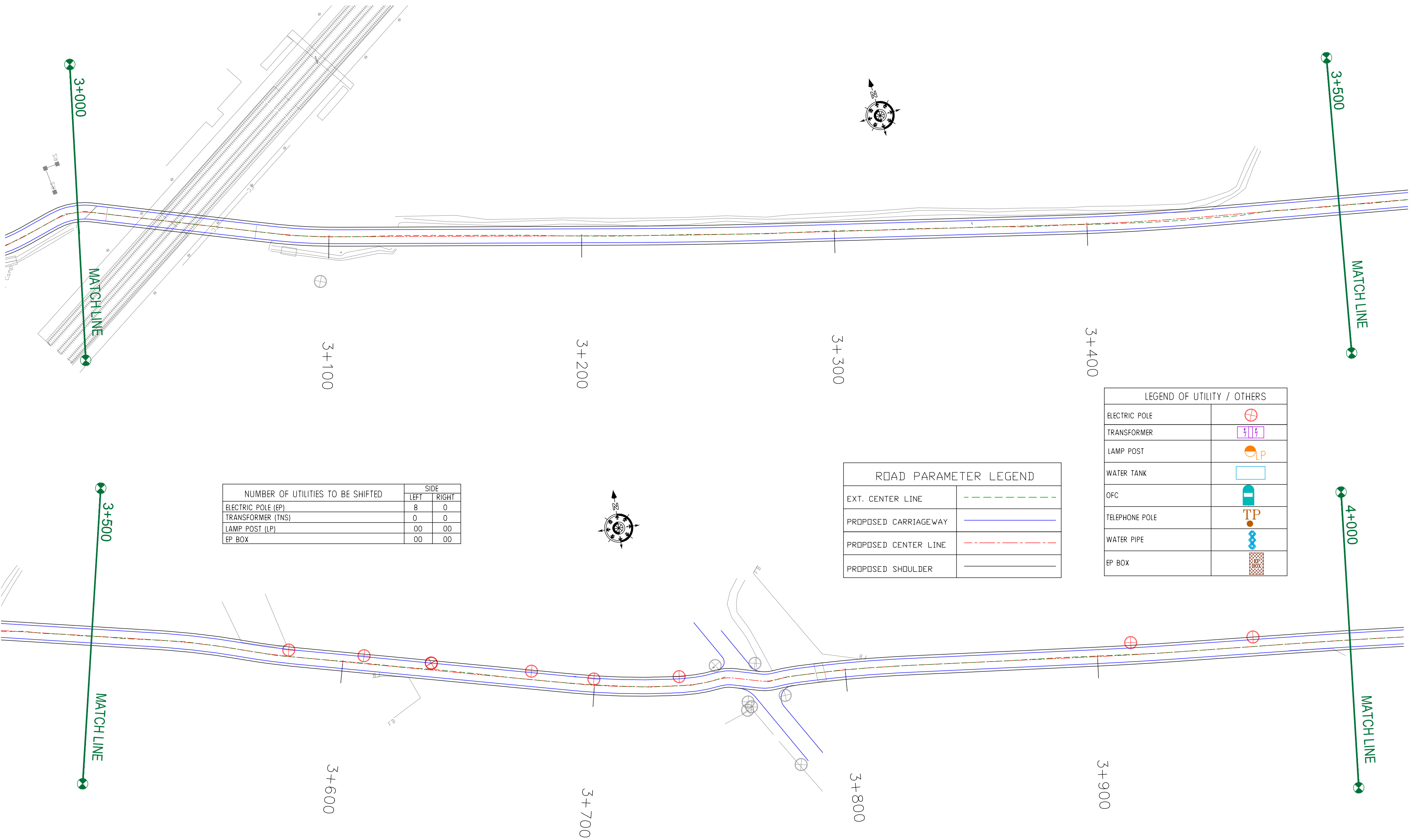
REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

TITLE : Utility Relocation Plan (For Electricity Department) (Ch. 2+000 to Ch. 3+000)	
DRG. NO. : EPTISA/JTRFP/DPR/J&K/URP/03	
REVISION : R-1	September 2019

← Sangam

Khudwani →



CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



servicios de Ingenieria S.L.

Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY : SD

DESIGNED BY : SCK/MM

APPROVED BY : KG

SCALE : 1:1000

TITLE :

Utility Relocation Plan
(For Electricity Department)
(Ch. 3+000 to Ch. 4+000)

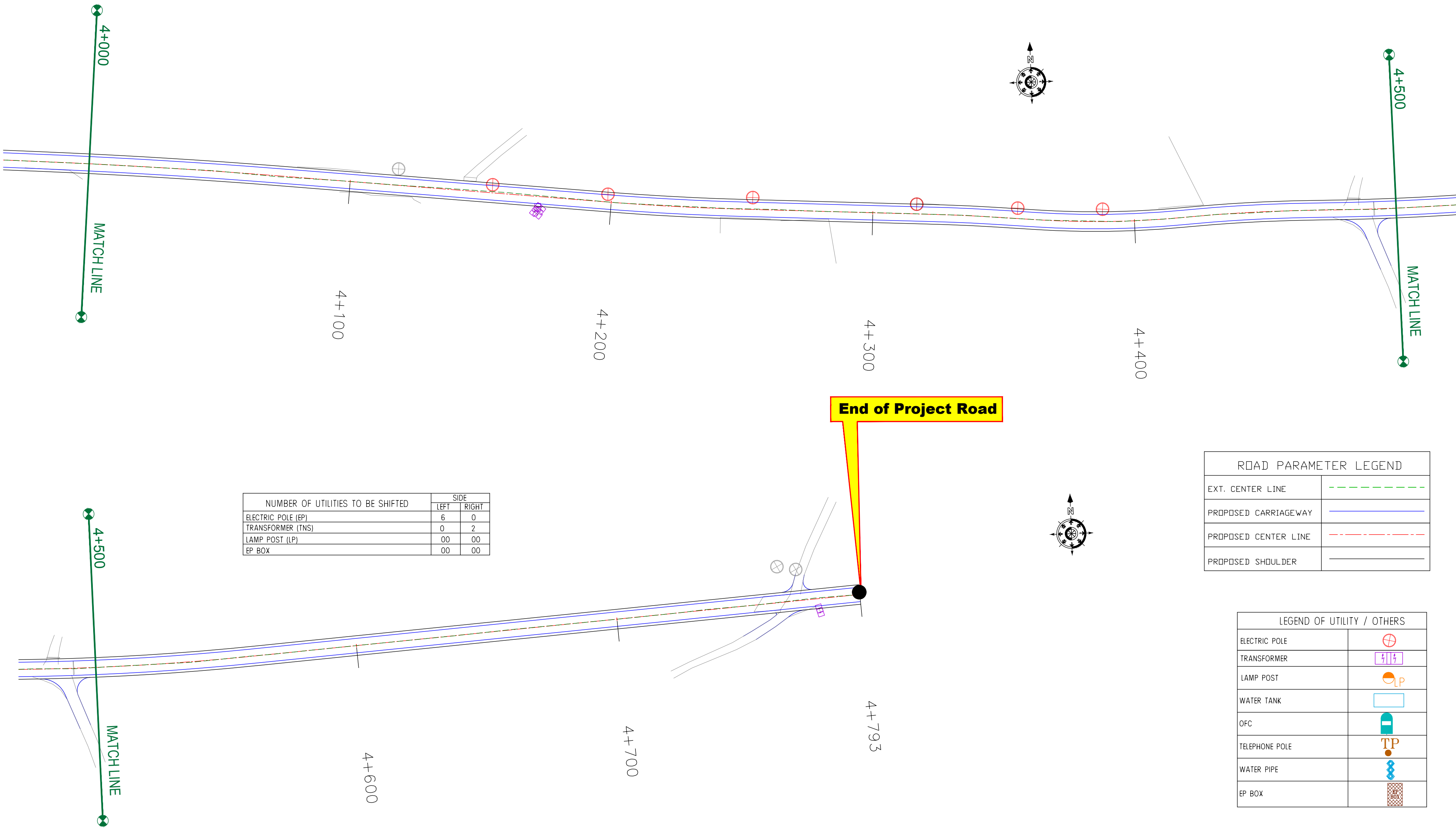
DRG. NO. : EPTISA/JTRFP/DPR/J&K/URP/04

REVISION : R-1

September 2019

← Sangam

Khudwani →



NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
ELECTRIC POLE (EP)	6	0
TRANSFORMER (TNS)	0	2
LAMP POST (LP)	00	00
EP BOX	00	00

ROAD PARAMETER LEGEND	
EXT. CENTER LINE	---
PROPOSED CARRIAGEWAY	---
PROPOSED CENTER LINE	---
PROPOSED SHOULDER	---

LEGEND OF UTILITY / OTHERS	
ELECTRIC POLE	⊕
TRANSFORMER	⚡
LAMP POST	LP
WATER TANK	☐
OFC	☑
TELEPHONE POLE	TP
WATER PIPE	⚡
EP BOX	⊠

CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



Servicios de Ingenieria S.L.

Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION
------	------	-------------

DRAWN BY : SD

DESIGNED BY : SCK/MM

APPROVED BY : KG

SCALE : 1:1000

TITLE :

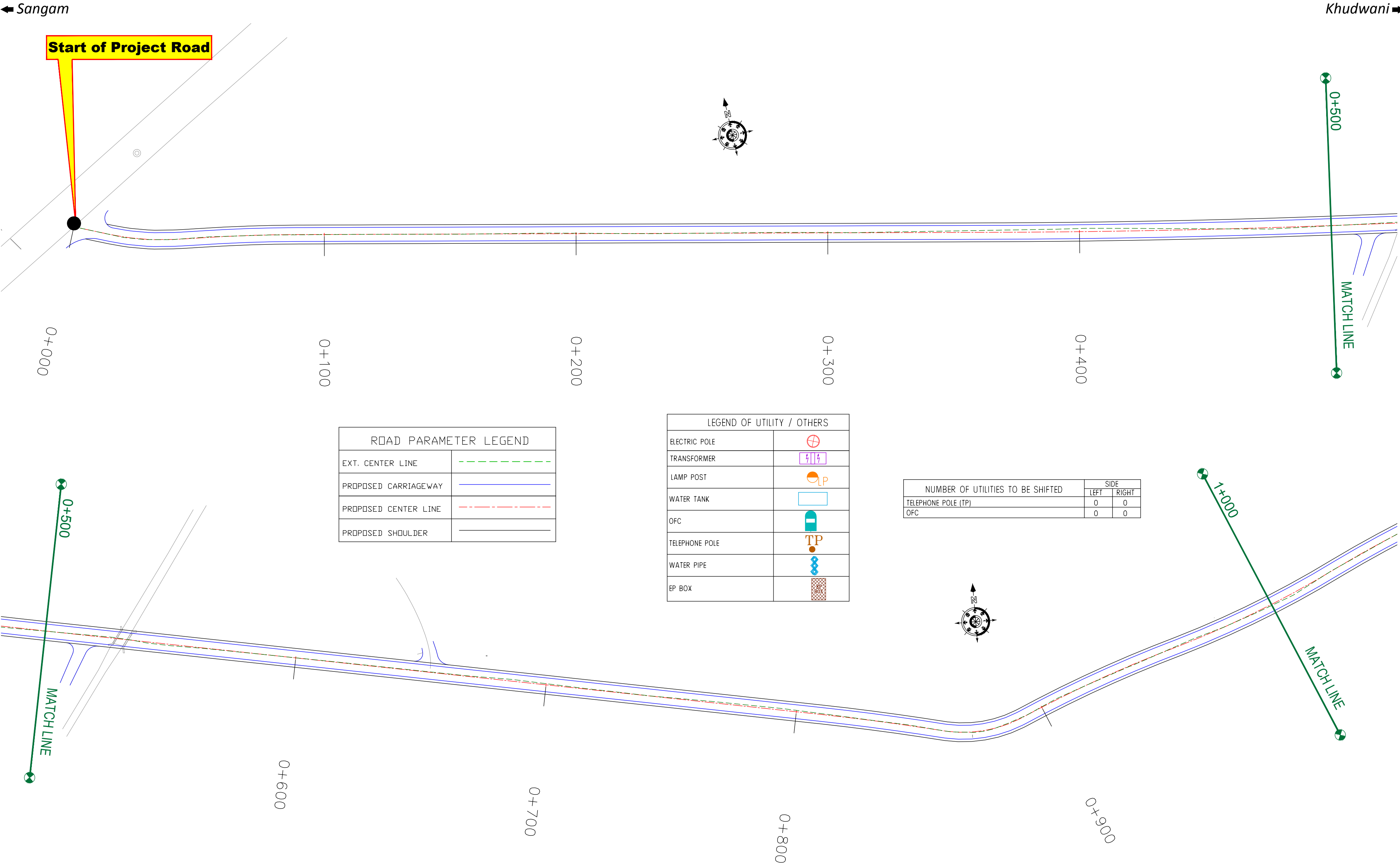
Utility Relocation Plan
(For Electricity Department)
(Ch. 4+000 to Ch. 4+793)

DRG. NO. : EPTISA/JTFRP/DPR/J&K/URP/05

REVISION : R-1

September 2019

≡ UTILITY RELOCATION PLAN FOR MAIN ROAD (TELEPHONE DEPARTMENT) ≡



CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:

eptisa **Servicios de Ingenieria S.L.**
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

TITLE : Utility Relocation Plan (For Telephone Department) (Ch. 0+000 to Ch. 1+000)	
DRG. NO. : EPTISA/JTFRP/DPR/J&K/URP/01	
REVISION : R-1	September 2019

← Sangam

Khudwani →



ROAD PARAMETER LEGEND	
EXT. CENTER LINE	
PROPOSED CARRIAGEWAY	
PROPOSED CENTER LINE	
PROPOSED SHOULDER	

LEGEND OF UTILITY / OTHERS	
ELECTRIC POLE	
TRANSFORMER	
LAMP POST	
WATER TANK	
OFC	
TELEPHONE POLE	
WATER PIPE	
EP BOX	

NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
TELEPHONE POLE (TP)	0	0
OFC	0	0

CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

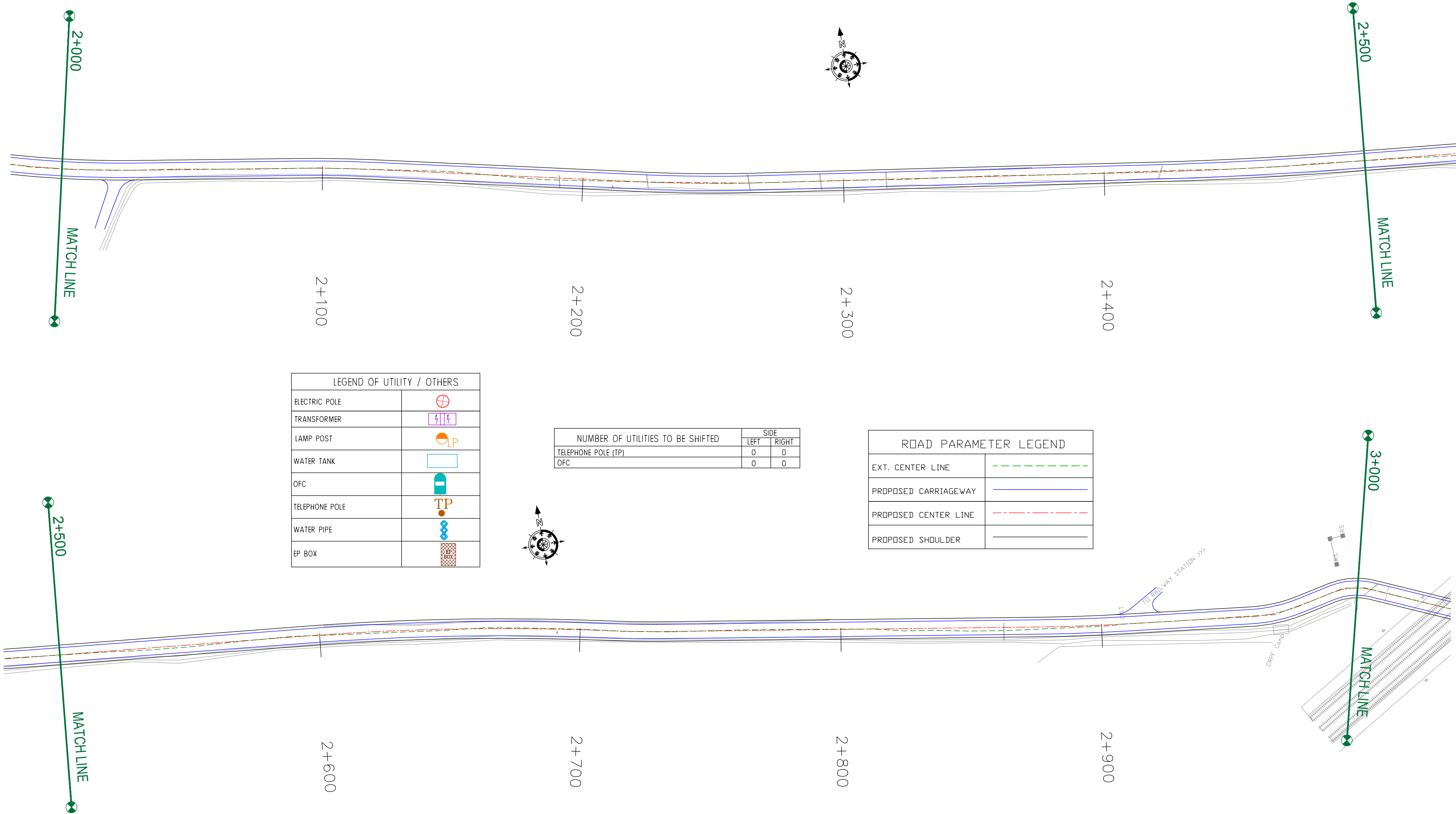
REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

TITLE : Utility Relocation Plan (For Telephone Department) (Ch. 1+000 to Ch. 2+000)	
DRG. NO. : EPTISA/JTFRP/DPR/J&K/URP/02	
REVISION : R-1	September 2019

← Sangam

Khudwani →



LEGEND OF UTILITY / OTHERS	
ELECTRIC POLE	
TRANSFORMER	
LAMP POST	
WATER TANK	
OFC	
TELEPHONE POLE	
WATER PIPE	
EP BOX	

NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
TELEPHONE POLE (TP)	0	0
OFC	0	0

ROAD PARAMETER LEGEND	
EXT. CENTER LINE	
PROPOSED CARRIAGEWAY	
PROPOSED CENTER LINE	
PROPOSED SHOULDER	

CLIENT :

Jhelum & Tawi
FLOOD RECOVERY PROJECT

Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:

Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

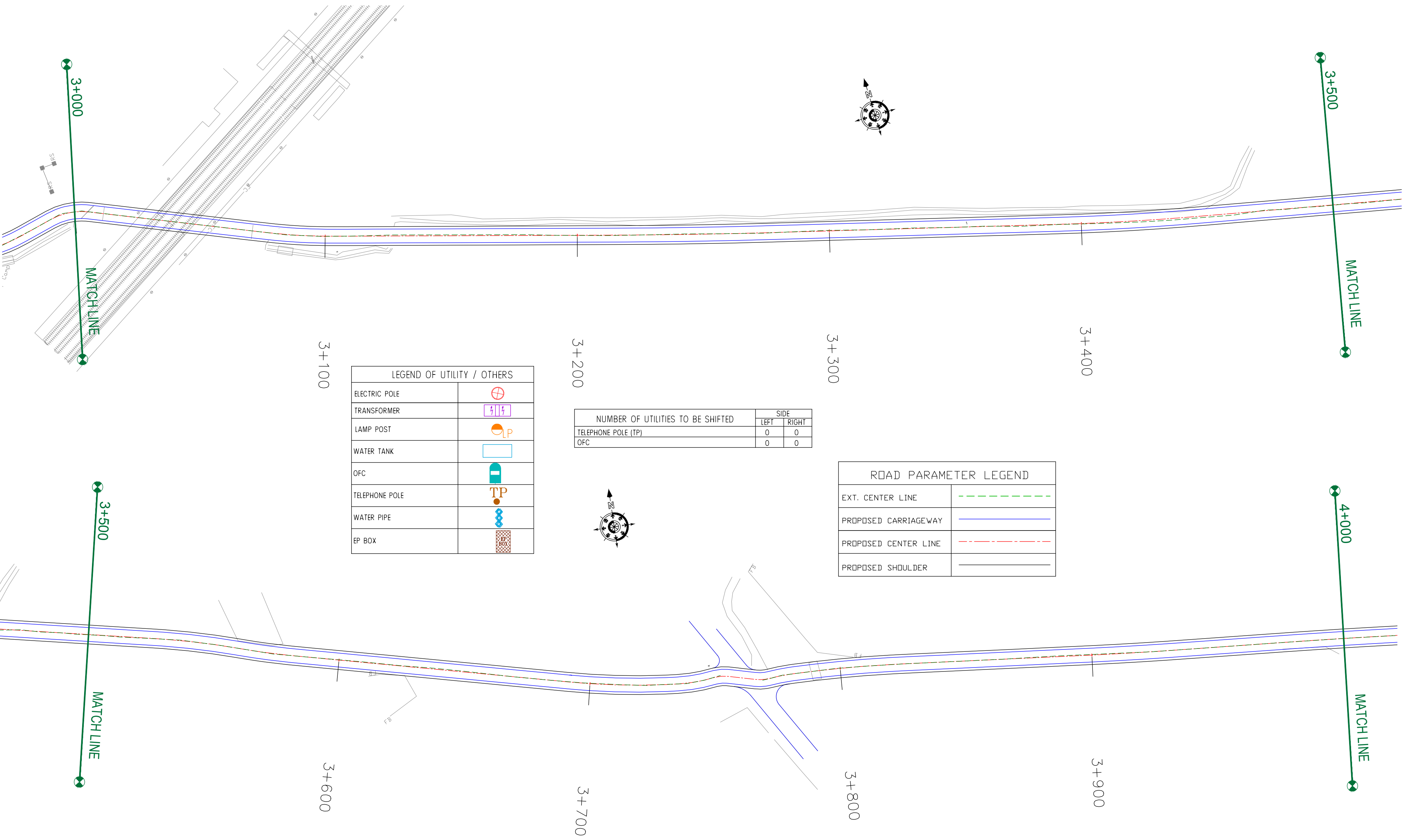
REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

TITLE : Utility Relocation Plan (For Telephone Department) (Ch. 2+000 to Ch. 3+000)	
DRG. NO. : EPTISA/JTFRP/DPR/J&K/URP/03	
REVISION : R-1	September 2019

← Sangam

Khudwani →



LEGEND OF UTILITY / OTHERS	
ELECTRIC POLE	
TRANSFORMER	
LAMP POST	
WATER TANK	
OFC	
TELEPHONE POLE	
WATER PIPE	
EP BOX	

NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
TELEPHONE POLE (TP)	0	0
OFC	0	0

ROAD PARAMETER LEGEND	
EXT. CENTER LINE	
PROPOSED CARRIAGEWAY	
PROPOSED CENTER LINE	
PROPOSED SHOULDER	

CLIENT :



Jhelum & Tawi
FLOOD RECOVERY PROJECT

Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:

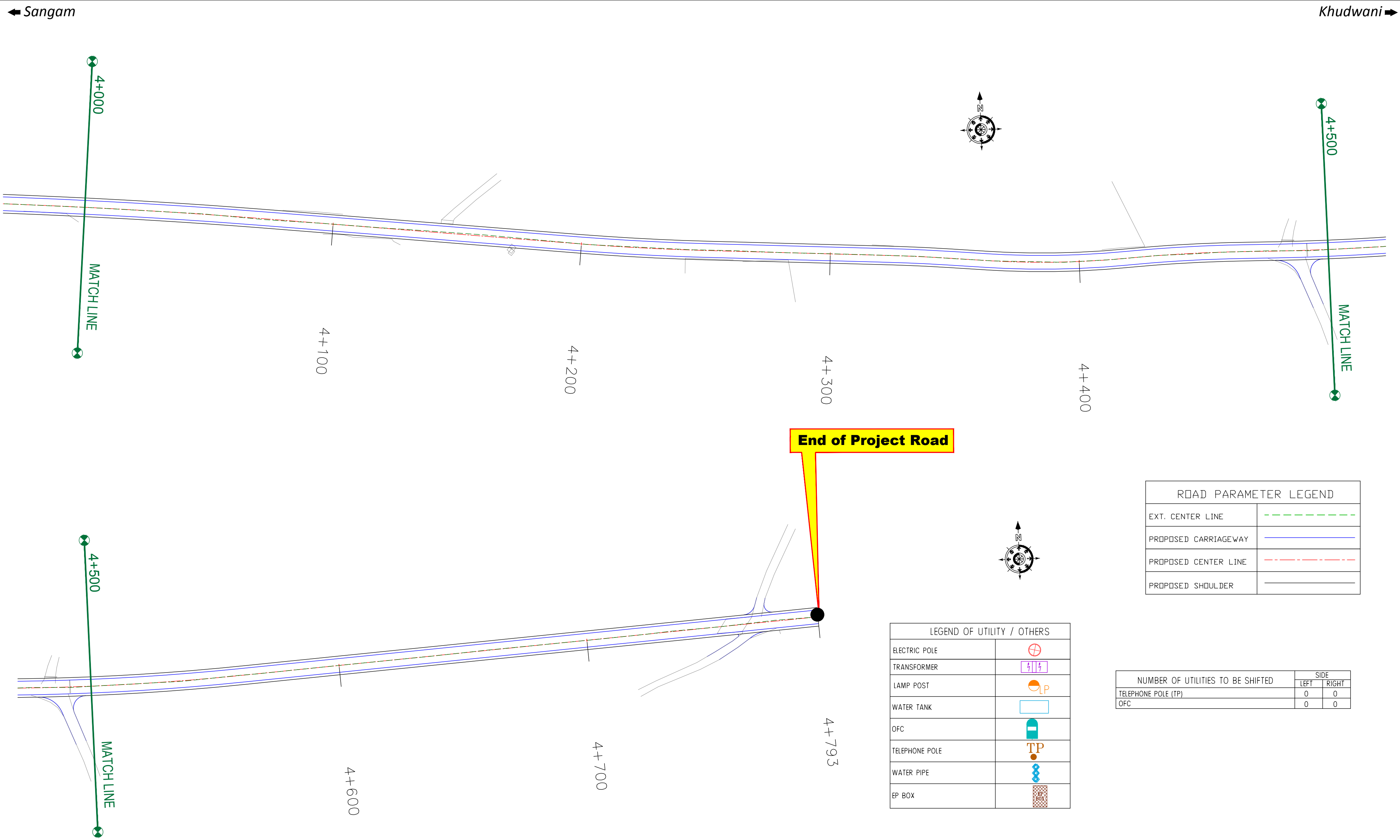


servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

TITLE : Utility Relocation Plan (For Telephone Department) (Ch. 3+000 to Ch. 4+000)	
DRG. NO. : EPTISA/JTFRP/DPR/J&K/URP/04	
REVISION : R-1	September 2019



ROAD PARAMETER LEGEND	
EXT. CENTER LINE	
PROPOSED CARRIAGEWAY	
PROPOSED CENTER LINE	
PROPOSED SHOULDER	

LEGEND OF UTILITY / OTHERS	
ELECTRIC POLE	
TRANSFORMER	
LAMP POST	
WATER TANK	
OFC	
TELEPHONE POLE	
WATER PIPE	
EP BOX	

NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
TELEPHONE POLE (TP)	0	0
OFC	0	0

CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



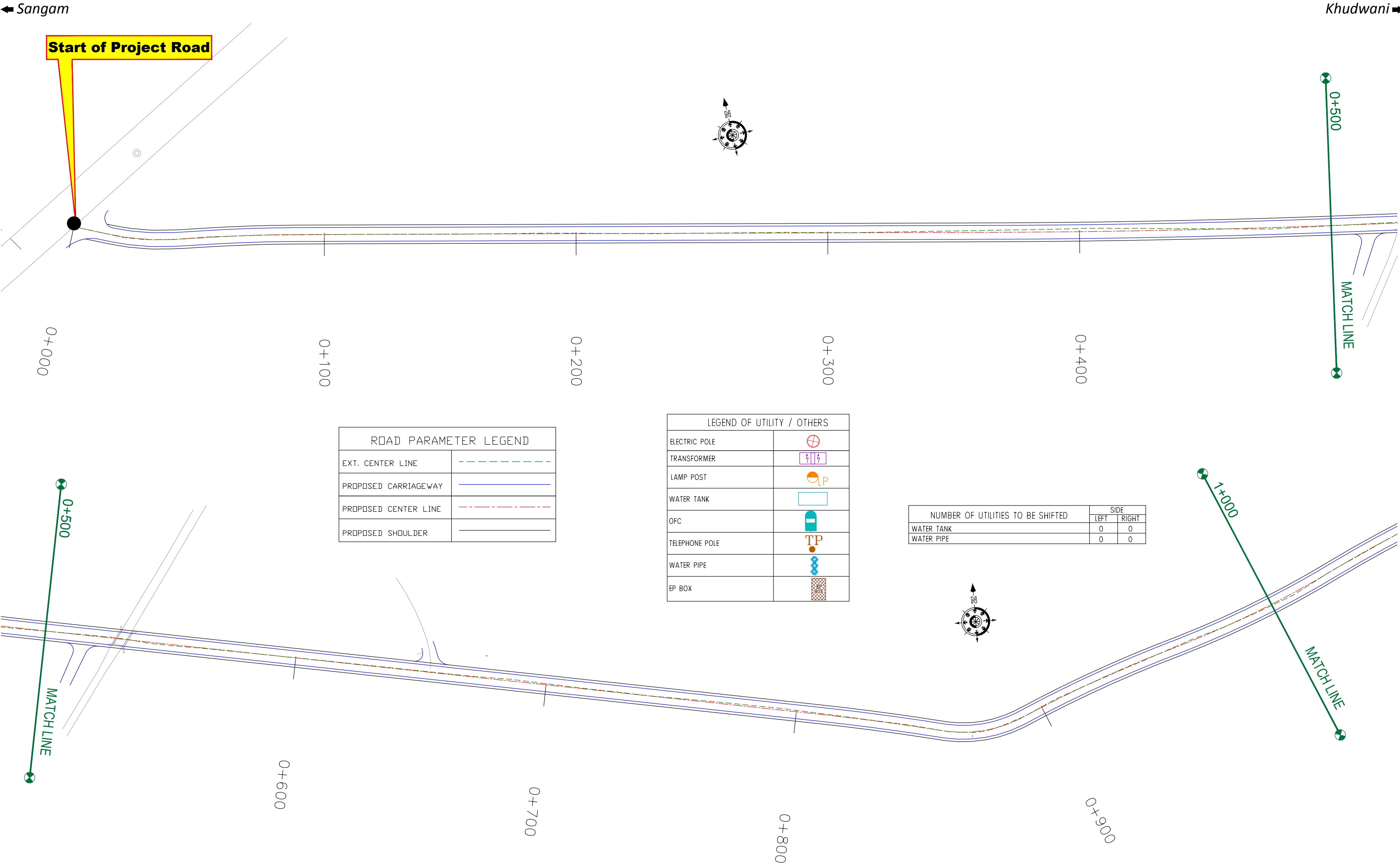
Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

TITLE : Utility Relocation Plan (For Telephone Department) (Ch. 4+000 to Ch. 4+793)	
DRG. NO. : EPTISA/JTFRP/DPR/J&K/URP/05	
REVISION : R-1	September 2019

≡ UTILITY RELOCATION PLAN FOR MAIN ROAD (WATER DEPARTMENT) ≡



CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:

eptisa **Servicios de Ingenieria S.L.**
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY : SD

DESIGNED BY : SCK/MM

APPROVED BY : KG

SCALE : 1:1000

TITLE : **Utility Relocation Plan**
(For Water Department)
(Ch. 0+000 to Ch. 1+000)

DRG. NO. : EPTISA/JTFRP/DPR/J&K/URP/01

REVISION : R-1

September 2019

← Sangam

Khudwani →



ROAD PARAMETER LEGEND	
EXT. CENTER LINE	
PROPOSED CARRIAGEWAY	
PROPOSED CENTER LINE	
PROPOSED SHOULDER	

LEGEND OF UTILITY / OTHERS	
ELECTRIC POLE	
TRANSFORMER	
LAMP POST	
WATER TANK	
OFC	
TELEPHONE POLE	
WATER PIPE	
EP BOX	

NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
WATER TANK	0	0
WATER PIPE	0	0

CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

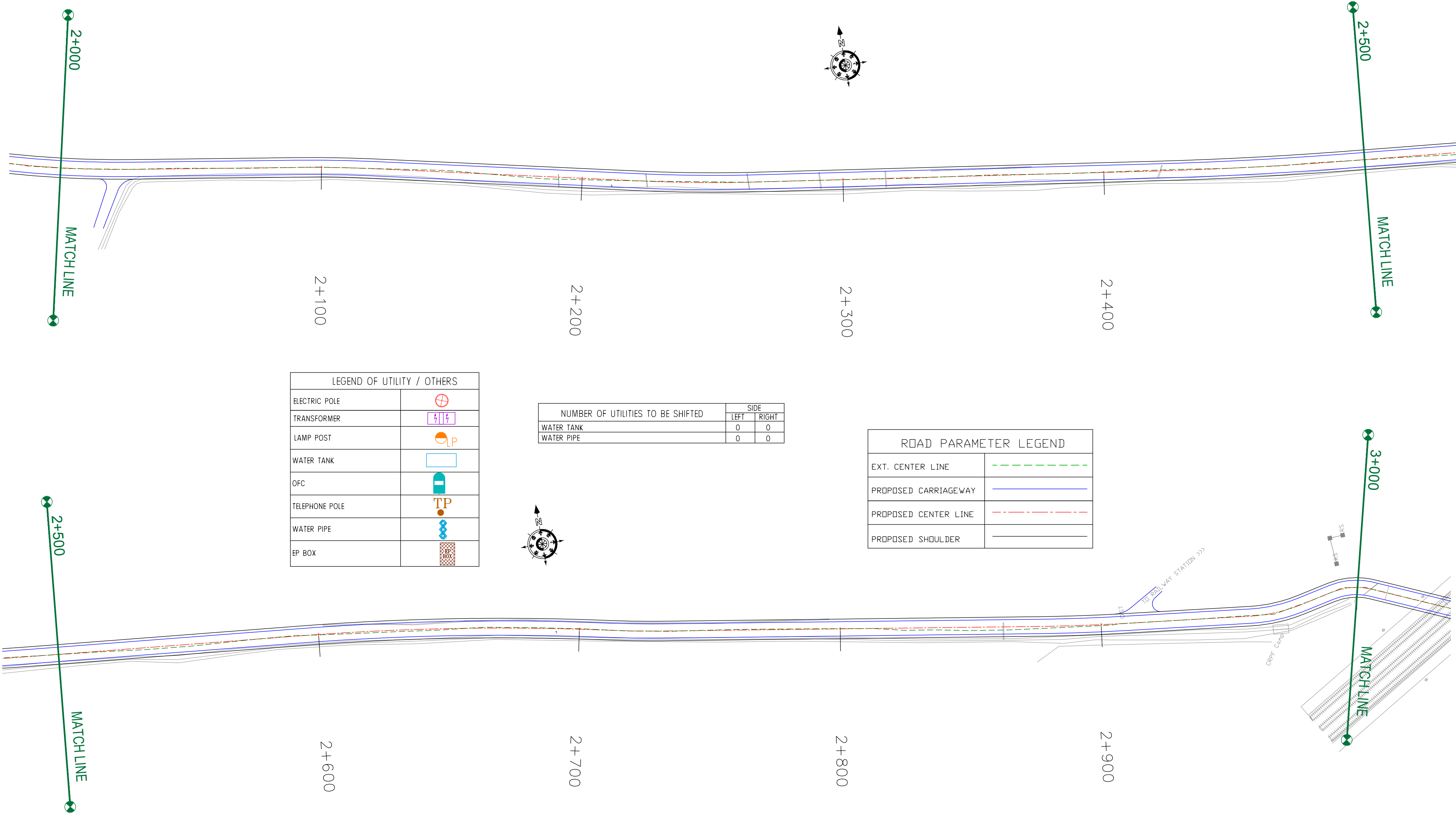
REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

TITLE : Utility Relocation Plan (For Water Department) (Ch. 1+000 to Ch. 2+000)	
DRG. NO. : EPTISA/JTFRP/DPR/J&K/URP/02	
REVISION : R-1	September 2019

← Sangam

Khudwani →



LEGEND OF UTILITY / OTHERS	
ELECTRIC POLE	
TRANSFORMER	
LAMP POST	
WATER TANK	
OFC	
TELEPHONE POLE	
WATER PIPE	
EP BOX	

NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
WATER TANK	0	0
WATER PIPE	0	0

ROAD PARAMETER LEGEND	
EXT. CENTER LINE	
PROPOSED CARRIAGEWAY	
PROPOSED CENTER LINE	
PROPOSED SHOULDER	

CLIENT :

Jhelum & Tawi
FLOOD RECOVERY PROJECT

Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:

Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

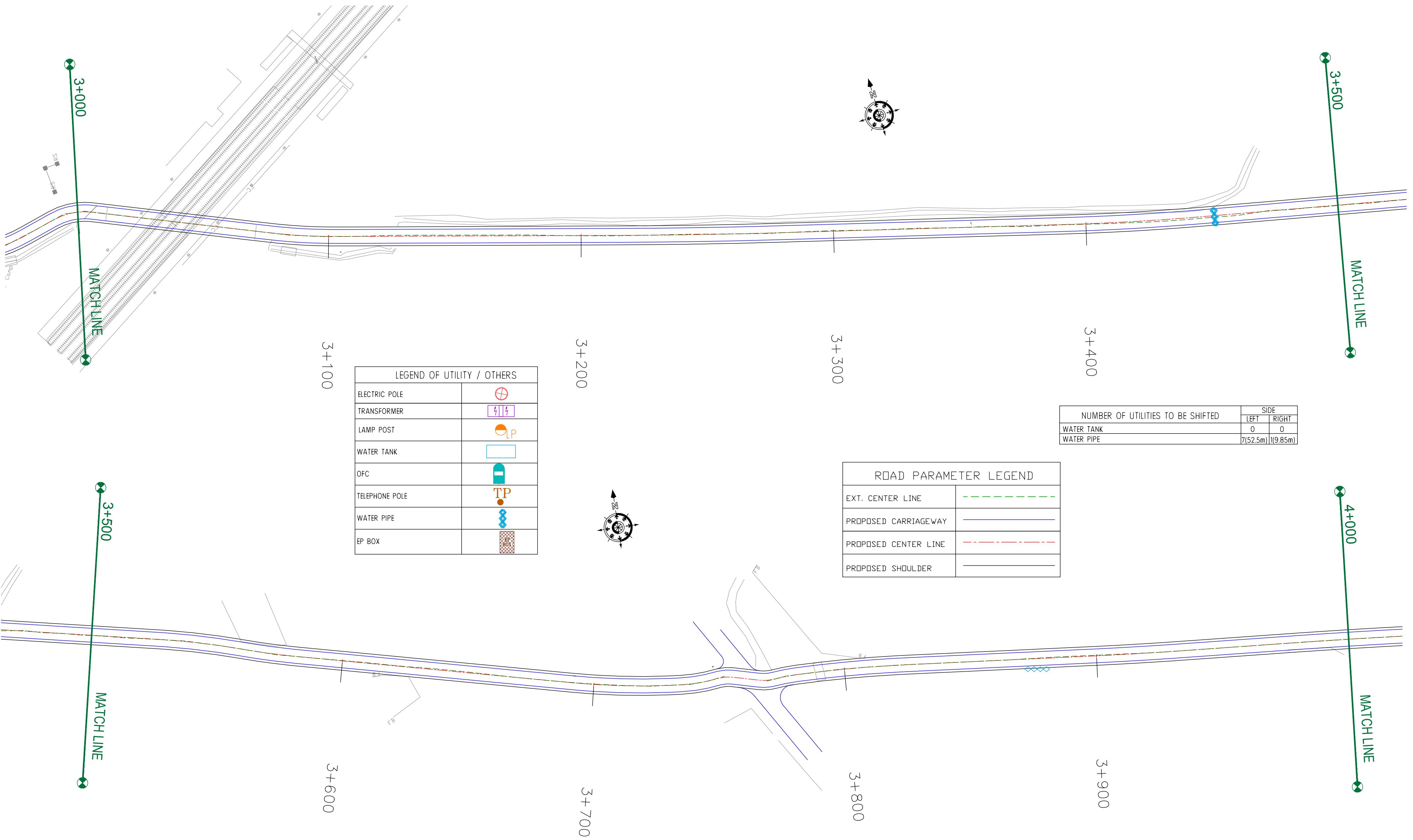
REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

TITLE :	Utility Relocation Plan (For Water Department) (Ch. 2+000 to Ch. 3+000)	
DRG. NO. :	EPTISA/JTRFP/DPR/J&K/URP/03	
REVISION : R-1	September 2019	

← Sangam

Khudwani →



CLIENT :



Jhelum & Tawi
FLOOD RECOVERY PROJECT

Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY : SD

DESIGNED BY : SCK/MM

APPROVED BY : KG

SCALE : 1:1000

TITLE : Utility Relocation Plan
(For Water Department)
(Ch. 3+000 to Ch. 4+000)

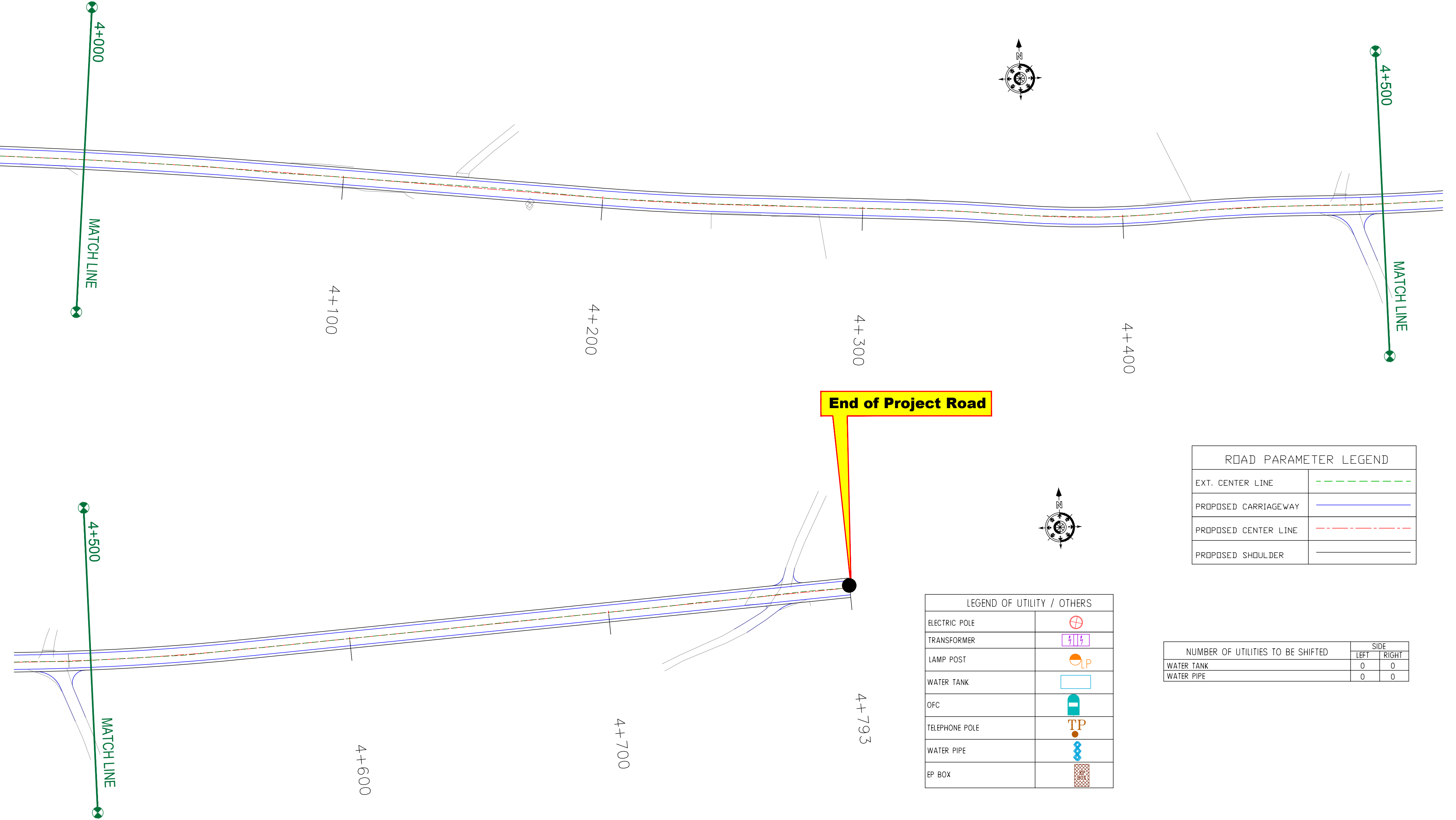
DRG. NO. : EPTISA/JTRP/DPR/J&K/URP/04

REVISION : R-1

September 2019

← Sangam

Khudwani →



ROAD PARAMETER LEGEND	
EXT. CENTER LINE	
PROPOSED CARRIAGEWAY	
PROPOSED CENTER LINE	
PROPOSED SHOULDER	

LEGEND OF UTILITY / OTHERS	
ELECTRIC POLE	
TRANSFORMER	
LAMP POST	
WATER TANK	
OFC	
TELEPHONE POLE	
WATER PIPE	
EP BOX	

NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
WATER TANK	0	0
WATER PIPE	0	0

CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

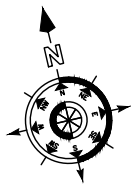
TITLE : Utility Relocation Plan (For Water Department) (Ch. 4+000 to Ch. 4+793)	
DRG. NO. : EPTISA/JTRFP/DPR/J&K/URP/05	
REVISION : R-1	September 2019

≡ TREE CUTTING (MAIN ROAD) ≡

← Sangam

Khudwani →

Start of Project Road



0+000

0+100

0+200

0+300

0+400

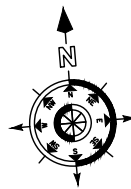
0+500

MATCH LINE

ROAD PARAMETER LEGEND	
EXT. CENTER LINE	
PROPOSED CARRIAGEWAY	
PROPOSED CENTER LINE	
PROPOSED SHOULDER	

NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
TREE POINT	96	49
CHINAR TREE	0	0

LEGEND OF UTILITY / OTHERS	
TREE POINT	



0+600

0+700

0+800

0+900

1+000

MATCH LINE

CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:

eptisa

Servicios de Ingenieria S.L.

Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY : SD

DESIGNED BY : SCK/MM

APPROVED BY : KG

SCALE : 1:1000

TITLE :

Tree Cutting

(Ch. 0+000 to Ch. 1+000)

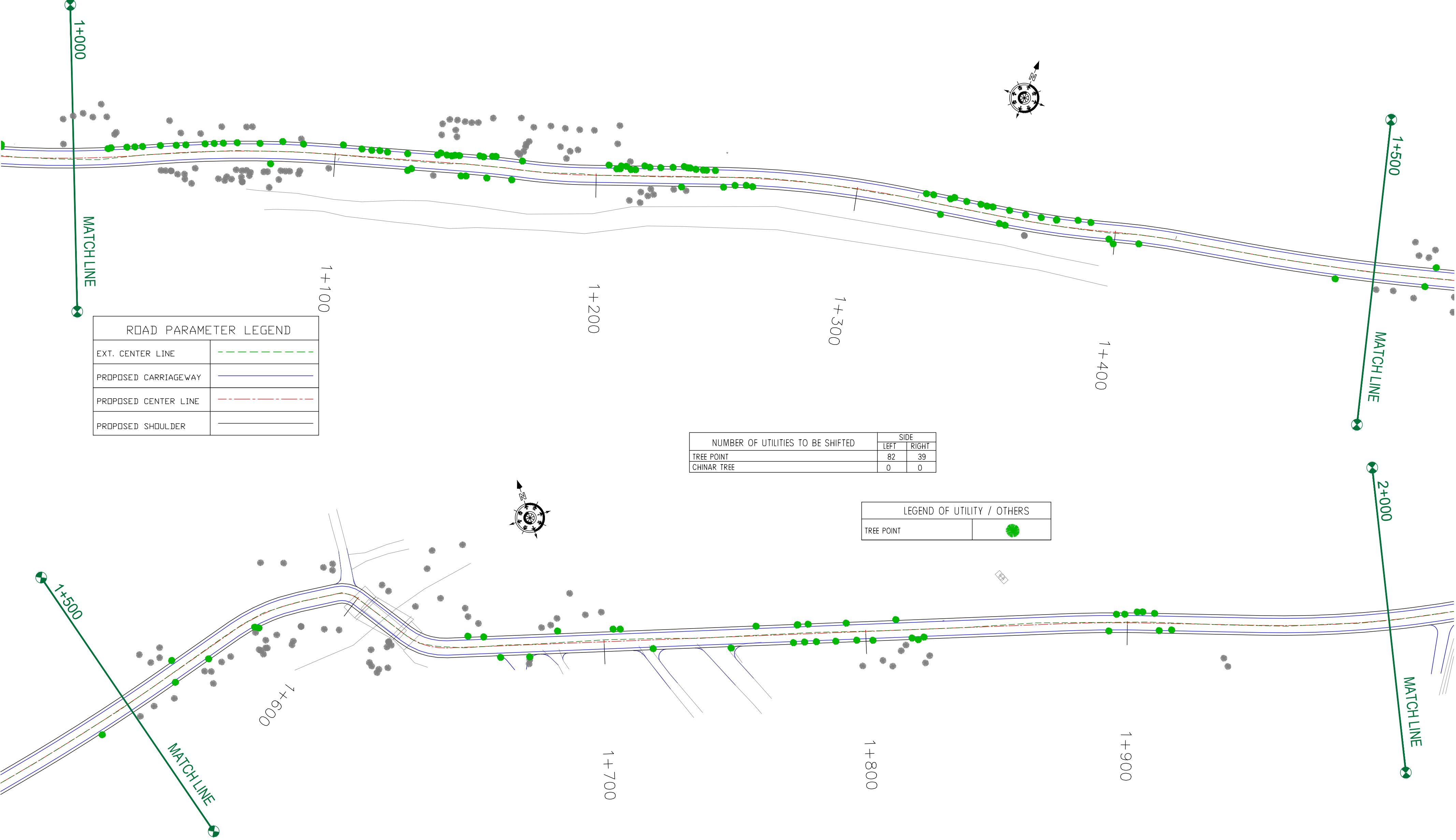
DRG. NO. : EPTISA/JTFRP/DPR/J&K/TC/01

REVISION : R-1

September 2019

← Sangam

Khudwani →



ROAD PARAMETER LEGEND	
EXT. CENTER LINE	
PROPOSED CARRIAGEWAY	
PROPOSED CENTER LINE	
PROPOSED SHOULDER	

NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
TREE POINT	82	39
CHINAR TREE	0	0

LEGEND OF UTILITY / OTHERS	
TREE POINT	

CLIENT :




Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000


TITLE :	
Tree Cutting	
(Ch. 1+000 to Ch. 2+000)	
DRG. NO. : EPTISA/JTRFP/DPR/J&K/TC/02	
REVISION : R-1	September 2019

← Sangam

Khudwani →



NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
TREE POINT	0	0
CHINAR TREE	0	0

LEGEND OF UTILITY / OTHERS	
TREE POINT	

ROAD PARAMETER LEGEND	
EXT. CENTER LINE	
PROPOSED CARRIAGEWAY	
PROPOSED CENTER LINE	
PROPOSED SHOULDER	

CLIENT :



Jhelum & Tawi
FLOOD RECOVERY PROJECT

Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

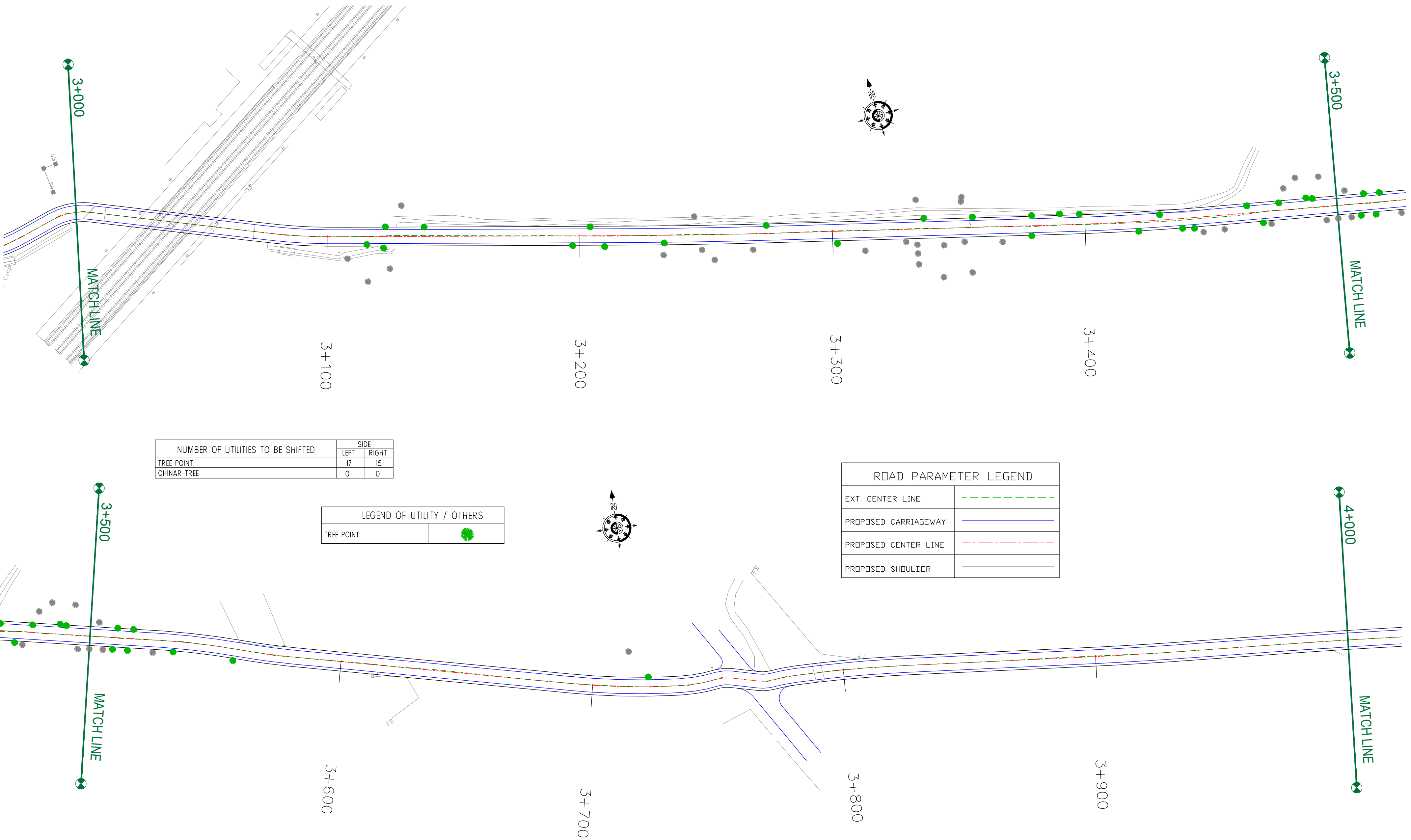
REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

TITLE :	
Tree Cutting (Ch. 2+000 to Ch. 3+000)	
DRG. NO. : EPTISA/JTFRP/DPR/J&K/TC/03	
REVISION : R-1	September 2019

← Sangam

Khudwani →



NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
TREE POINT	17	15
CHINAR TREE	0	0

LEGEND OF UTILITY / OTHERS	
TREE POINT	

ROAD PARAMETER LEGEND	
EXT. CENTER LINE	
PROPOSED CARRIAGEWAY	
PROPOSED CENTER LINE	
PROPOSED SHOULDER	

CLIENT :




Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:

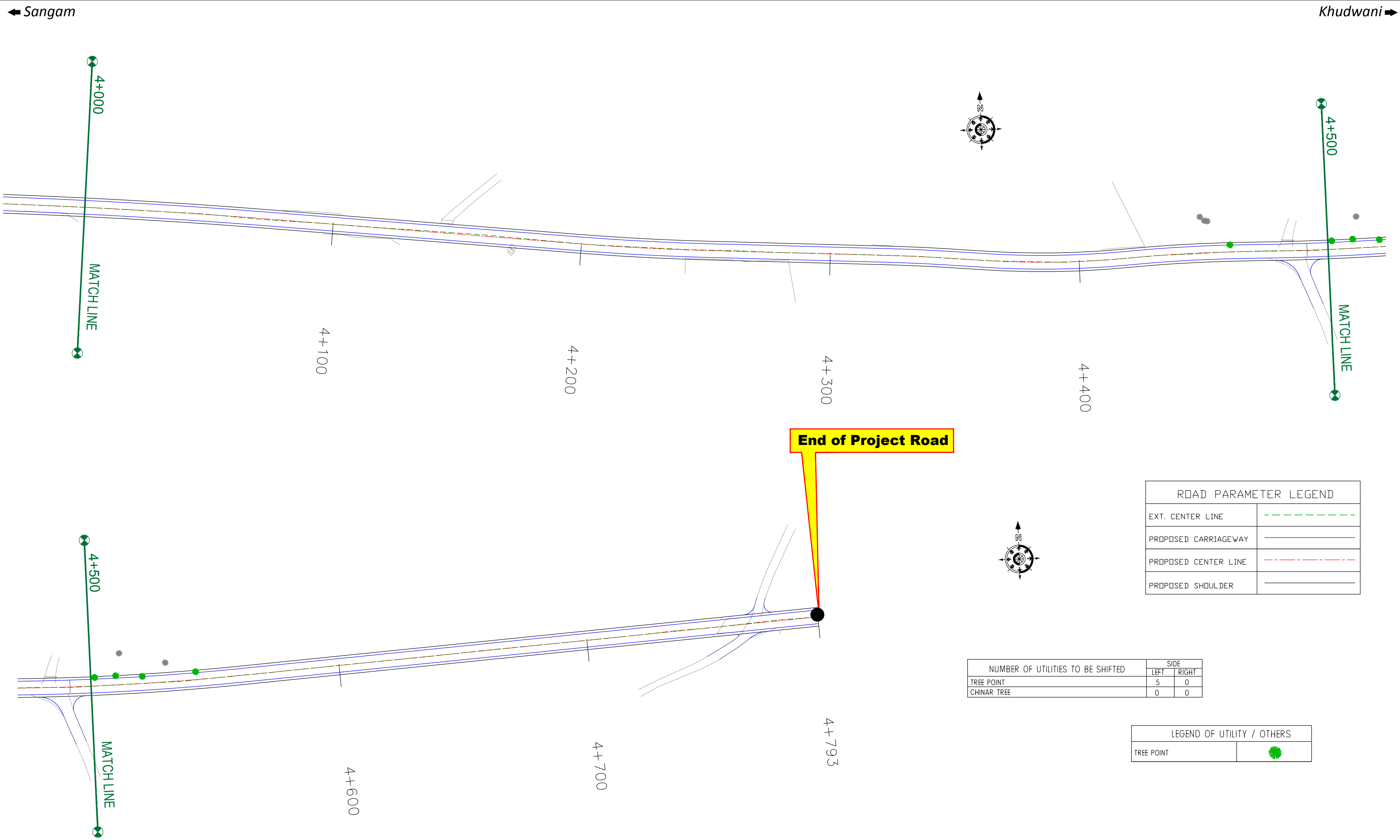


servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

TITLE :	
Tree Cutting	
(Ch. 3+000 to Ch. 4+000)	
DRG. NO. : EPTISA/JTRFP/DPR/J&K/TC/04	
REVISION : R-1	September 2019



ROAD PARAMETER LEGEND	
EXT. CENTER LINE	
PROPOSED CARRIAGEWAY	
PROPOSED CENTER LINE	
PROPOSED SHOULDER	

NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
TREE POINT	5	0
CHINAR TREE	0	0

LEGEND OF UTILITY / OTHERS	
TREE POINT	

CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



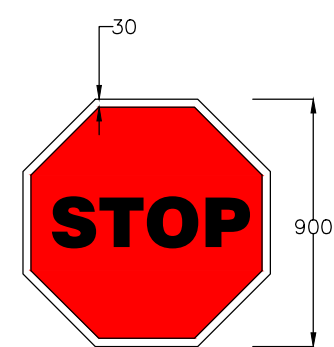
servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

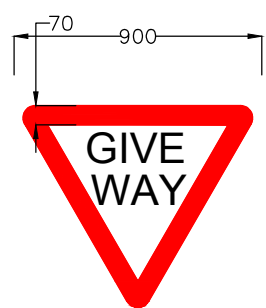
TITLE :	
Tree Cutting	
(Ch. 4+000 to Ch. 4+793)	
DRG. NO. : EPTISA/JTRFP/DPR/J&K/TC/05	
REVISION : R-1	September 2019

≡ MISCELLANEOUS DRAWINGS ≡



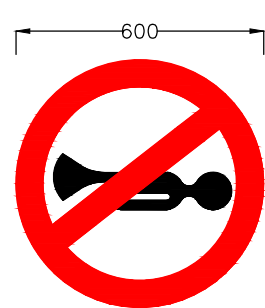
STOP SIGNS
Fig. 14.01

MS-1



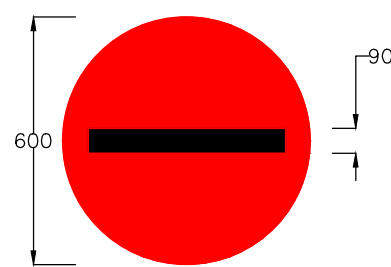
GIVE WAY
Fig. 14.02

MS-2



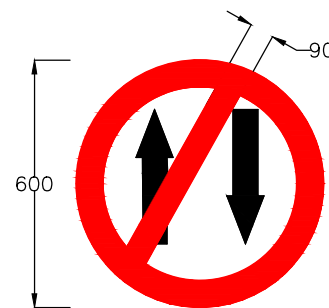
HORN PROHIBITED
Fig. 14.18

MS-3



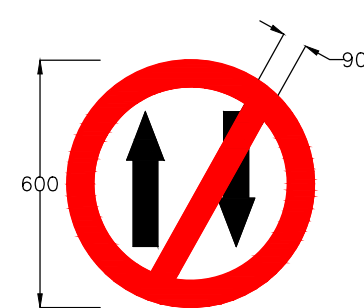
NO ENTRY
Fig. 14.19

MS-4



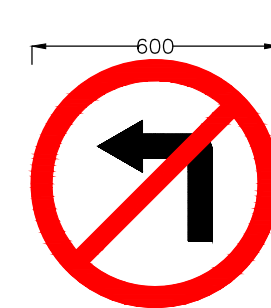
ONE WAY
Fig. 14.20

MS-5



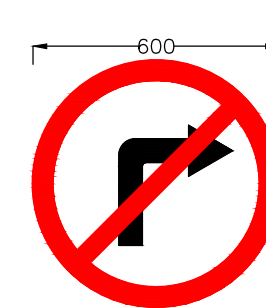
ONE WAY
Fig. 14.20

MS-6



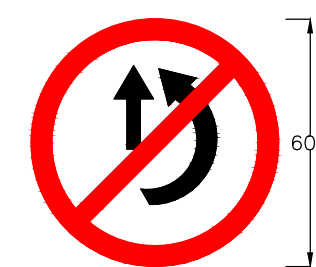
LEFT TURN PROHIBITED
Fig. 14.21

MS-7



RIGHT TURN PROHIBITED
Fig. 14.22

MS-8



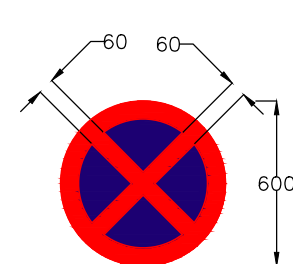
OVERTAKING PROHIBITED
Fig. 14.23

MS-9



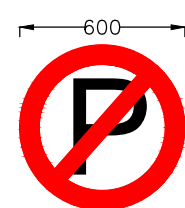
U- TURN PROHIBITED
Fig. 14.24

MS-10



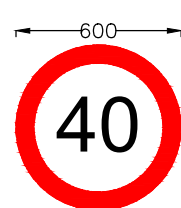
NO STOPPING AND NO STANDING
Fig. 14.28

MS-11



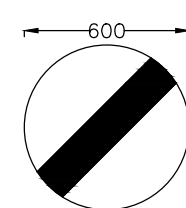
NO PARKING
Fig. 14.29

MS-12



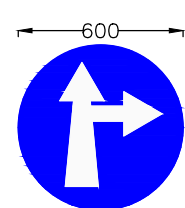
MAXIMUM SPEED LIMIT
Fig. 14.37

MS-13



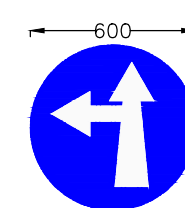
RESTRICTION ENDS
Fig. 14.40

MS-14



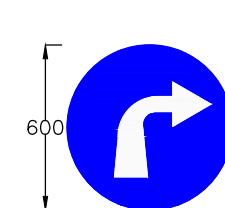
COMPULSORY AHEAD
OR RIGHT TURN
Fig. 14.42

MS-15



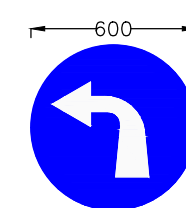
COMPULSORY AHEAD
OR LEFT TURN
Fig. 14.43

MS-16



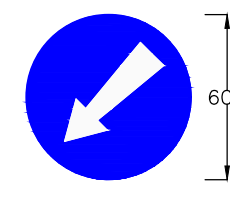
COMPULSORY
TURN RIGHT
Fig. 14.46

MS-17



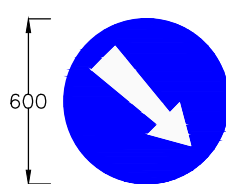
COMPULSORY
TURN LEFT
Fig. 14.47

MS-18



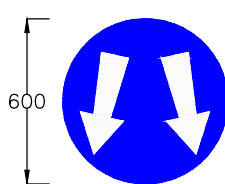
COMPULSORY KEEP LEFT
Fig. 14.48

MS-19



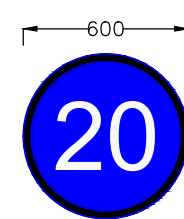
COMPULSORY KEEP RIGHT
Fig. 14.49

MS-20



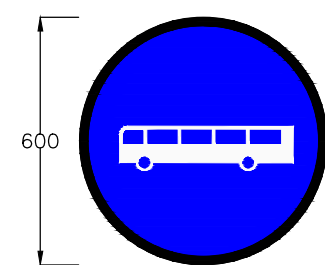
PASS EITHER SIDE
Fig. 14.50

MS-21



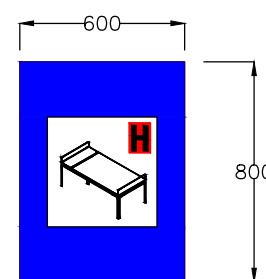
MINIMUM SPEED LIMIT
Fig. 14.51

MS-22



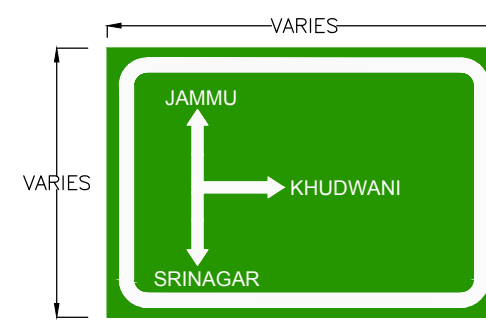
BUS WAY/BUSES ONLY
Fig. 14.56

MS-23



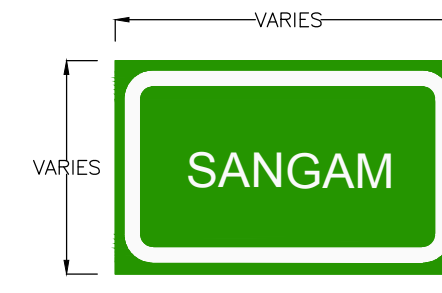
HOSPITAL
Fig. 17.07

IS-08



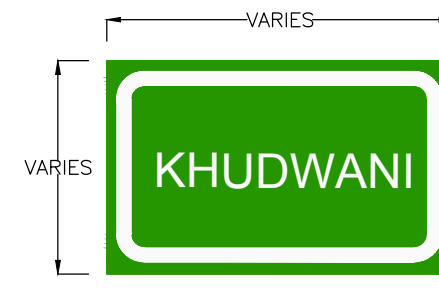
ADVANCE DIRECTION SIGN
Fig. 16.03

DS-01



PLACE IDENTIFICATION SIGN
Fig. 16.06

DS-02



PLACE IDENTIFICATION SIGN
Fig. 16.06

DS-03

Notes:

1. Road signs shall be erected as per IRC:67-2012.
2. Sizes of arrows, letters and numerals for road signs shall be as per IRC:67-2012
3. Route marker signs, letters and numerals shall be erected as per IRC:2-1968.
4. Spacing of TA2 on kerb face shall be 250mm C/C and that on metal beam crash barrier shall be 3000mm C/C. The number of reflector at island/median tips shall be as instructed by the Engineer, but in no case shall be less than five number at a tip.
5. All items indicated in this drawing may not be relevant for the subject project, these shall be used depending upon the requirement.
6. Besides the above, standards and specifications mentioned in IRC : SP : 73-2015 shall be followed strictly whenever applicable.
7. All dimensions are in millimetres unless otherwise mentioned.

CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



Eptisa Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	N.T.S

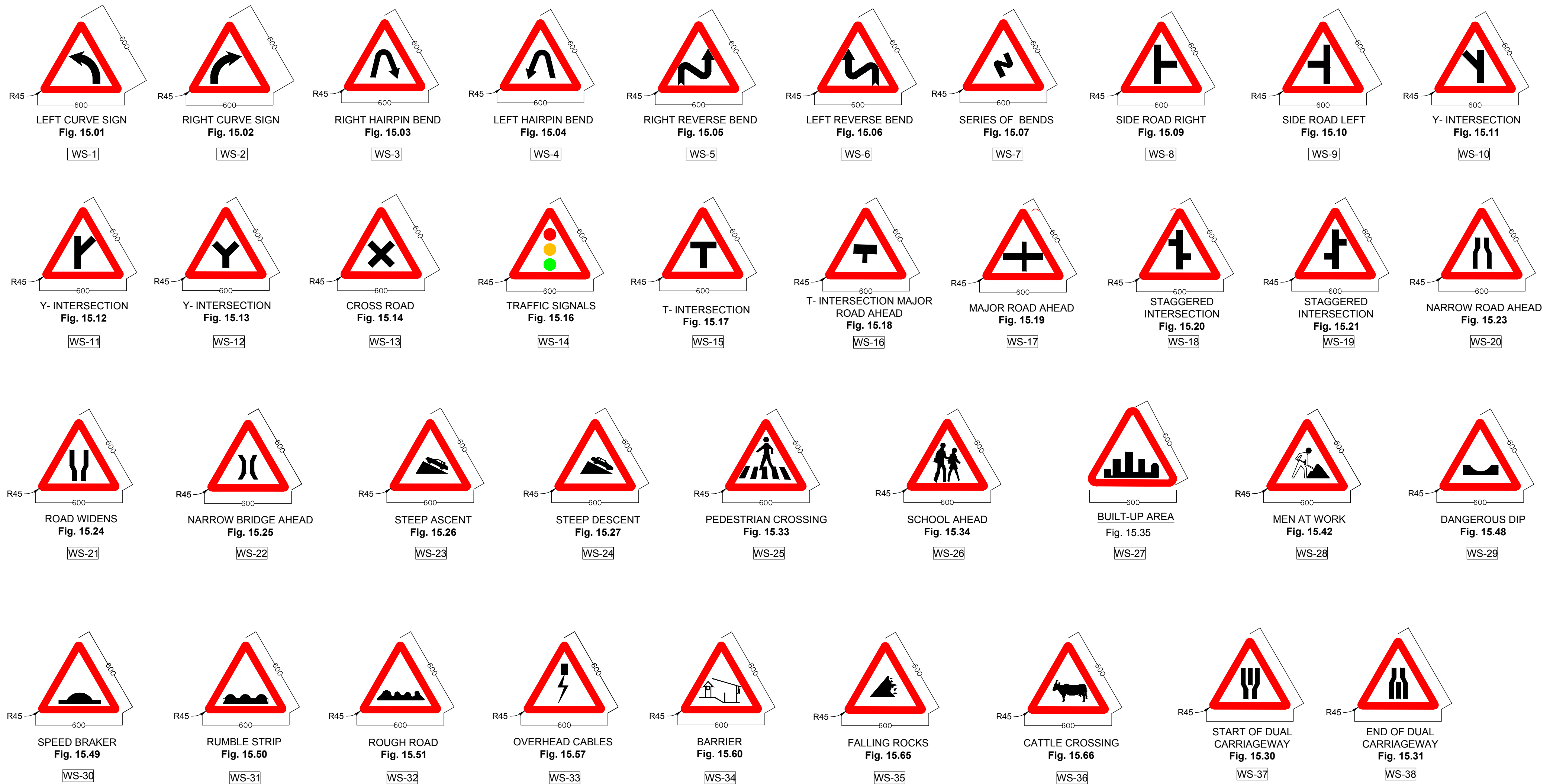
TITLE :

Road Signs & Road Delineators

DRG. NO. : EPTISA/JTRP/DPR/J&K/MISC/01
(Sheet 01 of 03)

REVISION : R-1

September 2019



Notes:

- 1.Road signs shall be erected as per IRC:67–2012.
- 2.Sizes of arrows, letters and numerals for road signs shall be as per IRC:67–2012
- 3.All items indicated in this drawing may not be relevant for the subject project, these shall be used depending upon the requirement.
- 4.Besides the above, standards and specifications mentioned in IRC:SP:73–2015 shall be followed strictly whenever applicable.
- 5.All dimensions are in millimetres unless otherwise mentioned.

CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



Eptisa Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

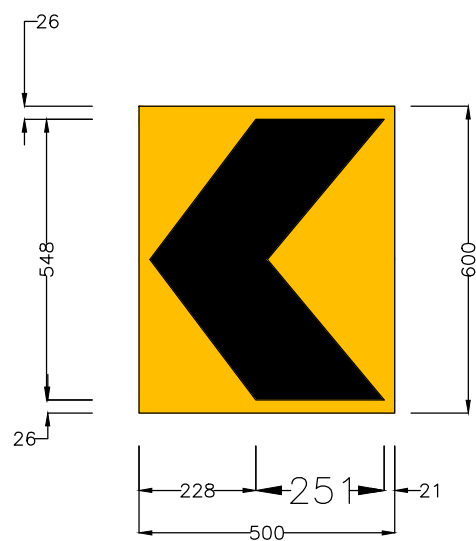
REV.	DATE	DESCRIPTION

DRAWN BY : SD
DESIGNED BY : SCK/MM
APPROVED BY : KG
SCALE : N.T.S

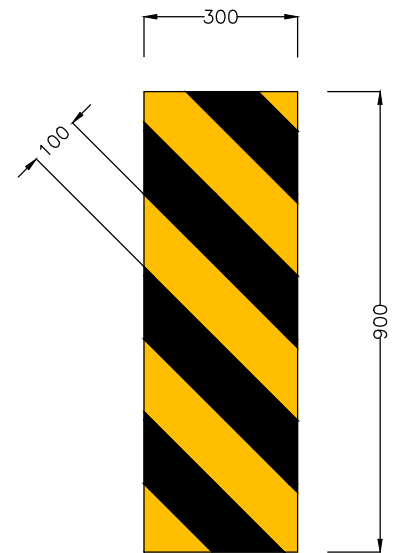
TITLE :

Road Signs & Road Delineators

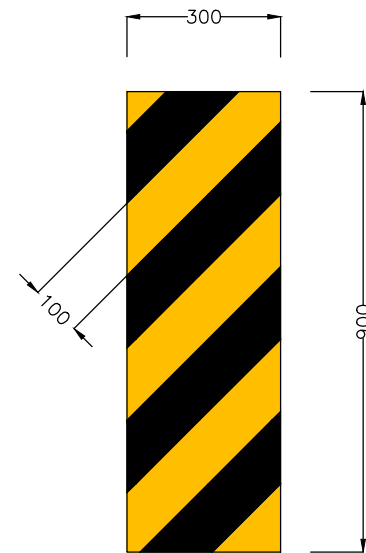
DRG. NO. : EPTISA/JTRP/DPR/J&K/MISC/01
(Sheet 02 of 03)
REVISION : R-1
September 2019



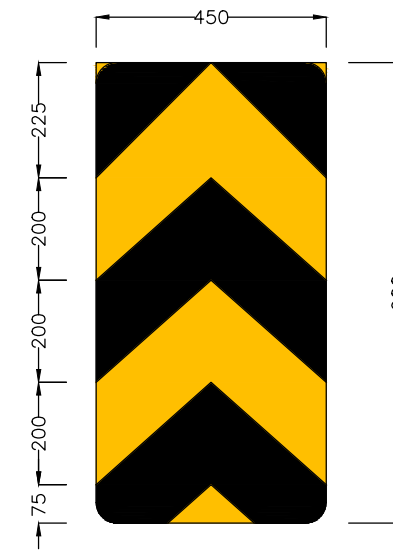
SINGLE CHEVRON
Fig. 15.72
TA-1
SCALE 1:15000



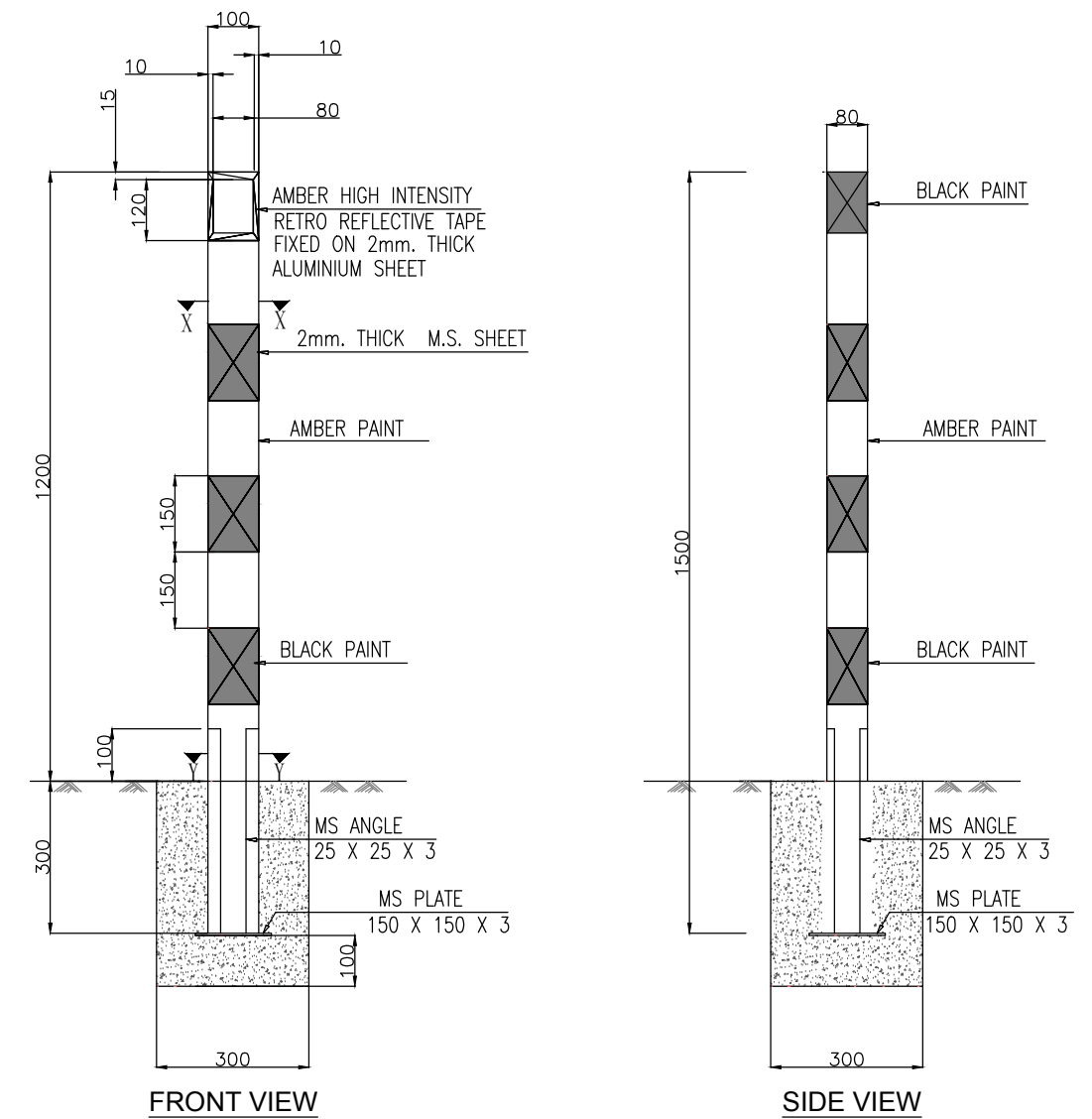
OBJECT HAZARD (LEFT)
Fig. 15.76
TA-2
SCALE 1:15000



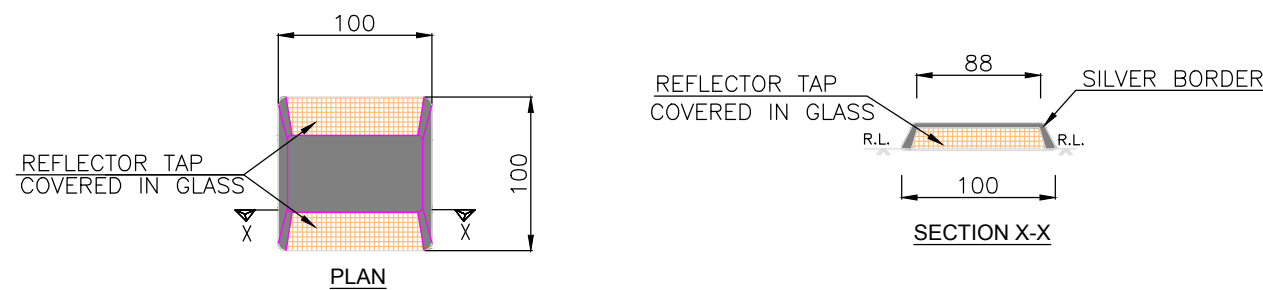
OBJECT HAZARD (RIGHT)
Fig. 15.77
TA-3
SCALE 1:15000



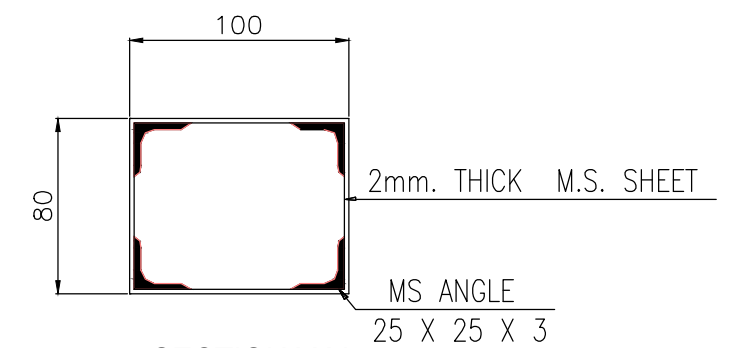
TWO WAY HAZARD MARKER
Fig. 15.78
TA-4
SCALE 1:15000



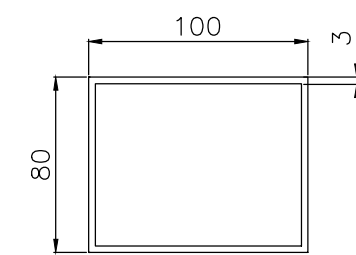
ROAD DELINEATORS
TA-6
SCALE 1:15000



ROAD STUDS (CATS'S EYE)
TA-7
SCALE 1:5000




SECTION Y-Y
SCALE 1:3500




SECTION X-X
SCALE 1:3500

Notes:

- 1.Road signs shall be erected as per IRC:67–2012.
- 2.Sizes of arrows, letters and numerals for road signs shall be as per IRC:67–2012
- 3.All items indicated in this drawing may not be relevant for the subject project, these shall be used depending upon the requirement.
- 4.Besides the above, standards and specifications mentioned in IRC:SP:73–2015 shall be followed strictly whenever applicable.
- 5.All dimensions are in millimetres unless otherwise mentioned.
- 6.The scale mentioned is applicable for A2 size sheet.

CLIENT :

Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

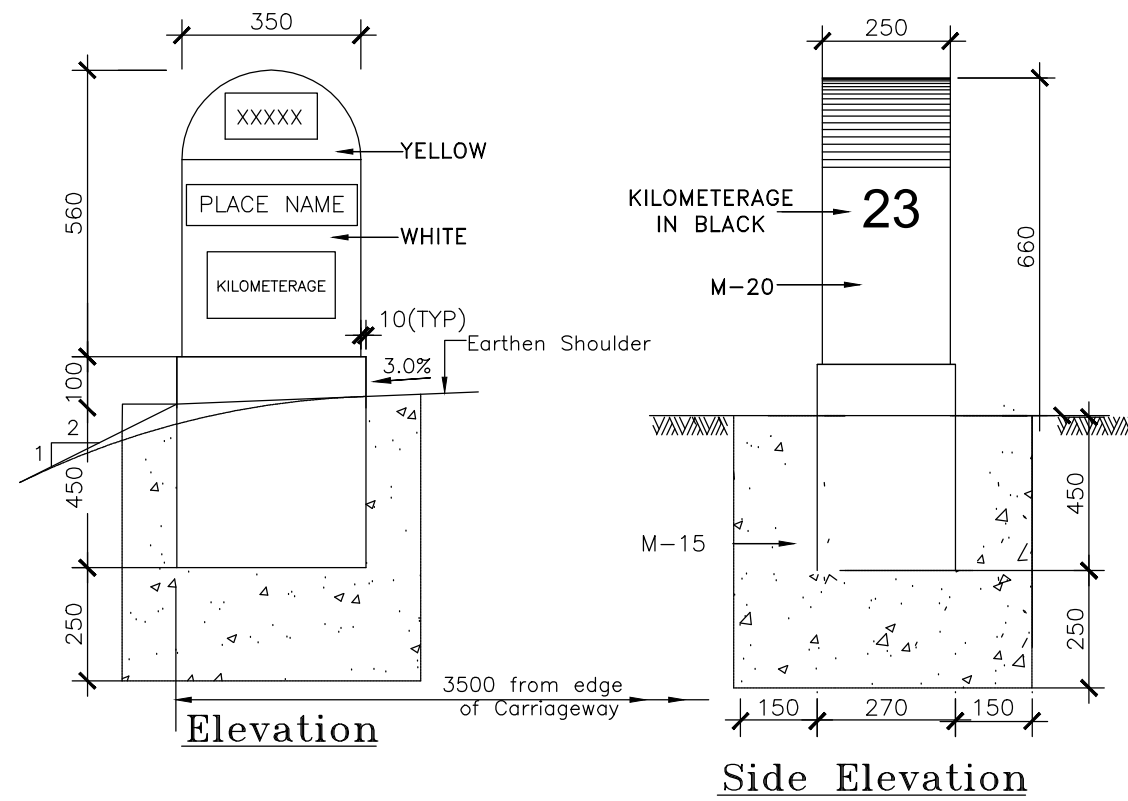
PROJECT :
Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:

Eptisa Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

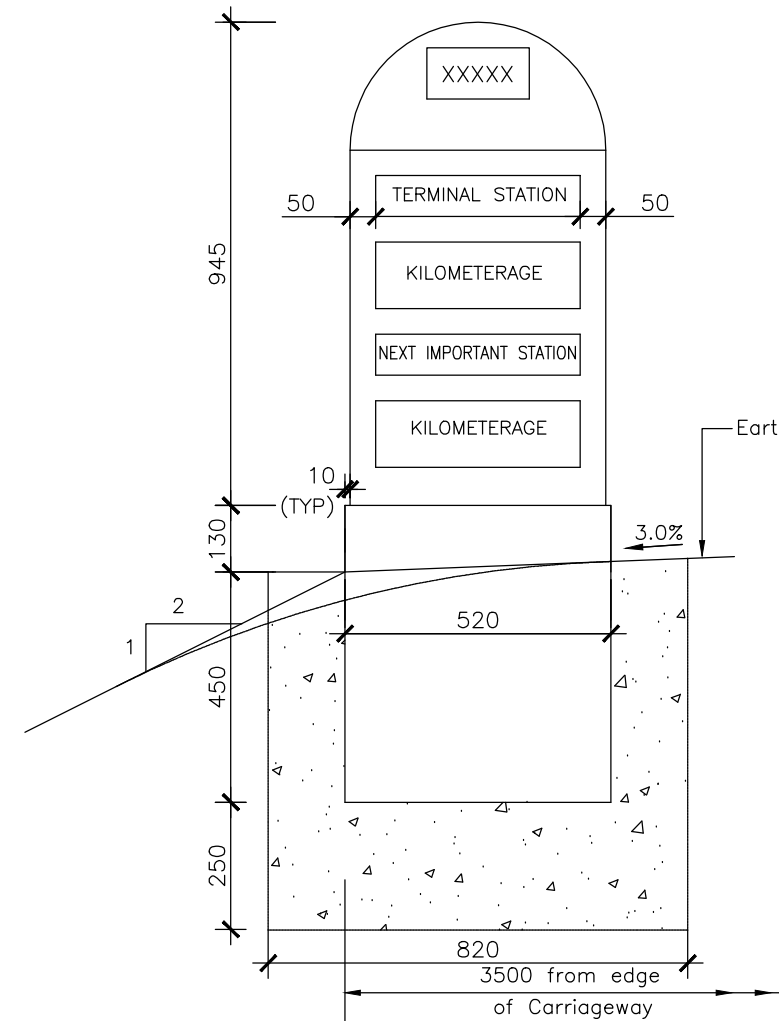
REV.	DATE	DESCRIPTION

DRAWN BY : SD
DESIGNED BY : SCK/MM
APPROVED BY : KG
SCALE : AS SHOWN

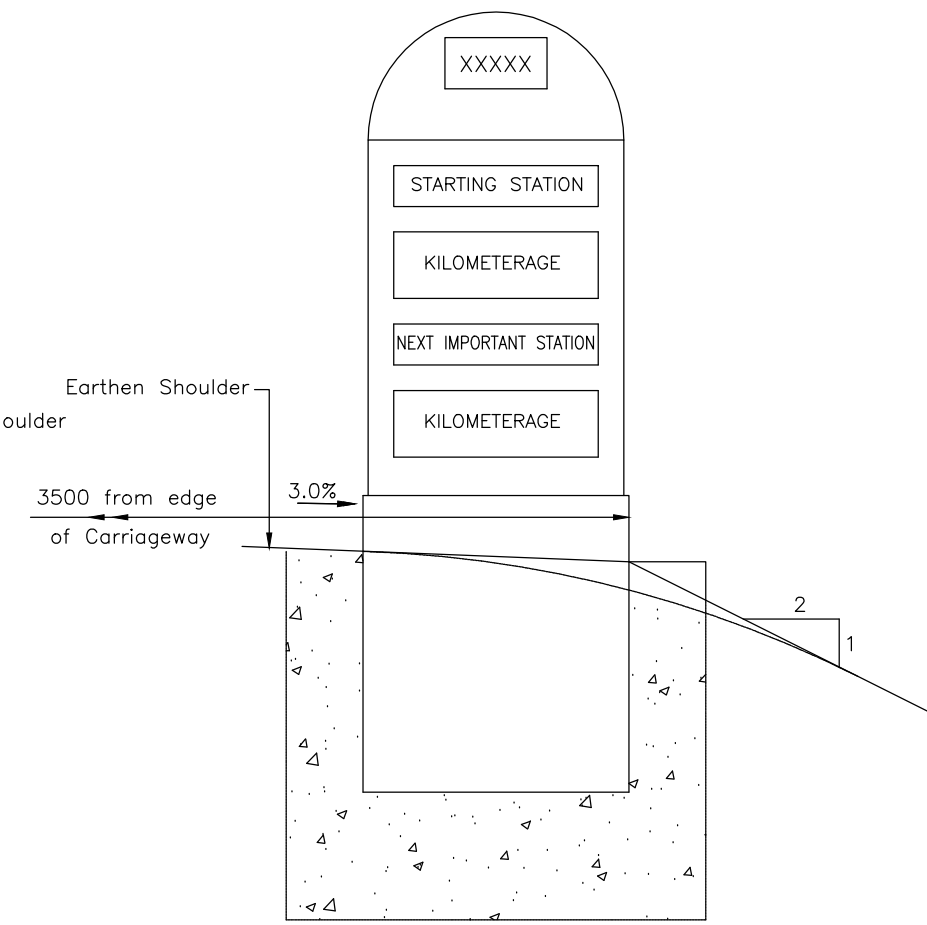
TITLE :
Road Signs & Road Delineators
DRG. NO. : EPTISA/JTRFP/DPR/J&K/MISC/01
(Sheet 03 of 03)
REVISION : R-1
September 2019



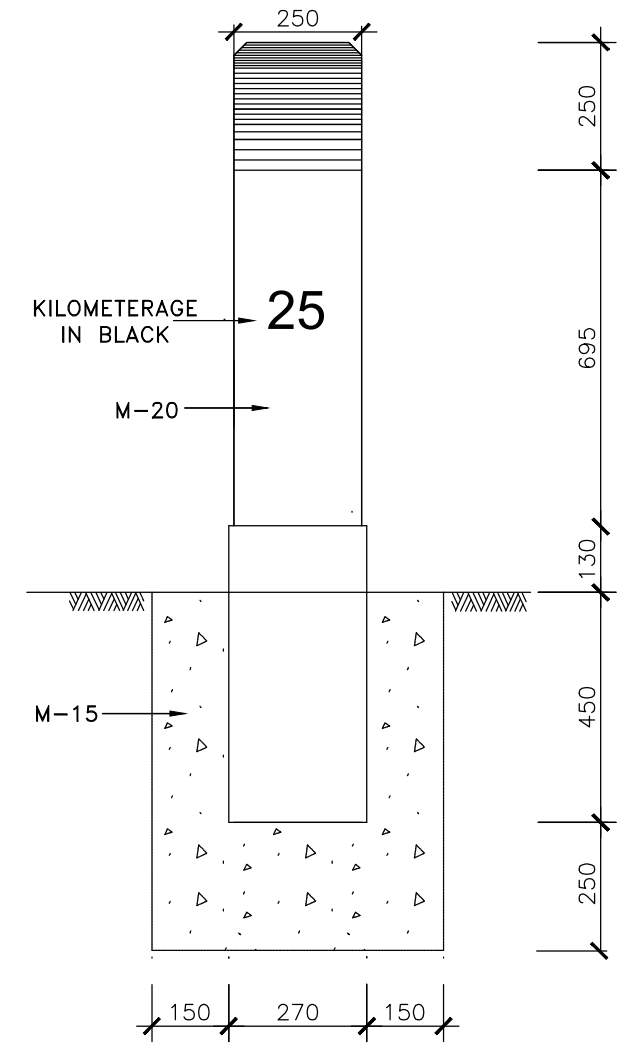
Kilometre Stone



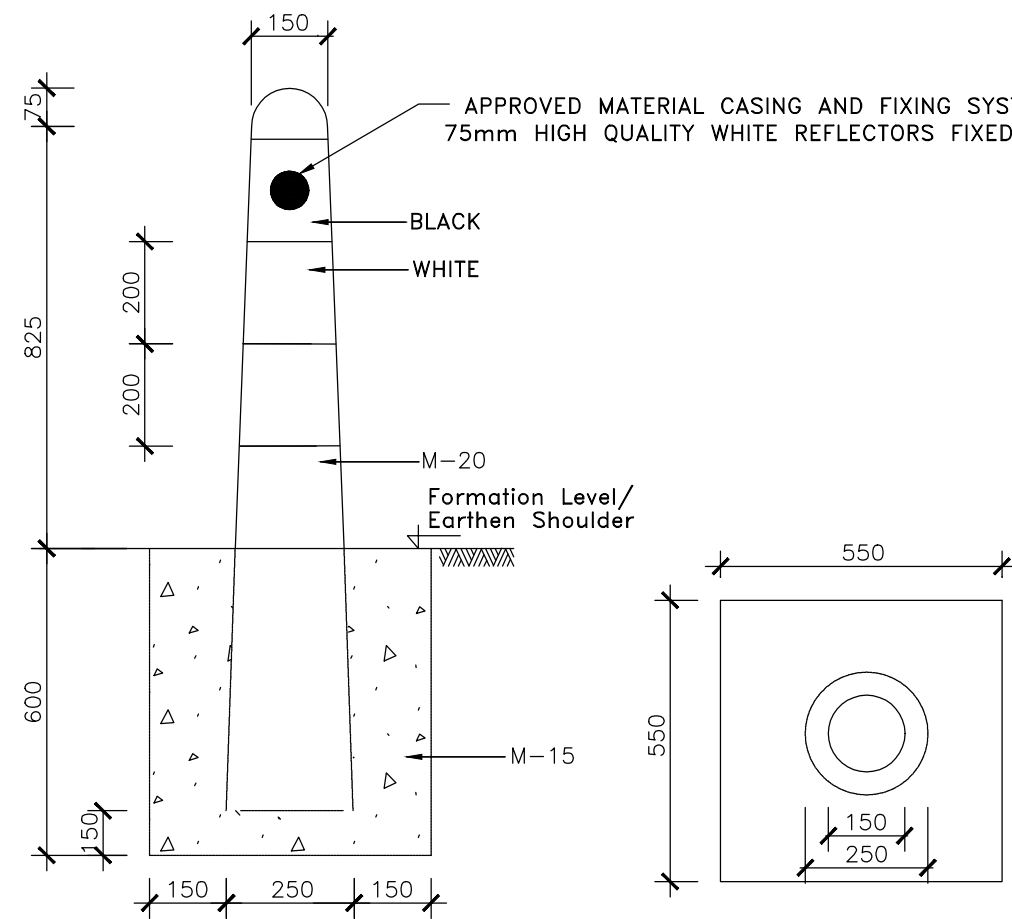
Face - I Elevation



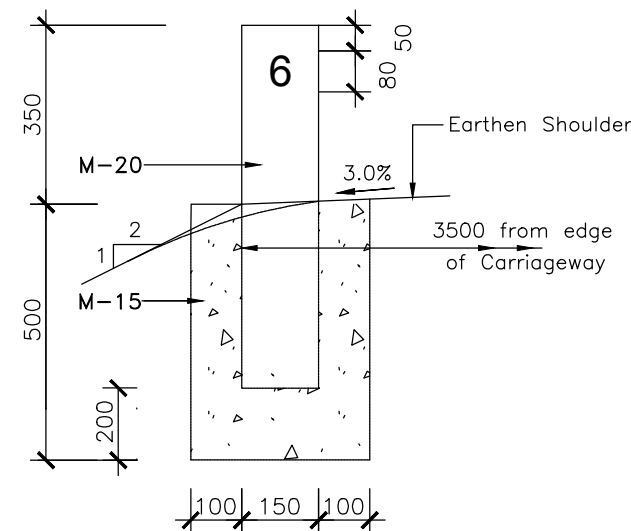
Face - II Elevation



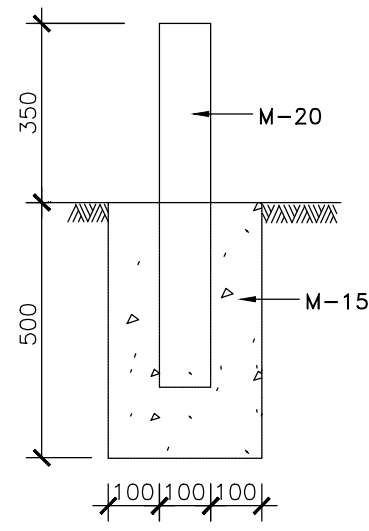
Side Elevation



Guard Post

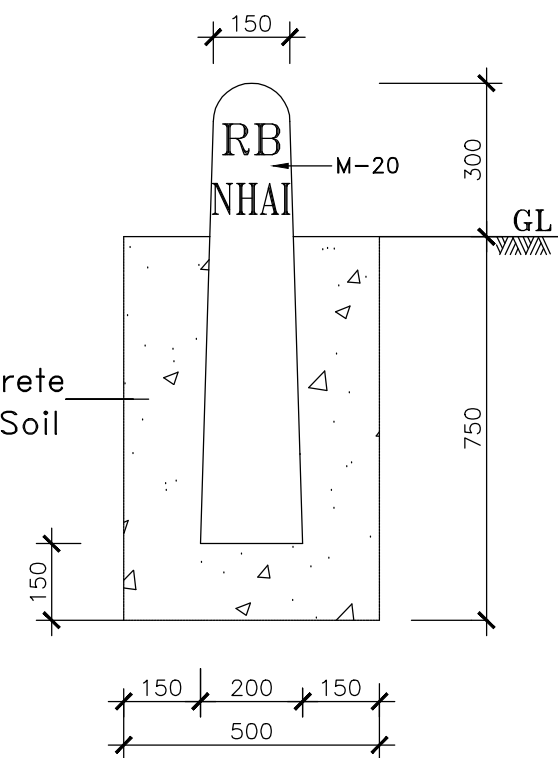


Front Elevation

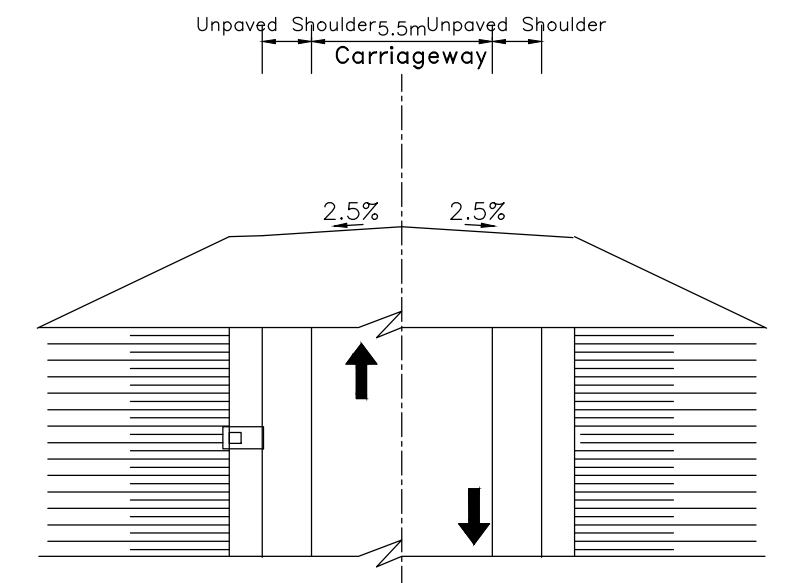


Side Elevation

200 metre Stone



Boundary Stone



Plan

Location of Distance Stones

Notes:

1. Details of kilometre stone and 5th kilometre stone are generally based on IRC:8-1980
2. Details of 200m stones are generally based on IRC:26-1967.
3. The distance stones shall be provided on left side of the road as shown independently for each direction of traffic flow.
4. The letters and numerals on distance stones shall be as per IRC:8-1980.
5. Details of boundary stones are generally based on IRC:25-1967.
6. Besides the above, standards and specifications mentioned in IRC : SP : 73-2015 shall be followed strictly whenever applicable.
7. All dimensions are in millimetres unless otherwise mentioned.
8. Location of Distance Stones shall be as per applicable TCSs for the stretches where Depressed Median has been provided.

CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



Eptisa Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY : SD

DESIGNED BY : SCK/MM

APPROVED BY : KG

SCALE : N.T.S

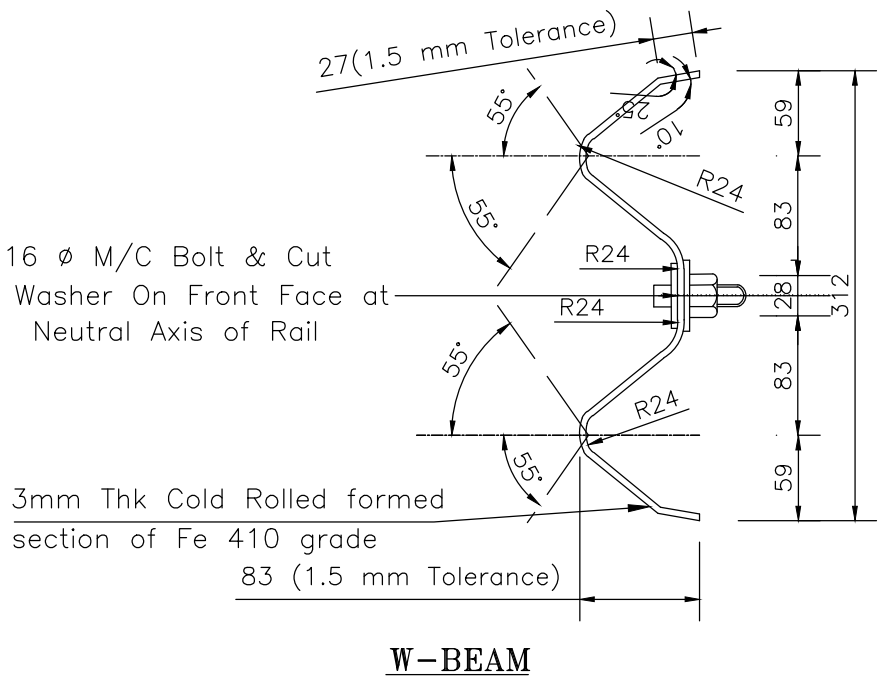
TITLE :

Typical Details of Distance Stone,
Boundary Stone & Guard Post

DRG. NO. : EPTISA/JTRP/DPR/J&K/MISC/02

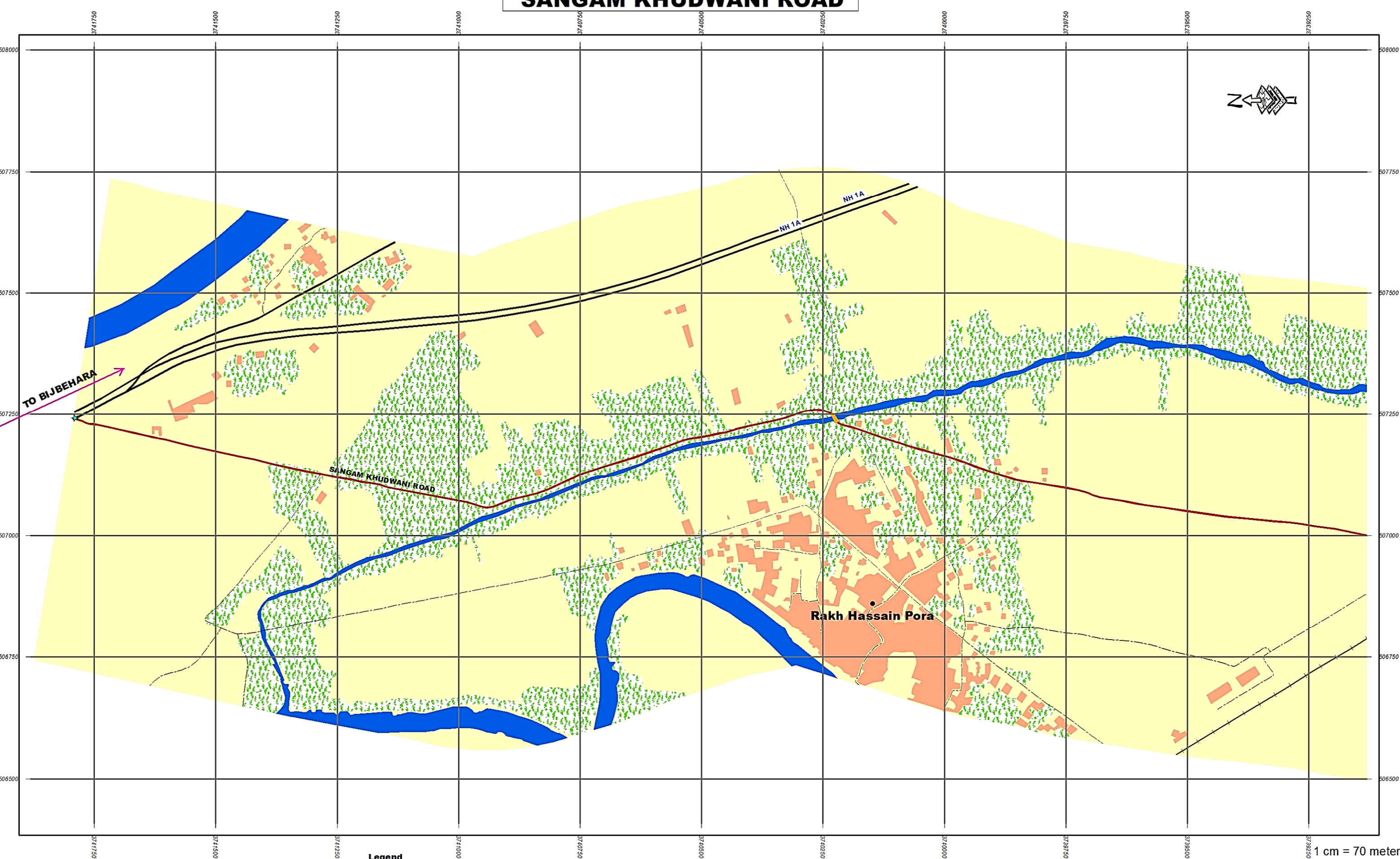
REVISION : R-1

September 2019

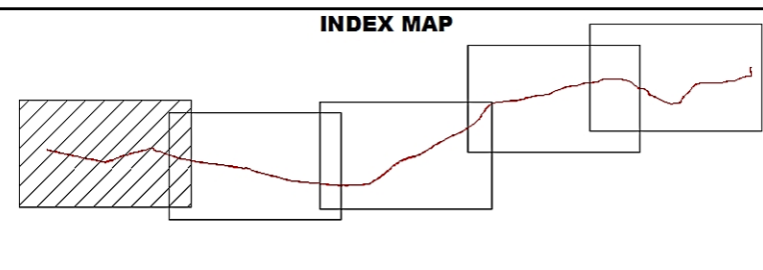


TITLE : Details of Metal Beam Crash Barrier	
DRG. NO. : EPTISA/JTFRP/DPR/J&K/MISC/03	
REVISION : R-1	September 2019

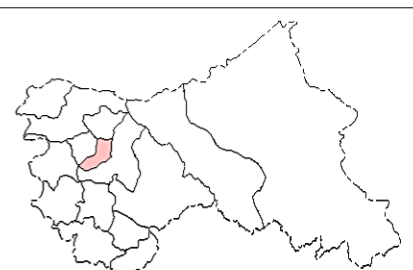
SANGAM KHUDWANI ROAD



1 cm = 70 meters



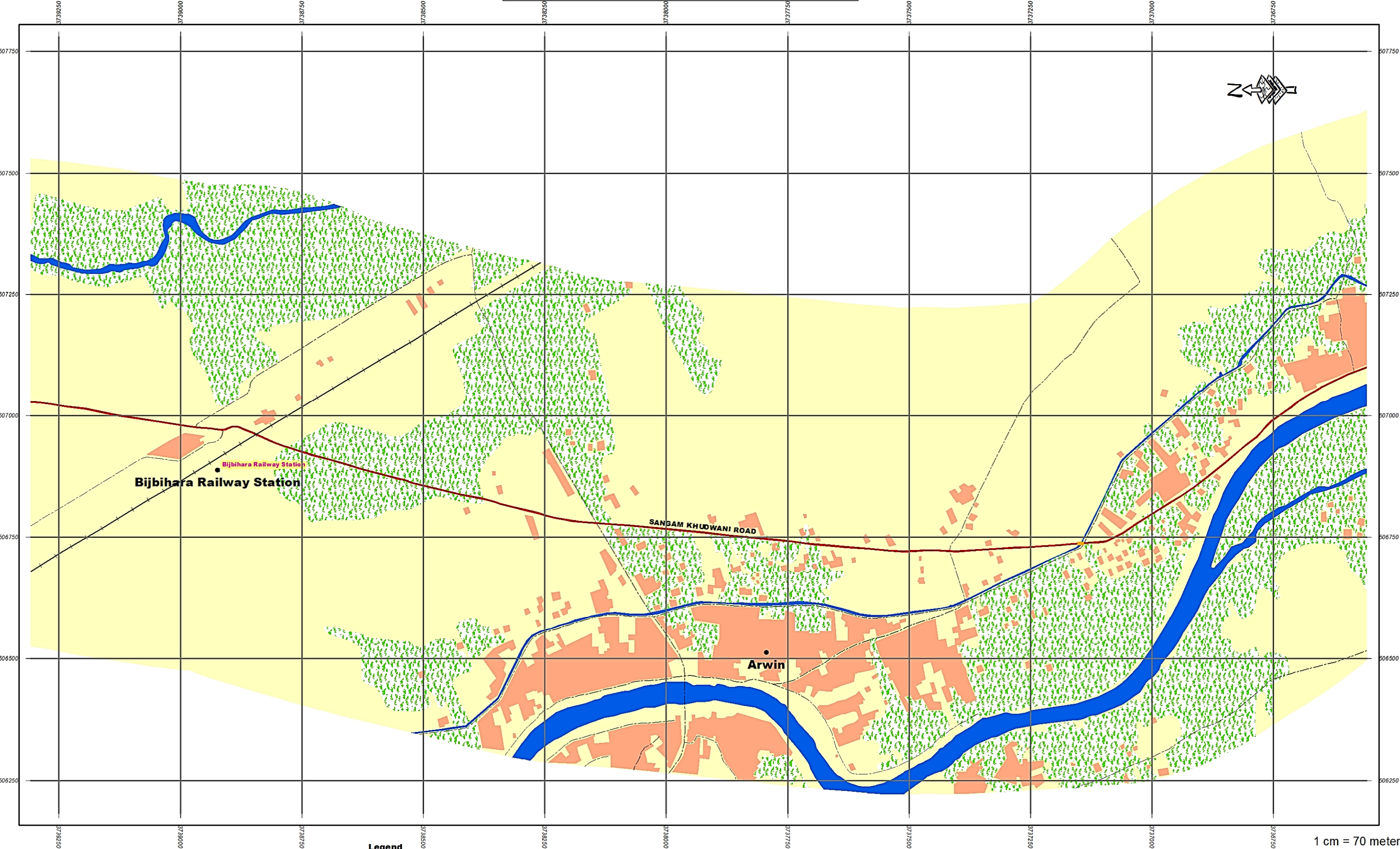
- Legend**
- ▲ Importance LandMark
 - ★ Start End Point
 - Village Name
 - Railways
 - Park
 - Bridge
 - Restricted Area
 - Road Centerline
 - Proposed Road
 - Major Road
 - Other Road
 - Building
 - Forest
 - Water
 - Swamp
 - Vegetation
 - Open/Agriculture Land



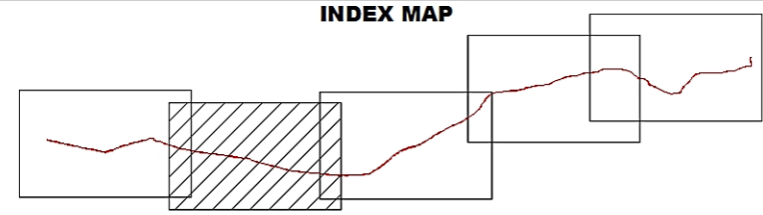
Project: JHELM TAWI FLOOD RECOVERY PROJECT
Sub-Project: FOR RECONSTRUCTION OF SANGAM KHUDWANI ROAD UNDER KASHMIR DIVISION
Agency: PROJECT MANAGEMENT UNIT JTFRP



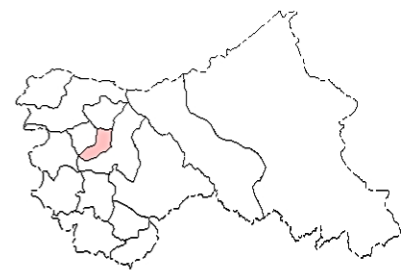
SANGAM KHUDWANI ROAD



1 cm = 70 meters



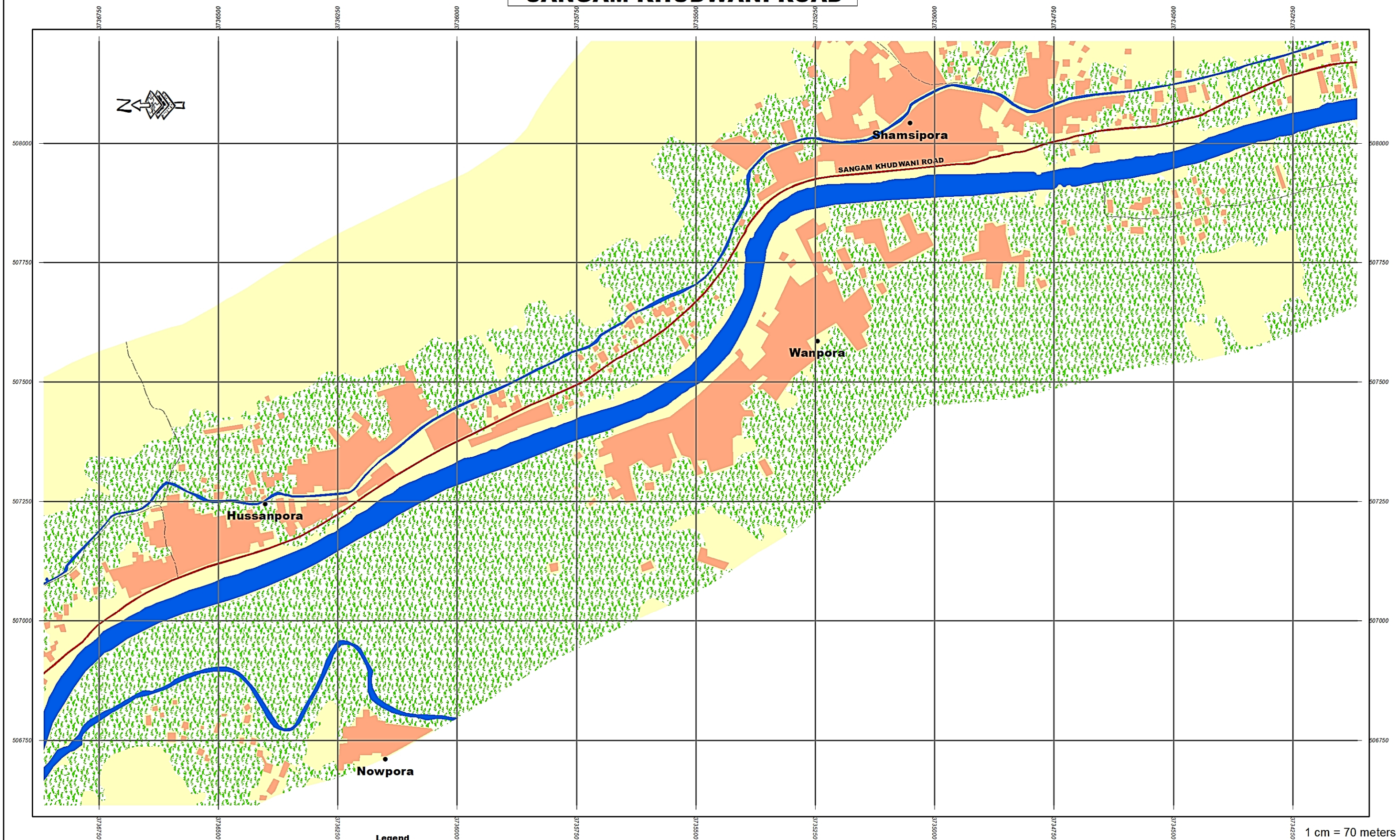
- Legend**
- | | | |
|---------------------------|-----------------------------|-----------------------|
| ▲ Importance LandMark | --- Road Centerline | Water |
| ★ Start End Point | Red Box Proposed Road | Swamp |
| ● Village Name | Thick Black Line Major Road | Vegetation |
| — Railways | Thin Black Line Other Road | Open/Agriculture Land |
| Green Stippled Park | Orange Box Building | |
| Yellow Box Bridge | Dashed Black Line Forest | |
| Black Box Restricted Area | | |



Project: JHELM TAWI FLOOD RECOVERY PROJECT
Sub-Project: FOR RECONSTRUCTION OF SANGAM KHUDWANI ROAD UNDER KASHMIR DIVISION
Agency: PROJECT MANAGEMENT UNIT JTFRP

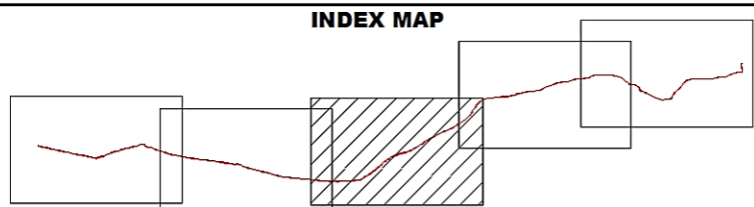


SANGAM KHUDWANI ROAD



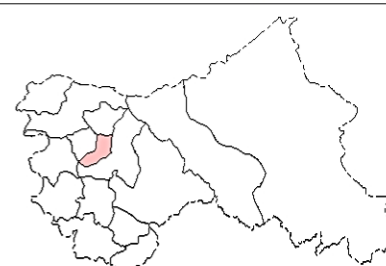
1 cm = 70 meters

INDEX MAP



Legend

- | | | |
|-----------------------|---------------------|-----------------------|
| ▲ Importance LandMark | --- Road Centerline | Water |
| ★ Start End Point | Red Proposed Road | Swamp |
| ● Village Name | Major Road | Vegetation |
| — Railways | Other Road | Open/Agriculture Land |
| Park | Building | |
| Bridge | Forest | |
| Restricted Area | | |



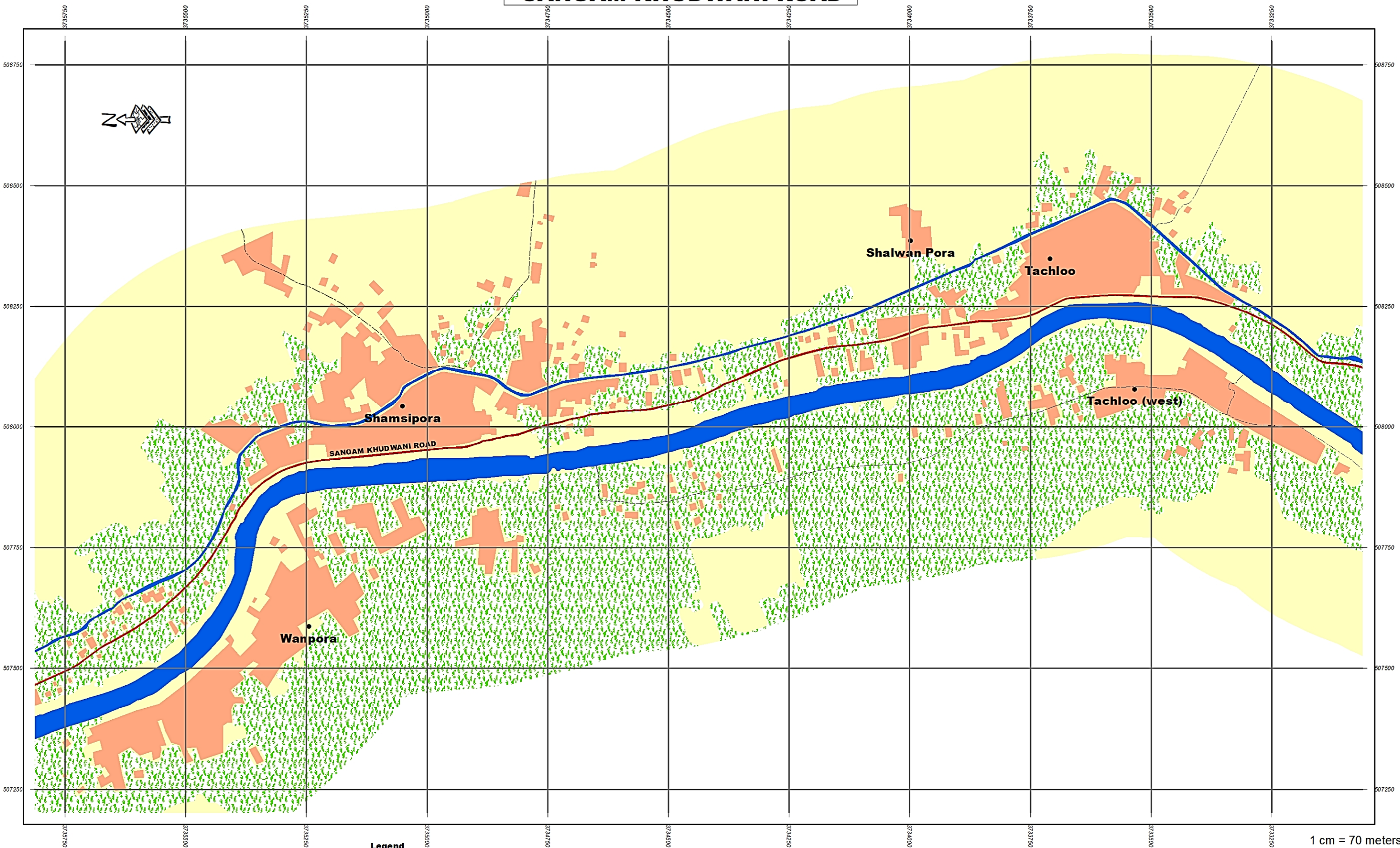
Project: JHELM TAWI FLOOD RECOVERY PROJECT

Sub-Project: FOR RECONSTRUCTION OF SANGAM KHUDWANI ROAD UNDER KASHMIR DIVISION

Agency: PROJECT MANAGEMENT UNIT JTFRP

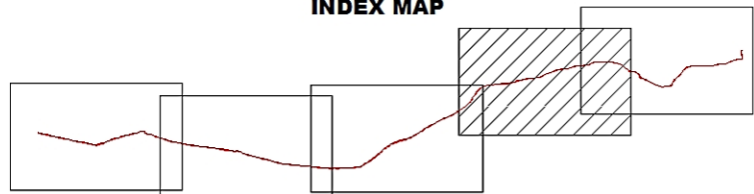
eptisa

SANGAM KHUDWANI ROAD



1 cm = 70 meters

INDEX MAP



Legend

- | | | |
|-------------------------|-----------------------|-----------------------|
| ▲ Importance LandMark | --- Road Centerline | Water |
| ★ Start End Point | Red Box Proposed Road | Swamp |
| ● Village Name | Black Line Major Road | Vegetation |
| — Railways | Grey Line Other Road | Open/Agriculture Land |
| Green Stippling Park | Orange Box Building | |
| Yellow Box Bridge | Dashed Box Forest | |
| Red Box Restricted Area | | |



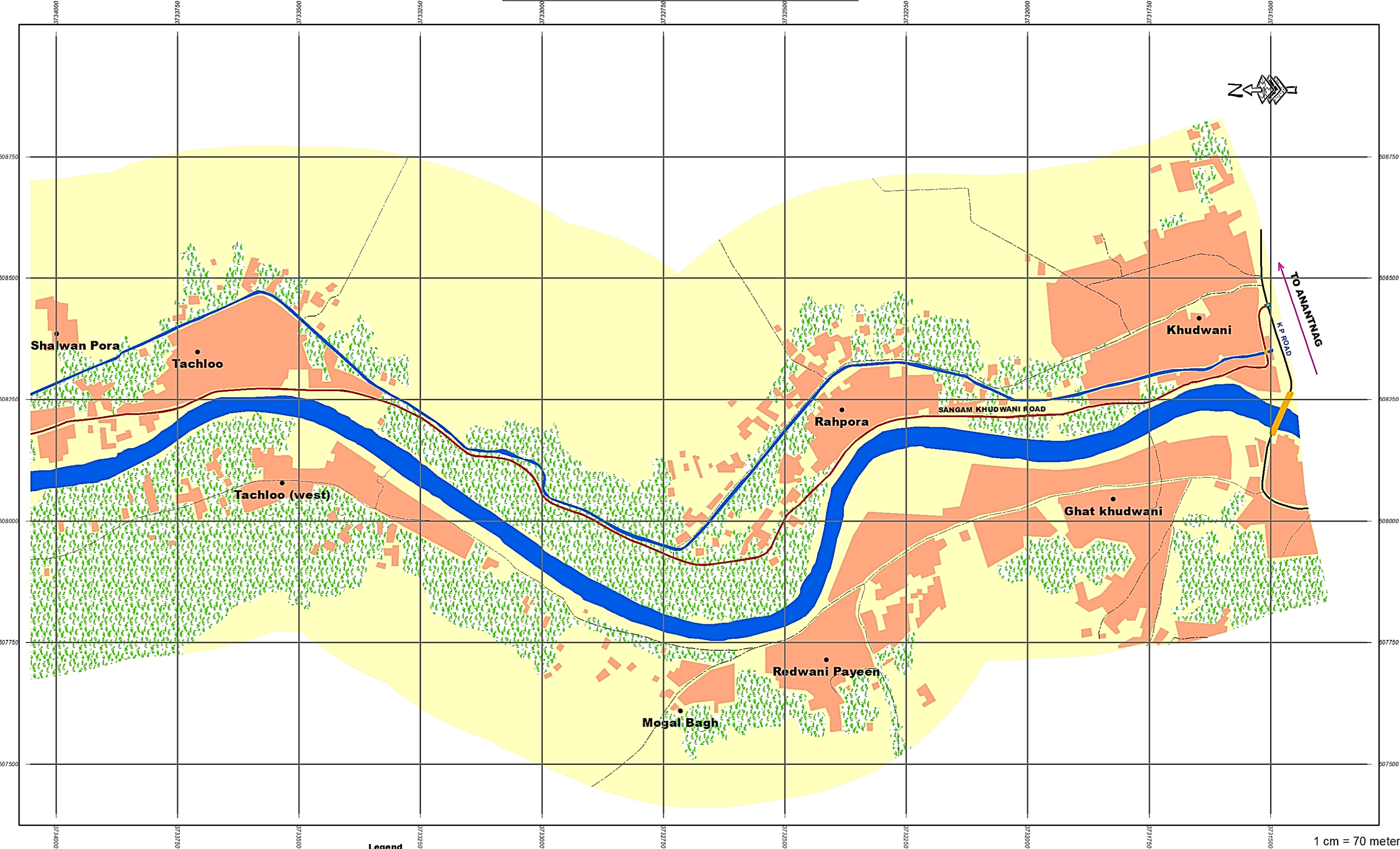
Project: JHELM TAWI FLOOD RECOVERY PROJECT

Sub-Project: FOR RECONSTRUCTION OF SANGAM KHUDWANI ROAD UNDER KASHMIR DIVISION

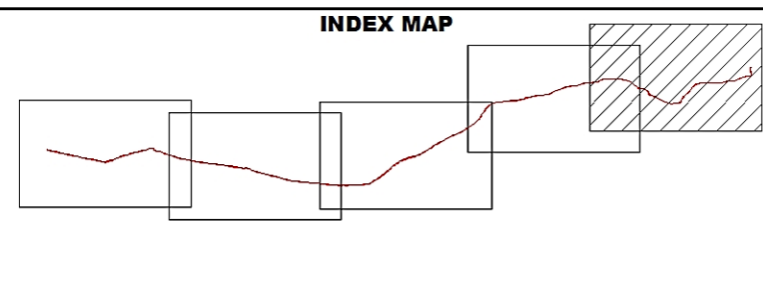
Agency: PROJECT MANAGEMENT UNIT JTFRP

eptisa

SANGAM KHUDWANI ROAD

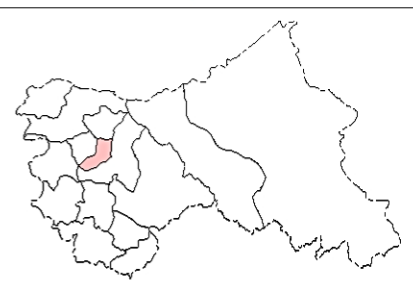


1 cm = 70 meters



Legend

▲ Importance LandMark	--- Road Centerline	Water
★ Start End Point	Red Proposed Road	Swamp
● Village Name	Major Road	Vegetation
— Railways	Other Road	Open/Agriculture Land
Park	Building	
Bridge	Forest	
Restricted Area		



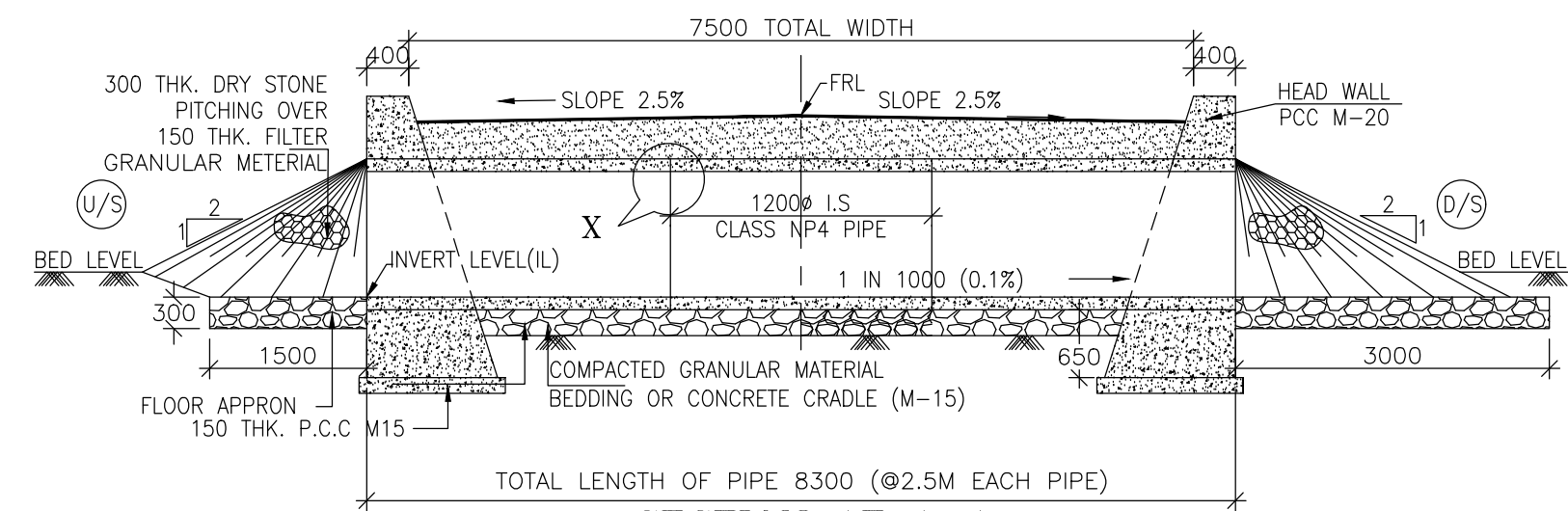
Project: JHELM TAWI FLOOD RECOVERY PROJECT

Sub-Project: FOR RECONSTRUCTION OF SANGAM KHUDWANI ROAD UNDER KASHMIR DIVISION

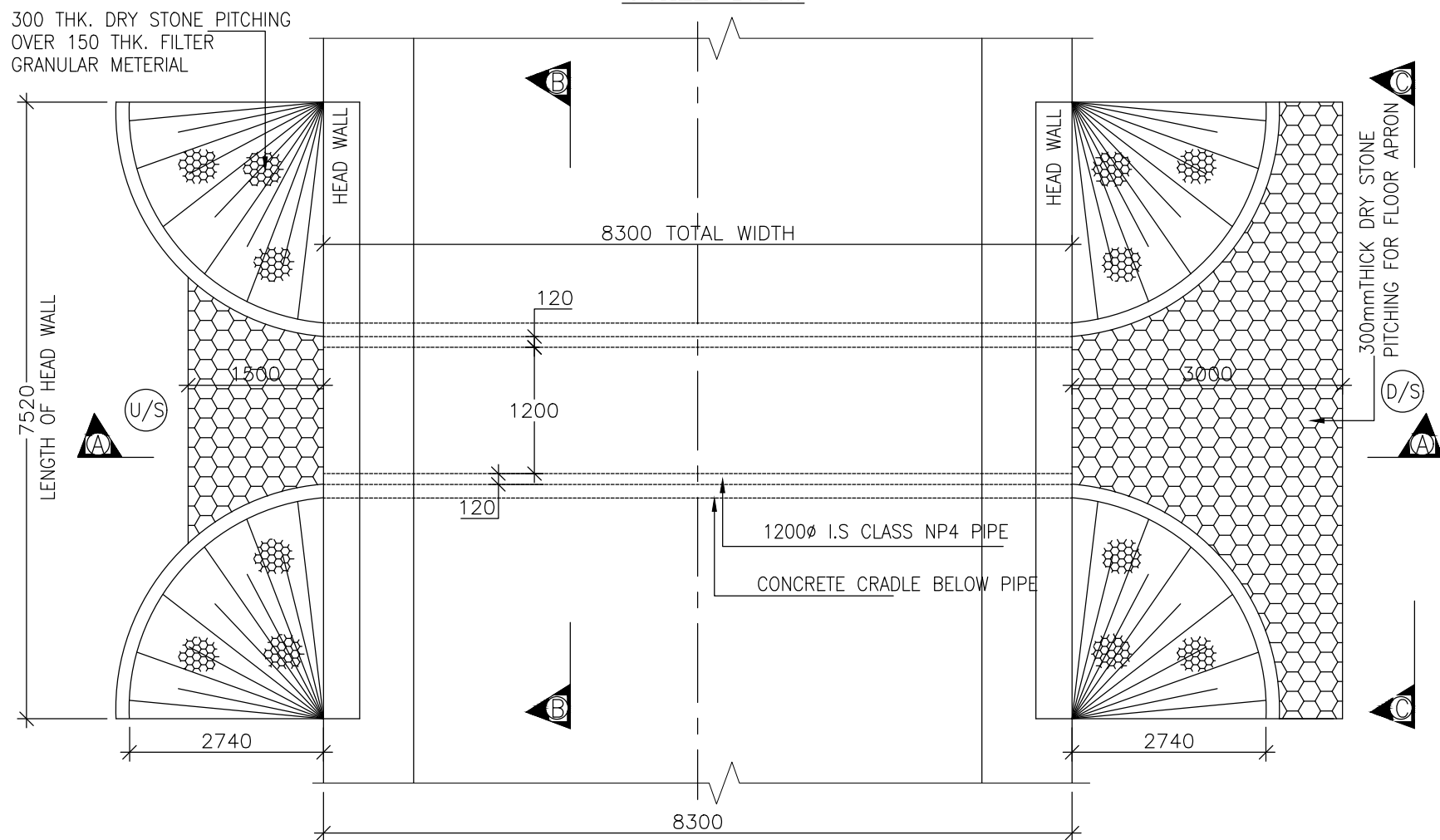
Agency: PROJECT MANAGEMENT UNIT JTRP

eptisa

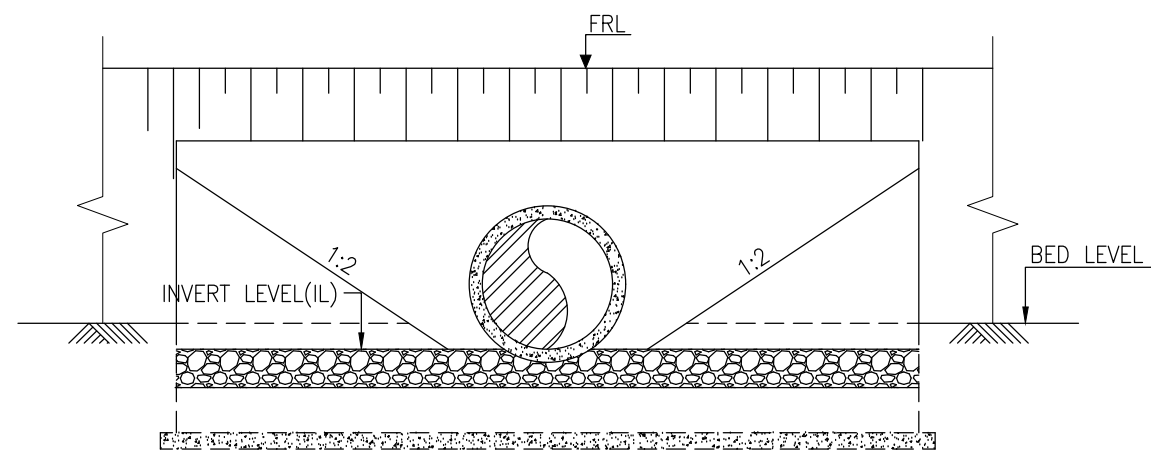
||≡| CULVERT DRAWINGS |≡||



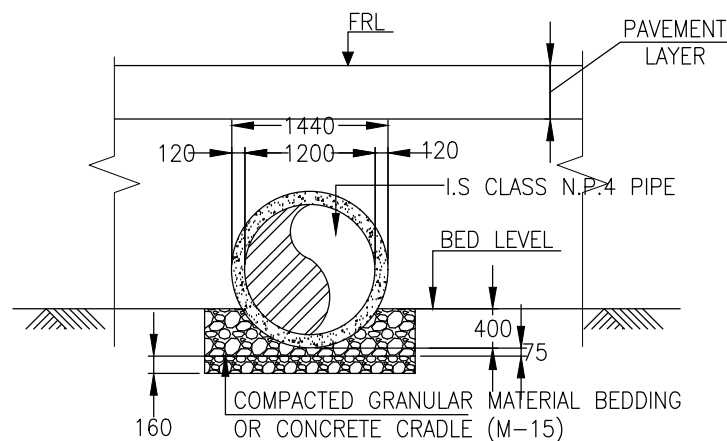
SECTION AT A-A
SCALE 1:100



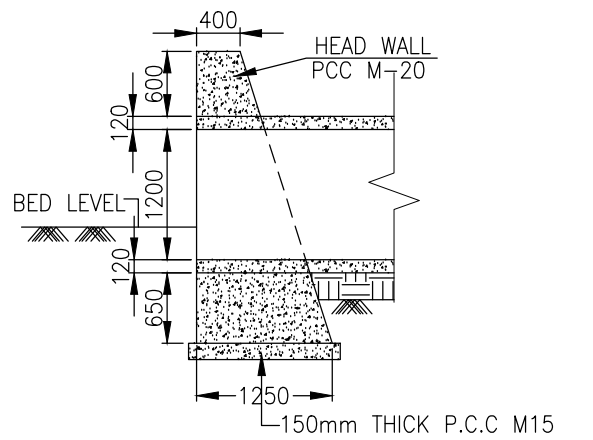
PLAN
SCALE 1:100



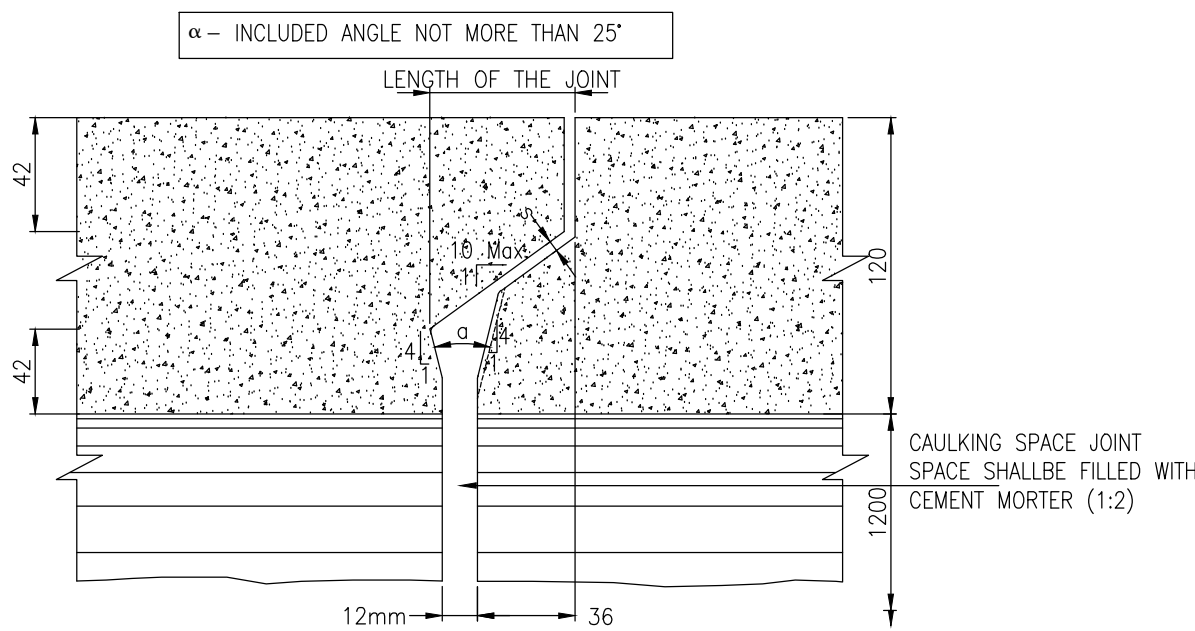
SECTION AT C-C
SCALE 1:100



SECTION AT B-B
SCALE 1:100



SECTION OF HEADWALL
(OVER PIPE)



DETAIL - X

SHOWING DETAILS OF TYP. PIPE JOINT

SCALE 1:100

NOTES:-

1. ALL DIMENSIONS ARE IN mm, EXCEPT OTHERWISE MENTIONED.
2. NO DIMENSION SHALL BE SCALED ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT ROAD DRAWINGS. FRL & CAMBER / SUPER ELEVATION AT PARTICULAR LOCATION SHALL BE VERIFIED WITH THE HIGHWAY DWG. DISCREPANCY, IF ANY, IS TO BE IMMEDIATELY BROUGHT TO THE NOTICE OF ENGINEER FOR NECESSARY MODIFICATION IN THE DRAWING.
4. HUME PIPE (NP4 TYPE), SHALL CONFORM TO IS : 458-2003.
5. COMPACTED GRANULAR BED SHALL CONFORM TO MORT&H SPECIFICATION CLAUSE NO.2904.
6. LONGITUDINAL SLOPE OF WIDENED PIPE SHALL BE 1 : 1000 (MIN.)
7. LENGTH, LOCATION, ORIENTATION & INVERT LEVEL OF PIPE CULVERT SHALL BE ADJUSTED TO SUIT SITE CONDITION AND AS APPROVED BY THE ENGINEER.
8. TRENCHES SHALL BE BACKFILLED IMMEDIATELY AFTER THE PIPES HAVE BEEN LAID AND THE JOINTING MATERIAL HAS HARDENED.
9. PIPE SHALL BE JOINTED BY FLUSH JOINT METHOD AS PER THE DETAILS GIVEN IN SECTION 2906 OF MORT&H SPECIFICATIONS OF ROAD & BRIDGE WORKS.
10. FLOOR APRON SHALL BE PROVIDED AT NON-IRRIGATION CROSS DRAINAGE WORKS ONLY.

CLIENT :



Jhelum Tawi Flood Recovery Project
2nd Floor ERA Commercial Complex Rambagh
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report
for the Road works in Jammu and Kashmir
(Sangam-Khudwani Road in Anantnag District)

DESIGN CONSULTANT:



Eptisa Servicios de Ingenieria S.L.
Unit 1203, 12th Floor, Tower 1, PS Srijan
Corporate Park, Plot No. 2, Block EP & GP,
Sector v, Salt Lake Kolkata - 700091,
West Bengal
Ph: 033-40347200
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY :	PD
DESIGNED BY :	SD
APPROVED BY :	KG
SCALE :	AS SHOWN

TITLE :
TYPICAL GENERAL ARRANGEMENT
DRAWING FOR SINGLE CELL PIPE
CULVERT

DRG. NO. : EPTISA/JTRP/DPR/J&K/PIPE/GAD/01

REVISION : R-1

September 2019