

# **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**

**(Shadipura-Khanpeth-Sumbal Road in Bandipora 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 06	06
7.	Horizontal Alignment Report	EPTISA/JTFRP/DPR/J&K/HAR-01 to 02	02
8.	Vertical Alignment Report	EPTISA/JTFRP/DPR/J&K/VAR-01 to 02	02
9.	Signage Plan	EPTISA/JTFRP/DPR/J&K/SP-01 to 06	06
10.	Detailed Cross Section	EPTISA/JTFRP/DPR/J&K/DCS-01 to 08	08
11.	Utility Relocation Plan-(For Electricity Department)	EPTISA/JTFRP/DPR/J&K/URP-01 to 06	06
12.	Utility Relocation Plan-(For Telephone Department)	EPTISA/JTFRP/DPR/J&K/URP-01 to 06	06
13.	Utility Relocation Plan-(For Water Department)	EPTISA/JTFRP/DPR/J&K/URP-01 to 06	06
14.	Tree Cutting	EPTISA/JTFRP/DPR/J&K/TC-01 to 06	06
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>		02
17.	<i>Culvert Drawings</i>		
i.)	Typical General Arrangement Drawing for Single Cell Box Culvert	EPTISA/JTFRP/DPR/J&K/BOX/GAD/01	01
ii.)	Typical General Arrangement Drawing for Single Cell Pipe Culvert	EPTISA/JTFRP/DPR/J&K/PIPE/GAD/01	01

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 Roadworks in Jammu and Kashmir  
**(Shadipura-Khanpeth-Sumbal Road in Bandipora 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

TITLE :

LIST OF DRAWING

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

REVISION : R-1

September 2019


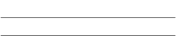

























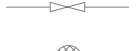
















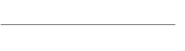















≡ LEGEND, ABBREVIATIONS & GENERAL NOTES ≡







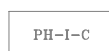
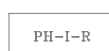








LEGEND

A. PLAN

a) Existing

1	Security Room		31	Divider	
2	Pump house		32	Dusbin	
3	Solar		33	Earthen Road	
4	Rail trac		34	Bitumen Road	
5	Railing		35	Existing Center Line	
6	Telephone Pst tp.		36	Shed	
7	Under Construction Building		37	Sign Board	
8	Hoarding Post		38	Bedi	
9	Water Tank		39	Canal / River	
10	Wire Crossing Details		40	Drain	
11	P.c.c Road		41	Alart Post ap.	
12	Pucca House One Storied Commercial& Residential ph-i/c+r.		42	Compound wall	
13	Pucca House Two Storied Residential ph-ii-r.		43	Fencing	
14	Abandoned Building		44	Gate	
15	Damage Culvert		45	GPS Pillar gps.	
16	Damage Pipe Culvert		46	Reference Pillar	
17	Ep Box		47	Electric Post ep.	
18	Hotel		48	Guard Wall	
19	Retaining Wall		49	Temple / Mandir	
20	Ohe		50	Pond / Ditch / Water Logged	
21	Parking		51	Nala / Natural Stream	
22	Shoulder		52	Petrol Pump	
23	Pave Shoulder		53	Heigh Must Light hmt.	
24	Pavement		54	Water Tap tap.	
25	Pipe Culvert		55	Wildlife Sanctuary Sign Board	
26	Seating bench		56	H.F.L hfl.	
27	Showroom		57	Toilet	
28	Stair		58	Handpump/Tube well tw.	
29	Chamber		59	OFC	
30	Cover Drain		60	Kancha House Commercial kh-c.	

61	Kancha House Residential kh-r.	
62	Km Stone kmp.	
63	Lamp Post lp.	
64	Semi Pucca House Commercial sp-c.	
65	Semi Pucca House Residential sp-r.	
66	Survey Station stn.	
67	Pucca House One Storied Commercial ph-i-c.	
68	Pucca House One Storied Residential ph-i-r.	
69	Pucca House Two Storied Commercial ph-ii-c.	
70	Transformer tns.	
71	TREE 1 (Ã?300 TO Ã?600) t1	
72	TREE 2 (Ã?600 TO Ã?900) t2	
73	TREE 3 (Ã?900 TO Ã?1200) t3	
74	TREE 4 (Ã?1200 TO ABOVE) t4	

GENERAL NOTES

A) General


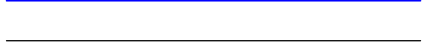
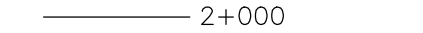

1. All angles are in degree (°) – minute (') – second (") format.
2. All chainages are in kilometres and all levels are in meters unless otherwise specified.
3. All the co-ordinates (X, Y) are with respect to GPS values (established for project road at 2 km interval).
4. Details shown in the plans are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

B) Geometric Design



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

b) Proposed

A. PLAN

Proposed Center Line	
Edge of Carriageway	
Edge of Unpaved Shoulder	
Proposed Chainage	

B. PROFILE

Finished Grade Line	
Existing Grade Line	

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REV.	DATE	DESCRIPTION

DRAWN BY : SD

DESIGNED BY : SCK/MM

APPROVED BY : KG

SCALE : N.T.S

TITLE :

LEGEND, ABBREVIATIONS & GENERAL NOTES

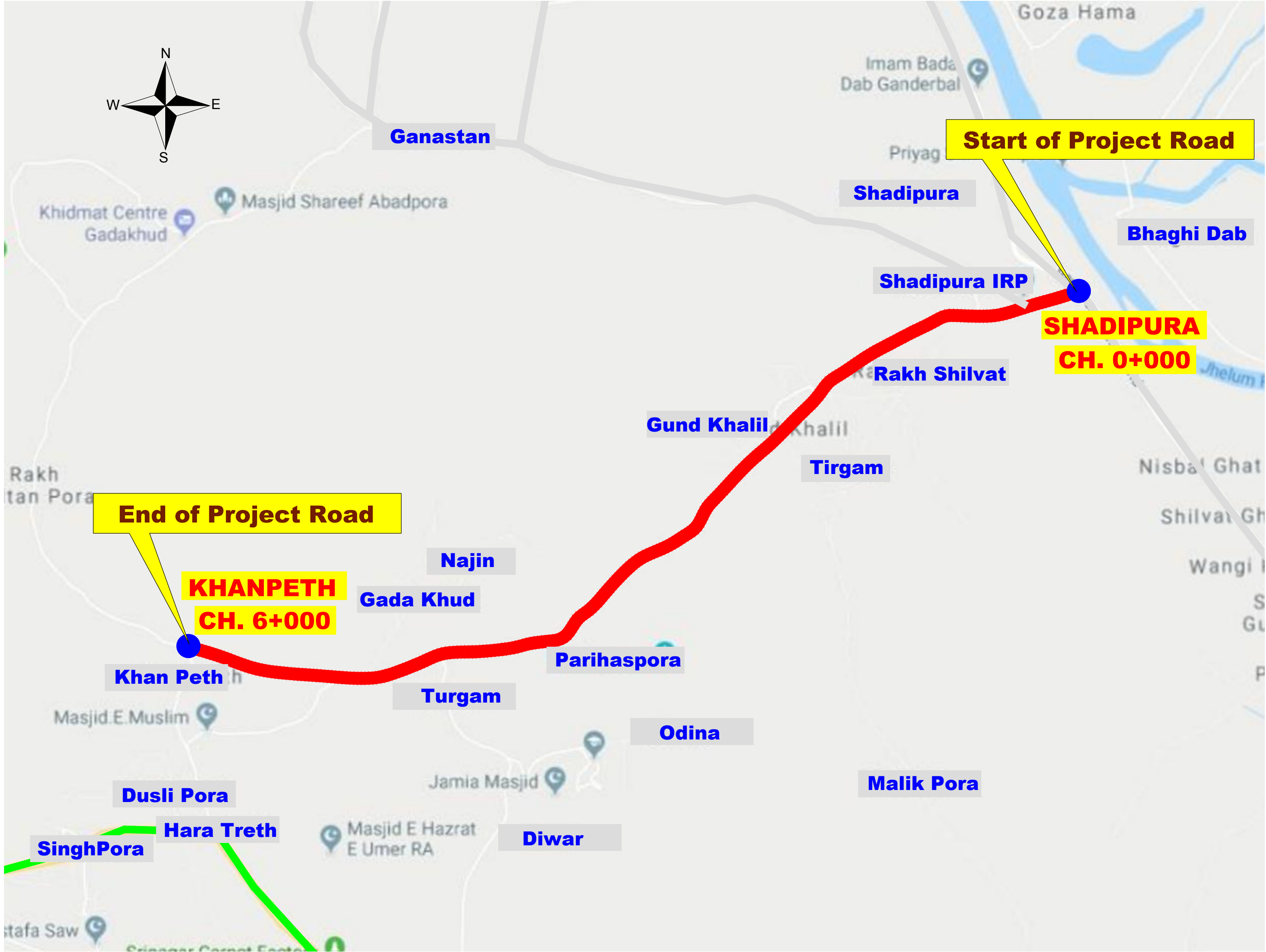
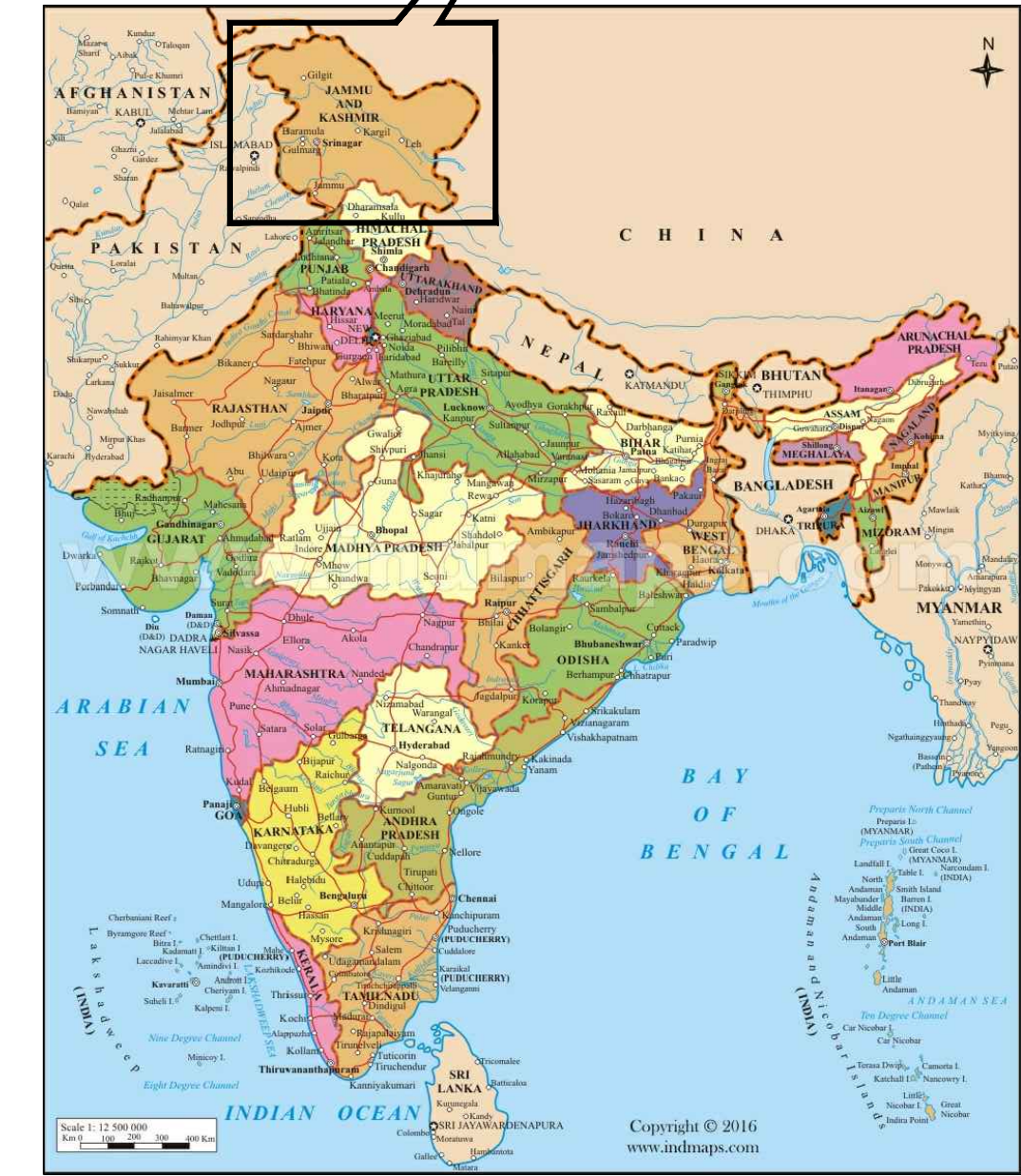
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REVISION : R-1

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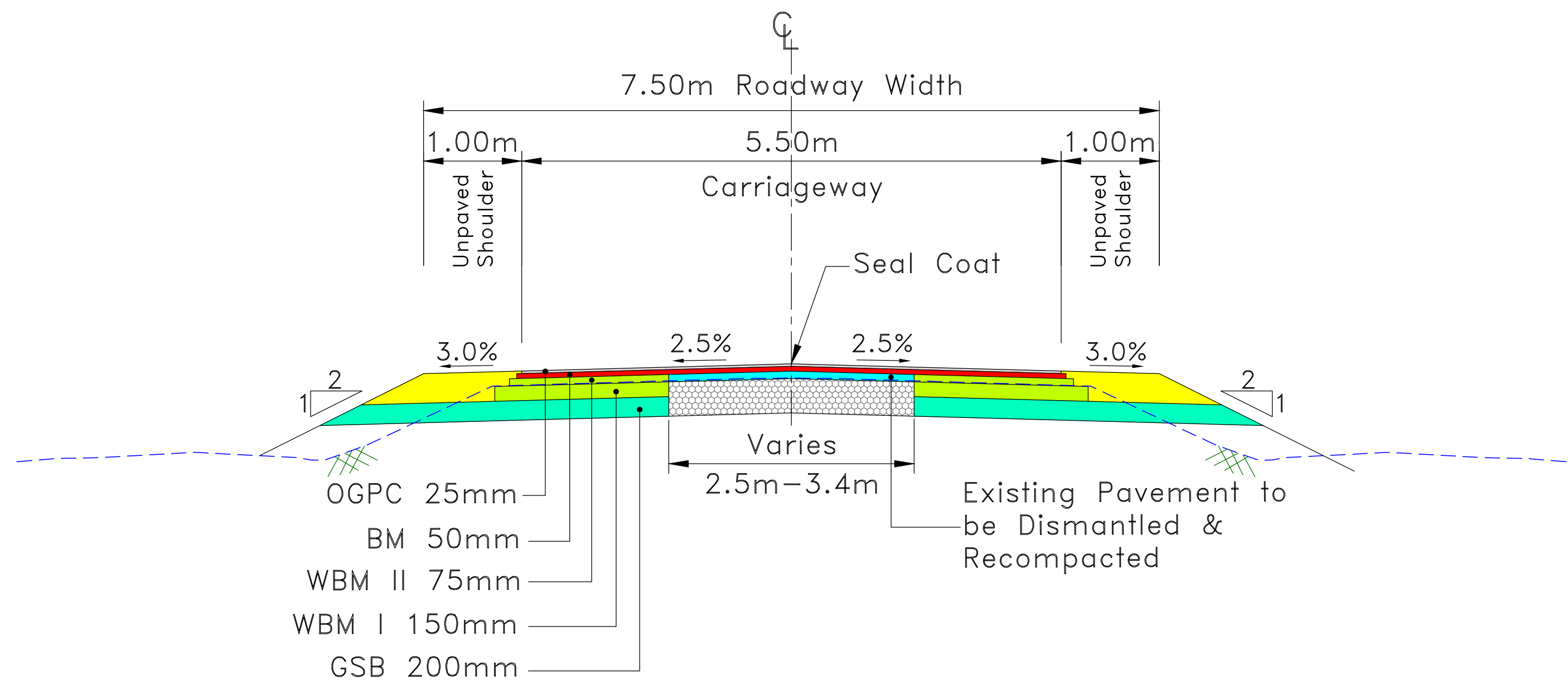
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DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	N.T.S

TITLE :	Index Map
DRG. NO. :	EPTISA/JTRP/DPR/J&K/IM/01
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 <b><i>(Shadipura-Khanpeth-Sumbal Road in Bandipora District)</i></b></div>	<div>DESIGN CONSULTANT:</div> <div><b>Eptisa Servicios de Ingenieria S.L.</b> Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP &amp; GP, Sector v, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.eptisa.com</div>				DRAWN BY : SD	TITLE :  TYPICAL CROSS SECTION			
						DESIGNED BY : SCK/MM				
								APPROVED BY : KG	DRG. NO. : EPTISA/JTFRP/DPR/J&K/TCS/01	
			REV.	DATE	DESCRIPTION	SCALE : 1:80	REVISION : R-1		September 2019	



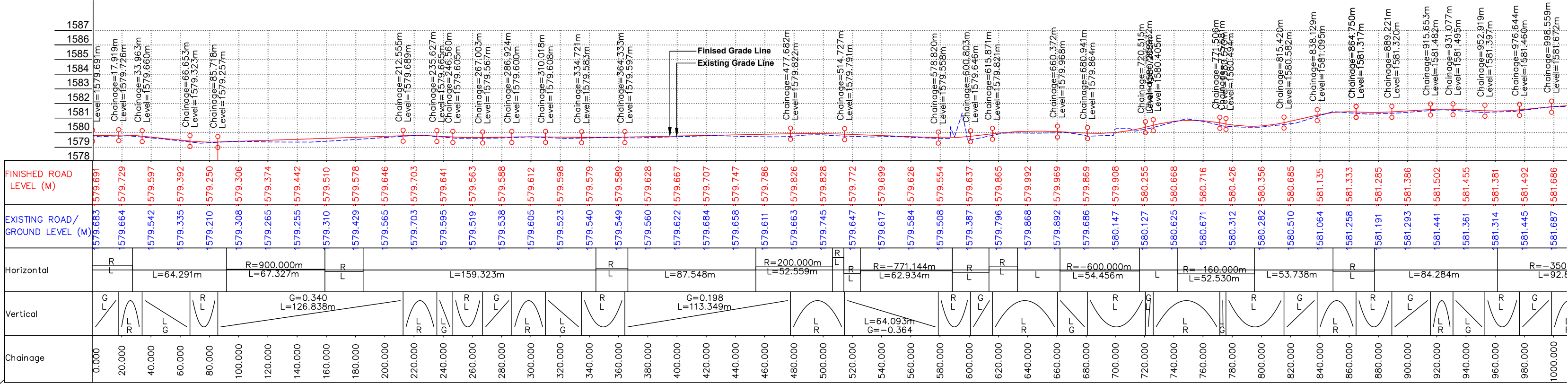








PLAN



LONGITUDINAL PROFILE

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DESIGN CONSULTANT:



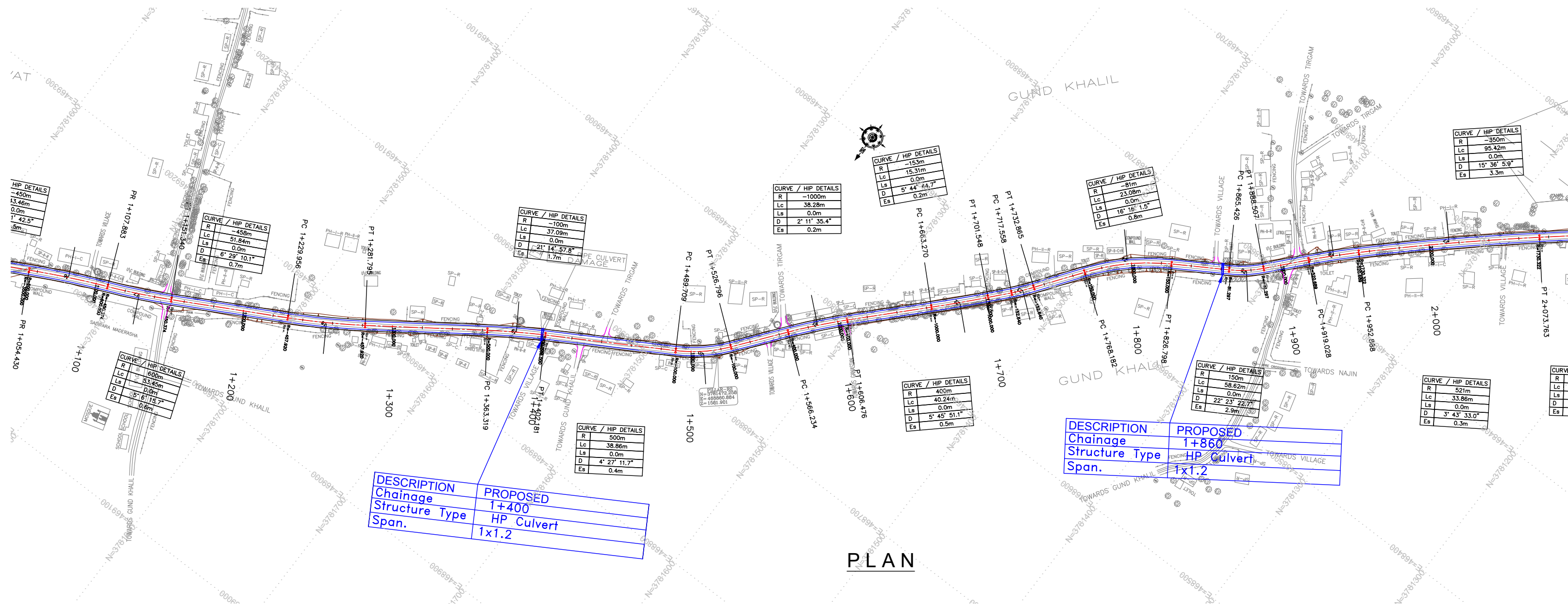
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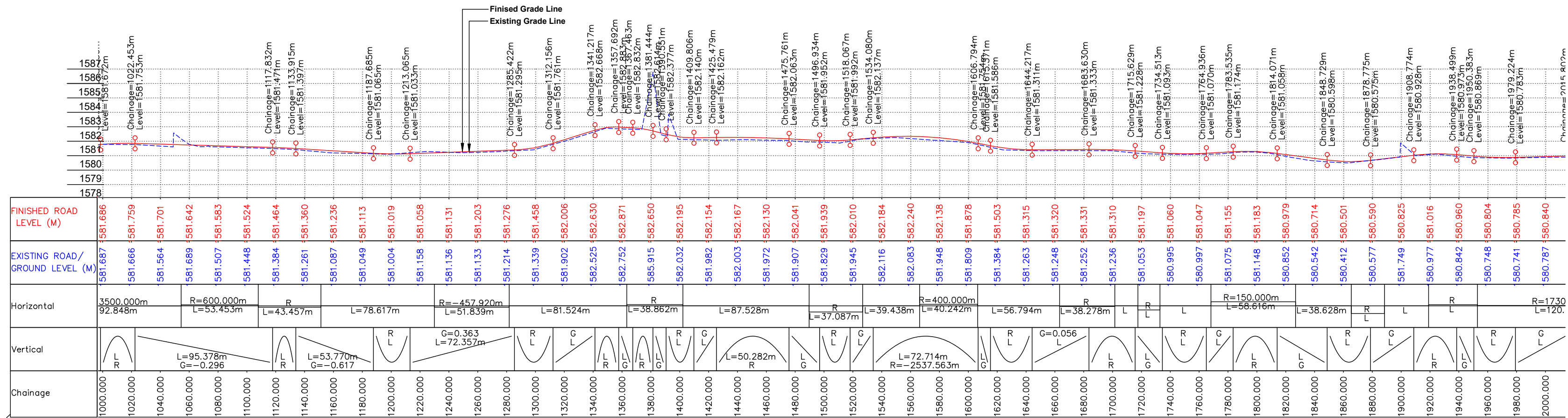
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APPROVED BY :	KG
SCALE :	HOR 1:2500 VER 1:250

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DRG. NO. :	EPTISAJTRP/DPR/J&K/PP/01
REVISION : R-1	September 2019

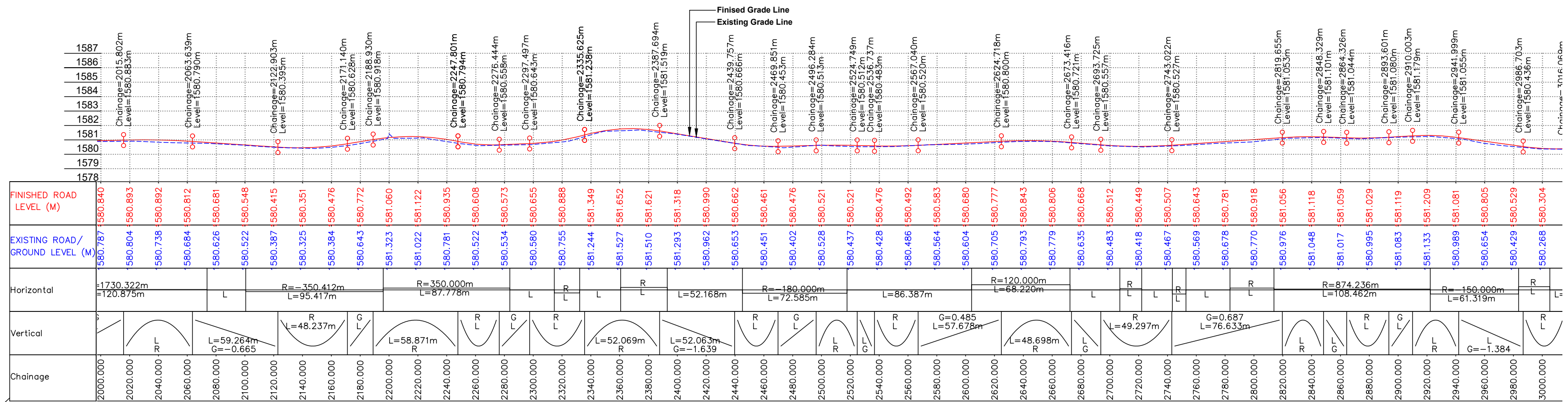
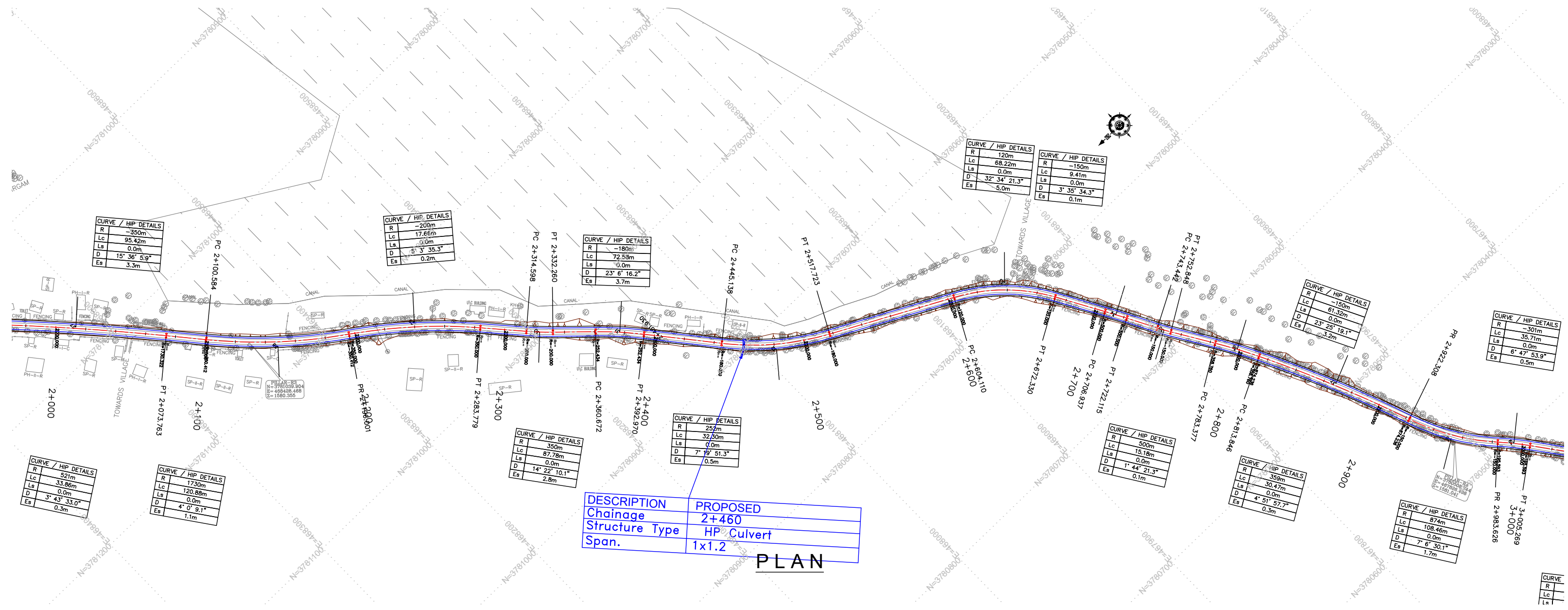




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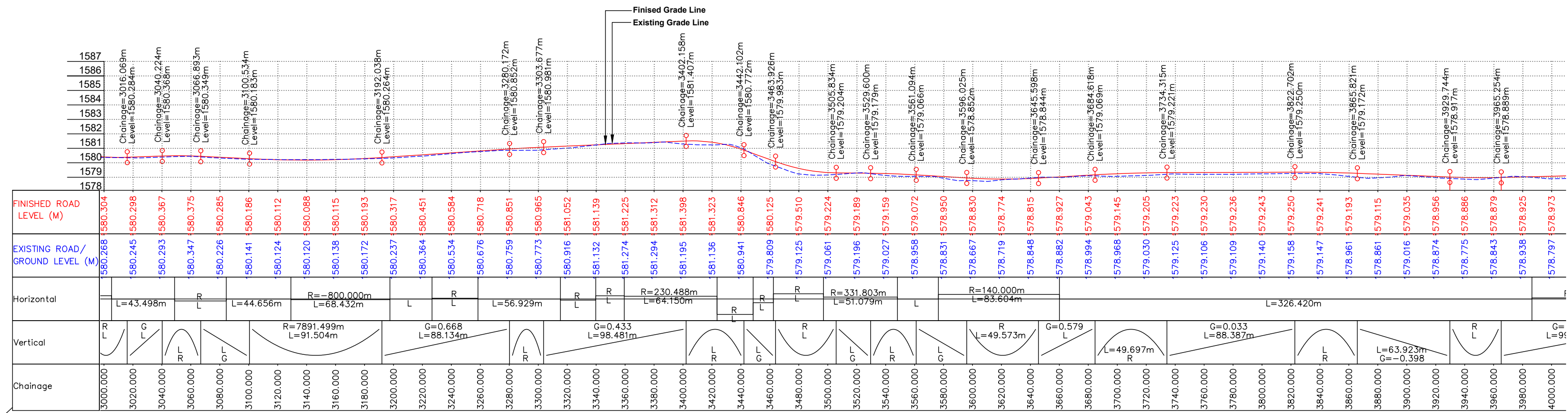
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DESIGNED BY :	SCK/MM
APPROVED BY :	KG
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TITLE :	Plan and Profile (Ch. 2+000 Km to Ch. 3+000 Km)
DRG. NO. :	EPTISAJTFRP/DPR/J&K/PP/03
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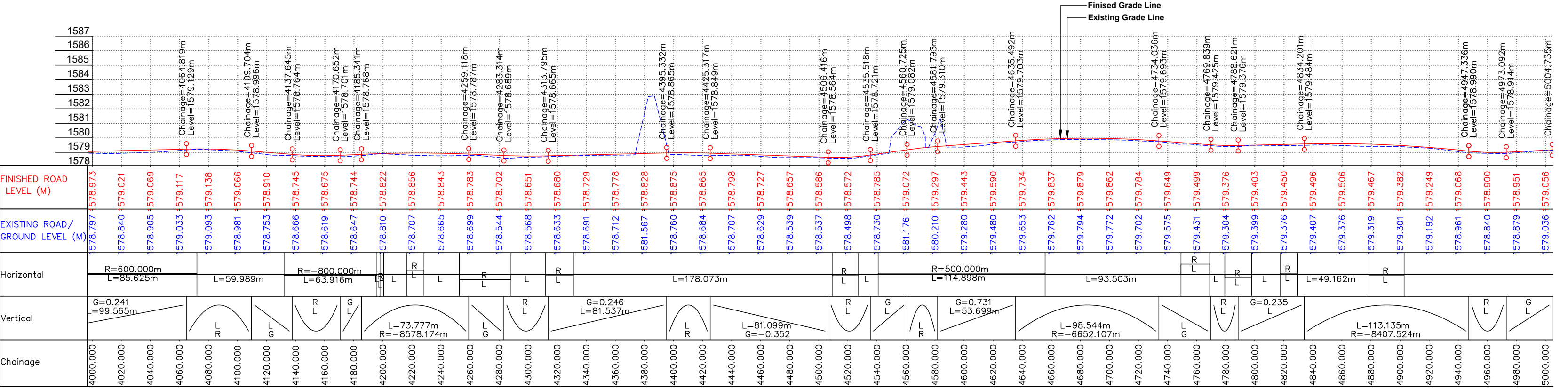
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DESIGNED BY :	SCK/MM
APPROVED BY :	KG
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DRG. NO. :	EPTISAJTRP/DPR/J&K/PP/04
REVISION : R-1	September 2019





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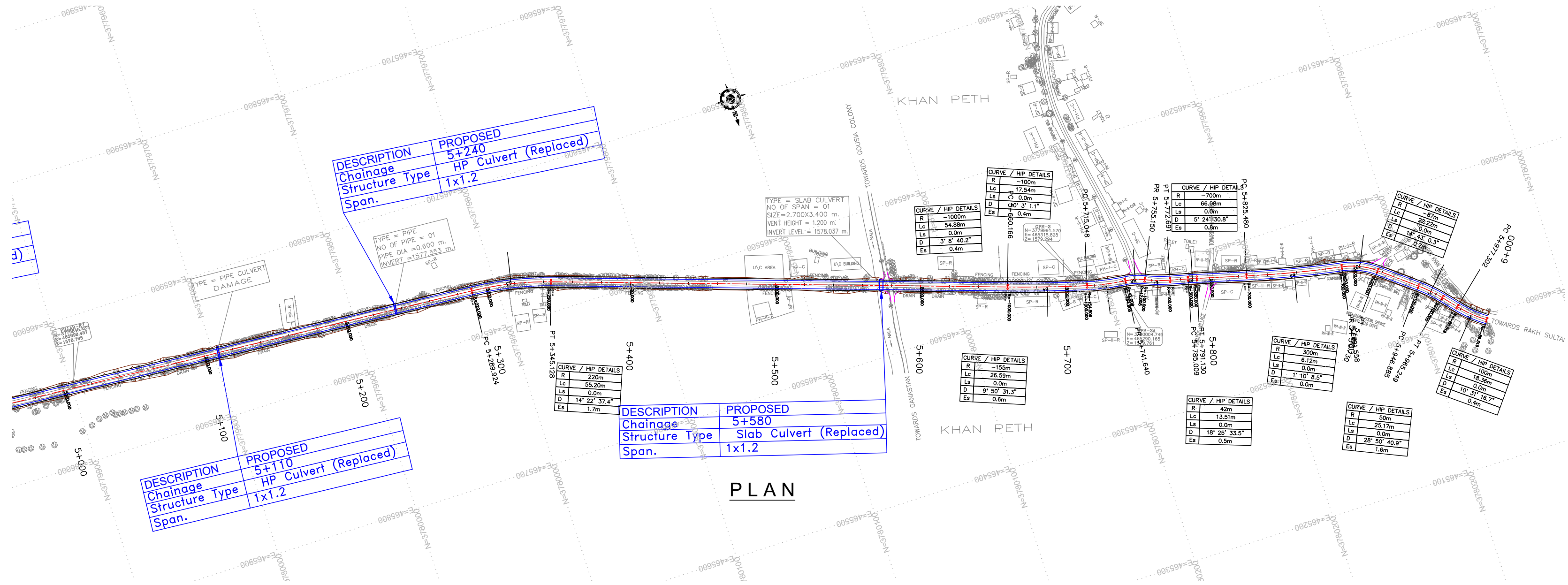
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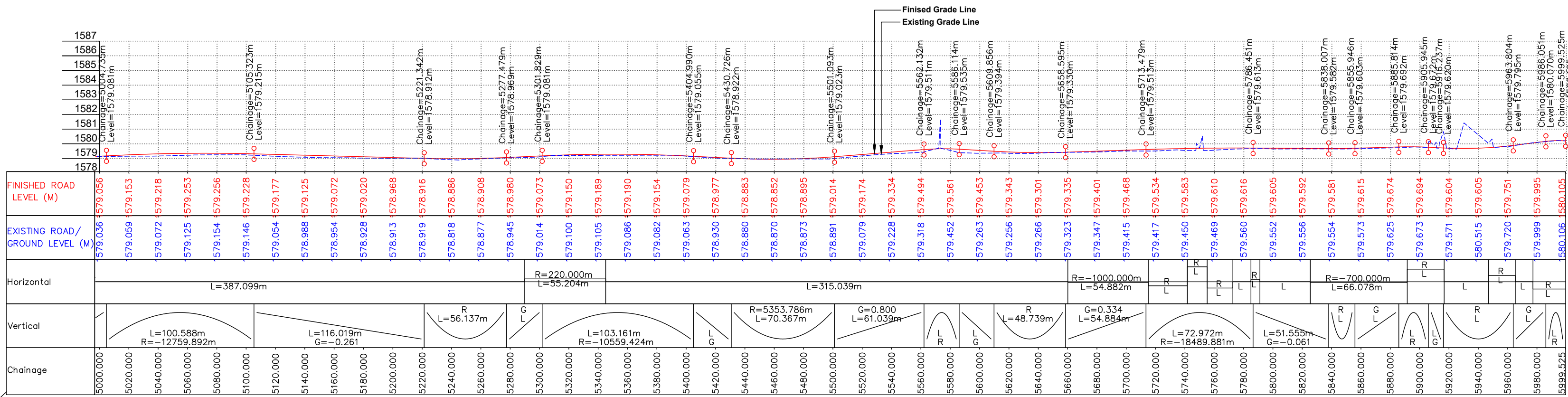
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TITLE :	Plan and Profile (Ch. 5+000 Km to Ch. 6+000 Km)
DRG. NO. :	EPTISAJTRP/DPR/J&K/PP/06
REVISION : R-1	September 2019

## 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+000.000	0+000.000	0+013.745	0+027.414	0+027.414	470251.797	3781968.373	150	40	0.00	0.00	27.41	0.000	0.000	13.75	13.75	0.00	0.00	10.47	10.47	0.628	Right	4.74	0.6
2	0+091.705	0+091.705	0+125.384	0+159.032	0+159.032	470145.549	3781933.852	900	40	0.00	0.00	67.33	0.000	0.000	33.68	33.68	0.00	0.00	4.29	4.29	0.630	Right	2.50	0
3	0+159.032	0+159.032	0+172.118	0+185.194	0+185.194	470100.117	3781922.766	400	40	0.00	0.00	26.16	0.000	0.000	13.09	13.09	0.00	0.00	3.75	3.75	0.214	Left	2.50	0
4	0+344.518	0+344.518	0+355.462	0+366.402	0+366.402	469925.212	3781867.751	500	40	0.00	0.00	21.88	0.000	0.000	10.94	10.94	0.00	0.00	2.51	2.51	0.120	Right	2.50	0
5	0+453.950	0+453.950	0+480.382	0+506.509	0+506.509	469804.518	3781835.518	200	40	0.00	0.00	52.56	0.000	0.000	26.43	26.43	0.00	0.00	15.06	15.06	1.739	Right	3.56	0.6
6	0+506.509	0+506.509	0+510.376	0+514.228	0+514.228	469774.219	3781835.573	50	30	0.00	0.00	7.72	0.000	0.000	3.87	3.87	0.00	0.00	8.85	8.85	0.149	Right	7.00	1.2
7	0+514.228	0+514.228	0+519.863	0+525.494	0+525.494	469764.833	3781837.051	168.641	40	0.00	0.00	11.27	0.000	0.000	5.64	5.64	0.00	0.00	3.83	3.83	0.094	Left	4.22	0.6
8	0+525.494	0+525.494	0+556.978	0+588.428	0+588.428	469727.861	3781840.365	771.144	40	0.00	0.00	62.93	0.000	0.000	31.48	31.48	0.00	0.00	4.68	4.68	0.642	Left	2.50	0
9	0+588.428	0+588.428	0+600.969	0+613.490	0+613.490	469683.837	3781840.707	257.328	40	0.00	0.00	25.06	0.000	0.000	12.54	12.54	0.00	0.00	5.58	5.58	0.305	Left	2.76	0.6
10	0+613.490	0+613.490	0+623.294	0+633.083	0+633.083	469661.581	3781838.708	200	40	0.00	0.00	19.59	0.000	0.000	9.80	9.80	0.00	0.00	5.61	5.61	0.240	Right	3.56	0.6
11	0+662.151	0+662.151	0+689.398	0+716.607	0+716.607	469595.465	3781839.259	600	40	0.00	0.00	54.46	0.000	0.000	27.25	27.25	0.00	0.00	5.20	5.20	0.618	Left	2.50	0
12	0+742.705	0+742.705	0+769.208	0+795.235	0+795.235	469515.888	3781832.686	160	40	0.00	0.00	52.53	0.000	0.000	26.50	26.50	0.00	0.00	18.81	18.81	2.180	Left	4.44	0.6
13	0+848.973	0+848.973	0+863.139	0+877.298	0+877.298	469429.331	3781794.991	500	40	0.00	0.00	28.33	0.000	0.000	14.17	14.17	0.00	0.00	3.25	3.25	0.201	Left	2.50	0
14	0+961.582	0+961.582	1+008.009	1+054.430	1+054.430	469299.992	3781729.718	3500	40	0.00	0.00	92.85	0.000	0.000	46.43	46.43	0.00	0.00	1.52	1.52	0.308	Left	2.50	0
15	1+054.430	1+054.430	1+081.174	1+107.883	1+107.883	469235.566	3781695.030	600	40	0.00	0.00	53.45	0.000	0.000	26.74	26.74	0.00	0.00	5.10	5.10	0.596	Right	2.50	0
16	1+107.883	1+107.883	1+129.628	1+151.340	1+151.340	469190.996	3781675.932	450.374	40	0.00	0.00	43.46	0.000	0.000	21.75	21.75	0.00	0.00	5.53	5.53	0.525	Left	2.50	0
17	1+229.956	1+229.956	1+255.903	1+281.795	1+281.795	469080.229	3781615.232	457.92	40	0.00	0.00	51.84	0.000	0.000	25.95	25.95	0.00	0.00	6.49	6.49	0.735	Left	2.50	0
18	1+363.319	1+363.319	1+382.760	1+402.181	1+402.181	468976.535	3781542.059	500	40	0.00	0.00	38.86	0.000	0.000	19.44	19.44	0.00	0.00	4.45	4.45	0.378	Right	2.50	0
19	1+489.709	1+489.709	1+508.468	1+526.796	1+526.796	468868.490	3781477.765	100	40	0.00	0.00	37.09	0.000	0.000	18.76	18.76	0.00	0.00	21.25	21.25	1.744	Left	7.00	0.9
20	1+566.234	1+566.234	1+586.372	1+606.476	1+606.476	468820.267	3781416.032	400	40	0.00	0.00	40.24	0.000	0.000	20.14	20.14	0.00	0.00	5.76	5.76	0.507	Right	2.50	0
21	1+663.270	1+663.270	1+682.411	1+701.548	1+701.548	468753.820	3781346.642	1000	40	0.00	0.00	38.28	0.000	0.000	19.14	19.14	0.00	0.00	2.19	2.19	0.183	Left	2.50	0
22	1+717.558	1+717.558	1+725.218	1+732.865	1+732.865	468725.416	3781314.612	152.64	40	0.00	0.00	15.31	0.000	0.000	7.66	7.66	0.00	0.00	5.75	5.75	0.192	Left	4.66	0.6
23	1+768.182	1+768.182	1+797.869	1+826.798	1+826.798	468682.890	3781255.691	150	40	0.00	0.00	58.62	0.000	0.000	29.69	29.69	0.00	0.00	22.39	22.39	2.909	Right	4.74	0.6
24	1+865.426	1+865.426	1+877.045	1+888.507	1+888.507	468614.948	3781213.582	81.297	40	0.00	0.00	23.08	0.000	0.000	11.62	11.62	0.00	0.00	16.27	16.27	0.826	Left	7.00	0.9
25	1+919.028	1+919.028	1+935.964	1+952.888	1+952.888	468575.462	3781169.641	520.689	40	0.00	0.00	33.86	0.000	0.000	16.94	16.94	0.00	0.00	3.73	3.73	0.275	Right	2.50	0
26	1+952.888	1+952.888	2+013.350	2+073.763	2+073.763	468520.099	3781115.554	1730.322	40	0.00	0.00	120.88	0.000	0.000	60.46	60.46	0.00	0.00	4.00	4.00	1.056	Right	2.50	0
27	2+100.584	2+100.584	2+148.589	2+196.001	2+196.001	468416.963	3781027.999	350.412	40	0.00	0.00	95.42	0.000	0.000	48.01	48.01	0.00	0.00	15.60	15.60	3.273	Left	2.50	0
28	2+196.001	2+196.001	2+240.121	2+283.779	2+283.779	468365.354	3780951.686	350	40	0.00	0.00	87.78	0.000	0.000	44.12	44.12	0.00	0.00	14.37	14.37	2.770	Right	2.50	0
29	2+314.598	2+314.598	2+323.435	2+332.260	2+332.260	468302.669	3780896.107	200	40	0.00	0.00	17.66	0.000	0.000	8.84	8.84	0.00	0.00	5.06	5.06	0.195	Left	3.56	0.6
30	2+360.672	2+360.672	2+376.843	2+392.970	2+392.970	468265.978	3780857.280	252.434	40	0.00	0.00	32.30	0.000	0.000	16.17	16.17	0.00	0.00	7.33	7.33	0.517	Right	2.82	0.6
31	2+445.138	2+445.138	2+481.930	2+517.723	2+517.723	468184.612	3780790.706	180	40	0.00	0.00	72.59	0.000	0.000	36.79	36.79	0.00	0.00	23.10	23.10	3.722	Left	3.95	0.6
32	2+604.110	2+604.110	2+639.169	2+672.330	2+672.330	468111.287	3780650.481	120	40	0.00	0.00	68.22	0.000	0.000	35.06	35.06	0.00	0.						

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						
51	4+132.077	4+132.077	4+164.052	4+195.993	4+195.993	466818.036	3779975.348	800	40	0.00	0.00	63.92	0.000	0.000	31.98	31.98	0.00	0.00	4.58	4.58	0.639	Left	2.50	0
52	4+198.072	4+198.072	4+199.299	4+200.525	4+200.525	466782.913	3779972.013	100	40	0.00	0.00	2.45	0.000	0.000	1.23	1.23	0.00	0.00	1.41	1.41	0.008	Left	7.00	0.9
53	4+216.622	4+216.622	4+222.492	4+228.356	4+228.356	466759.883	3779969.255	150	40	0.00	0.00	11.73	0.000	0.000	5.87	5.87	0.00	0.00	4.48	4.48	0.115	Right	4.74	0.6
54	4+252.707	4+252.707	4+270.608	4+288.247	4+288.247	466711.802	3779967.284	120	40	0.00	0.00	35.54	0.000	0.000	17.90	17.90	0.00	0.00	16.97	16.97	1.328	Left	5.93	0.6
55	4+312.058	4+312.058	4+321.606	4+331.154	4+331.154	466663.427	3779950.327	1000	40	0.00	0.00	19.10	0.000	0.000	9.55	9.55	0.00	0.00	1.09	1.09	0.046	Left	2.50	0
56	4+509.227	4+509.227	4+518.129	4+527.030	4+527.030	466479.242	3779881.790	500	40	0.00	0.00	17.80	0.000	0.000	8.90	8.90	0.00	0.00	2.04	2.04	0.079	Left	2.50	0
57	4+540.898	4+540.898	4+598.601	4+655.796	4+655.796	466404.868	3779851.057	500	40	0.00	0.00	114.90	0.000	0.000	57.70	57.70	0.00	0.00	13.17	13.17	3.319	Right	2.50	0
58	4+749.299	4+749.299	4+759.261	4+769.042	4+769.042	466245.812	3779825.055	60	30	0.00	0.00	19.74	0.000	0.000	9.96	9.96	0.00	0.00	18.85	18.85	0.821	Right	6.67	1.2
59	4+779.406	4+779.406	4+788.708	4+797.997	4+797.997	466216.596	3779829.980	200	40	0.00	0.00	18.59	0.000	0.000	9.30	9.30	0.00	0.00	5.33	5.33	0.216	Left	3.56	0.6
60	4+817.448	4+817.448	4+823.503	4+829.557	4+829.557	466181.884	3779832.555	500	40	0.00	0.00	12.11	0.000	0.000	6.05	6.05	0.00	0.00	1.39	1.39	0.037	Right	2.50	0
61	4+878.719	4+878.719	4+890.772	4+902.824	4+902.824	466114.938	3779839.155	1000	40	0.00	0.00	24.10	0.000	0.000	12.05	12.05	0.00	0.00	1.38	1.38	0.073	Left	2.50	0
62	5+289.924	5+289.924	5+317.672	5+345.128	5+345.128	465689.211	3779870.784	220	40	0.00	0.00	55.20	0.000	0.000	27.75	27.75	0.00	0.00	14.38	14.38	1.743	Right	3.23	0.6
63	5+660.166	5+660.166	5+687.614	5+715.048	5+715.048	465338.369	3779989.034	1000	40	0.00	0.00	54.88	0.000	0.000	27.45	27.45	0.00	0.00	3.14	3.14	0.377	Left	2.50	0
64	5+715.048	5+715.048	5+728.377	5+741.640	5+741.640	465299.071	3779999.918	154.806	40	0.00	0.00	26.59	0.000	0.000	13.33	13.33	0.00	0.00	9.84	9.84	0.573	Left	4.59	0.6
65	5+741.640	5+741.640	5+748.454	5+755.150	5+755.150	465279.027	3780001.897	42.008	30	0.00	0.00	13.51	0.000	0.000	6.81	6.81	0.00	0.00	18.43	18.43	0.549	Right	7.00	1.2
66	5+755.150	5+755.150	5+763.943	5+772.691	5+772.691	465264.776	3780008.261	100	40	0.00	0.00	17.54	0.000	0.000	8.79	8.79	0.00	0.00	10.05	10.05	0.386	Left	7.00	0.9
67	5+785.009	5+785.009	5+788.070	5+791.130	5+791.130	465241.324	3780014.115	300	40	0.00	0.00	6.12	0.000	0.000	3.06	3.06	0.00	0.00	1.17	1.17	0.016	Right	2.50	0.6
68	5+825.480	5+825.480	5+858.544	5+891.558	5+891.558	465173.310	3780032.574	700	40	0.00	0.00	66.08	0.000	0.000	33.06	33.06	0.00	0.00	5.41	5.41	0.780	Left	2.50	0
69	5+891.558	5+891.558	5+904.417	5+916.730	5+916.730	465128.055	3780040.372	50	30	0.00	0.00	25.17	0.000	0.000	12.86	12.86	0.00	0.00	28.84	28.84	1.627	Right	7.00	1.2
70	5+946.885	5+946.885	5+956.093	5+965.249	5+965.249	465087.254	3780072.966	100	40	0.00	0.00	18.36	0.000	0.000	9.21	9.21	0.00	0.00	10.52	10.52	0.423	Right	7.00	0.9
71	5+977.302	5+977.302	5+988.475	5+999.525	5+999.525	465066.036	3780097.497	86.519	40	0.00	0.00	22.22	0.000	0.000	11.17	11.17	0.00	0.00	14.72	14.72	0.718	Left	7.00	0.9

CLIENT : <div><p>Jhelum Tawi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.</p></div>	PROJECT :  Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir <b><i>(Shadipura-Khanpeth-Sumbal Road in Bandipora District)</i></b>	DESIGN CONSULTANT: <div><p><b>Eptisa Servicios de Ingenieria S.L.</b> Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP &amp; GP, Sector v, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.eptisa.com</p></div>				DRAWN BY : SD	TITLE :  Horizontal Alignment Report	
						DESIGNED BY : SCK/MM		
						APPROVED BY : KG		
						SCALE : N.T.S		
			REV.	DATE	DESCRIPTION		DRG. NO. : EPTISA/JTRP/DPR/J&K/HAR/02	
							REVISION : R-1	September 2019

≡ 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+017.919	1579.726	0+025.941	1579.742	0+033.963	1579.660	0.197	-1.029	Hog	16	13.09
2	0+066.653	1579.323	0+076.185	1579.225	0+085.718	1579.257	-1.029	0.340	Sag	19	13.92
3	0+212.555	1579.689	0+224.091	1579.728	0+235.627	1579.665	0.340	-0.546	Hog	23	26.04
4	0+246.560	1579.605	0+256.781	1579.549	0+267.003	1579.567	-0.546	0.168	Sag	20	28.61
5	0+286.924	1579.600	0+298.471	1579.620	0+310.018	1579.608	0.168	-0.102	Hog	23	85.34
6	0+334.721	1579.583	0+349.527	1579.567	0+364.333	1579.597	-0.102	0.198	Sag	30	98.57
7	0+477.682	1579.822	0+496.205	1579.858	0+514.727	1579.791	0.198	-0.364	Hog	37	65.94
8	0+578.820	1579.558	0+589.811	1579.518	0+600.803	1579.646	-0.364	1.162	Sag	22	14.41
9	0+615.871	1579.821	0+638.122	1580.079	0+660.372	1579.968	1.162	-0.502	Hog	45	26.76
10	0+680.941	1579.864	0+700.728	1579.765	0+720.515	1580.268	-0.502	2.540	Sag	40	13.01
11	0+725.932	1580.405	0+748.719	1580.984	0+771.506	1580.570	2.540	-1.816	Hog	46	10.46
12	0+775.681	1580.494	0+795.551	1580.134	0+815.420	1580.582	-1.816	2.257	Sag	40	9.76
13	0+838.129	1581.095	0+851.439	1581.395	0+864.750	1581.317	2.257	-0.585	Hog	27	9.37
14	0+864.750	1581.317	0+876.985	1581.246	0+889.221	1581.320	-0.585	0.611	Sag	24	20.46
15	0+915.653	1581.482	0+923.365	1581.529	0+931.077	1581.495	0.611	-0.446	Hog	15	14.60
16	0+952.919	1581.397	0+964.781	1581.344	0+976.644	1581.460	-0.446	0.971	Sag	24	16.74
17	0+998.559	1581.672	1+010.506	1581.788	1+022.453	1581.753	0.971	-0.296	Hog	24	18.86
18	1+117.832	1581.471	1+125.873	1581.447	1+133.915	1581.397	-0.296	-0.617	Hog	16	50.00
19	1+187.685	1581.065	1+200.375	1580.987	1+213.065	1581.033	-0.617	0.363	Sag	25	25.90
20	1+285.422	1581.295	1+298.789	1581.344	1+312.156	1581.761	0.363	3.122	Sag	27	9.69
21	1+341.217	1582.668	1+349.454	1582.925	1+357.692	1582.883	3.122	-0.521	Hog	16	4.52
22	1+367.463	1582.832	1+374.454	1582.795	1+381.444	1582.614	-0.521	-2.598	Hog	14	6.73
23	1+390.551	1582.377	1+400.179	1582.127	1+409.806	1582.140	-2.598	0.136	Sag	19	7.04
24	1+425.479	1582.162	1+450.620	1582.196	1+475.761	1582.063	0.136	-0.527	Hog	50	75.85
25	1+496.934	1581.952	1+507.501	1581.896	1+518.067	1581.992	-0.527	0.906	Sag	21	14.75
26	1+534.080	1582.137	1+570.437	1582.466	1+606.794	1581.754	0.906	-1.960	Hog	73	25.38
27	1+615.371	1581.586	1+629.794	1581.303	1+644.217	1581.311	-1.960	0.056	Sag	29	14.31
28	1+683.630	1581.333	1+699.629	1581.342	1+715.629	1581.228	0.056	-0.715	Hog	32	41.48
29	1+734.513	1581.093	1+749.724	1580.984	1+764.936	1581.070	-0.715	0.563	Sag	30	23.80
30	1+783.535	1581.174	1+798.803	1581.260	1+814.071	1581.058	0.563	-1.327	Hog	31	16.16
31	1+848.729	1580.598	1+863.752	1580.399	1+878.775	1580.575	-1.327	1.176	Sag	30	12.01
32	1+908.774	1580.928	1+923.637	1581.103	1+938.499	1580.973	1.176	-0.873	Hog	30	14.51
33	1+950.383	1580.869	1+964.803	1580.743	1+979.224	1580.783	-0.873	0.274	Sag	29	25.15
34	2+015.802	1580.883	2+039.720	1580.949	2+063.639	1580.790	0.274	-0.665	Hog	48	50.93
35	2+122.903	1580.395	2+147.021	1580.235	2+171.140	1580.628	-0.665	1.629	Sag	48	21.03
36	2+188.930	1580.918	2+218.365	1581.397	2+247.801	1580.794	1.629	-2.049	Hog	59	16.01
37	2+247.801	1580.794	2+262.122	1580.500	2+276.444	1580.558	-2.049	0.403	Sag	29	11.68
38	2+297.497	1580.643	2+316.561	1580.720	2+335.625	1581.238	0.403	2.719	Sag	38	16.47
39	2+335.625	1581.238	2+361.659	1581.946	2+387.694	1581.519	2.719	-1.639	Hog	52	11.95
40	2+439.757	1580.666	2+454.804	1580.419	2+469.851	1580.453	-1.639	0.226	Sag	30	16.13

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			
41	2+496.284	1580.513	2+510.516	1580.545	2+524.749	1580.512	0.226	-0.239	Hog	28	61.25
42	2+536.737	1580.483	2+551.888	1580.447	2+567.040	1580.520	-0.239	0.485	Sag	30	41.89
43	2+624.718	1580.800	2+649.067	1580.918	2+673.416	1580.721	0.485	-0.809	Hog	49	37.65
44	2+693.725	1580.557	2+718.373	1580.357	2+743.022	1580.527	-0.809	0.687	Sag	49	32.96
45	2+819.655	1581.053	2+833.992	1581.152	2+848.329	1581.101	0.687	-0.355	Hog	29	27.52
46	2+864.326	1581.044	2+878.964	1580.992	2+893.601	1581.080	-0.355	0.603	Sag	29	30.56
47	2+910.003	1581.179	2+926.001	1581.276	2+941.999	1581.055	0.603	-1.384	Hog	32	16.10
48	2+986.703	1580.436	3+001.386	1580.233	3+016.069	1580.284	-1.384	0.348	Sag	29	16.95
49	3+040.224	1580.368	3+053.558	1580.415	3+066.893	1580.349	0.348	-0.492	Hog	27	31.73
50	3+100.534	1580.183	3+146.286	1579.958	3+192.038	1580.264	-0.492	0.668	Sag	92	78.92
51	3+280.172	1580.852	3+291.924	1580.931	3+303.677	1580.981	0.668	0.433	Hog	24	100.00
52	3+402.158	1581.407	3+422.130	1581.494	3+442.102	1580.772	0.433	-3.615	Hog	40	9.87
53	3+463.926	1579.983	3+484.880	1579.226	3+505.834	1579.204	-3.615	-0.105	Sag	42	11.94
54	3+529.600	1579.179	3+545.347	1579.162	3+561.094	1579.066	-0.105	-0.612	Hog	31	62.03
55	3+596.025	1578.852	3+620.812	1578.700	3+645.598	1578.844	-0.612	0.579	Sag	50	41.62
56	3+684.618	1579.069	3+709.466	1579.213	3+734.315	1579.221	0.579	0.033	Hog	50	91.03
57	3+822.702	1579.250	3+844.262	1579.258	3+865.821	1579.172	0.033	-0.398	Hog	43	100.00
58	3+929.744	1578.917	3+947.499	1578.846	3+965.254	1578.889	-0.398	0.241	Sag	36	55.55
59	4+064.819	1579.129	4+087.262	1579.183	4+109.704	1578.996	0.241	-0.832	Hog	45	41.82
60	4+137.645	1578.764	4+154.148	1578.626	4+170.652	1578.701	-0.832	0.455	Sag	33	25.63
61	4+185.341	1578.768	4+222.229	1578.936	4+259.118	1578.787	0.455	-0.405	Hog	74	85.78
62	4+283.314	1578.689	4+298.555	1578.627	4+313.795	1578.665	-0.405	0.246	Sag	30	46.84
63	4+395.332	1578.865	4+410.325	1578.902	4+425.317	1578.849	0.246	-0.352	Hog	30	50.12
64	4+506.416	1578.564	4+520.967	1578.512	4+535.518	1578.721	-0.352	1.433	Sag	29	16.30
65	4+560.725	1579.082	4+571.259	1579.233	4+581.793	1579.310	1.433	0.731	Hog	21	30.00
66	4+635.492	1579.703	4+684.764	1580.063	4+734.036	1579.693	0.731	-0.750	Hog	99	66.52
67	4+769.839	1579.425	4+779.230	1579.354	4+788.621	1579.376	-0.750	0.235	Sag	19	19.06
68	4+834.201	1579.484	4+890.821	1579.617	4+947.336	1578.990	0.235	-1.110	Hog	113	84.08
69	4+947.336	1578.990	4+960.214	1578.847	4+973.092	1578.914	-1.110	0.527	Sag	26	15.73
70	5+004.735	1579.081	5+055.029	1579.346	5+105.323	1579.215	0.527	-0.261	Hog	101	127.60
71	5+221.342	1578.912	5+249.411	1578.839	5+277.479	1578.969	-0.261	0.463	Sag	56	77.58
72	5+301.829	1579.081	5+353.410	1579.320	5+404.990	1579.055	0.463	-0.514	Hog	103	105.59
73	5+430.726	1578.922	5+465.910	1578.741	5+501.093	1579.023	-0.514	0.800	Sag	70	53.54
74	5+562.132	1579.511	5+574.123	1579.607	5+586.114	1579.535	0.800	-0.596	Hog	24	17.18
75	5+609.856	1579.394	5+634.226	1579.249	5+658.595	1579.330	-0.596	0.334	Sag	49	52.43
76	5+713.479	1579.513	5+749.965	1579.635	5+786.451	1579.613	0.334	-0.061	Hog	73	184.90
77	5+838.007	1579.582	5+846.976	1579.576	5+855.946	1579.603	-0.061	0.298	Sag	18	50.00
78	5+885.814	1579.692	5+895.880	1579.722	5+905.945	1579.672	0.298	-0.499	Hog	20	25.27
79	5+916.237	1579.620	5+940.020	1579.502	5+963.804	1579.795	-0.499	1.235	Sag	48	27.44
80	5+986.051	1580.070	5+992.788	1580.153	5+999.525	1580.105	1.235	-0.725	Hog	13	6.87

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  
***(Shadipura-Khanpeth-Sumbal Road in Bandipora 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

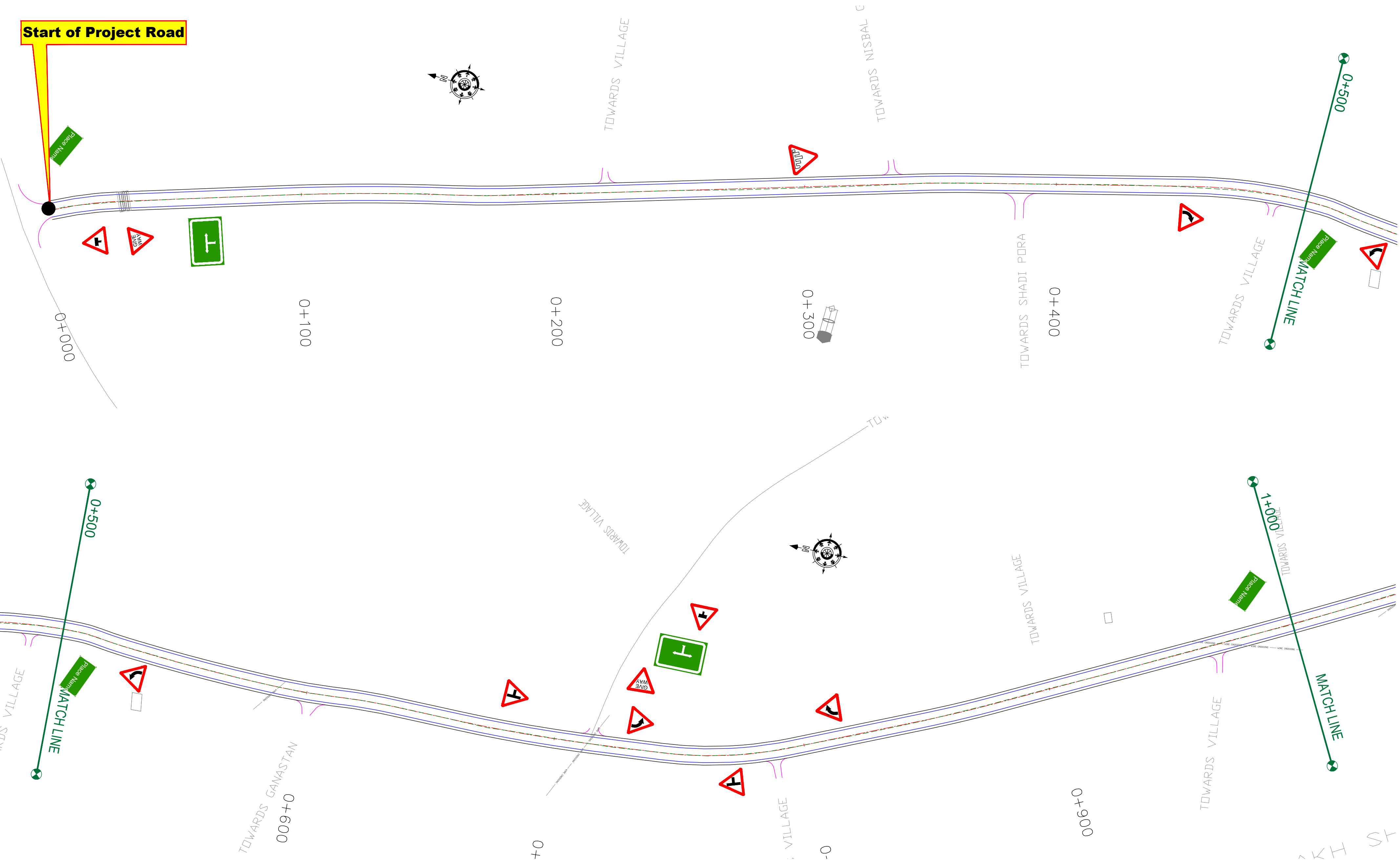
DRG. NO. : EPTISA/JTRP/DPR/J&K/VAR/02

REVISION : R-1

September 2019

≡ SIGNAGE PLAN (MAIN ROAD) ≡





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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)

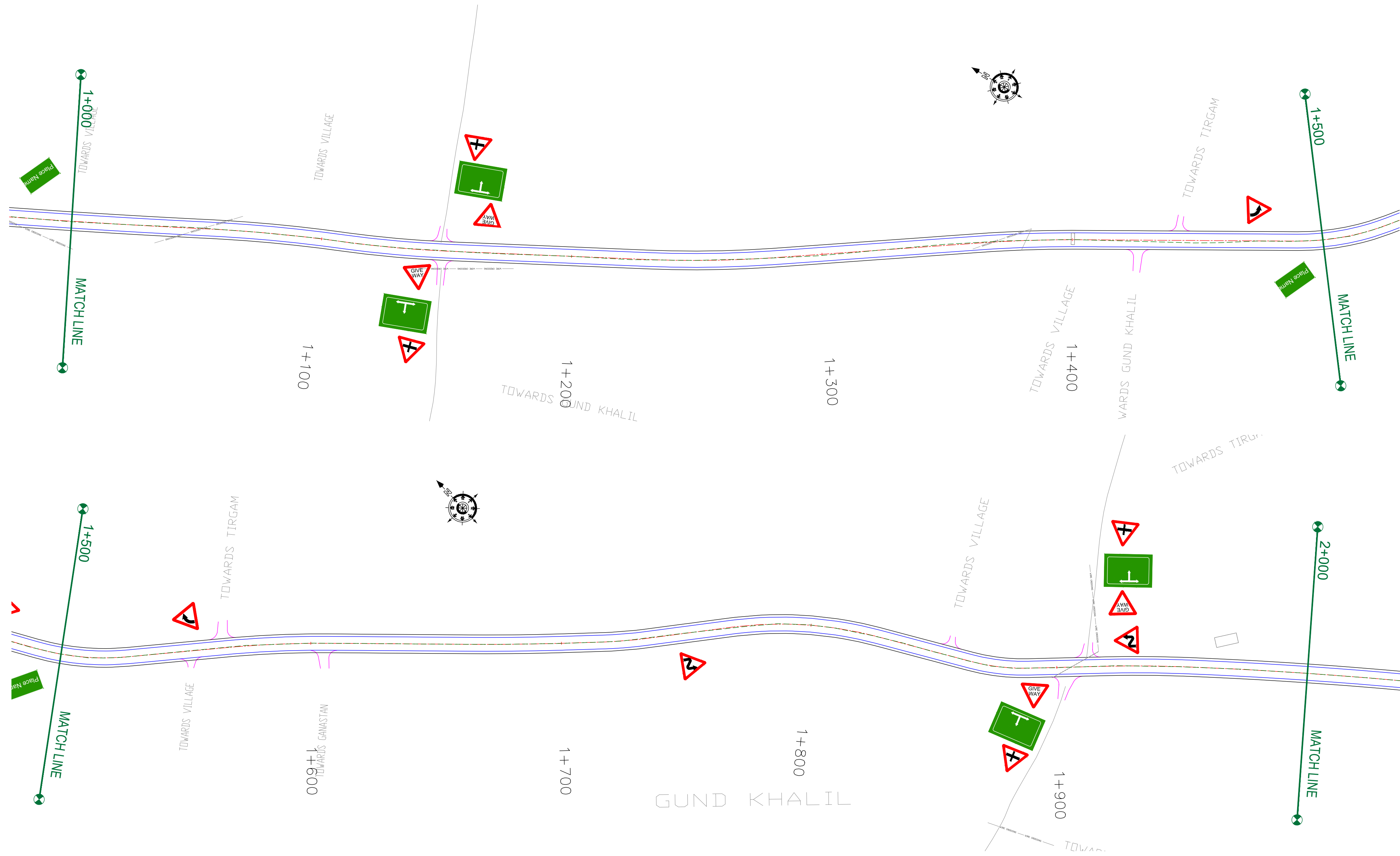
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REVISION : R-1

September 2019

← Shadipura

Khanpeth-Sumbal Road →



CLIENT :



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REV.	DATE	DESCRIPTION

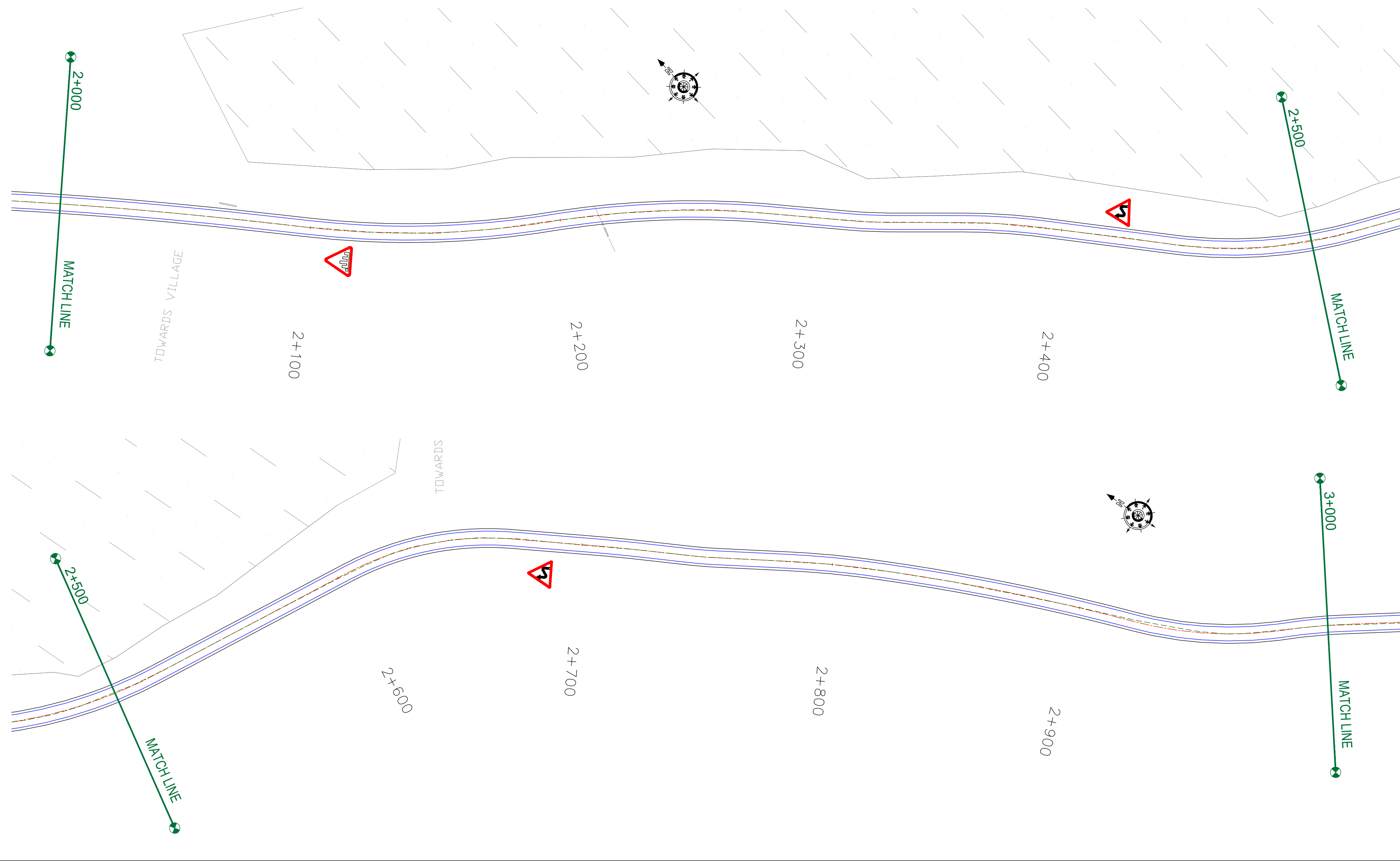
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Signage Plan	
(Ch. 1+000 to Ch. 2+000)	
DRG. NO. : EPTISA/JTFRP/DPR/J&K/SP/02	
REVISION : R-1	September 2019



← Shadipura

Khanpeth-Sumbal Road →



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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/JTFRP/DPR/J&K/SP/03	
REVISION : R-1	September 2019

← Shadipura

Khanpeth-Sumbal Road →



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West Bengal  
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REV.	DATE	DESCRIPTION

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DESIGNED BY : SCK/MM

APPROVED BY : KG

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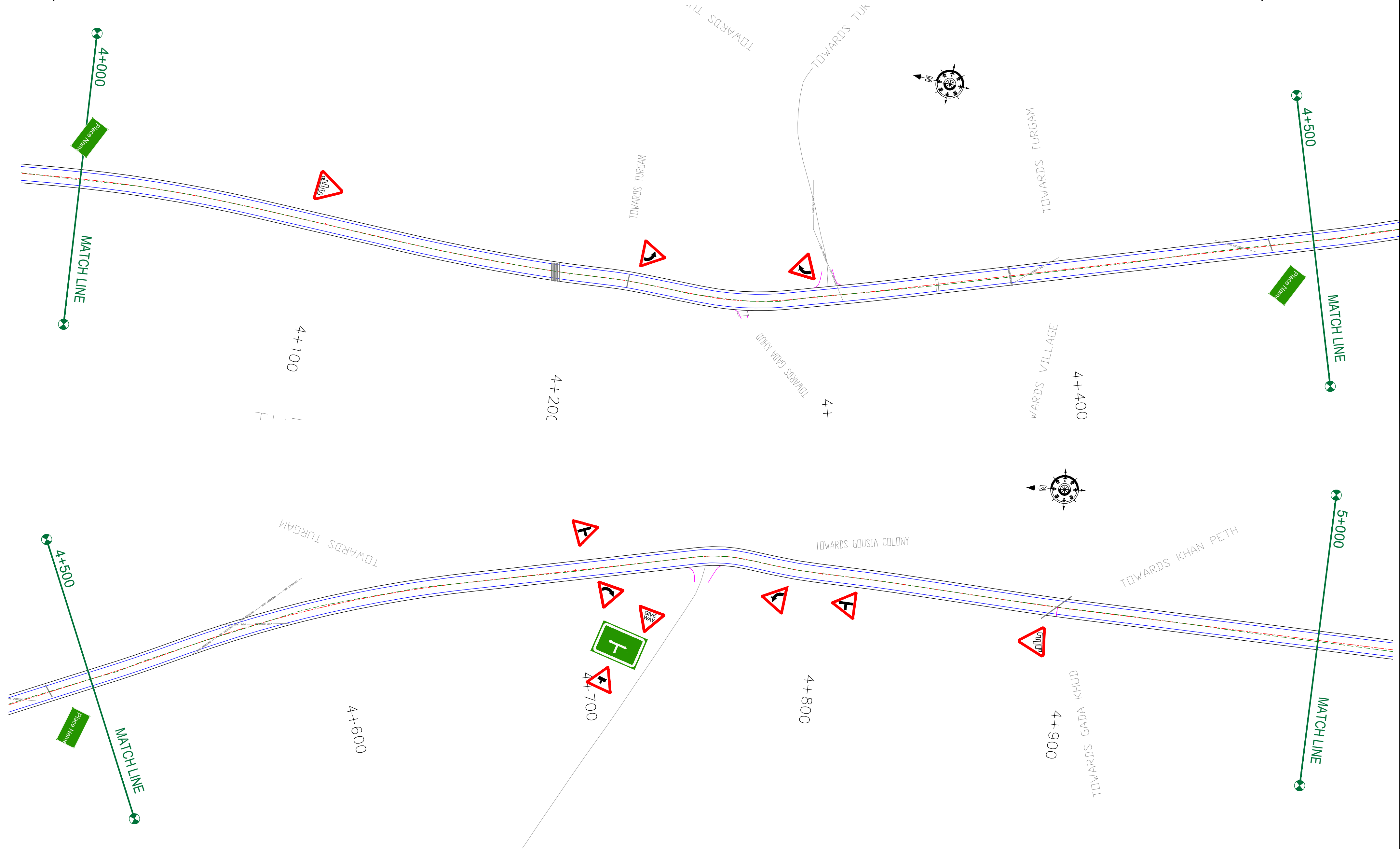
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(Ch. 3+000 to Ch. 4+000)

DRG. NO. : EPTISA/JTFRP/DPR/J&K/SP/04

REVISION : R-1September 2019

← Shadipura

Khanpeth-Sumbal Road →



CLIENT :



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DESIGN CONSULTANT:

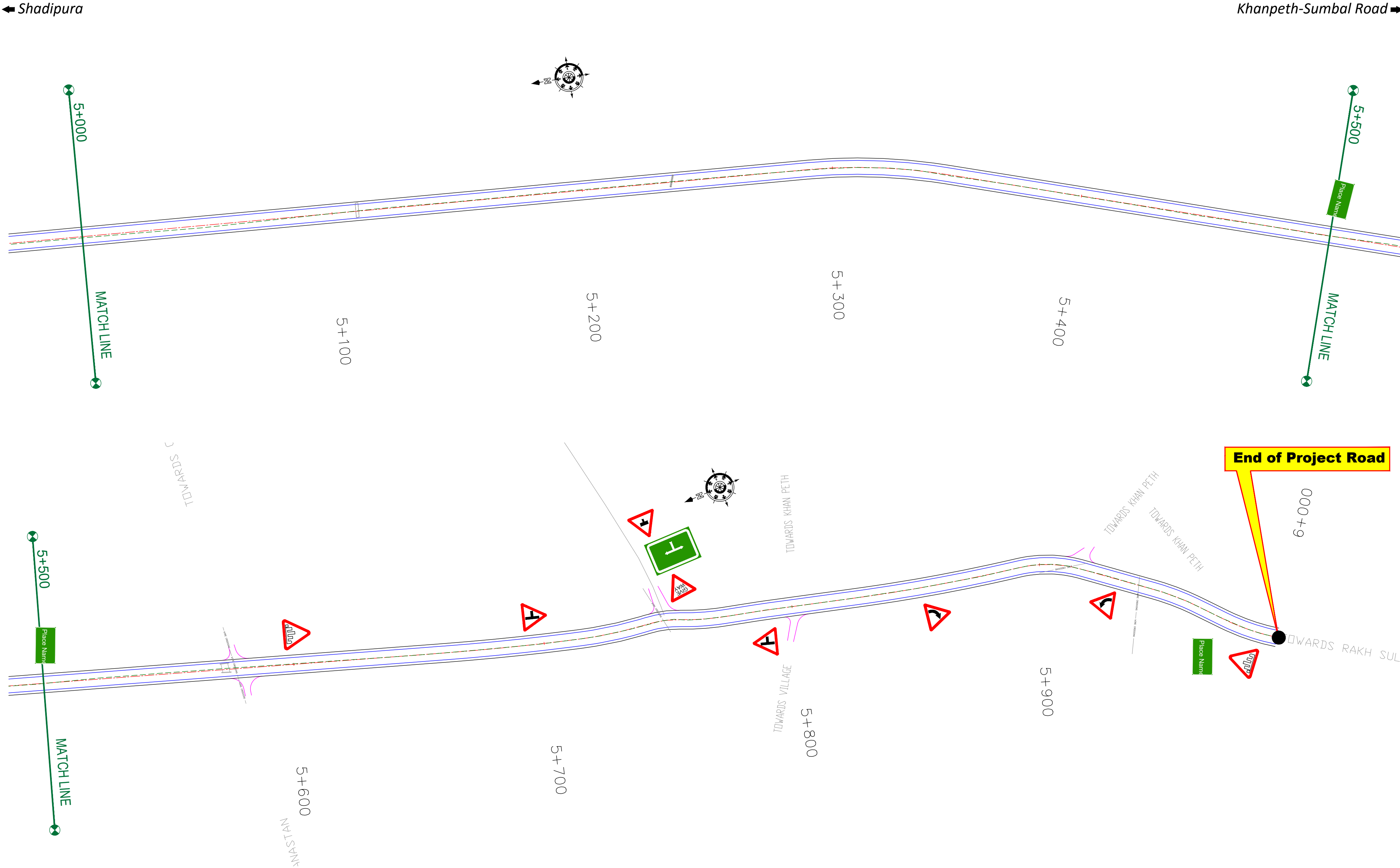


**Servicios de Ingenieria S.L.**  
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REV.	DATE	DESCRIPTION

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

TITLE :	Signage Plan (Ch. 4+000 to Ch. 5+000)
DRG. NO. :	EPTISA/JTRP/DPR/J&K/SP/05
REVISION : R-1	September 2019



CLIENT :



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www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY : SD

DESIGNED BY : SCK/MM

APPROVED BY : KG

SCALE : 1:1000

TITLE :

Signage Plan  
(Ch. 5+000 to Ch. 6+000)

DRG. NO. : EPTISA/JTRFP/DPR/J&K/SP/06

REVISION : R-1

September 2019

≡ DETAILED CROSS SECTION ≡





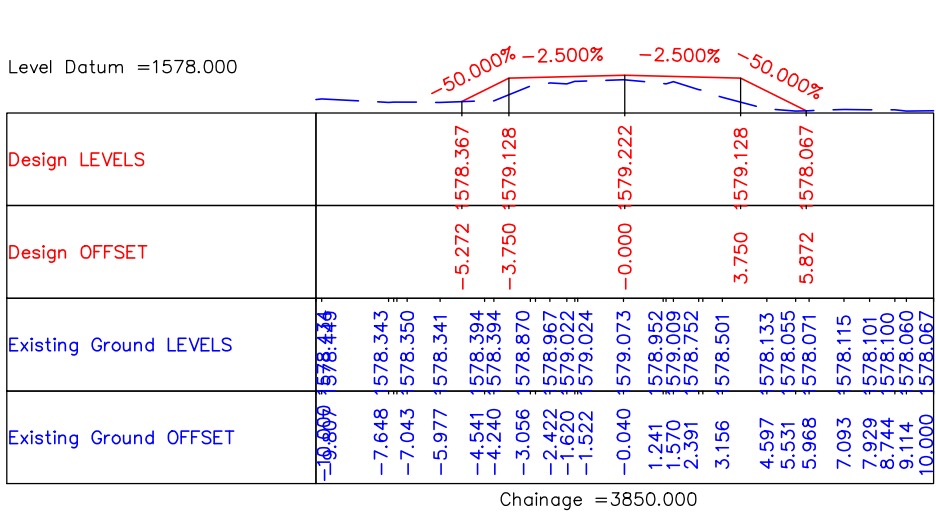
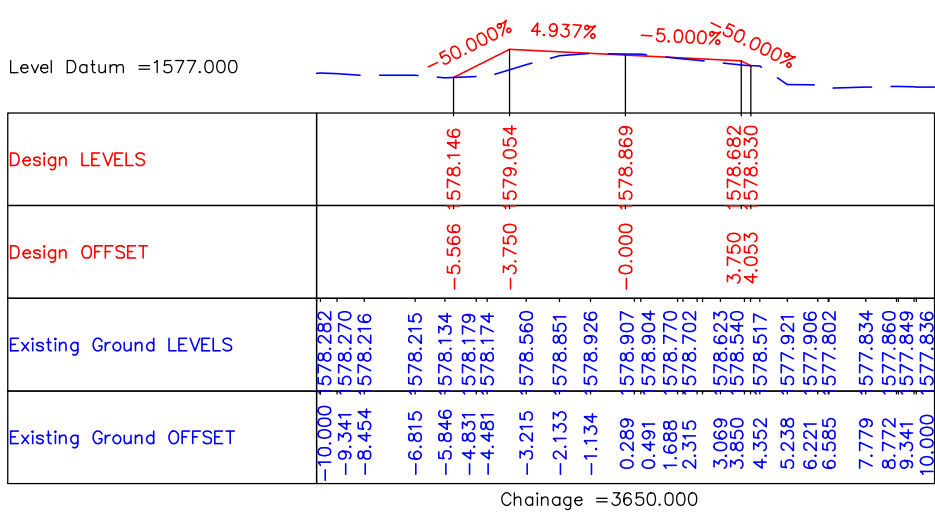
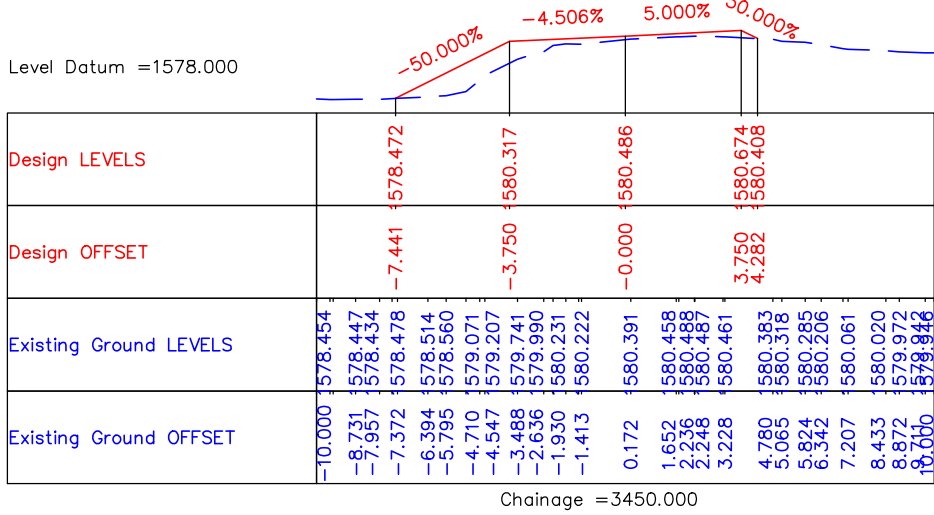
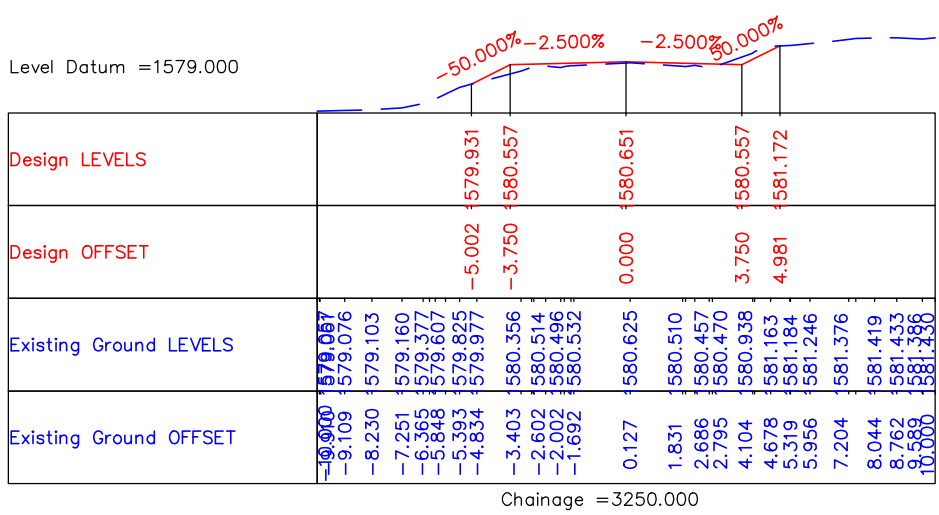
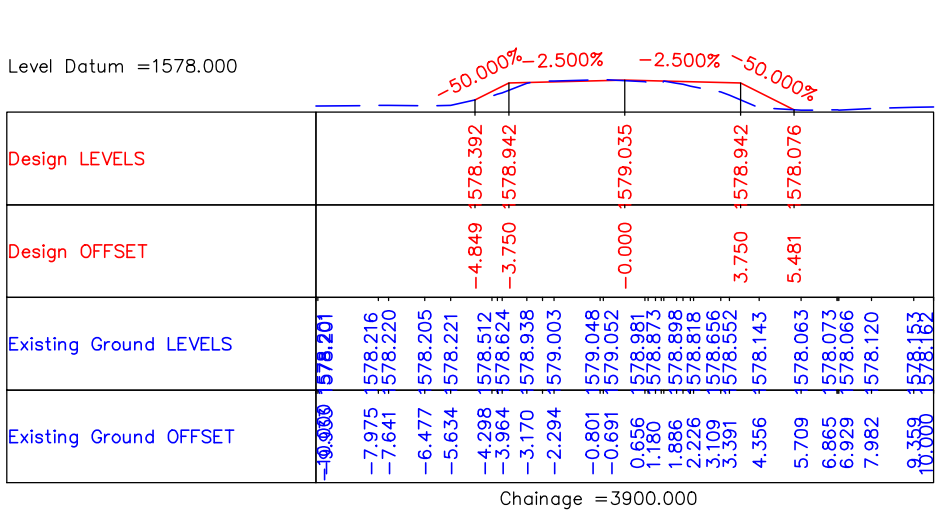
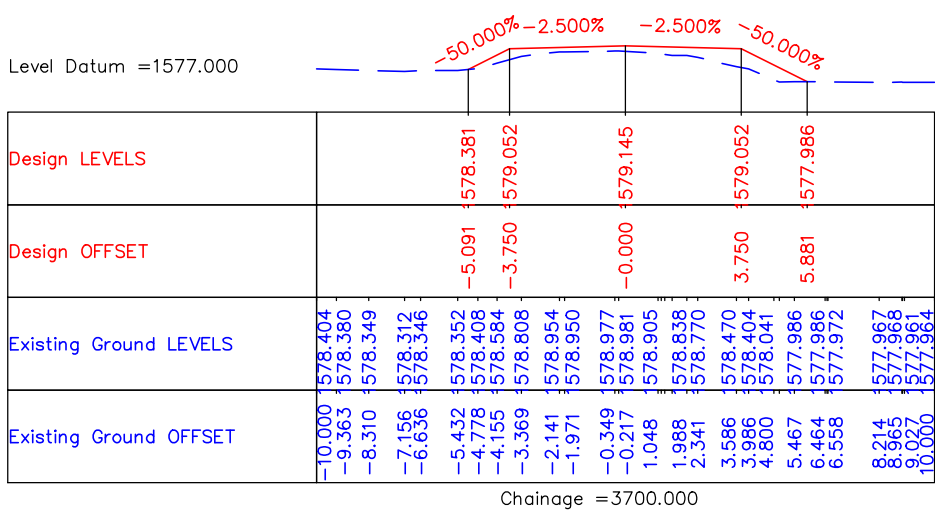
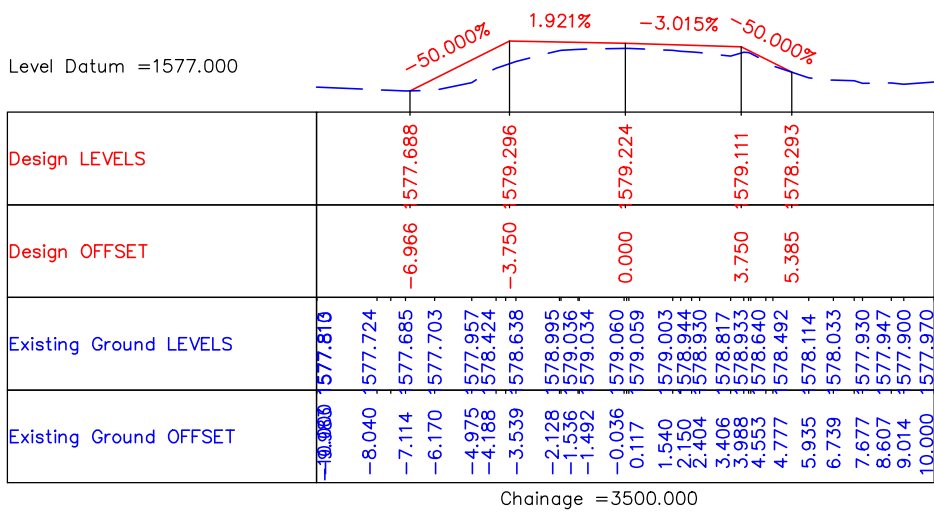
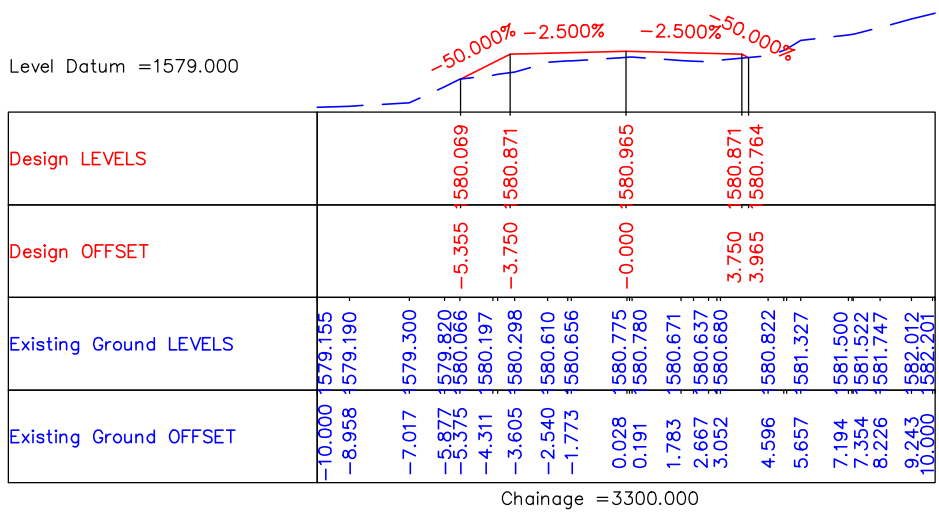
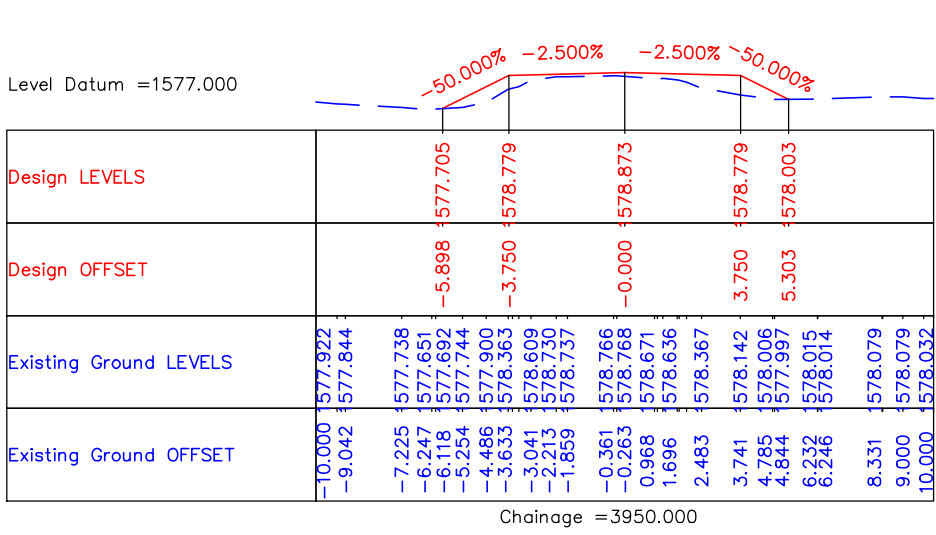
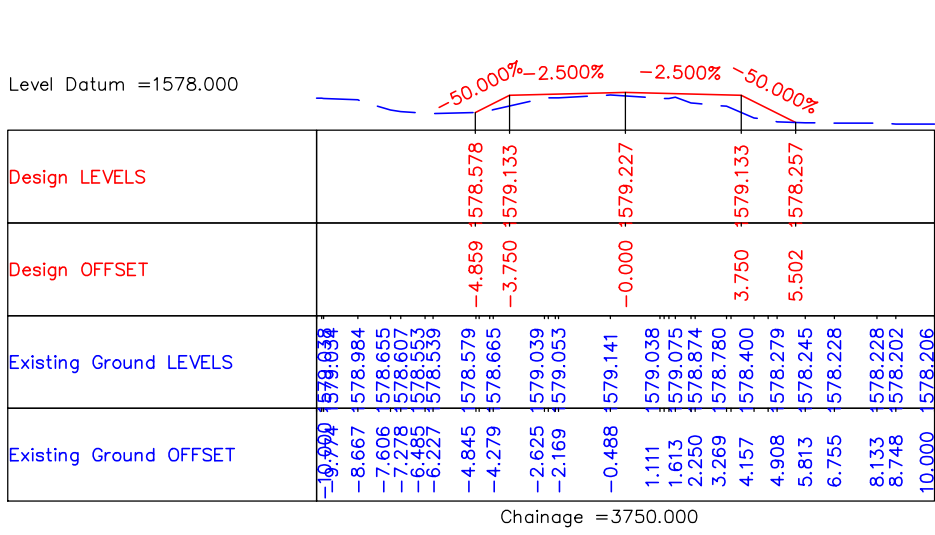
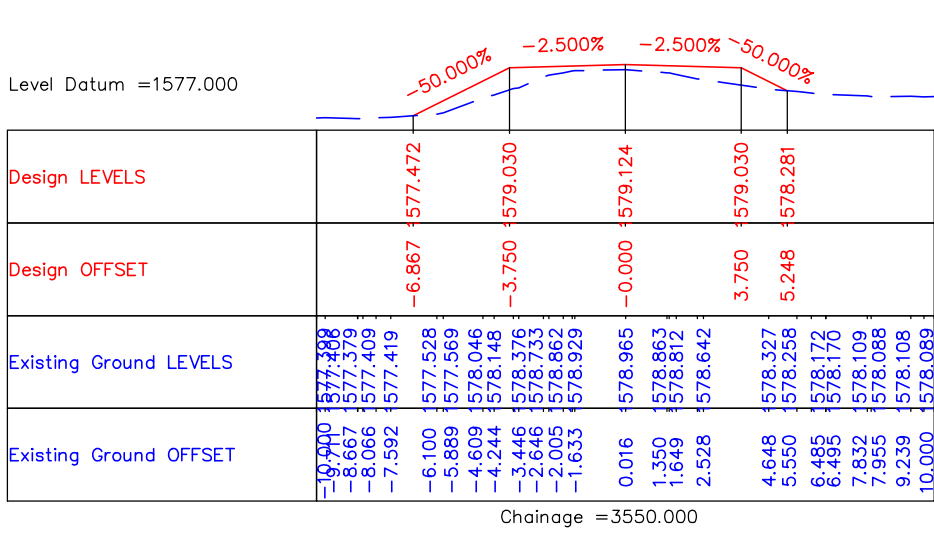
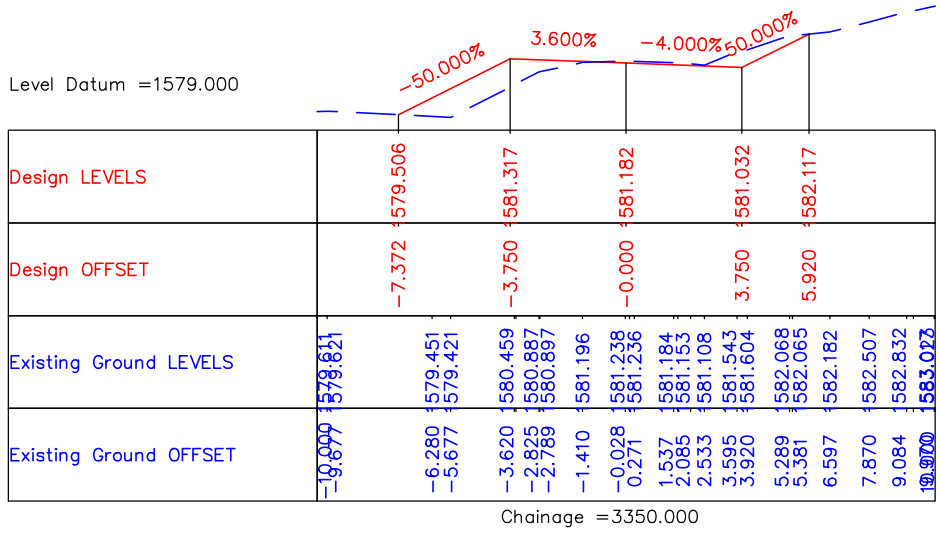


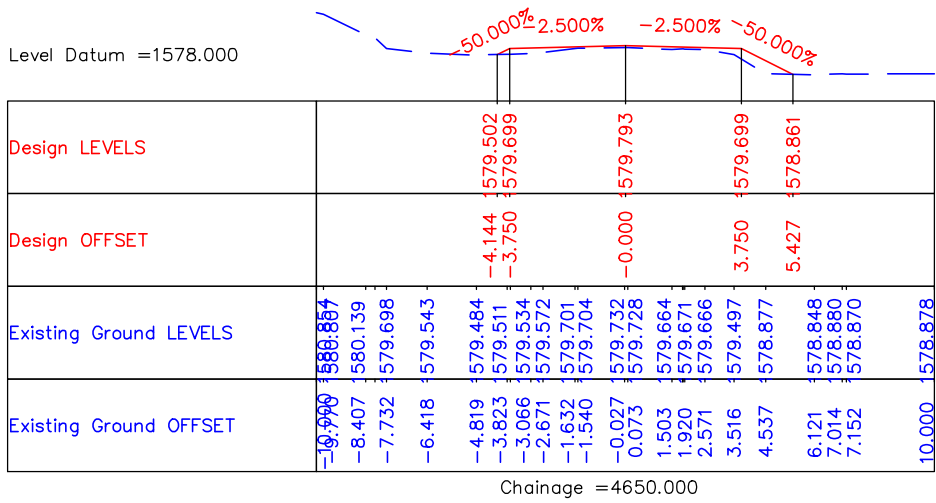
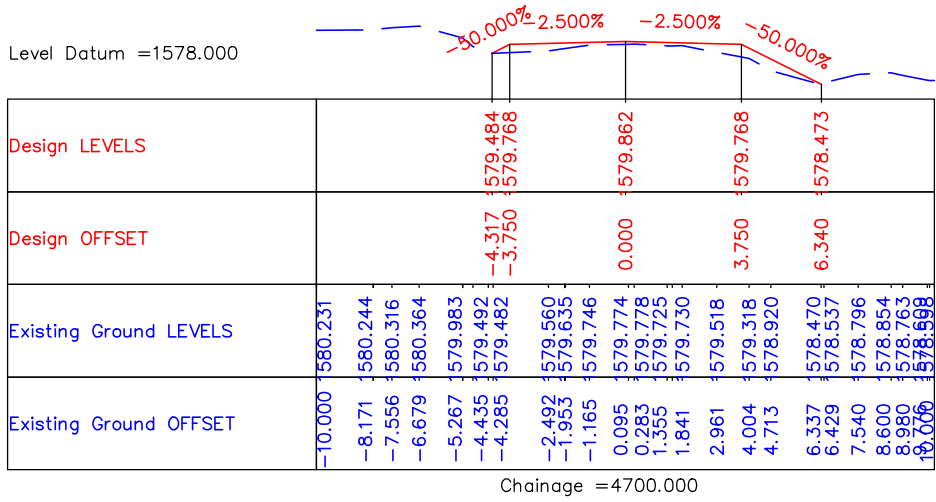
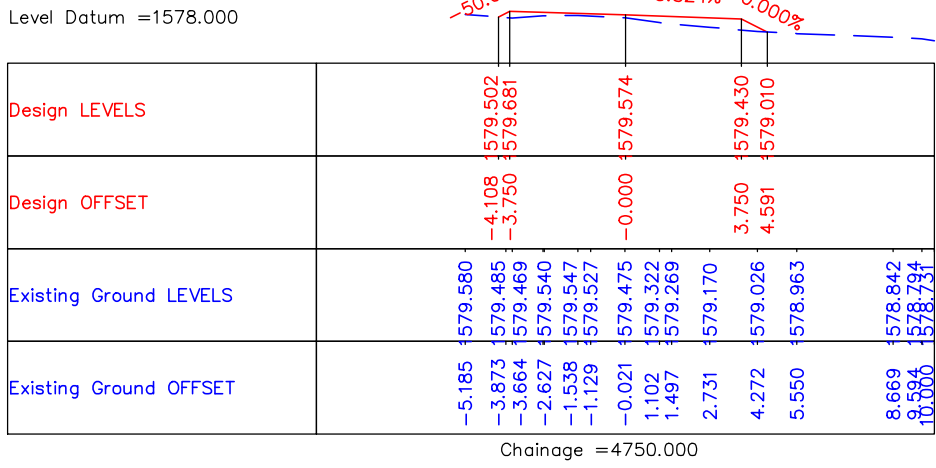
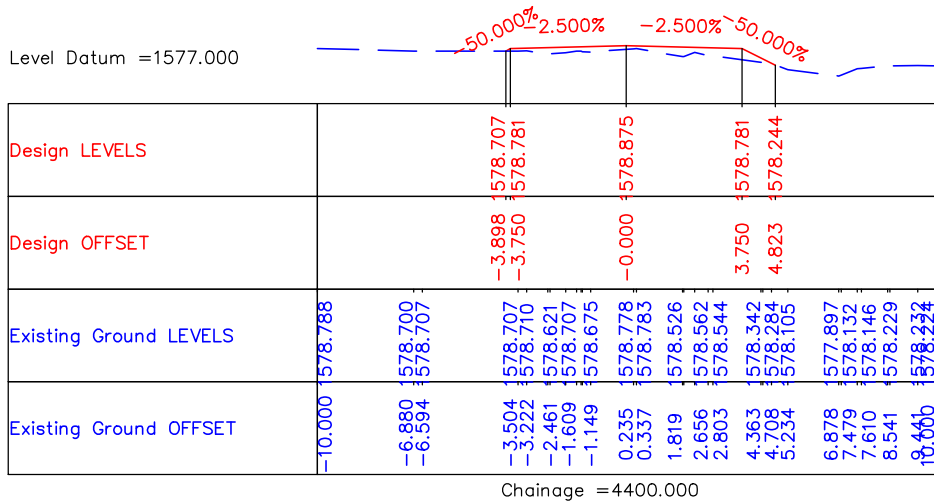
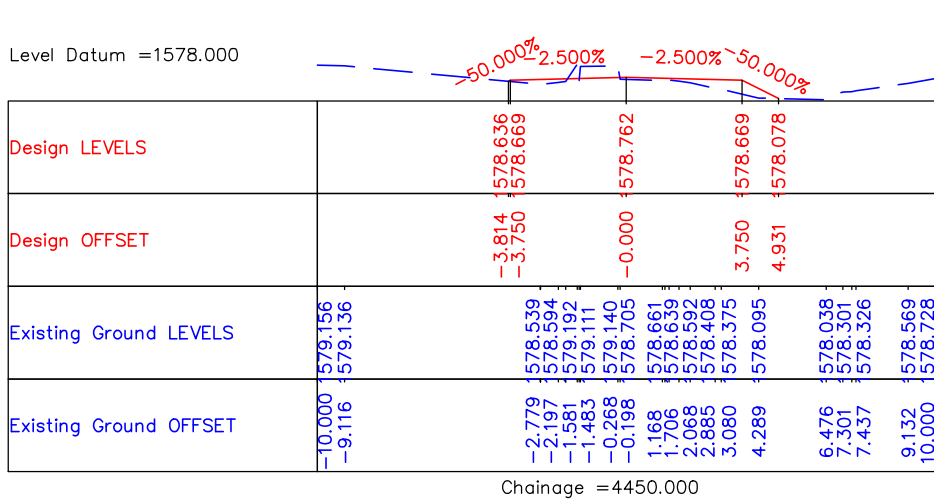
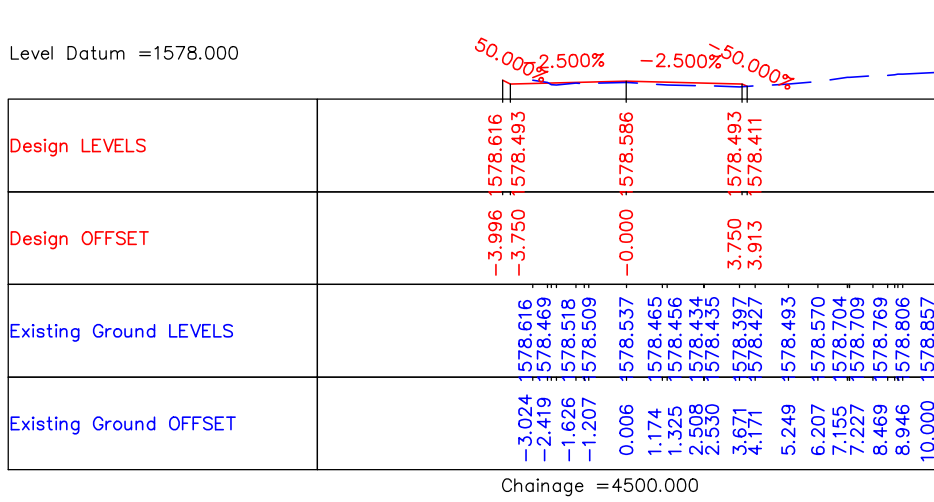
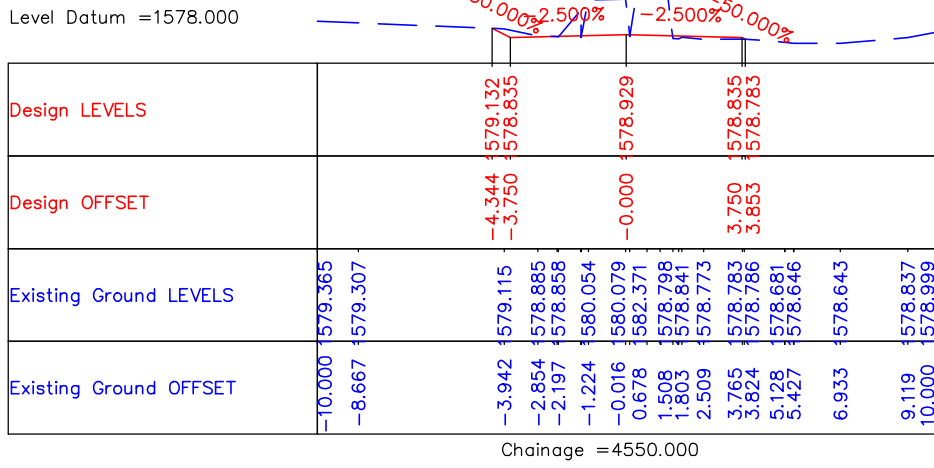
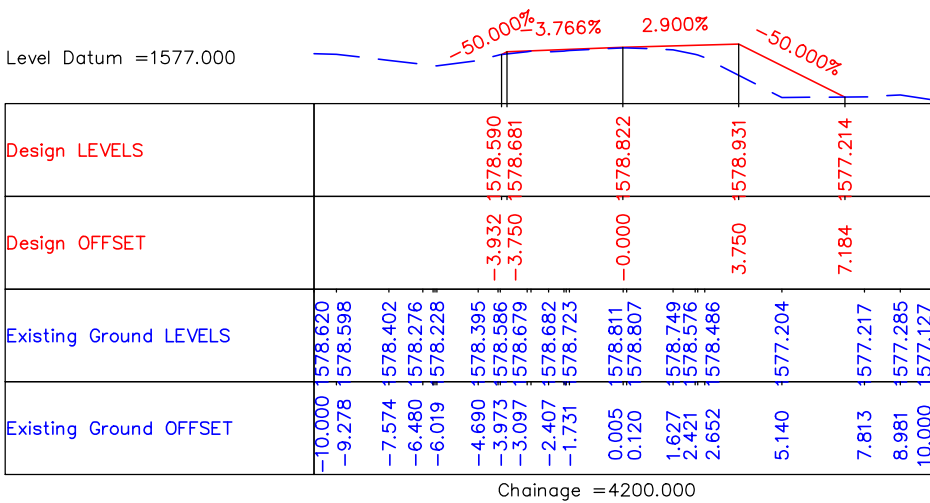
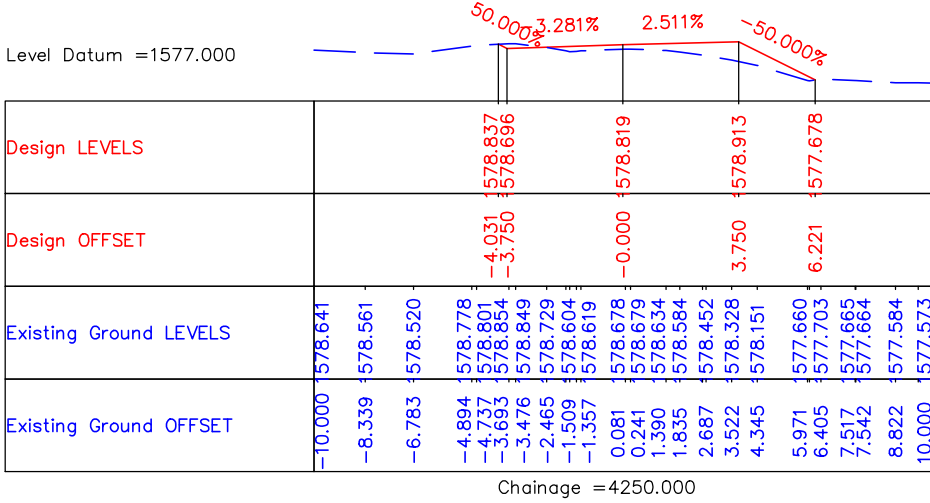
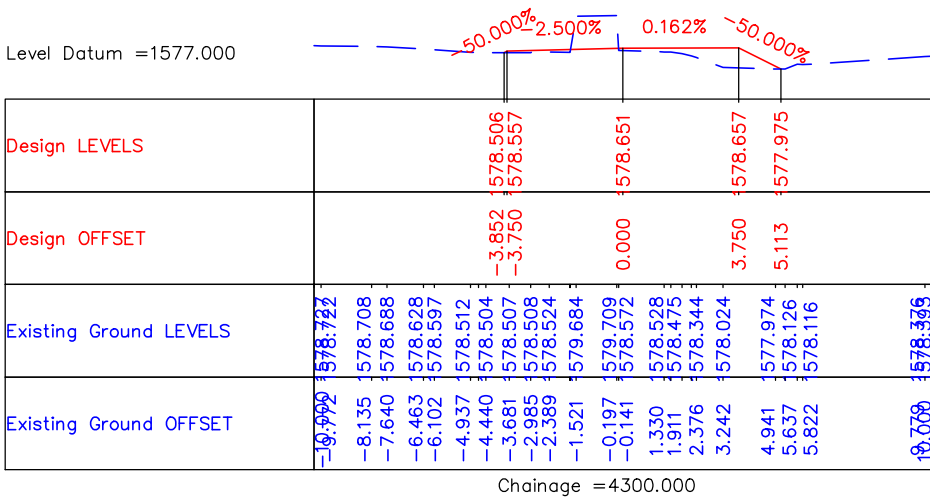
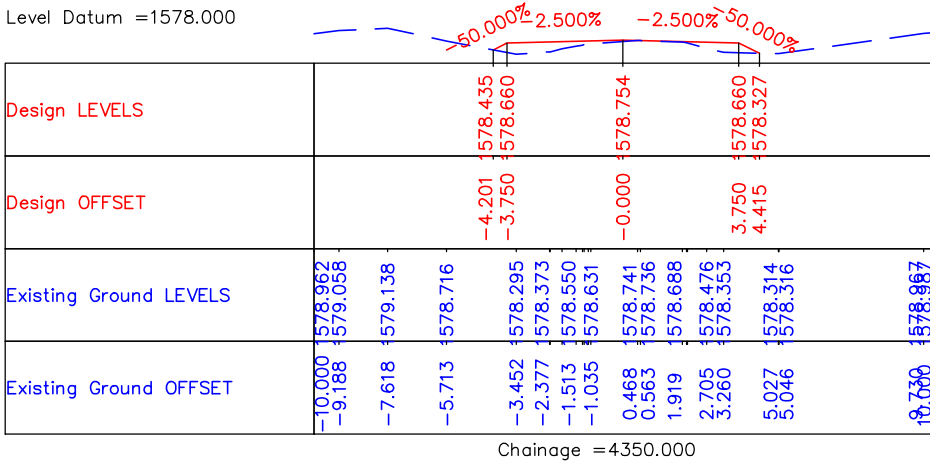
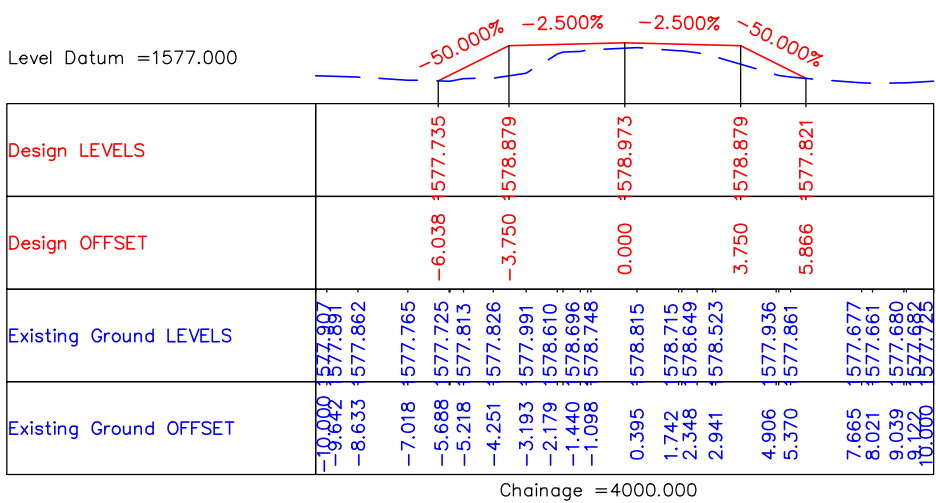
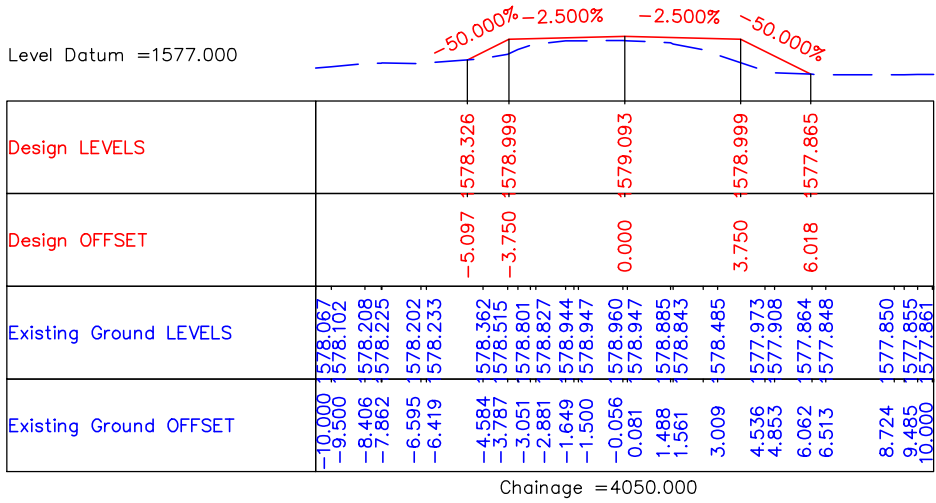
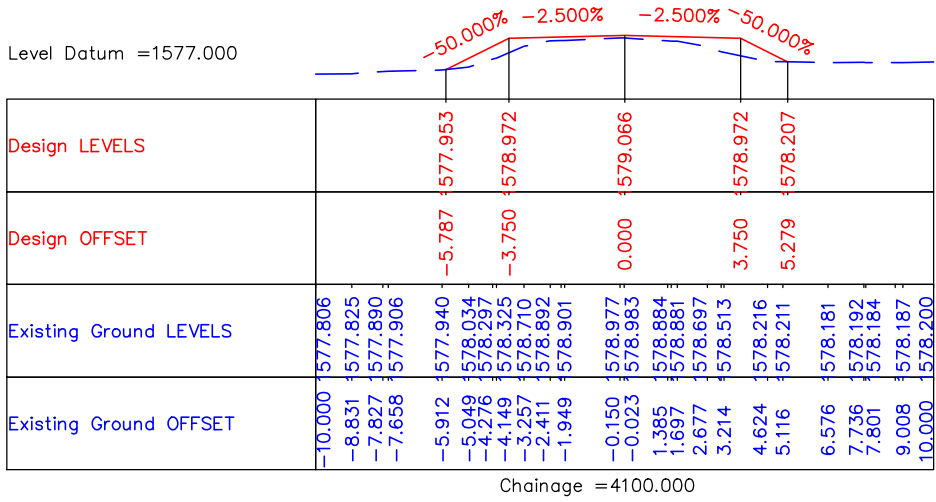
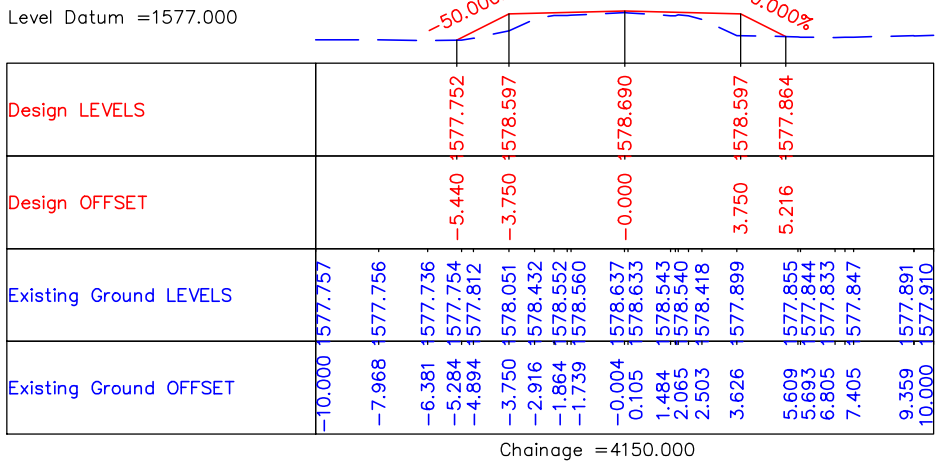




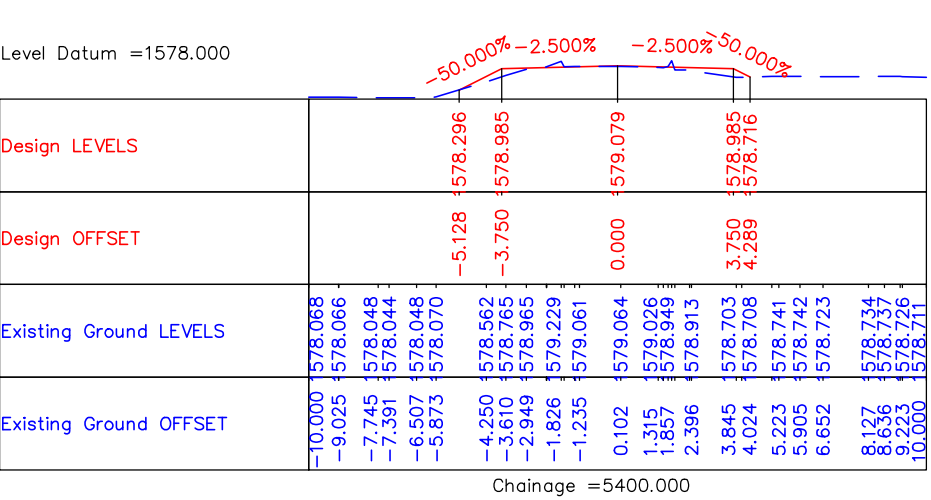
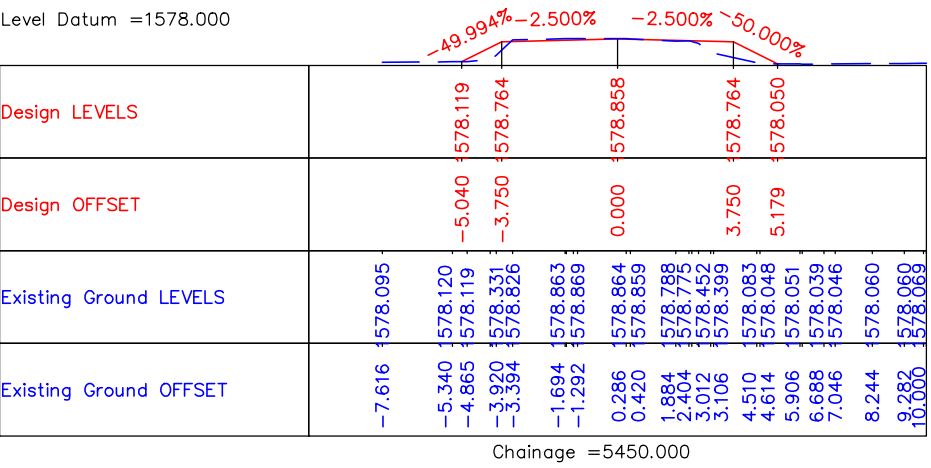
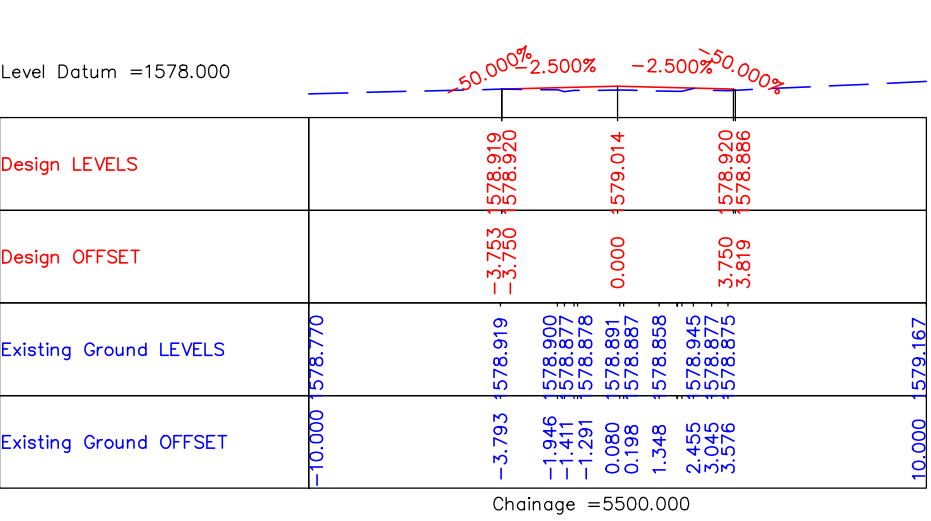
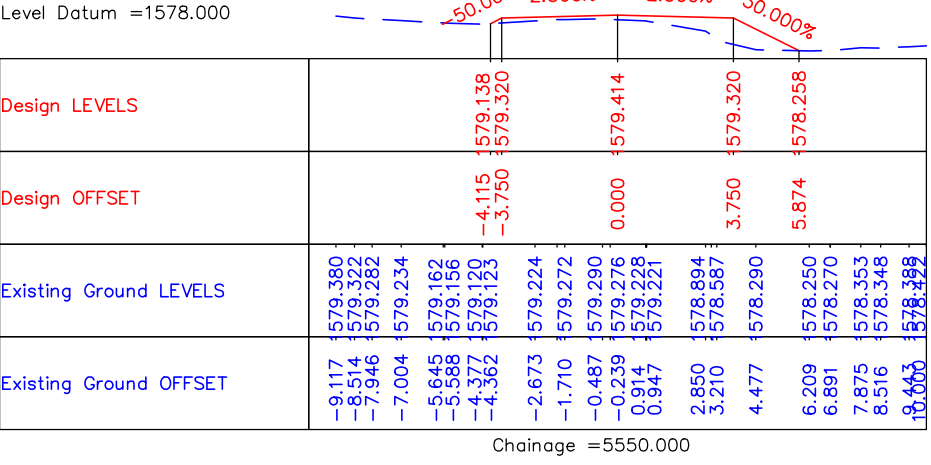
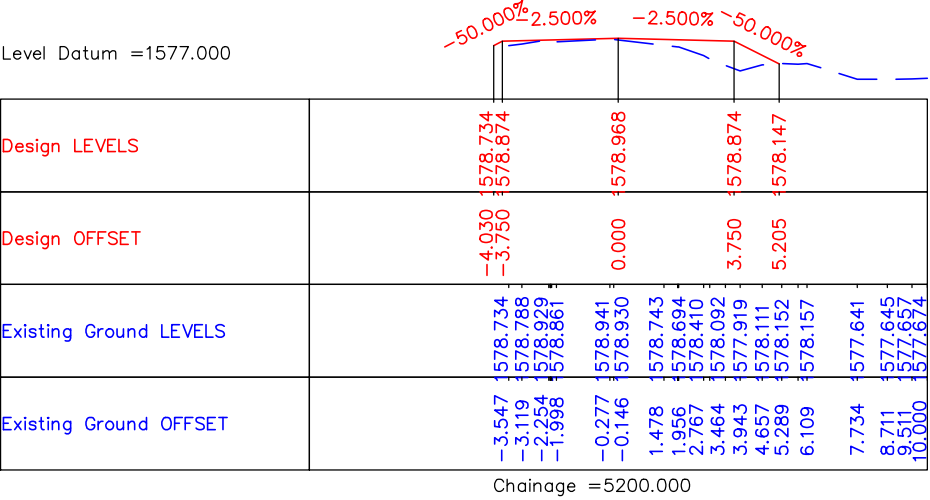
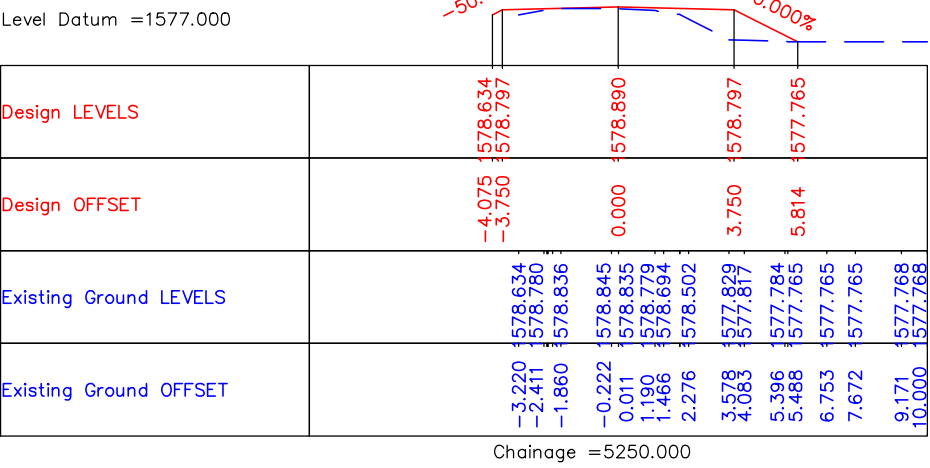
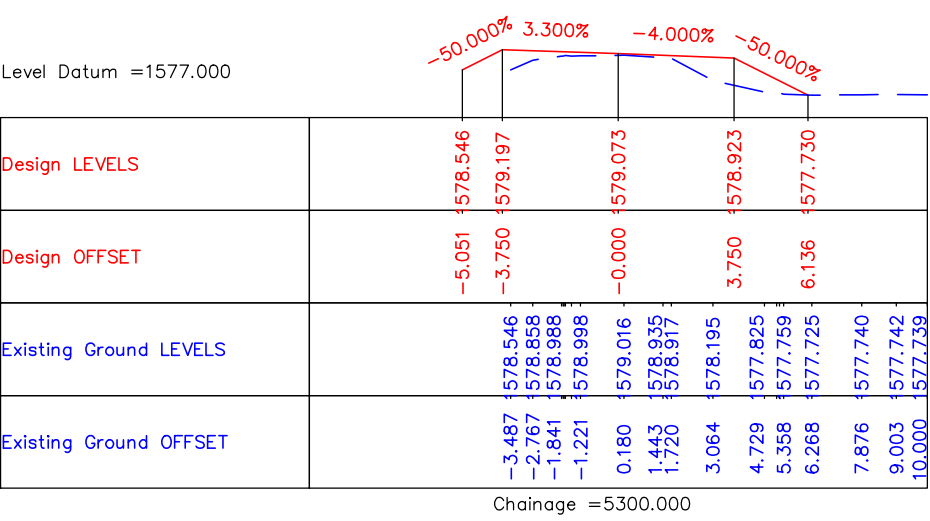
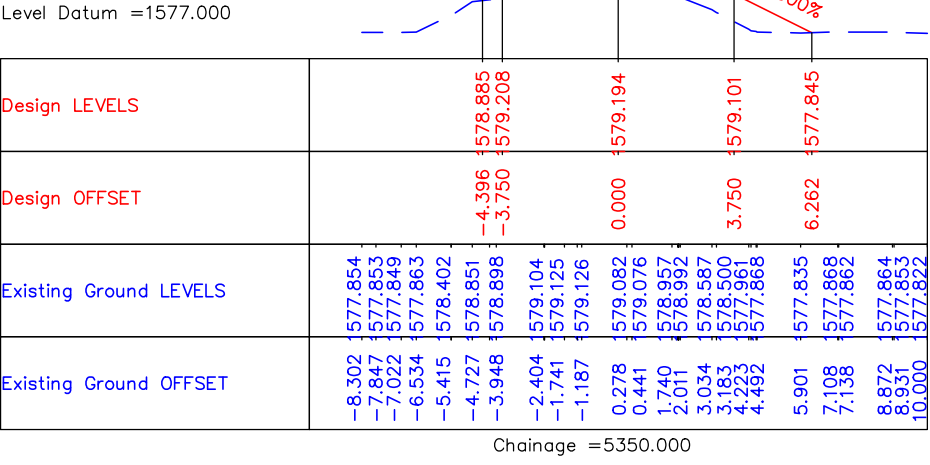
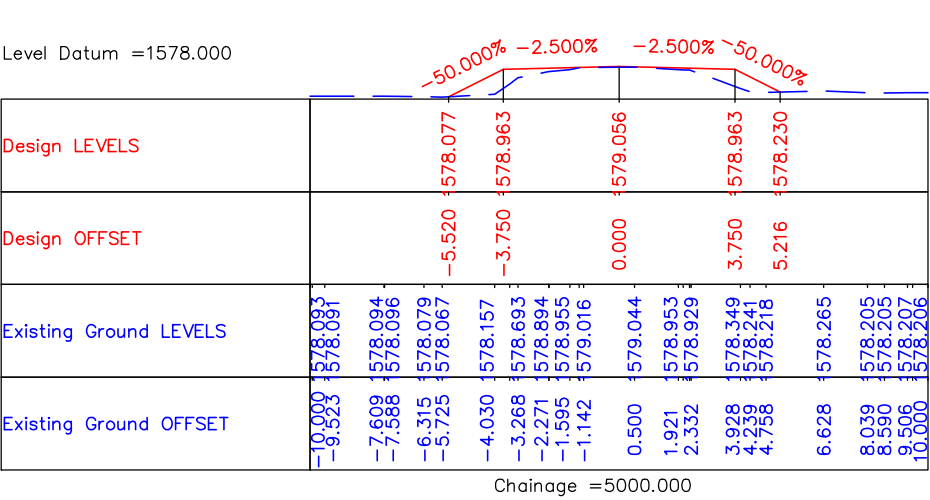
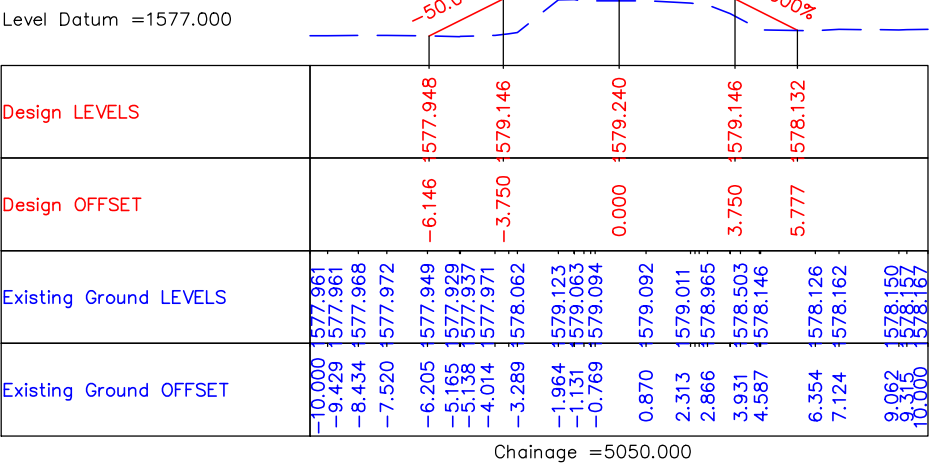
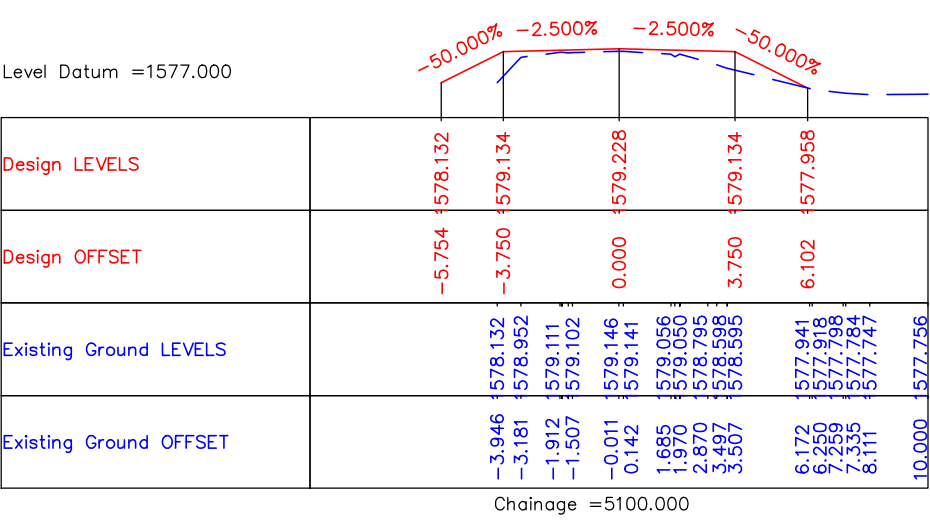
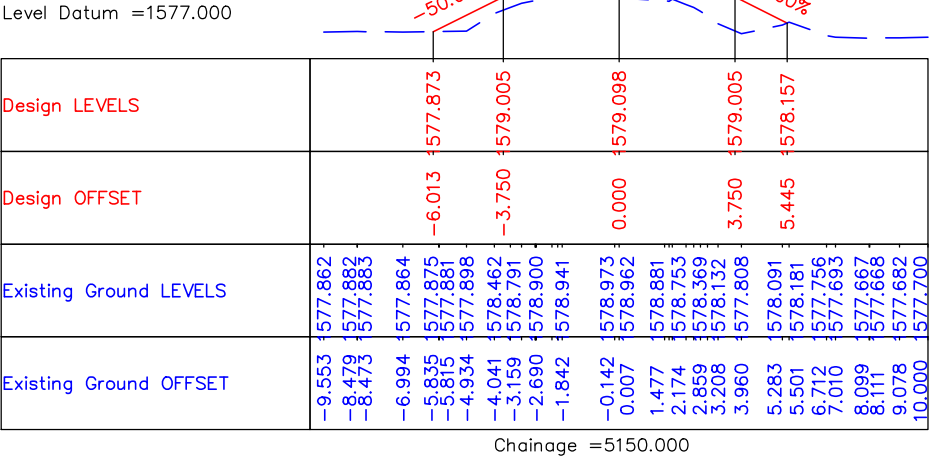
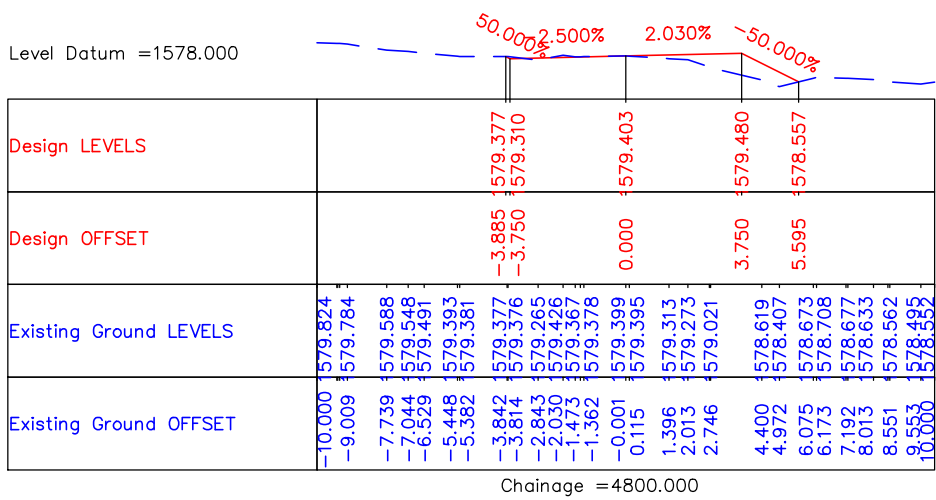
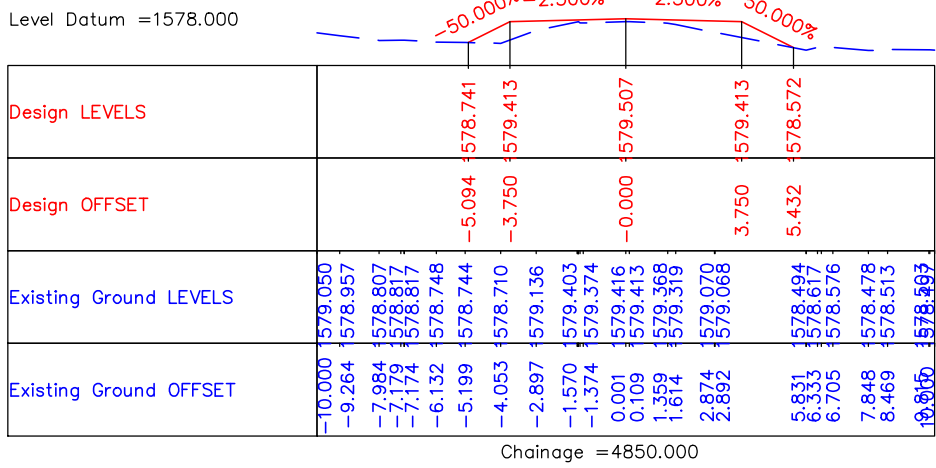
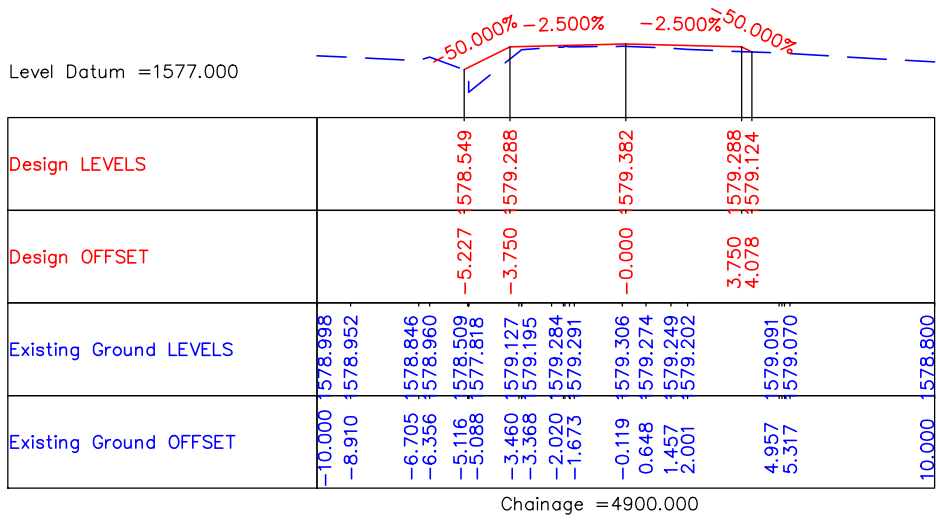
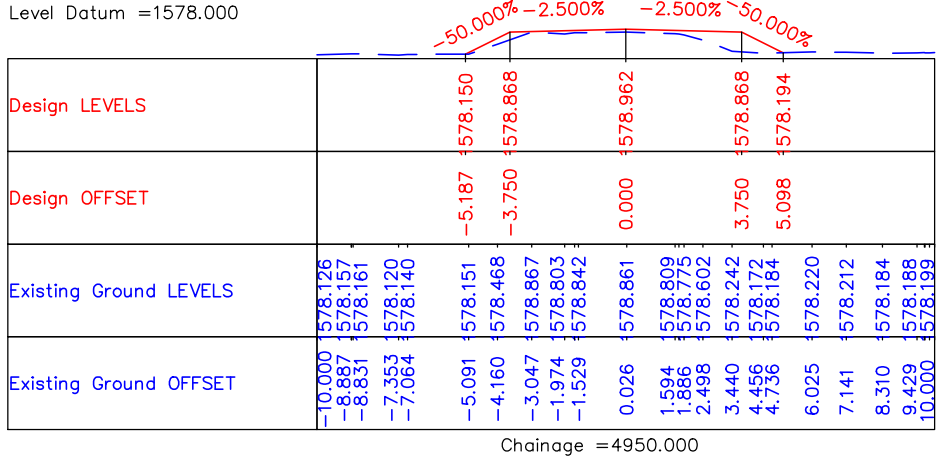












CLIENT :



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DESIGN CONSULTANT:



**Eptisa Servicios de Ingenieria S.L.**  
Unit 12



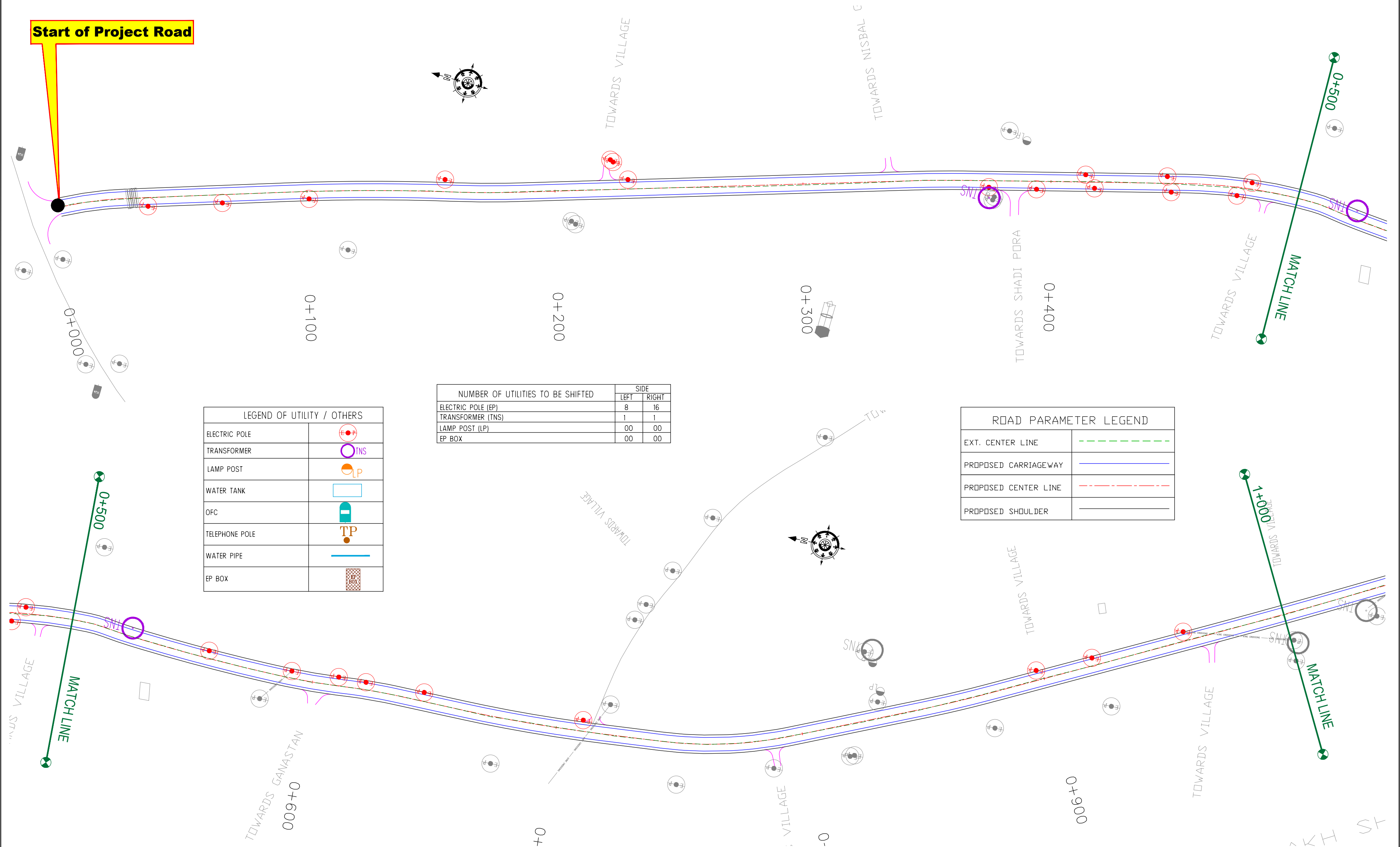


≡ UTILITY RELOCATION PLAN FOR MAIN ROAD (ELECTRICITY DEPARTMENT) ≡

← Shadipura

Khanpeth-Sumbal Road →

Start of Project Road



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Corporate Park, Plot No. 2, Block EP & GP,  
Sector v, Salt Lake Kolkata - 700091,  
West Bengal  
Ph: 033-40347200  
www.eptisa.com

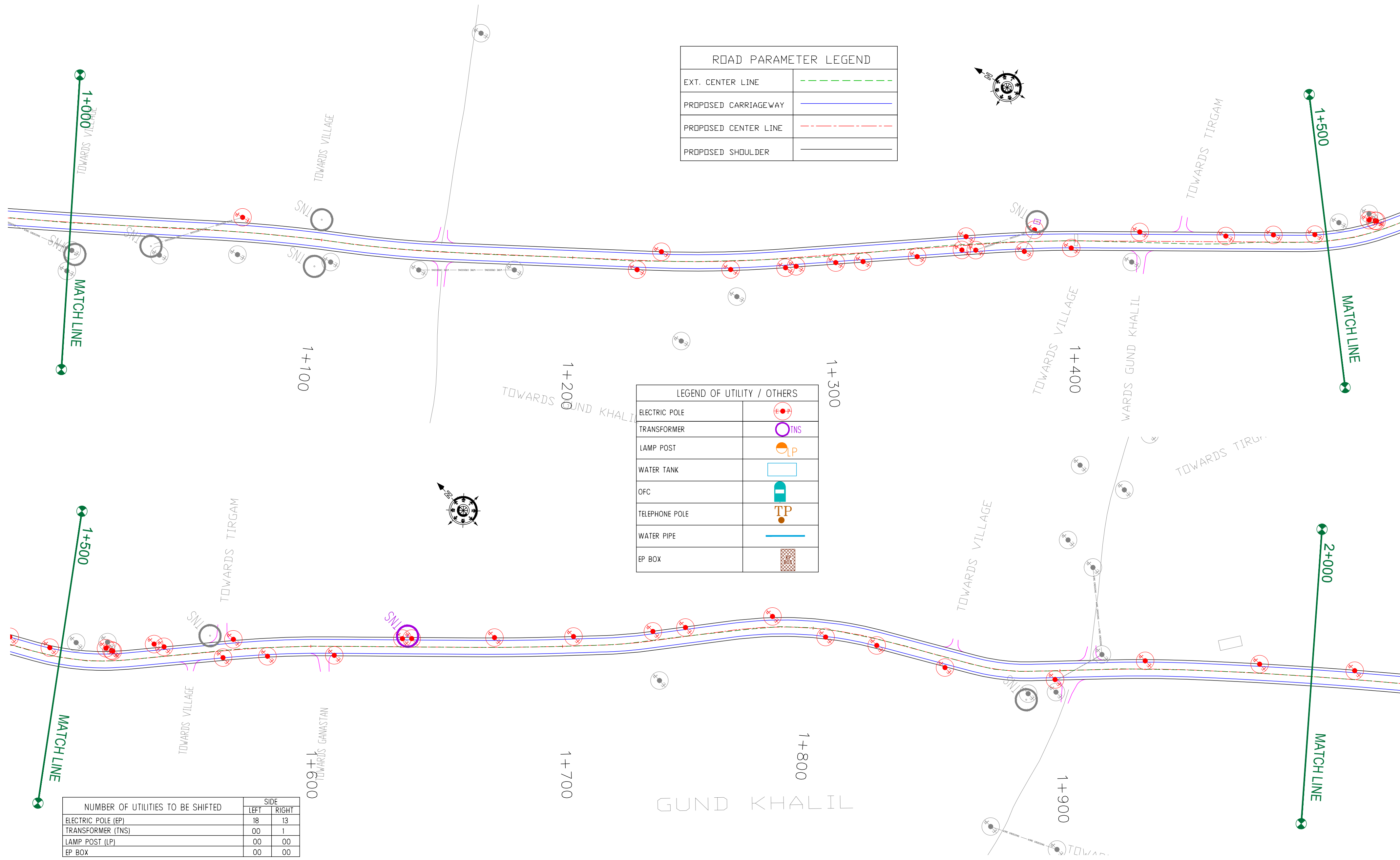
REV.	DATE	DESCRIPTION

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

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

← Shadipura

Khanpeth-Sumbal Road →



NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
ELECTRIC POLE (EP)	18	13
TRANSFORMER (TNS)	00	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  
**(Shadipura-Khanpeth-Sumbal Road in Bandipora District)**

DESIGN CONSULTANT:



**Servicios de Ingenieria S.L.**  
Unit 1203, 12th Floor, Tower 1, PS Srijan  
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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)

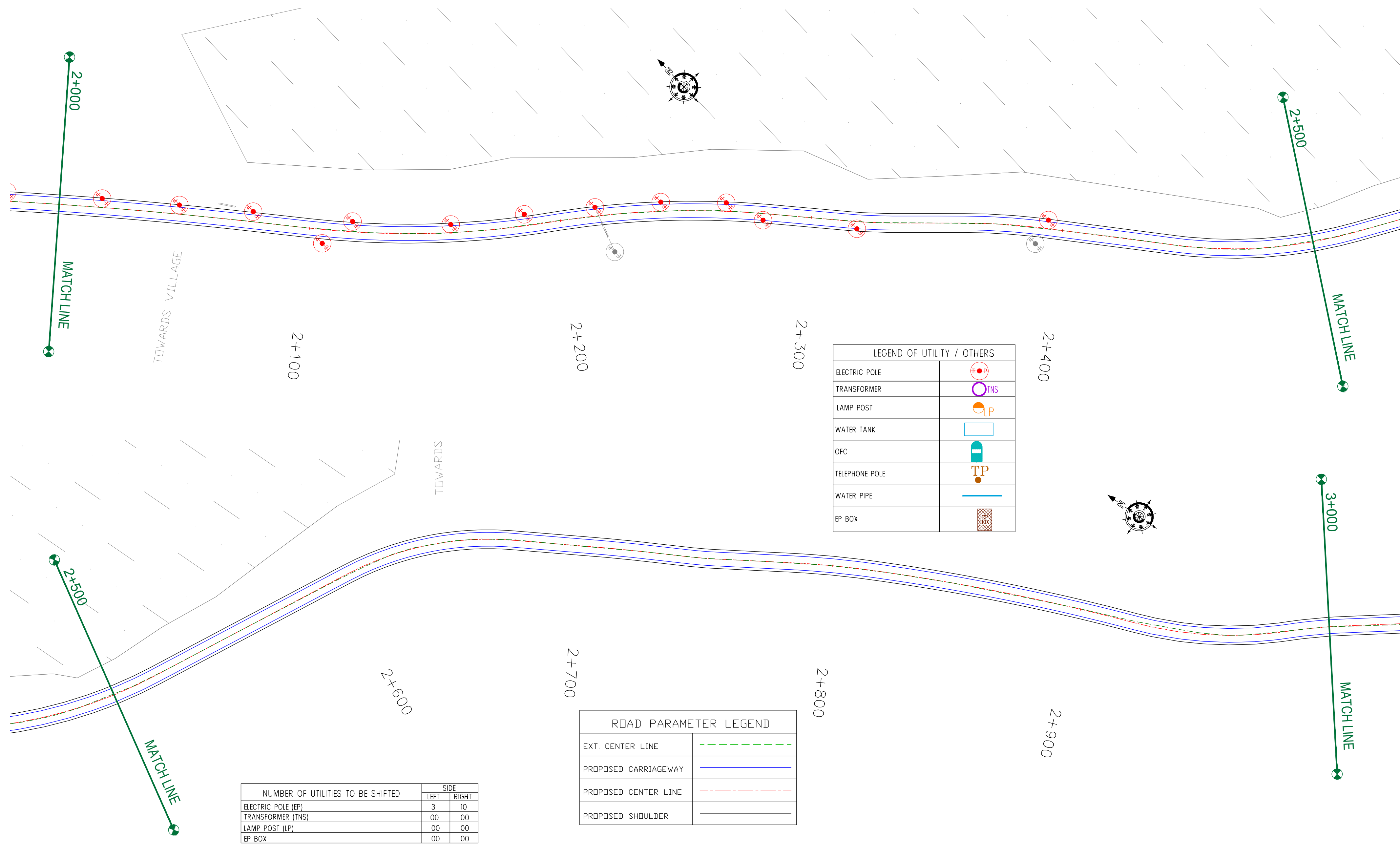
DRG. NO. : EPTISA/JTFRP/DPR/J&K/URP/02

REVISION : R-1

September 2019

← Shadipura

Khanpeth-Sumbal Road →



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	

NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
ELECTRIC POLE (EP)	3	10
TRANSFORMER (TNS)	00	00
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  
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DESIGN CONSULTANT:



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West Bengal  
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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



← Shadipura

Khanpeth-Sumbal Road →



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	

NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
ELECTRIC POLE (EP)	8	4
TRANSFORMER (TNS)	00	00
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  
**(Shadipura-Khanpeth-Sumbal Road in Bandipora District)**

DESIGN CONSULTANT:

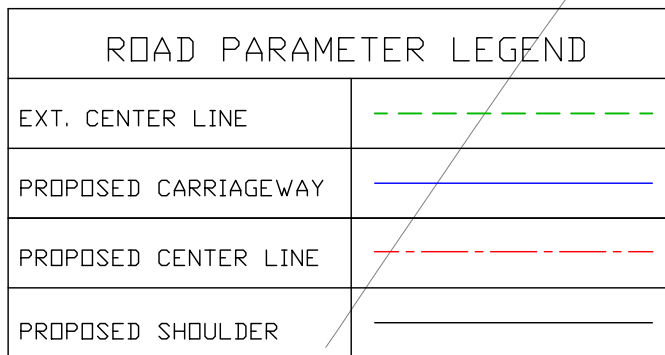
**eptisa** **servicios de Ingenieria S.L.**  
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REV.	DATE	DESCRIPTION

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

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

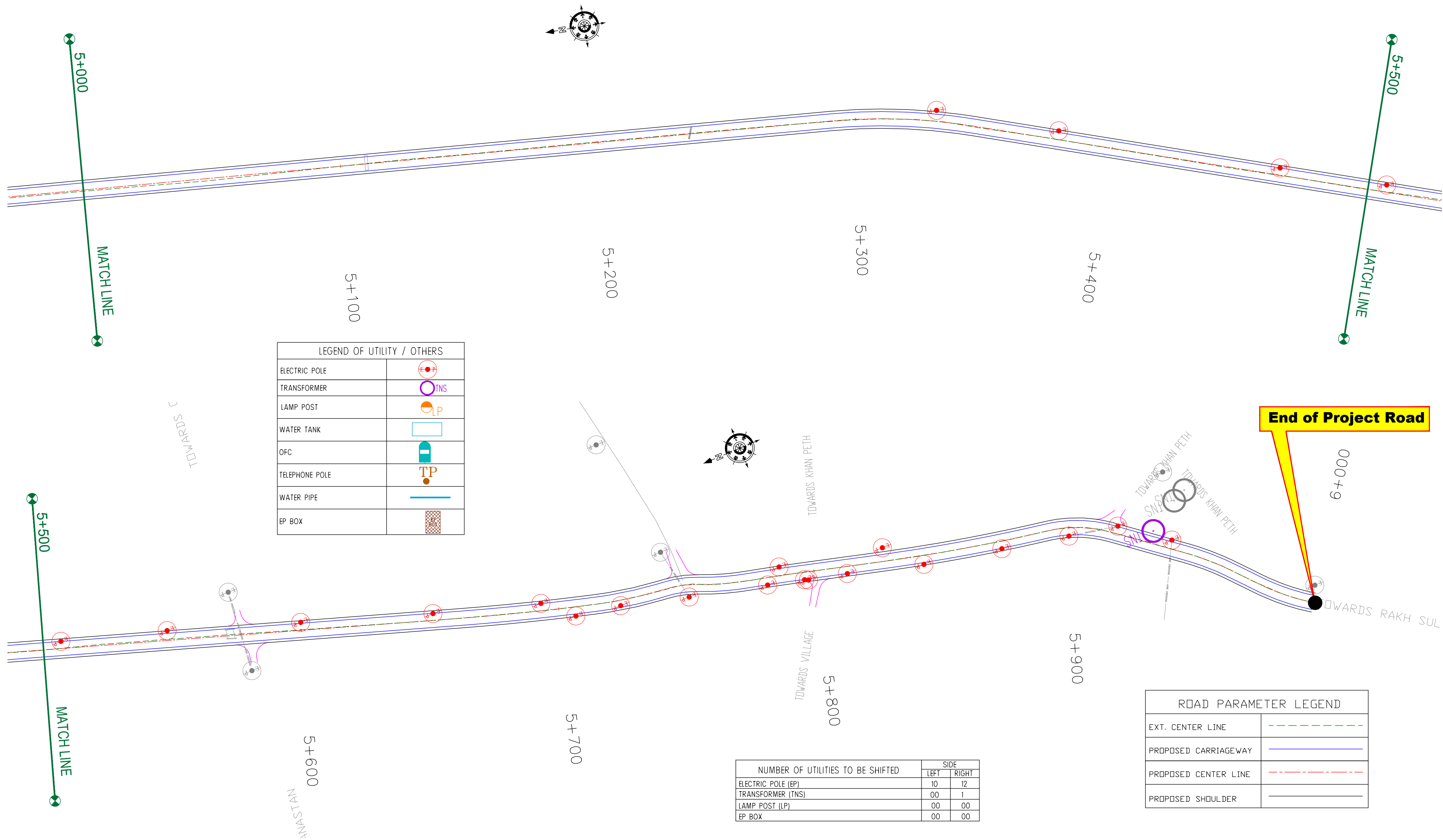
*Khanpeth-Sumbal Road* ➡



<b>TITLE :      Utility Relocation Plan</b> <b>(For Electricity Department)</b> <b>(Ch. 4+000 to Ch. 5+000)</b>	
<b>DRG. NO. : EPTISA/JTFRP/DPR/J&amp;K/URP/05</b>	
<b>REVISION : R-1</b>	<b>September 2019</b>

← Shadipura

Khanpeth-Sumbal Road →



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)	10	12
TRANSFORMER (TNS)	00	1
LAMP POST (LP)	00	00
EP BOX	00	00

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

CLIENT :



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REV.	DATE	DESCRIPTION

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

TITLE : **Utility Relocation Plan**  
(For Electricity Department)  
(Ch. 5+000 to Ch. 6+000)

DRG. NO. : EPTISA/JTRFP/DPR/J&K/URP/06

REVISION : R-1

September 2019

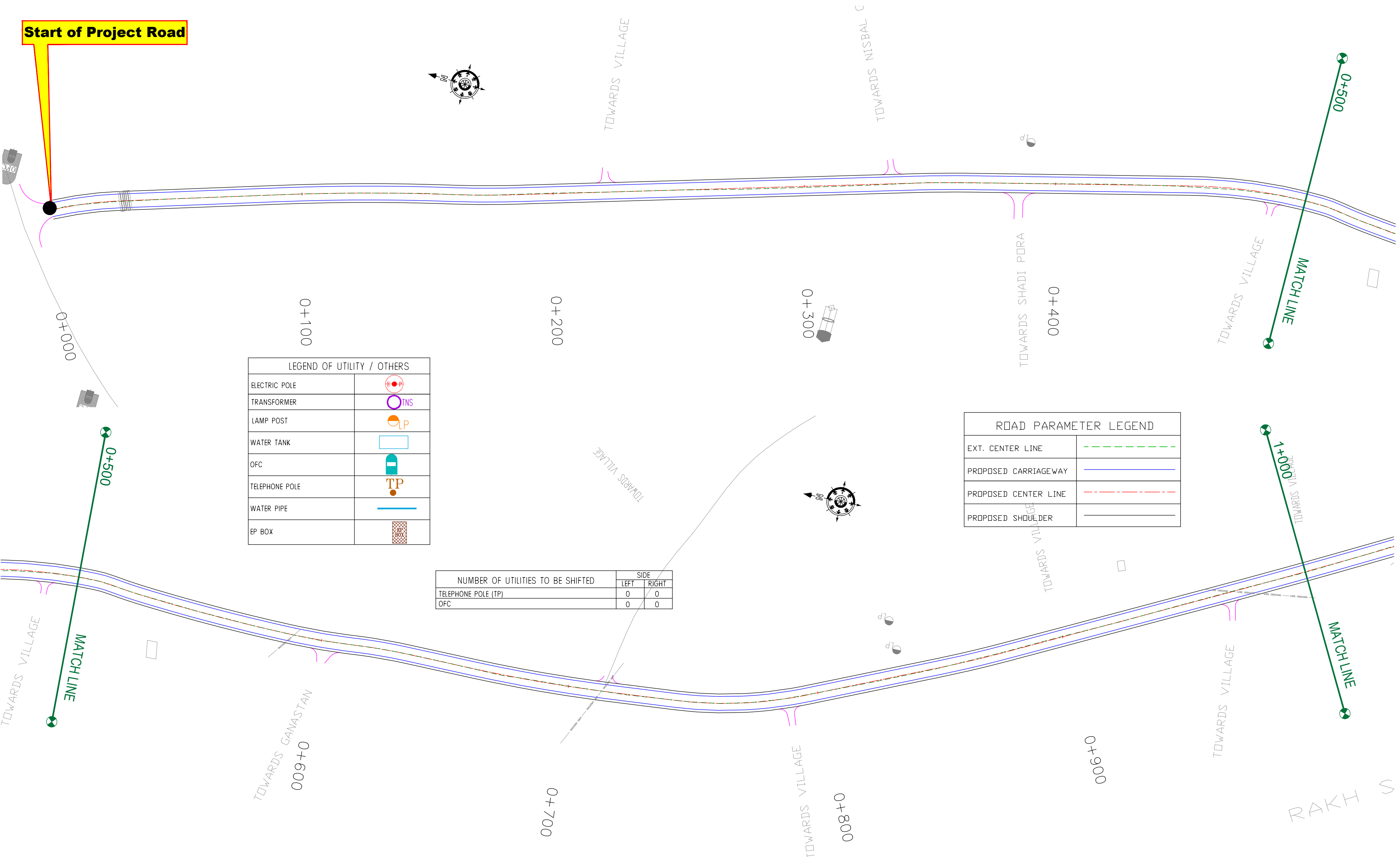


≡ UTILITY RELOCATION PLAN FOR MAIN ROAD (TELEPHONE DEPARTMENT) ≡

← Shadipura

Khanpeth-Sumbal Road →

Start of Project Road



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	

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  
**(Shadipura-Khanpeth-Sumbal Road in Bandipora District)**

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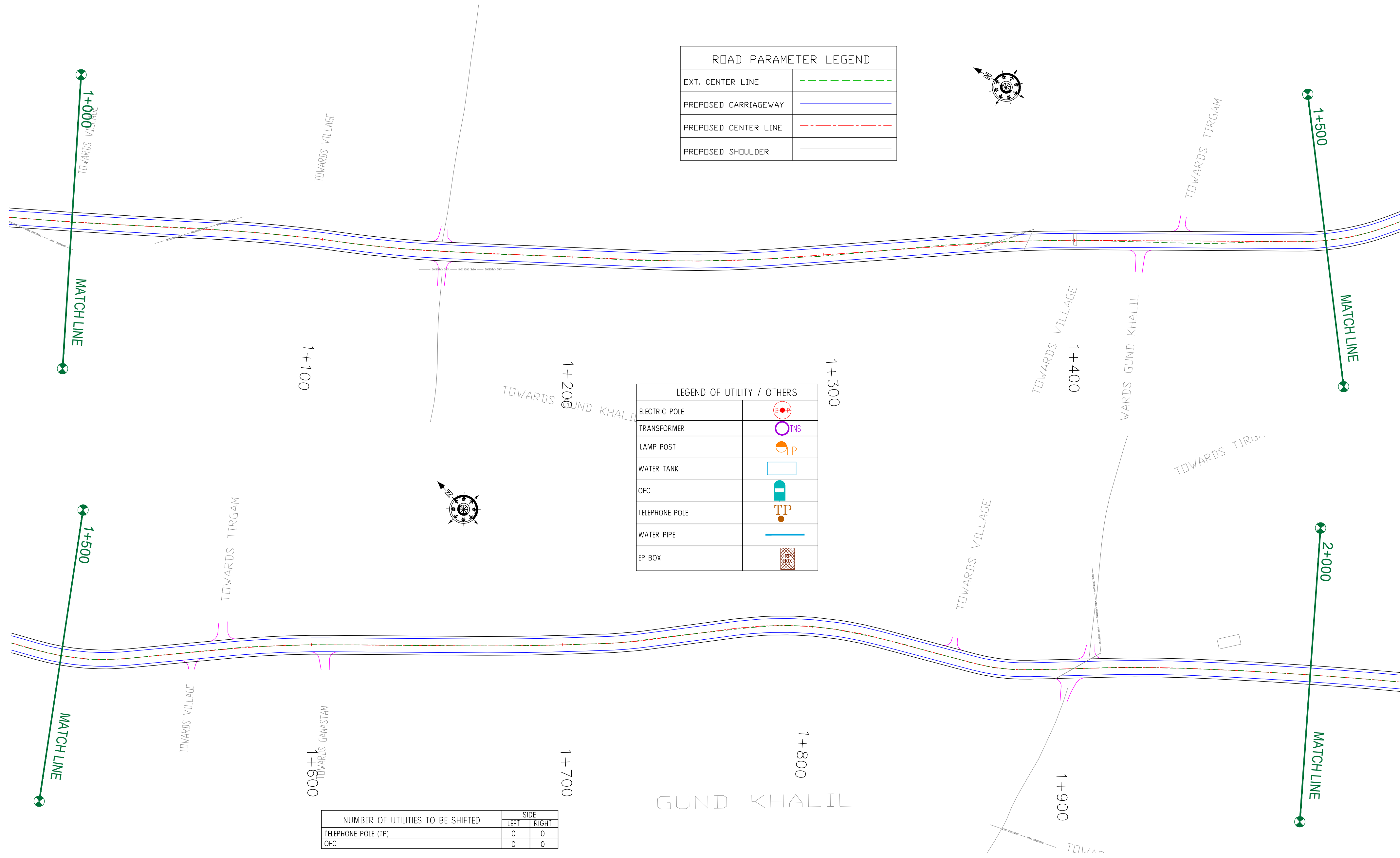
REV.	DATE	DESCRIPTION

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

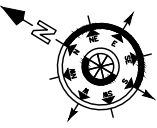
TITLE : <b>Utility Relocation Plan (For Telephone Department)</b> (Ch. 0+000 to Ch. 1+000)	
DRG. NO. : EPTISA/JTRFP/DPR/J&K/URP/01	
REVISION : R-1	September 2019

← Shadipura

Khanpeth-Sumbal Road →



ROAD PARAMETER LEGEND	
EXT. CENTER LINE	<div></div>
PROPOSED CARRIAGEWAY	<div></div>
PROPOSED CENTER LINE	<div></div>
PROPOSED SHOULDER	<div></div>



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

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  
**(Shadipura-Khanpeth-Sumbal Road in Bandipora District)**

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REV.	DATE	DESCRIPTION

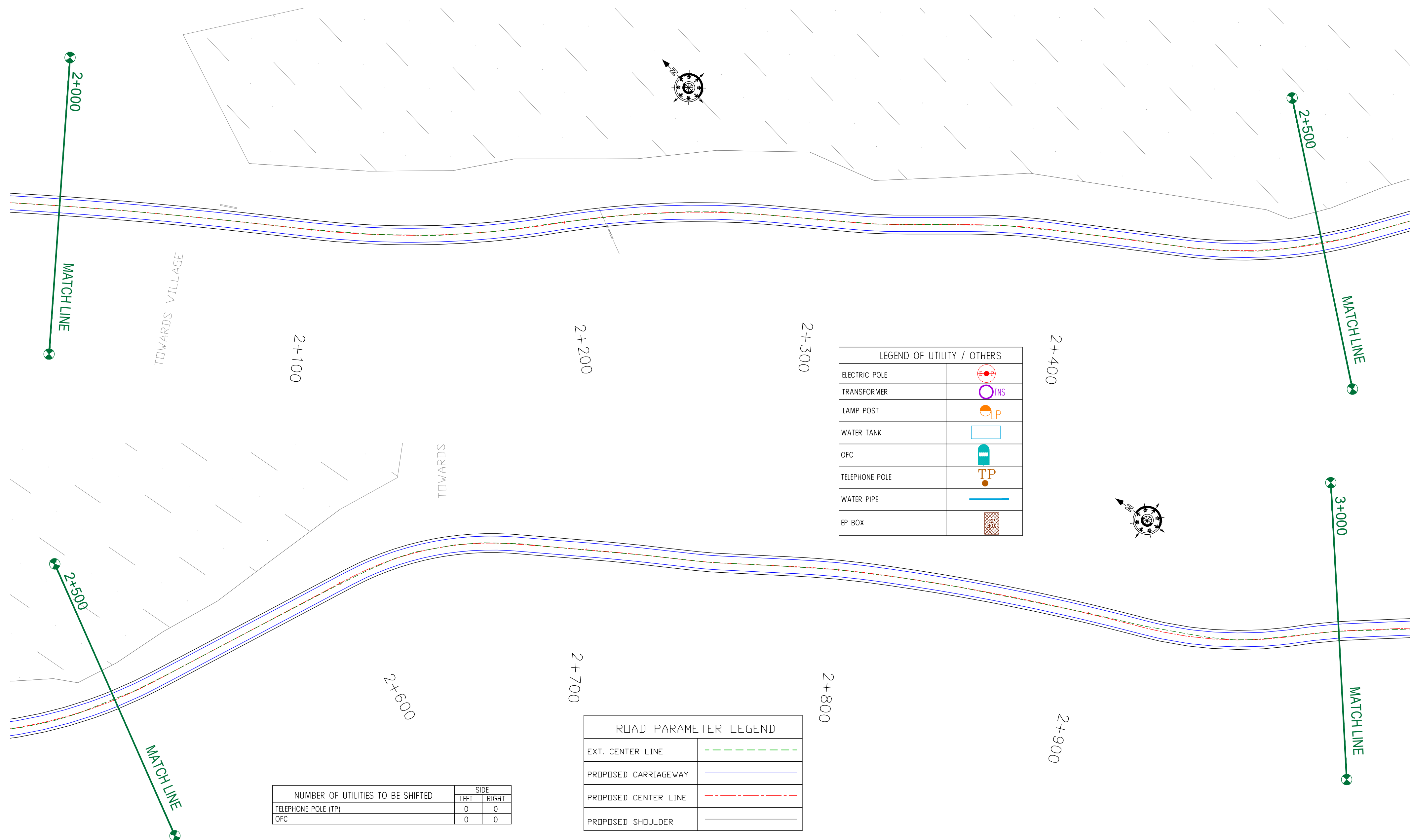
DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

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



← Shadipura

Khanpeth-Sumbal Road →



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 :



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2nd Floor ERA Commercial Complex Rambagh  
Srinagar-190 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report  
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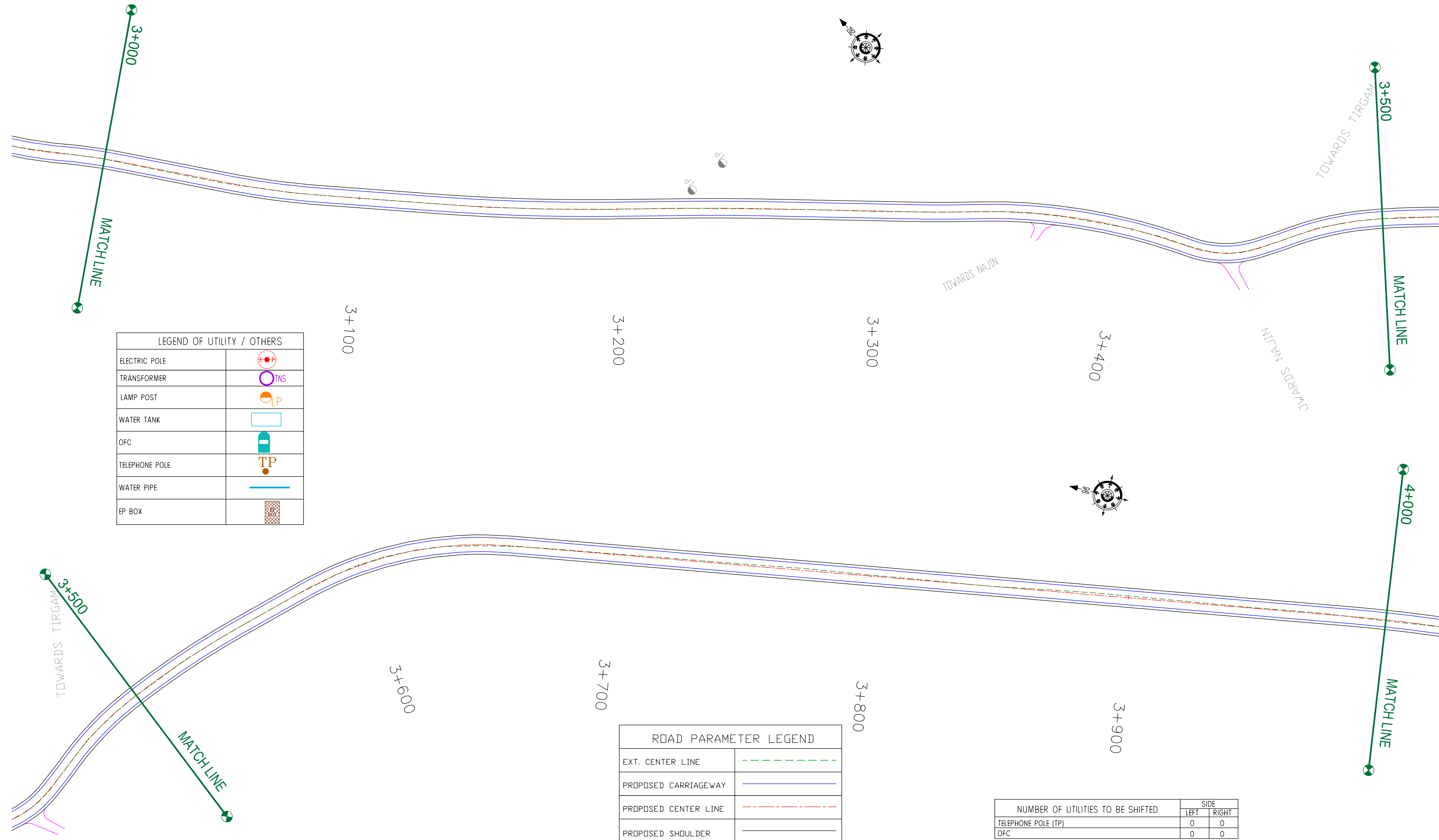
REV.	DATE	DESCRIPTION

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

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

← Shadipura

Khanpeth-Sumbal 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  
**(Shadipura-Khanpeth-Sumbal Road in Bandipora District)**

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REV.	DATE	DESCRIPTION

DRAWN BY : SD

DESIGNED BY : SCK/MM

APPROVED BY : KG

SCALE : 1:1000

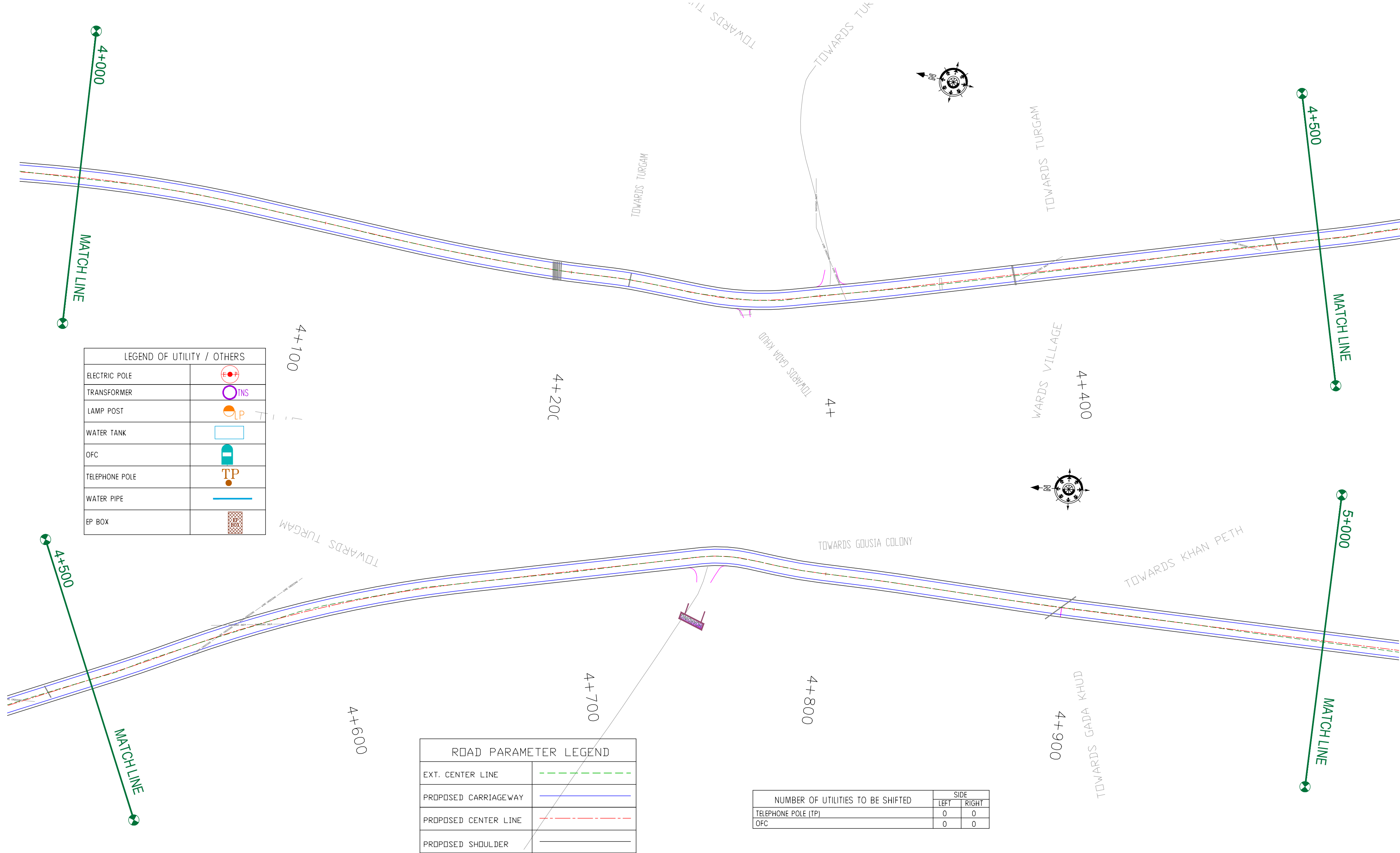
TITLE : Utility Relocation Plan  
(For Telephone Department)  
(Ch. 3+000 to Ch. 4+000)

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

REVISION : R-1September 2019

Shadipura

Khanpeth-Sumbal Road



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	

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  
(**Shadipura-Khanpeth-Sumbal Road in Bandipora District**)

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REV.	DATE	DESCRIPTION

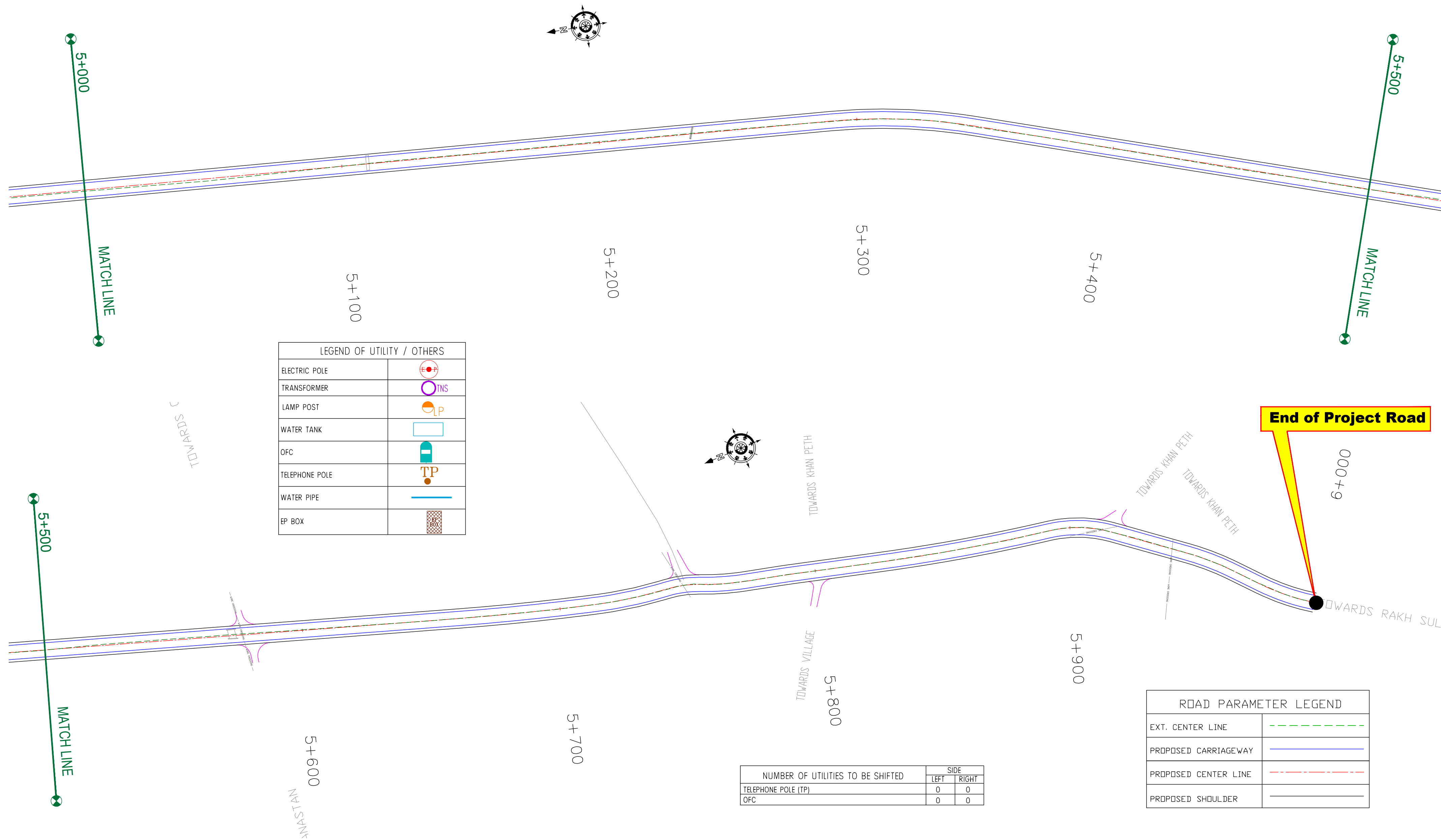
DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

TITLE :	Utility Relocation Plan (For Telephone Department) (Ch. 4+000 to Ch. 5+000)
DRG. NO. :	EPTISA/JTFRP/DPR/J&K/URP/05
REVISION : R-1	September 2019



← Shadipura

Khanpeth-Sumbal 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  
**(Shadipura-Khanpeth-Sumbal Road in Bandipora District)**

DESIGN CONSULTANT:  
  
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REV.	DATE	DESCRIPTION

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

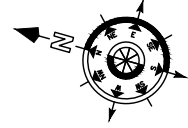
TITLE : **Utility Relocation Plan**  
(For Telephone Department)  
(Ch. 5+000 to Ch. 6+000)  
DRG. NO. : EPTISA/JTRFP/DPR/J&K/URP/06  
REVISION : R-1  
September 2019

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

← Shadipura

Khanpeth-Sumbal Road →

Start of Project Road



TOWARDS VILLAGE

TOWARDS NISBAL C



TOWARDS SHADI PORA

TOWARDS VILLAGE

MATCH LINE

0+500

0+100

0+200

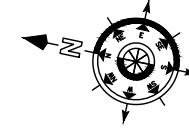
0+300

0+400

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	

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



TOWARDS VILLAGE

TOWARDS VILLAGE

TOWARDS VILLAGE

MATCH LINE

1+000

TOWARDS VILLAGE

RAKH SI

TOWARDS VILLAGE

MATCH LINE

0+500

TOWARDS GANASTAN

0+600

0+700

TOWARDS VILLAGE

0+800

0+900

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  
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REV.	DATE	DESCRIPTION

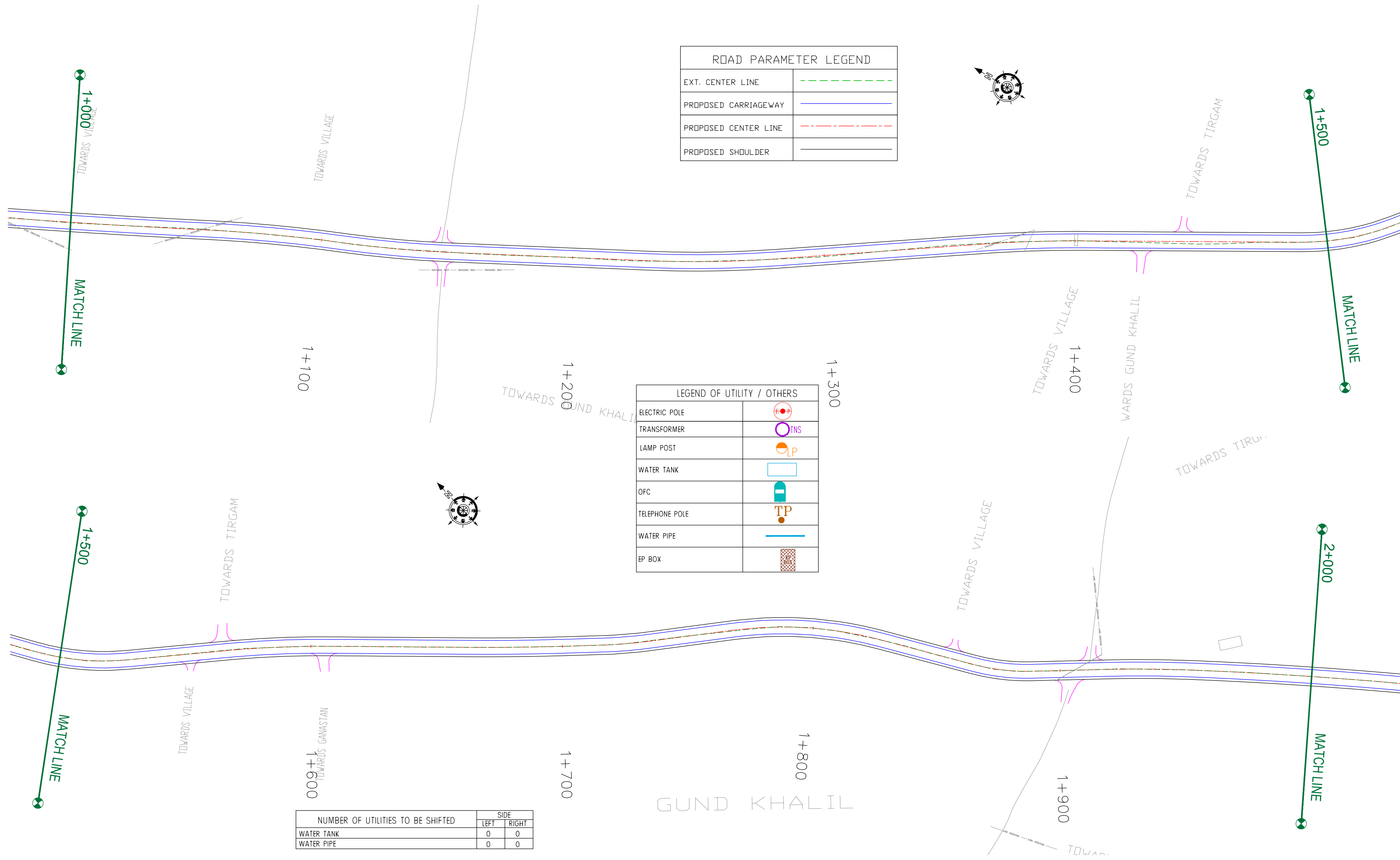
DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

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

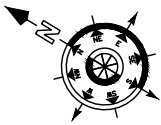


← Shadipura

Khanpeth-Sumbal Road →



ROAD PARAMETER LEGEND	
EXT. CENTER LINE	<div></div>
PROPOSED CARRIAGEWAY	<div></div>
PROPOSED CENTER LINE	<div></div>
PROPOSED SHOULDER	<div></div>



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

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  
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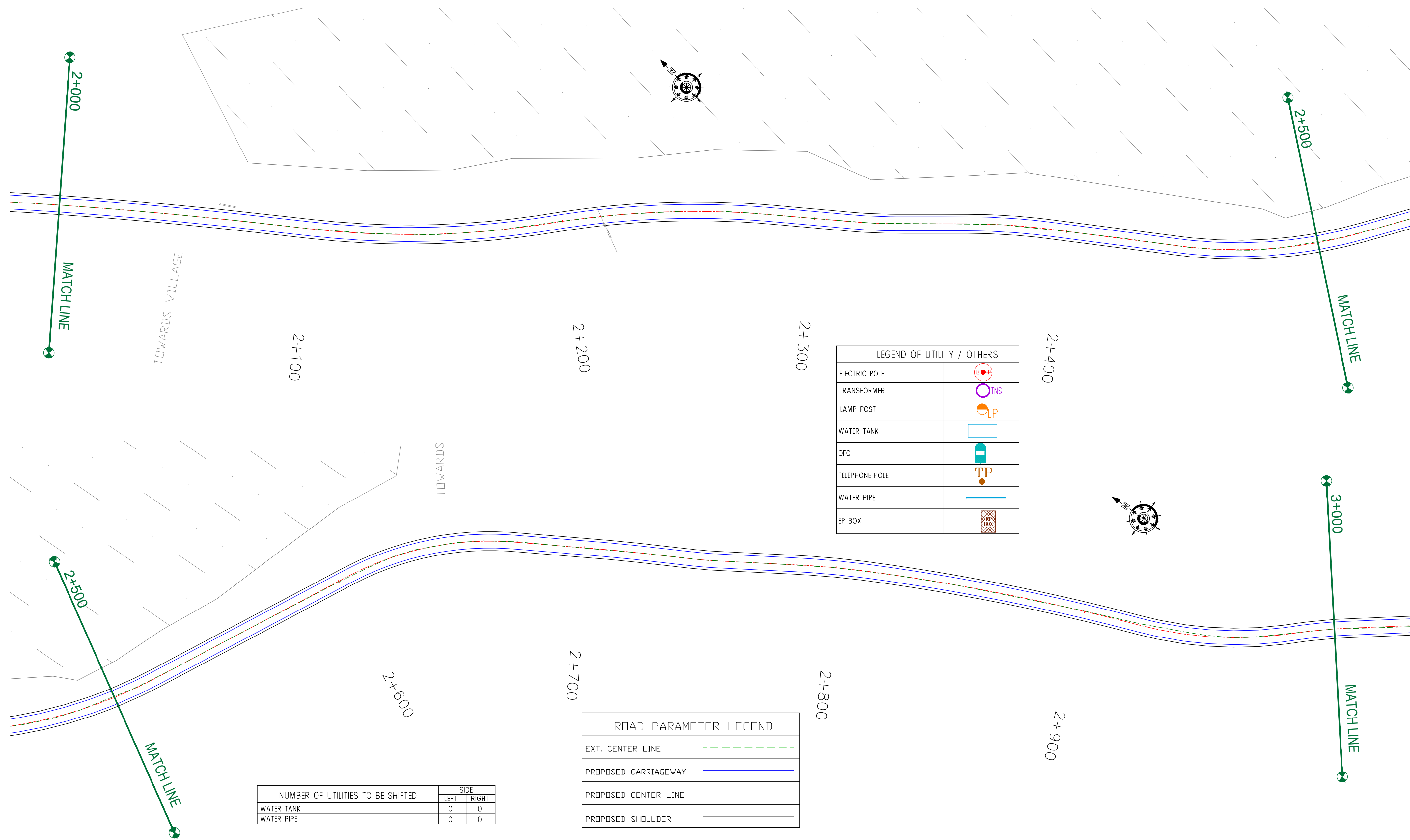
REV.	DATE	DESCRIPTION

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	

← Shadipura

Khanpeth-Sumbal Road →



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	

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 :

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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	

← Shadipura

Khanpeth-Sumbal Road →



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	

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  
**(Shadipura-Khanpeth-Sumbal Road in Bandipora 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

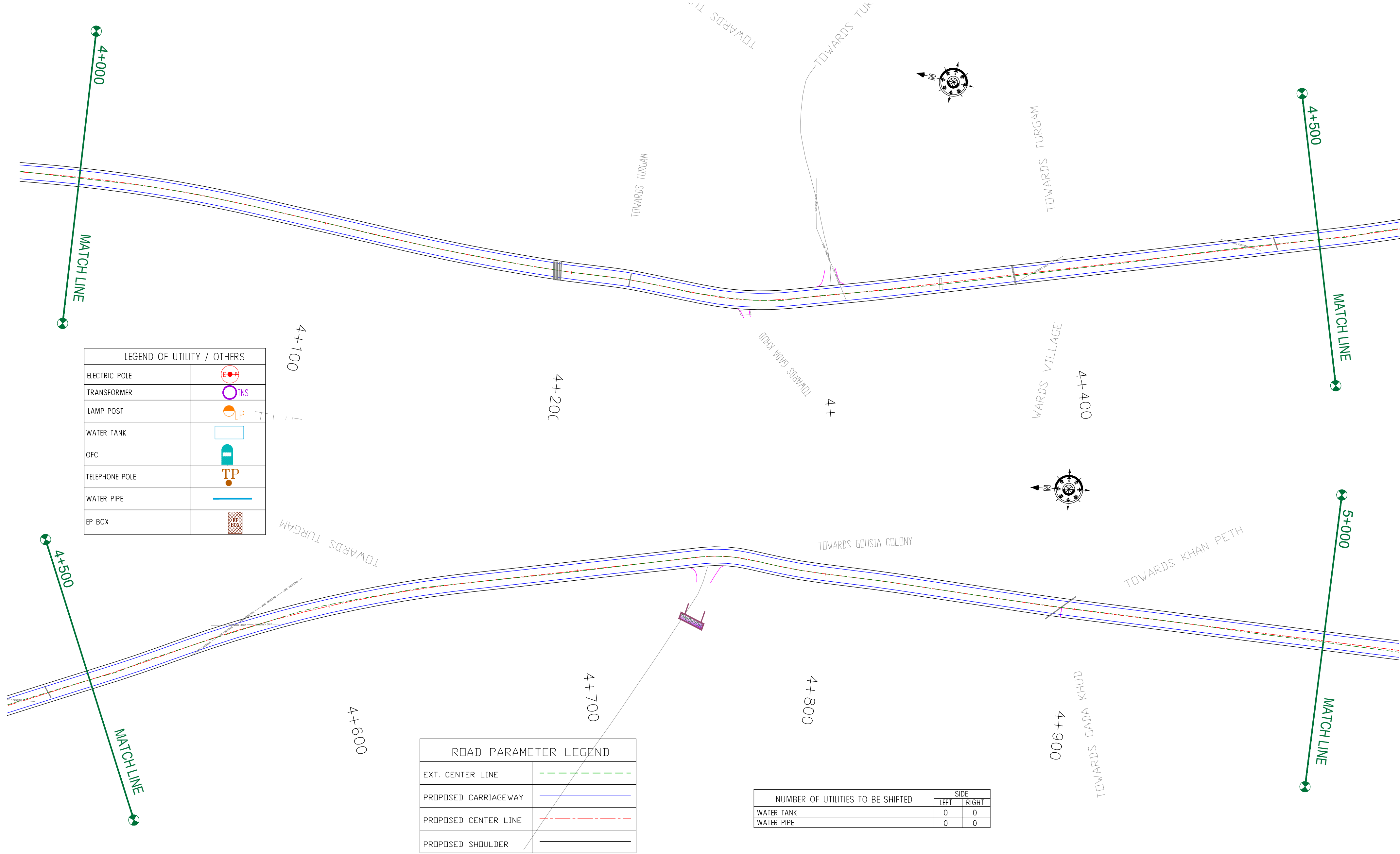
DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

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



Shadipura

Khanpeth-Sumbal Road



CLIENT :



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

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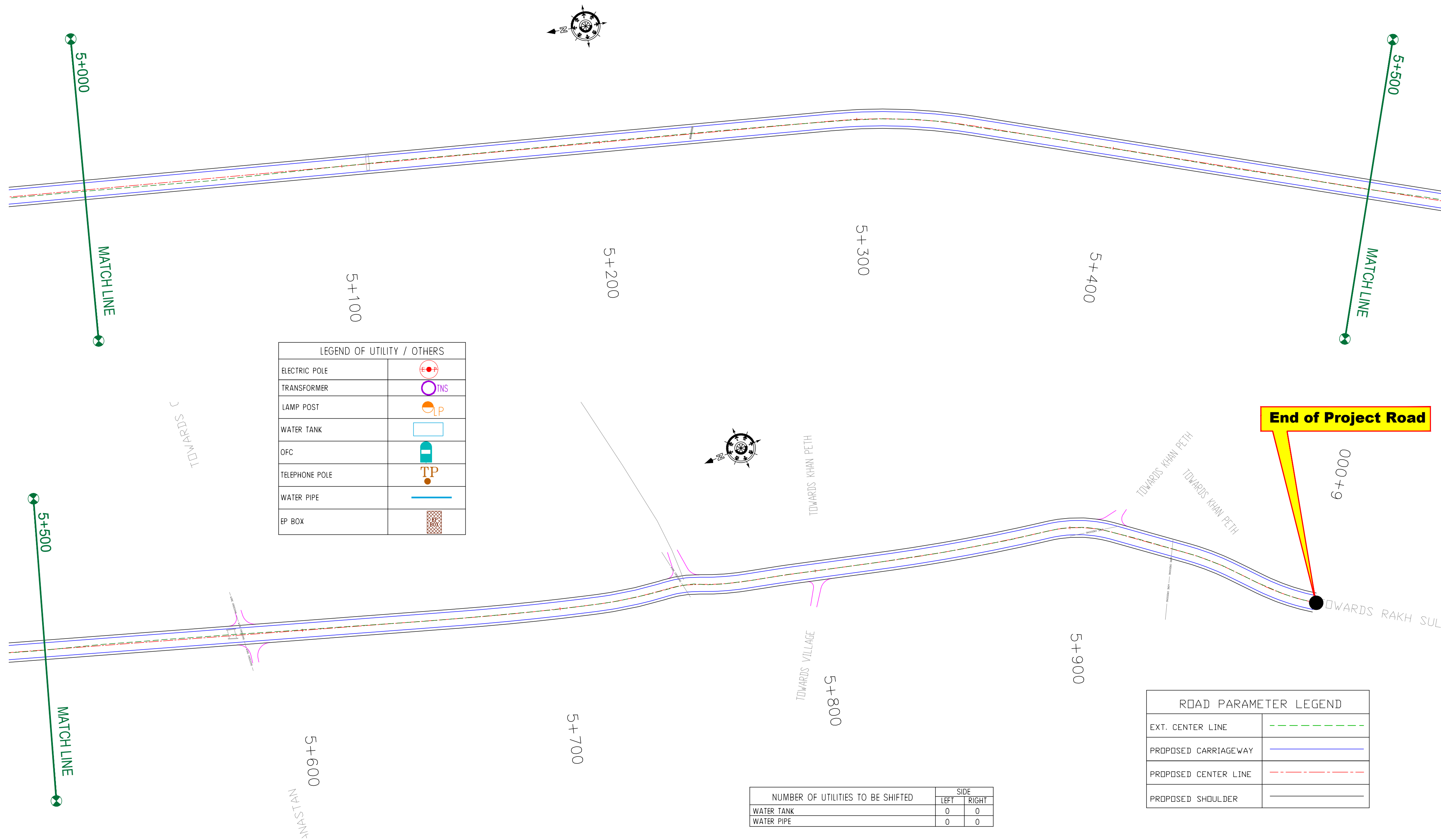
REV.	DATE	DESCRIPTION

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. 5+000)
DRG. NO. :	EPTISA/JTRFP/DPR/J&K/URP/05
REVISION : R-1	September 2019

← Shadipura

Khanpeth-Sumbal Road →



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  
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**(Shadipura-Khanpeth-Sumbal Road in Bandipora District)**

DESIGN CONSULTANT:

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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. 5+000 to Ch. 6+000)

DRG. NO. : EPTISA/JTRFP/DPR/J&K/URP/06

REVISION : R-1September 2019

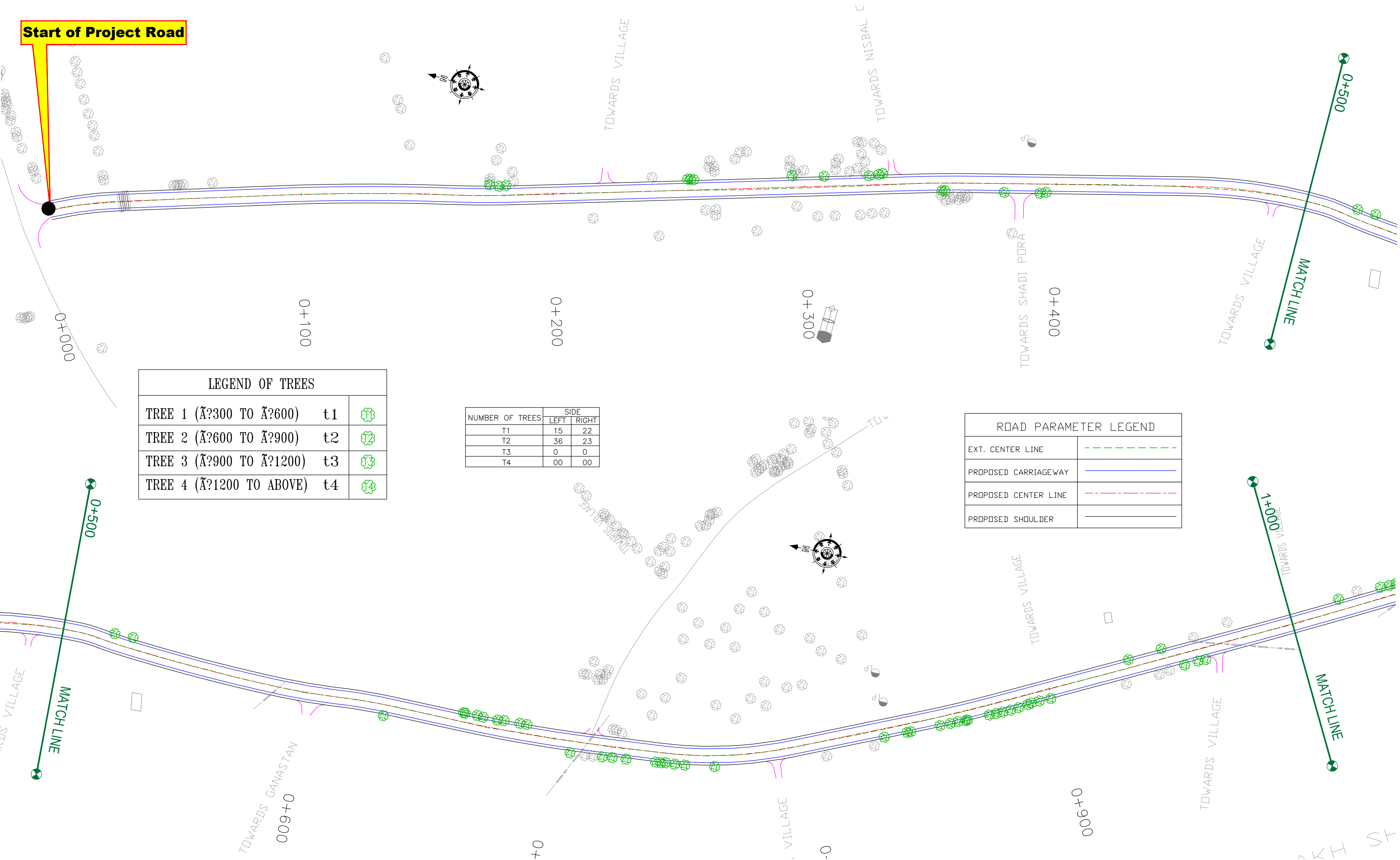
≡ TREE CUTTING (MAIN ROAD) ≡



← Shadipura

Khanpeth-Sumbal Road →

Start of Project Road



LEGEND OF TREES		
TREE 1 (300 TO 600)	t1	
TREE 2 (600 TO 900)	t2	
TREE 3 (900 TO 1200)	t3	
TREE 4 (1200 TO ABOVE)	t4	

NUMBER OF TREES	SIDE	
	LEFT	RIGHT
T1	15	22
T2	36	23
T3	0	0
T4	00	00

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.

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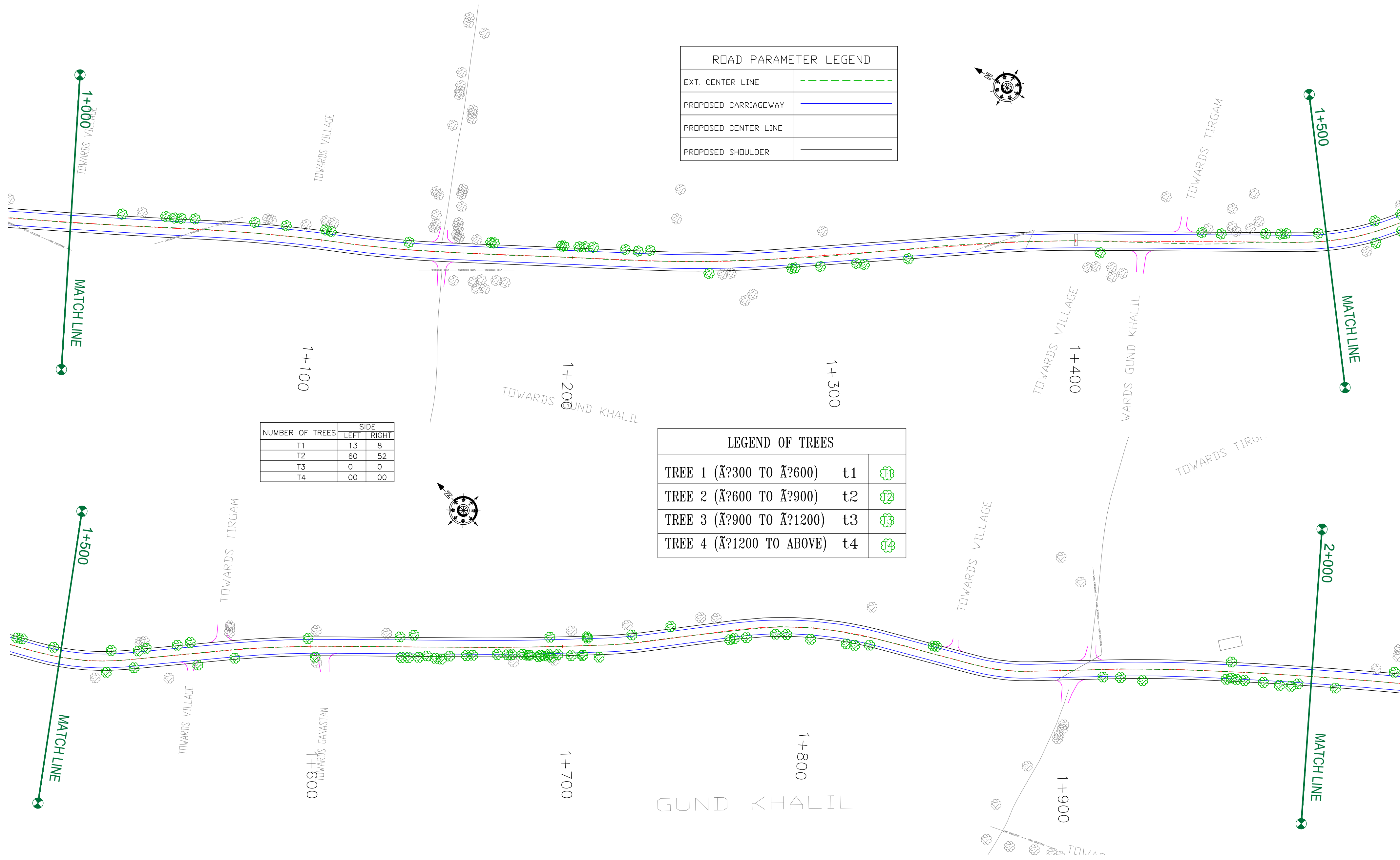
REV.	DATE	DESCRIPTION

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/JTRP/DPR/J&K/TC/01	
REVISION : R-1	September 2019

← Shadipura

Khanpeth-Sumbal Road →



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  
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Ph: 033-40347200  
www.eptisa.com

REV.	DATE	DESCRIPTION

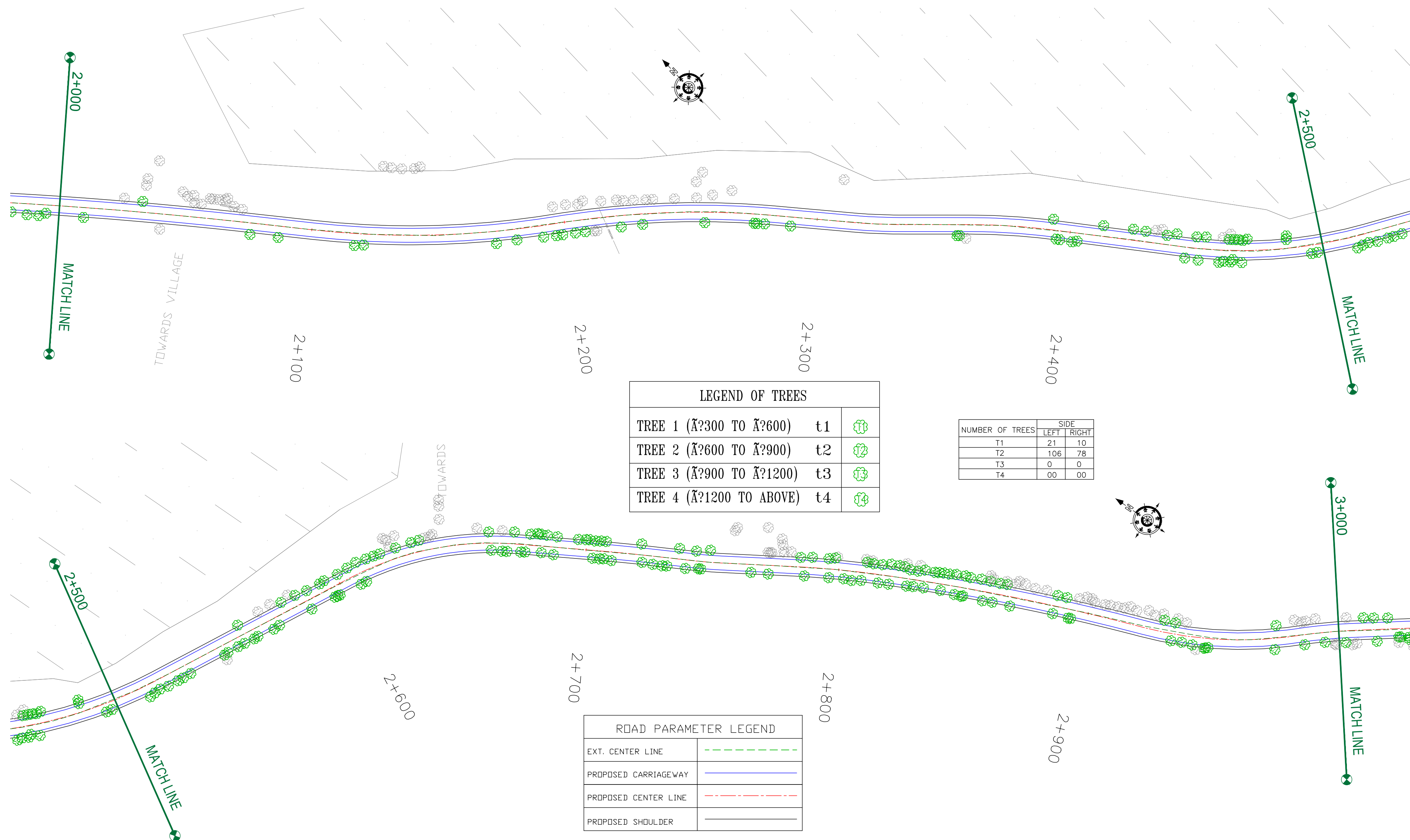
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DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

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



← Shadipura

Khanpeth-Sumbal Road →



LEGEND OF TREES		
TREE 1 (300 TO 600)	t1	
TREE 2 (600 TO 900)	t2	
TREE 3 (900 TO 1200)	t3	
TREE 4 (1200 TO ABOVE)	t4	

NUMBER OF TREES	SIDE	
	LEFT	RIGHT
T1	21	10
T2	106	78
T3	0	0
T4	00	00

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  
**(Shadipura-Khanpeth-Sumbal Road in Bandipora District)**

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Sector v, Salt Lake Kolkata - 700091,  
West Bengal  
Ph: 033-40347200  
www.eptisa.com

REV.	DATE	DESCRIPTION

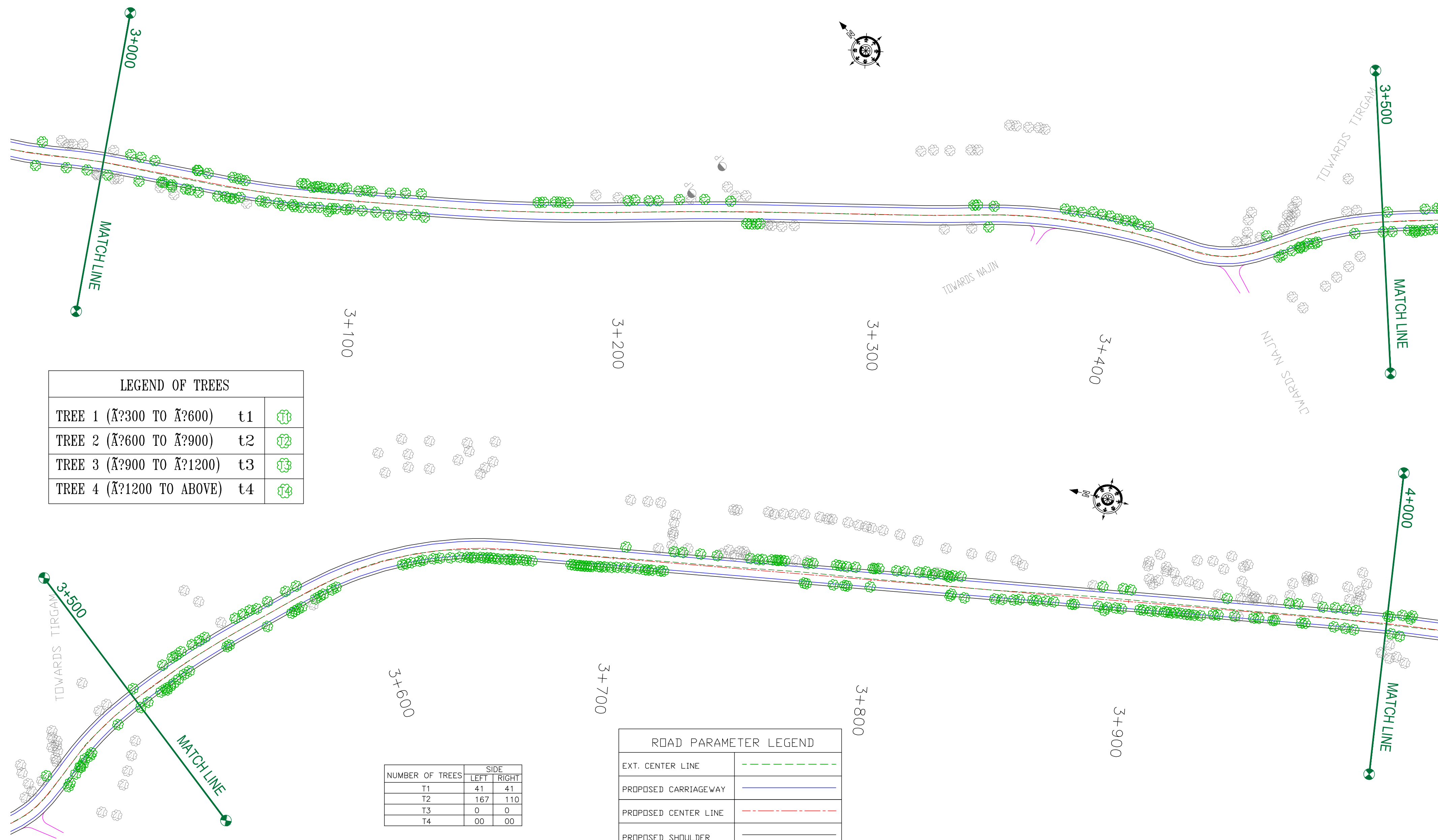
DRAWN BY :	SD
DESIGNED BY :	SCK/MM
APPROVED BY :	KG
SCALE :	1:1000

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



← Shadipura

Khanpeth-Sumbal Road →



LEGEND OF TREES		
TREE 1 (300 TO 600)	t1	
TREE 2 (600 TO 900)	t2	
TREE 3 (900 TO 1200)	t3	
TREE 4 (1200 TO ABOVE)	t4	

NUMBER OF TREES	SIDE	
	LEFT	RIGHT
T1	41	41
T2	167	110
T3	0	0
T4	00	00

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  
**(Shadipura-Khanpeth-Sumbal Road in Bandipora District)**

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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/JTFRP/DPR/J&K/TC/04	
REVISION : R-1	September 2019

Shadipura

Khanpeth-Sumbal Road



LEGEND OF TREES		
TREE 1 (300 TO 600)	t1	
TREE 2 (600 TO 900)	t2	
TREE 3 (900 TO 1200)	t3	
TREE 4 (1200 TO ABOVE)	t4	

NUMBER OF TREES	SIDE	
	LEFT	RIGHT
T1	61	48
T2	74	94
T3	0	0
T4	00	00

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  
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PROJECT :

Consultancy Services for Preparing Detailed Project Report  
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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. 5+000)	
DRG. NO. : EPTISA/JTRFP/DPR/J&K/TC/05	
REVISION : R-1	September 2019



← Shadipura

Khanpeth-Sumbal Road →



LEGEND OF TREES		
TREE 1 (300 TO 600)	t1	
TREE 2 (600 TO 900)	t2	
TREE 3 (900 TO 1200)	t3	
TREE 4 (1200 TO ABOVE)	t4	

NUMBER OF TREES	SIDE	
	LEFT	RIGHT
T1	92	21
T2	125	120
T3	0	0
T4	00	00

End of Project Road

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  
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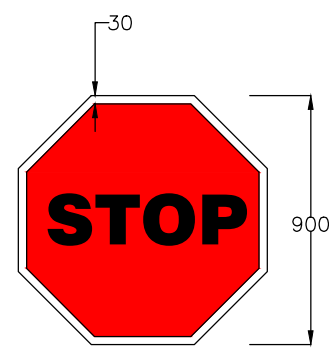
REV.	DATE	DESCRIPTION

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

TITLE :	
Tree Cutting (Ch. 5+000 to Ch. 6+000)	
DRG. NO. : EPTISA/JTRFP/DPR/J&K/TC/06	
REVISION : R-1	September 2019

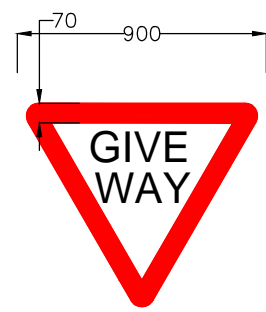


≡ MISCELLANEOUS DRAWINGS ≡



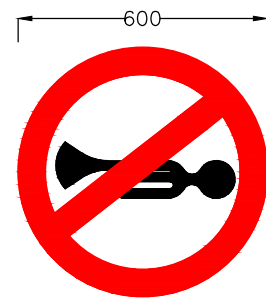
STOP SIGNS  
Fig. 14.01

MS-1



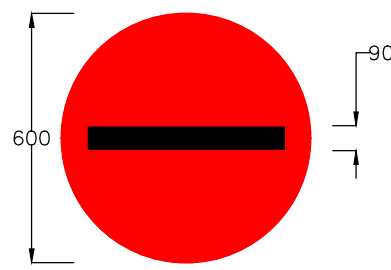
GIVE WAY  
Fig. 14.02

MS-2



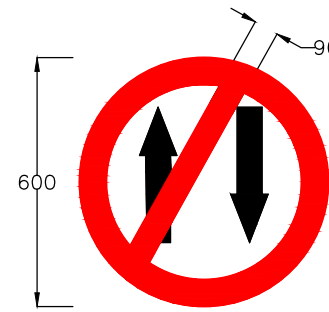
HORN PROHIBITED  
Fig. 14.18

MS-3



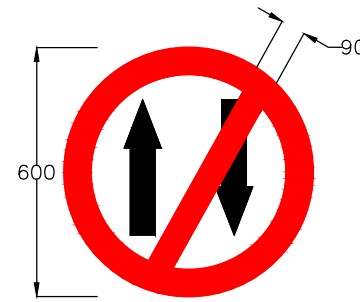
NO ENTRY  
Fig. 14.19

MS-4



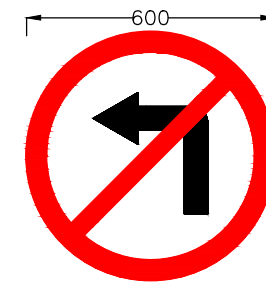
ONE WAY  
Fig. 14.20

MS-5



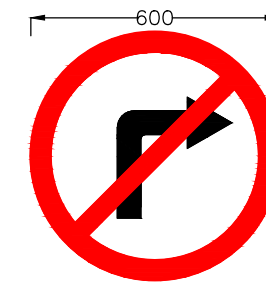
ONE WAY  
Fig. 14.20

MS-6



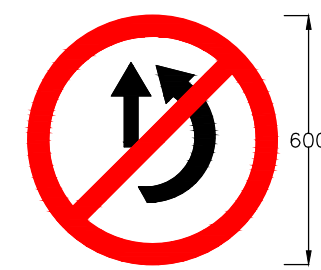
LEFT TURN PROHIBITED  
Fig. 14.21

MS-7



RIGHT TURN PROHIBITED  
Fig. 14.22

MS-8



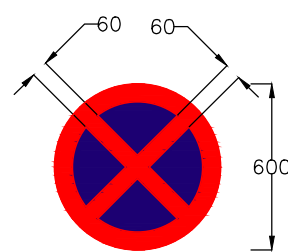
OVERTAKING PROHIBITED  
Fig. 14.23

MS-9



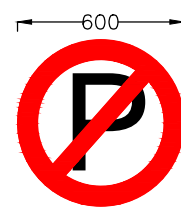
U-TURN PROHIBITED  
Fig. 14.24

MS-10



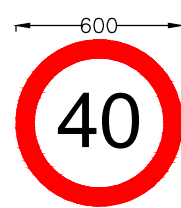
NO STOPPING AND NO STANDING  
Fig. 14.28

MS-11



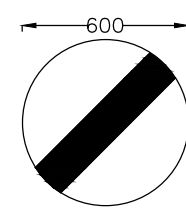
NO PARKING  
Fig. 14.29

MS-12



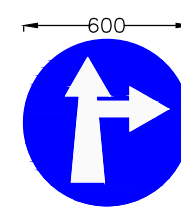
MAXIMUM SPEED LIMIT  
Fig. 14.37

MS-13



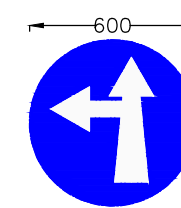
RESTRICTION ENDS  
Fig. 14.40

MS-14



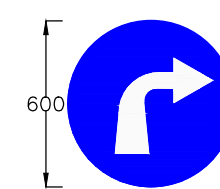
COMPULSORY AHEAD  
OR RIGHT TURN  
Fig. 14.42

MS-15



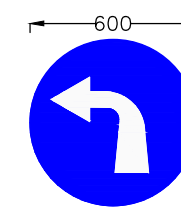
COMPULSORY AHEAD  
OR LEFT TURN  
Fig. 14.43

MS-16



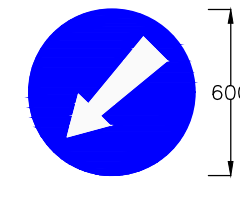
COMPULSORY  
TURN RIGHT  
Fig. 14.46

MS-17



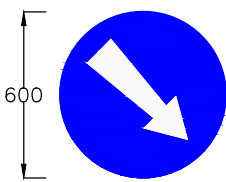
COMPULSORY  
TURN LEFT  
Fig. 14.47

MS-18



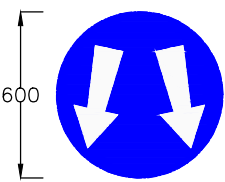
COMPULSORY KEEP LEFT  
Fig. 14.48

MS-19



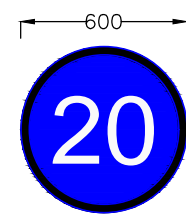
COMPULSORY KEEP RIGHT  
Fig. 14.49

MS-20



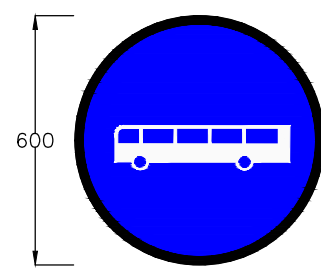
PASS EITHER SIDE  
Fig. 14.50

MS-21



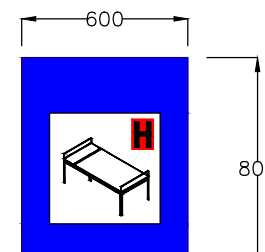
MINIMUM SPEED LIMIT  
Fig. 14.51

MS-22



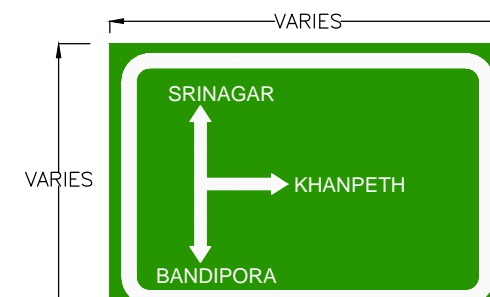
BUS WAY/BUSES ONLY  
Fig. 14.56

MS-23



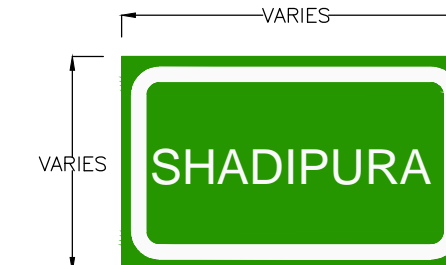
HOSPITAL  
Fig. 17.07

IS-08



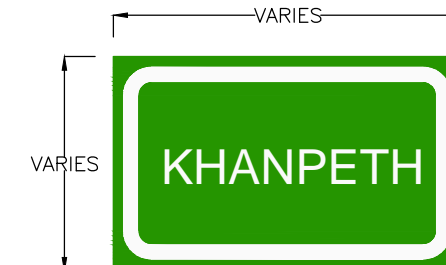
ADVANCE DIRECTION SIGN  
Fig. 16.03

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 Roadworks in Jammu and Kashmir  
(Shadipura-Khanpeth-Sumbal Road in Bandipora District)

DESIGN CONSULTANT:

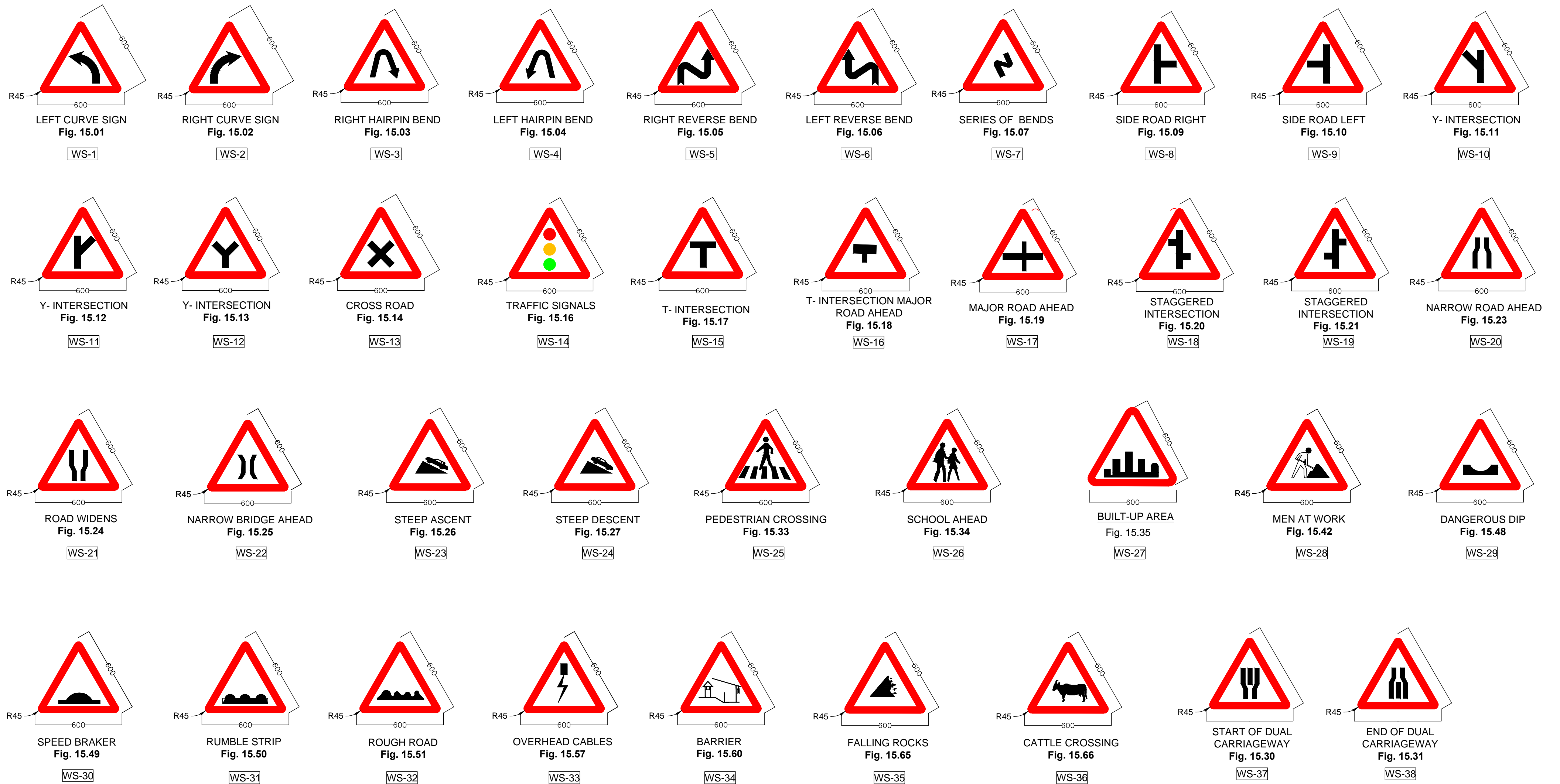


**Eptisa Servicios de Ingenieria S.L.**  
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West Bengal  
Ph: 033-40347200  
www.eptisa.com

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/JTRFP/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 :



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DESIGN CONSULTANT:



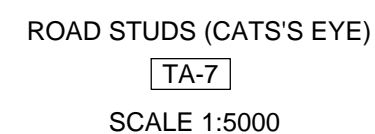
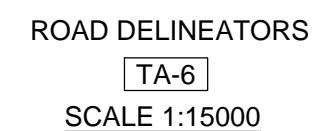
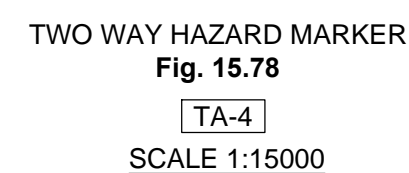
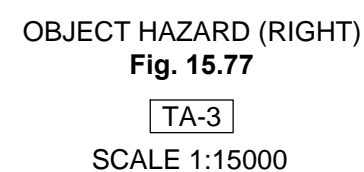
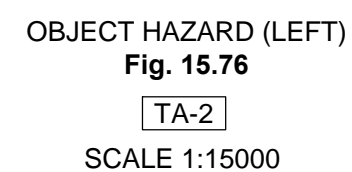
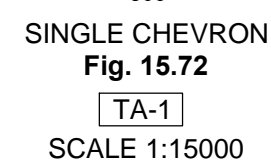
**Eptisa Servicios de Ingenieria S.L.**  
Unit 1203, 12th Floor, Tower 1, PS Srijan  
Corporate Park, Plot No. 2, Block EP & GP,  
Sector v, Salt Lake Kolkata - 700091,  
West Bengal  
Ph: 033-40347200  
www.eptisa.com

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





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.

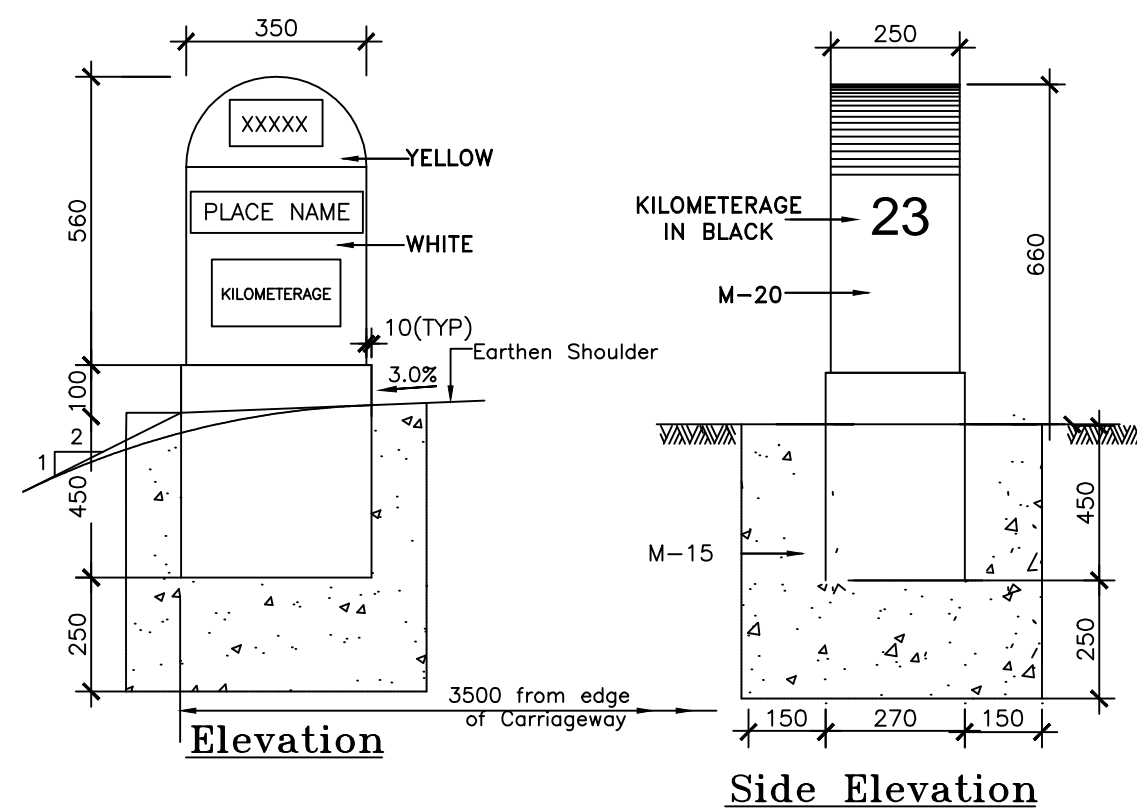
Jhelum Tawi Flood Recovery Project  
2nd Floor ERA Commercial Complex Rambagh  
Srinagar-190 009.

Consultancy Services for Preparing Detailed Project Report  
for the Roadworks in Jammu and Kashmir  
*(Shadipura-Khanpeth-Sumbal Road in Bandipora District)*

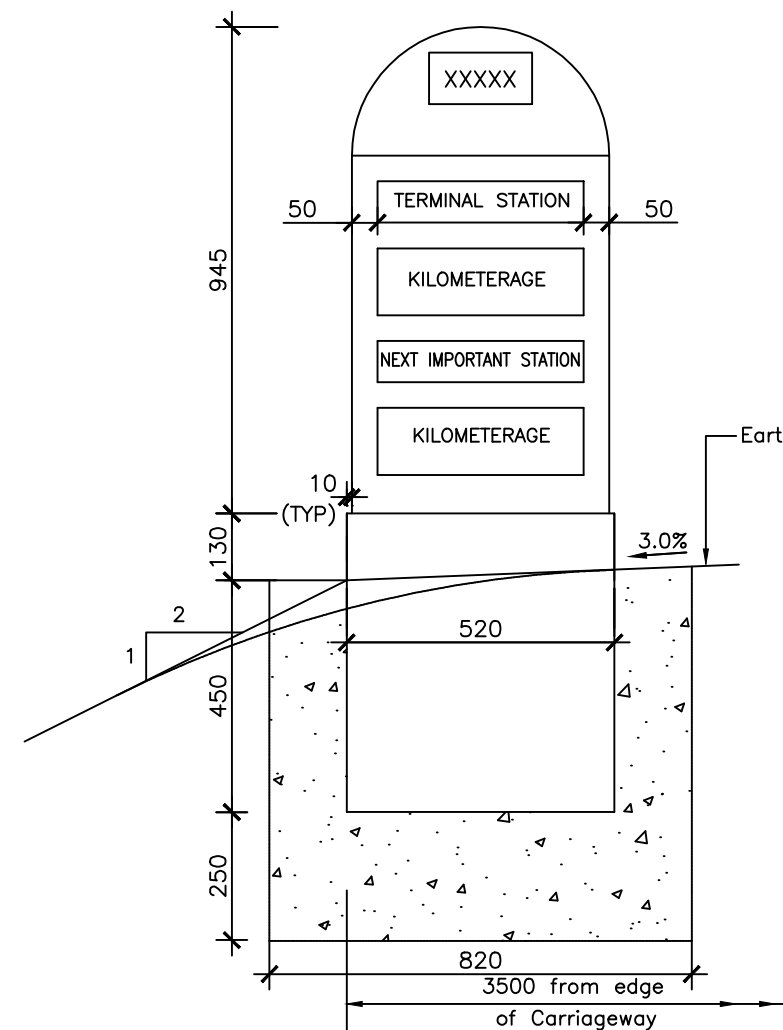
**Eptisa Servicios de Ingenieria S.L.**  
Unit 1203, 12th Floor, Tower 1, PS Srijan  
Corporate Park, Plot No. 2, Block EP & GP,  
Sector v, Salt Lake Kolkata - 700091,  
West Bengal  
Ph: 033-40347200  
[www.eptisa.com](http://www.eptisa.com)

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

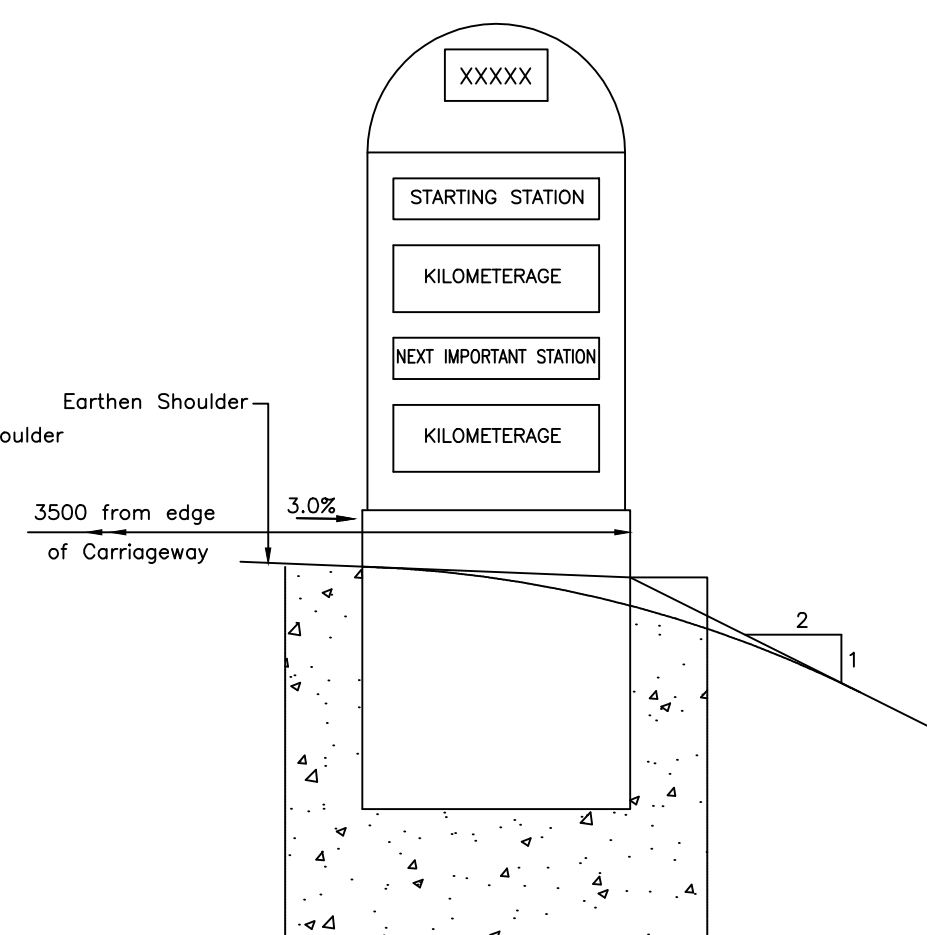
REVISION : R-1	September 2019
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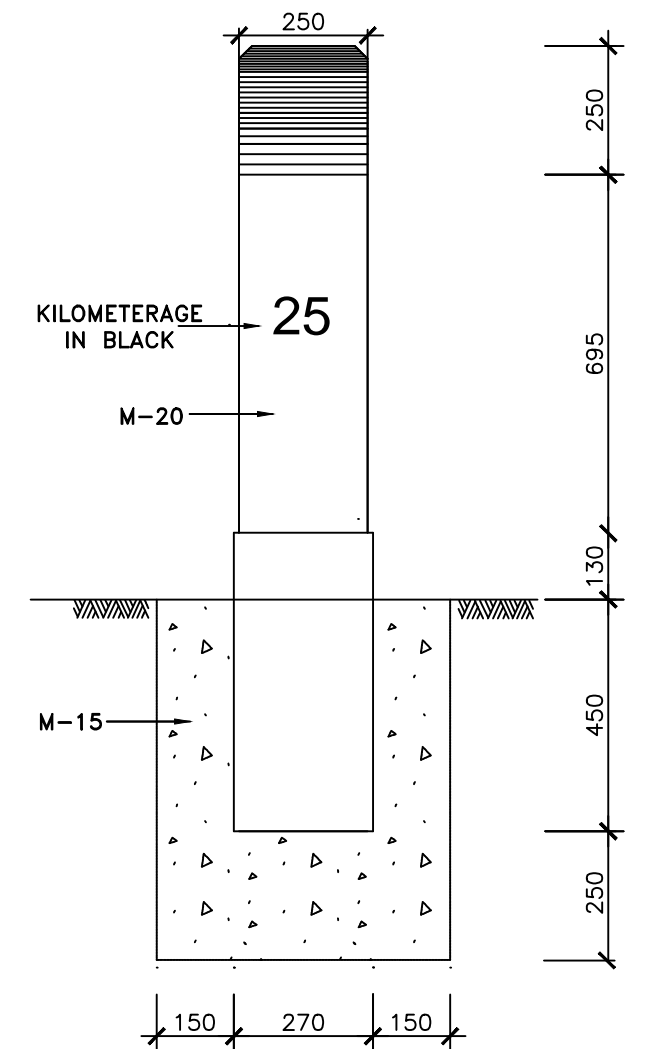
**Kilometre Stone**



**Face - I Elevation**

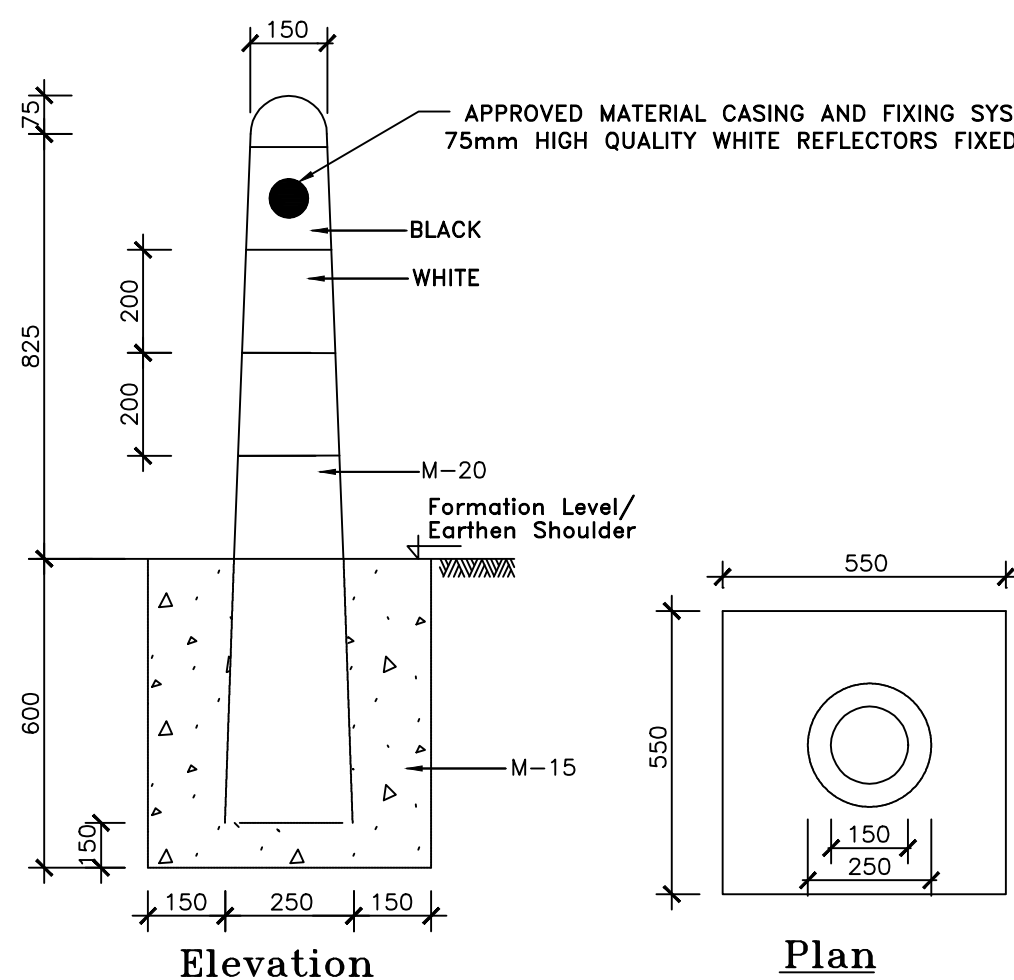


**Face - II Elevation**

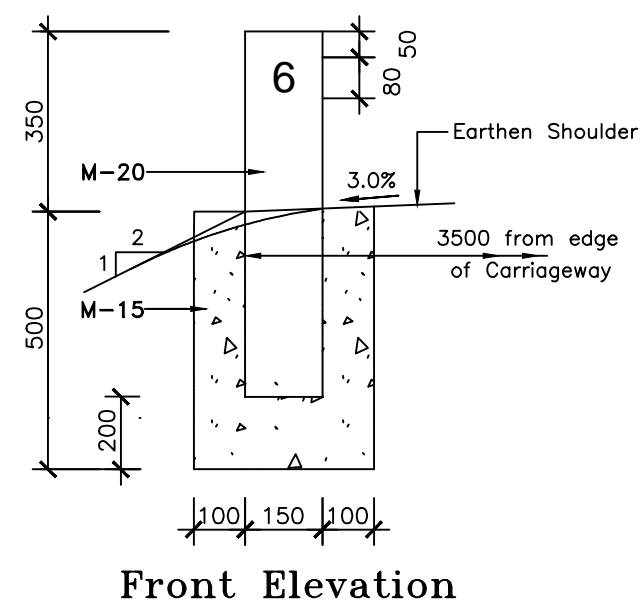


**Side Elevation**

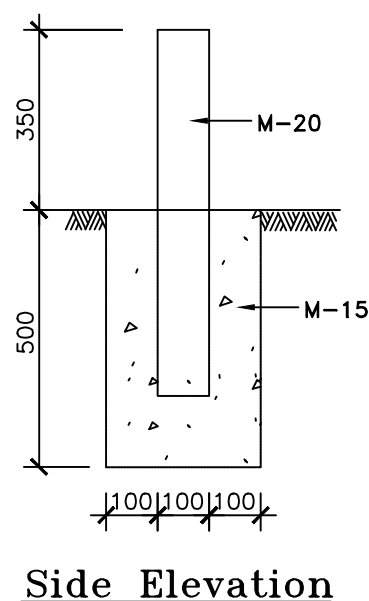
**Fifth Kilometre Stone**



**Guard Post**

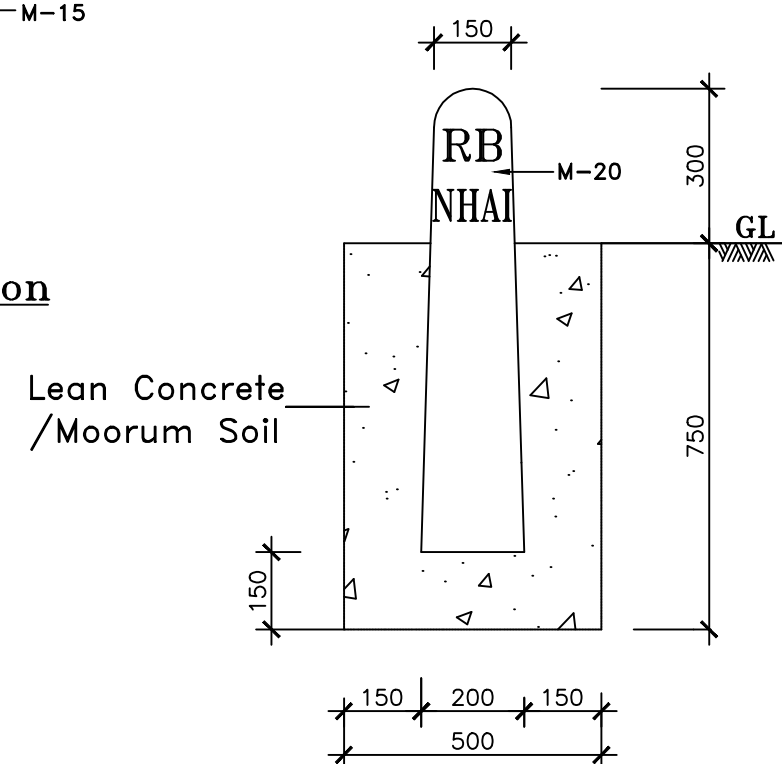


**Front Elevation**

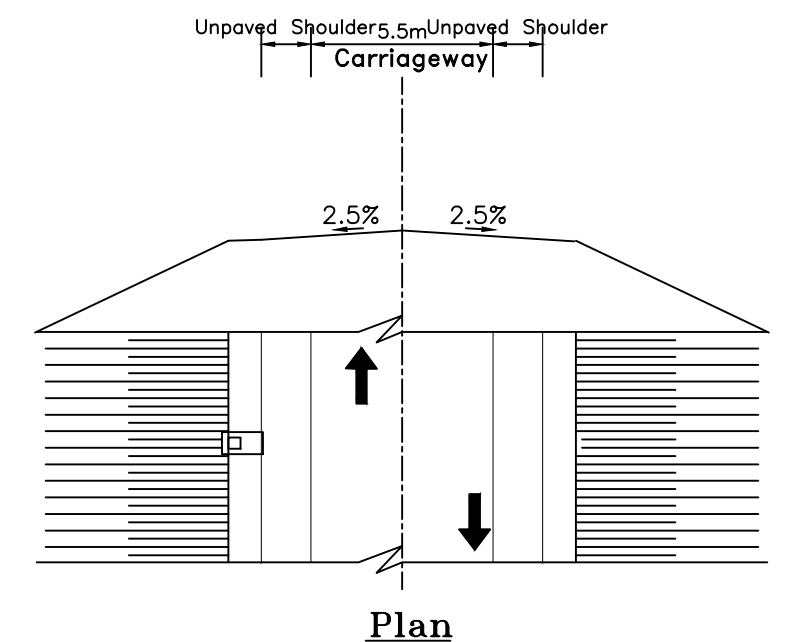


**Side Elevation**

**200 metre Stone**



**Elevation 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 Roadworks in Jammu and Kashmir  
(**Shadipura-Khanpeth-Sumbal Road in Bandipora District**)

DESIGN CONSULTANT:

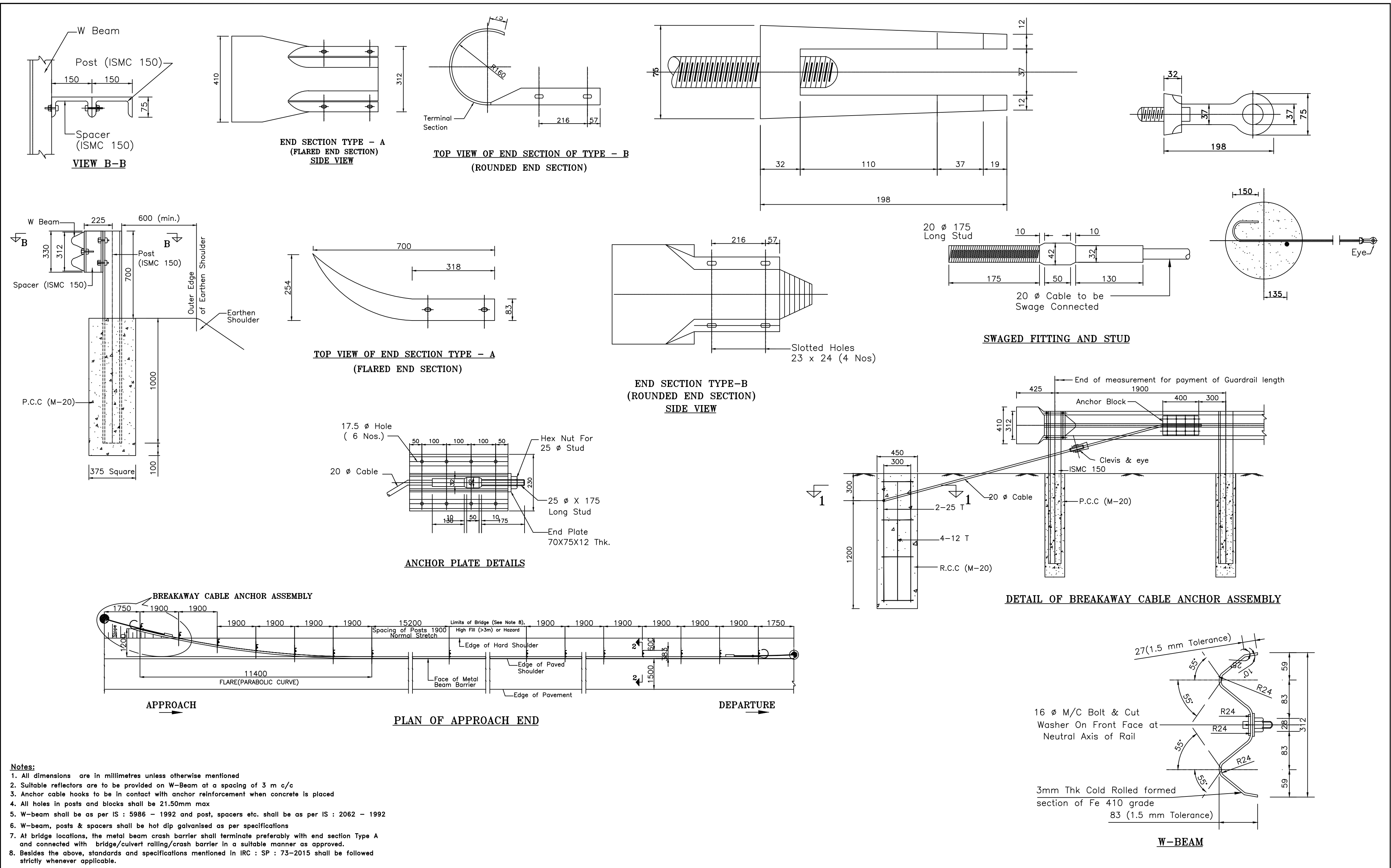


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West Bengal  
Ph: 033-40347200  
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REV.	DATE	DESCRIPTION

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

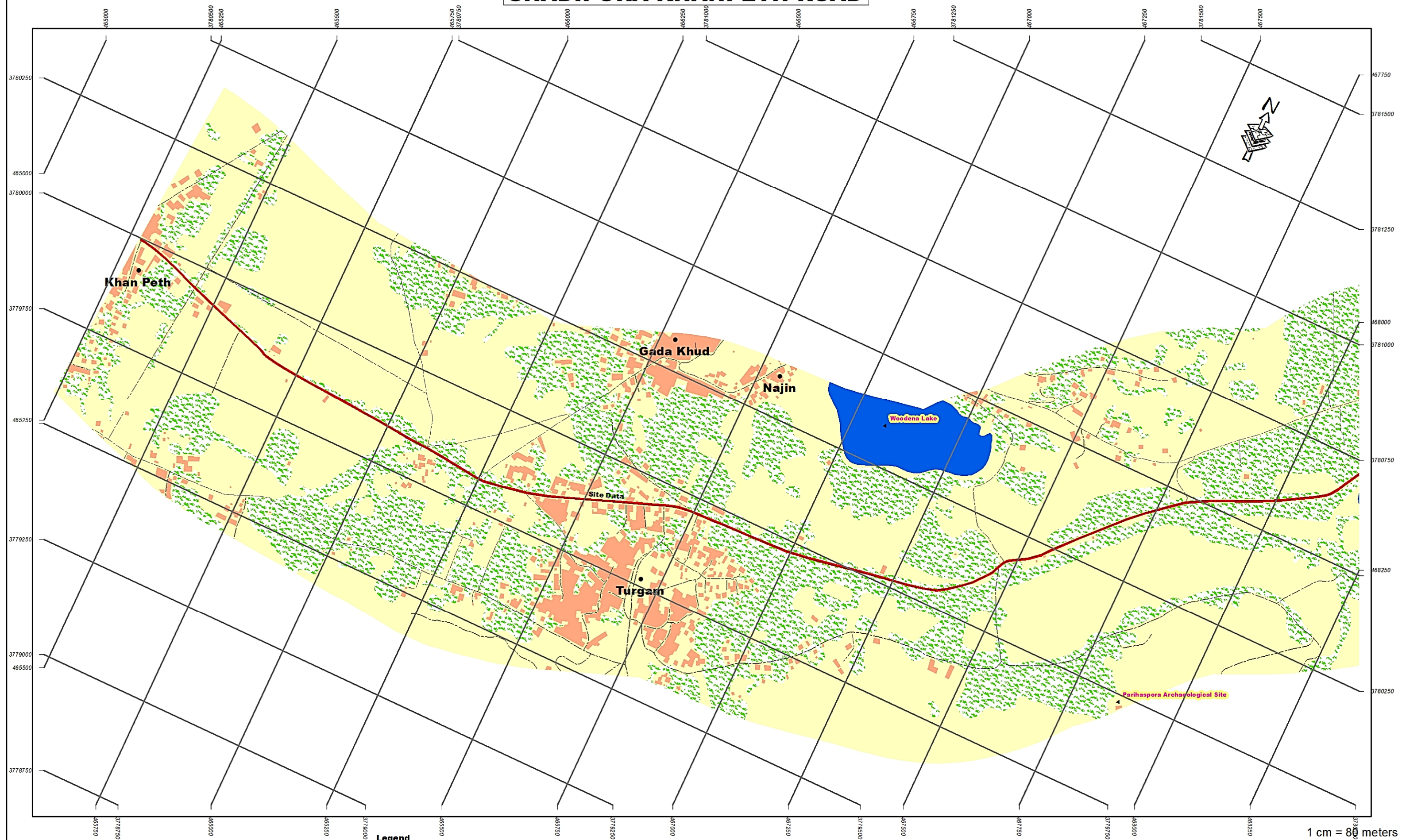


CLIENT : <div> Jhelum Tawi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.</div>	PROJECT :  Consultancy Services for Preparing Detailed Project Report for the Roadworks in Jammu and Kashmir <b><i>(Shadipura-Khanpeth-Sumbal Road in Bandipora District)</i></b>	DESIGN CONSULTANT: <div><b>Eptisa Servicios de Ingenieria S.L.</b> Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP &amp; GP, Sector v, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.eptisa.com</div>				DRAWN BY : SD	TITLE : Details of Metal Beam Crash Barrier	
						DESIGNED BY : SCK/MM	DRG. NO. : EPTISA/JTRP/DPR/J&K/MISC/03	
						APPROVED BY : KG	REVISION : R-1	
						SCALE : N.T.S	September 2019	
			REV.	DATE	DESCRIPTION			



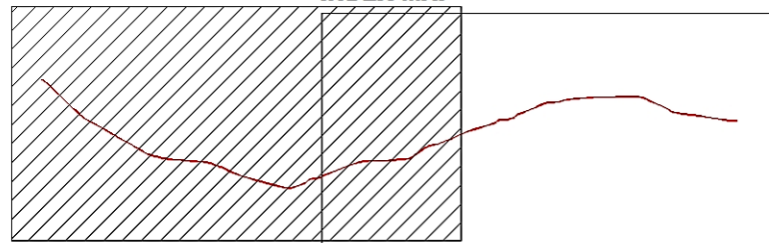


# SHADIPORA KHANPETH ROAD



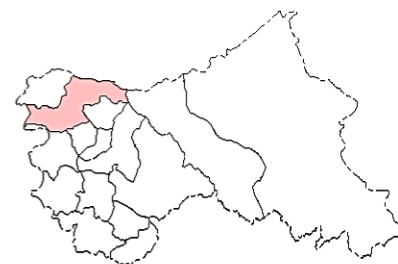
1 cm = 80 meters

## INDEX MAP



## Legend

- |                       |                     |                       |
|-----------------------|---------------------|-----------------------|
| ▲ Importance LandMark | --- Road Centerline | Water                 |
| ★ Start End Point     | 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

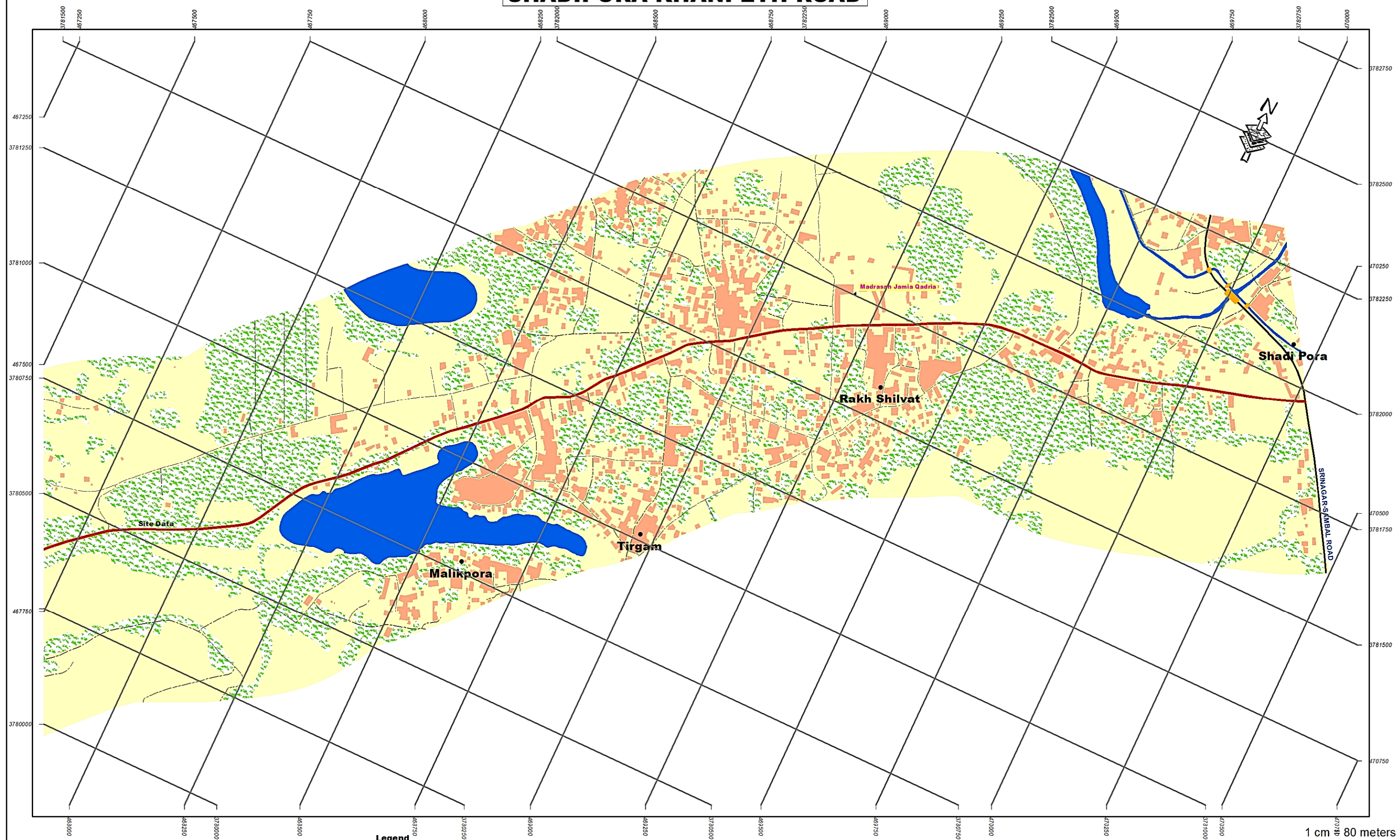
**Sub-Project:** FOR RECONSTRUCTION OF SHADIPORA KHANPETH ROAD UNDER KASHMIR DIVISION

**Agency:** PROJECT MANAGEMENT UNIT JTRP

**eptisa**

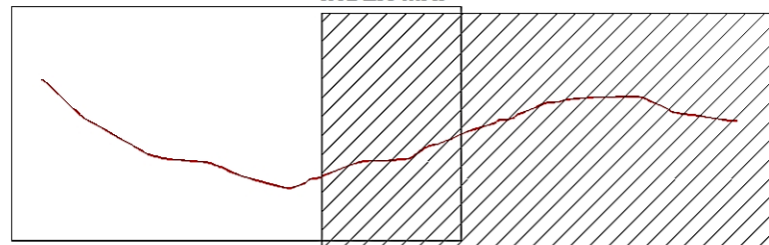


# SHADIPORA KHANPETH ROAD



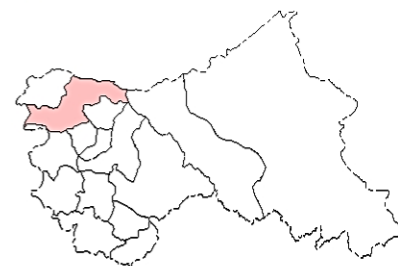
1 cm = 80 meters

## 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 Dots Park           | Orange Box Building   |                       |
| Orange Box Bridge         | Dashed Box Forest     |                       |
| Black Box Restricted Area |                       |                       |



**Project:** JHELM TAWI FLOOD RECOVERY PROJECT

**Sub-Project:** FOR RECONSTRUCTION OF SHADIPORA KHANPETH ROAD UNDER KASHMIR DIVISION

**Agency:** PROJECT MANAGEMENT UNIT JTRP

**eptisa**



||≡| CULVERT DRAWINGS |≡||

← Shadipura

Khanpeth-Sumbal Road →

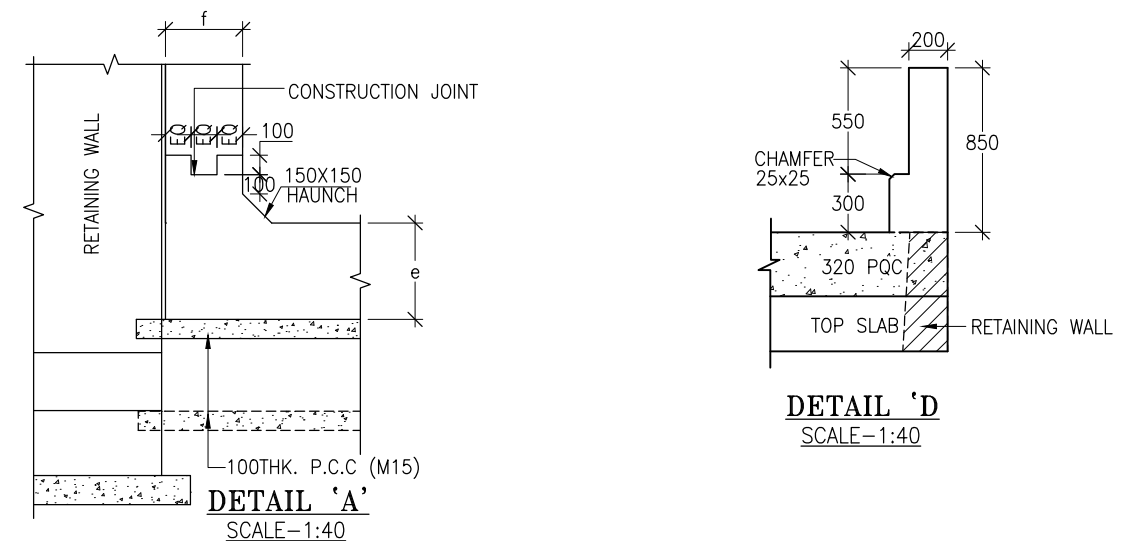
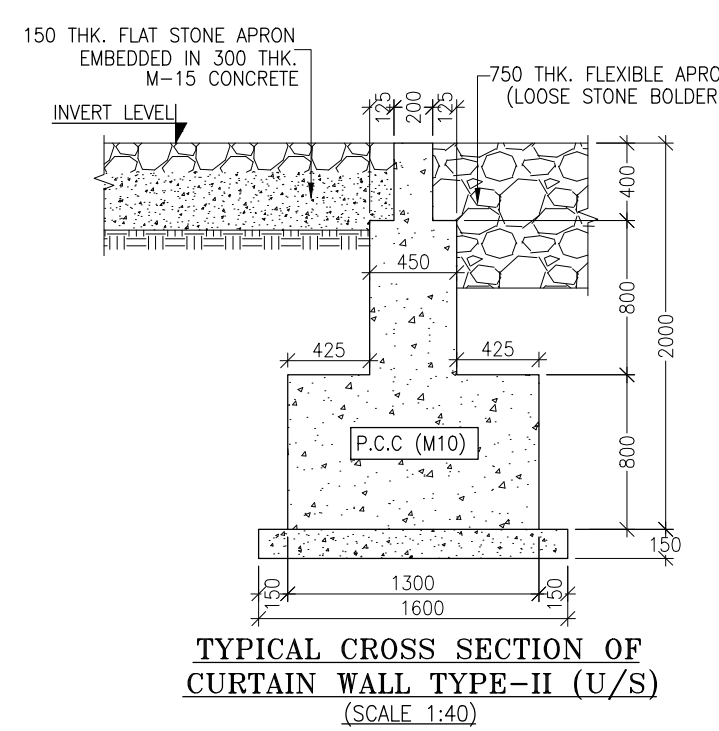
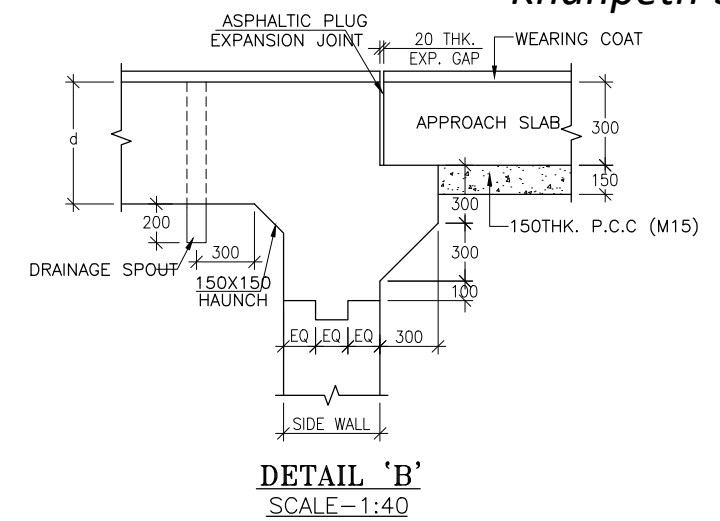
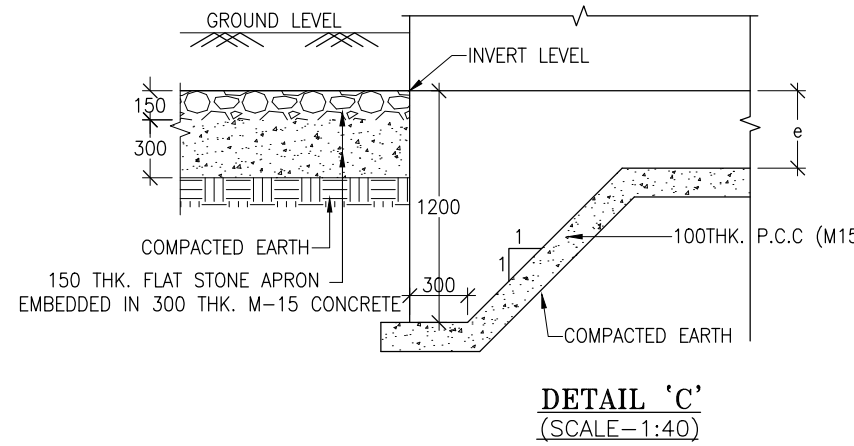
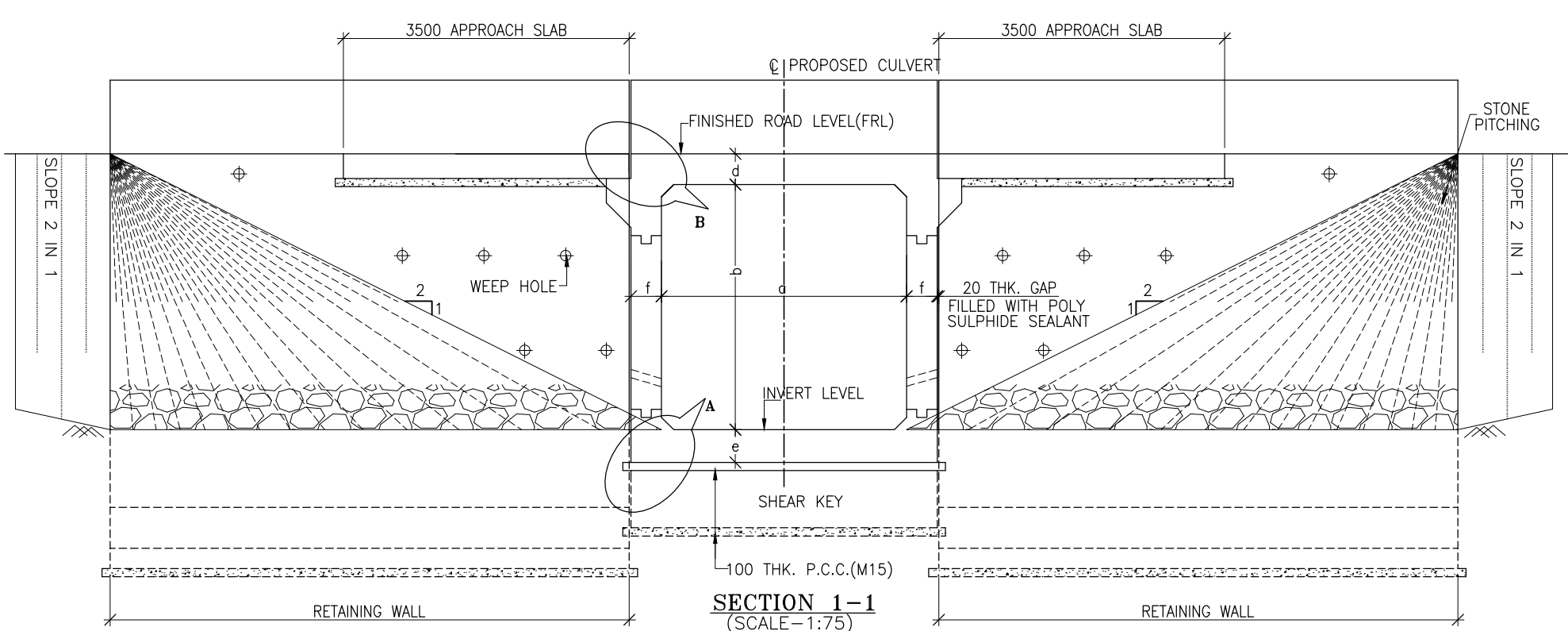
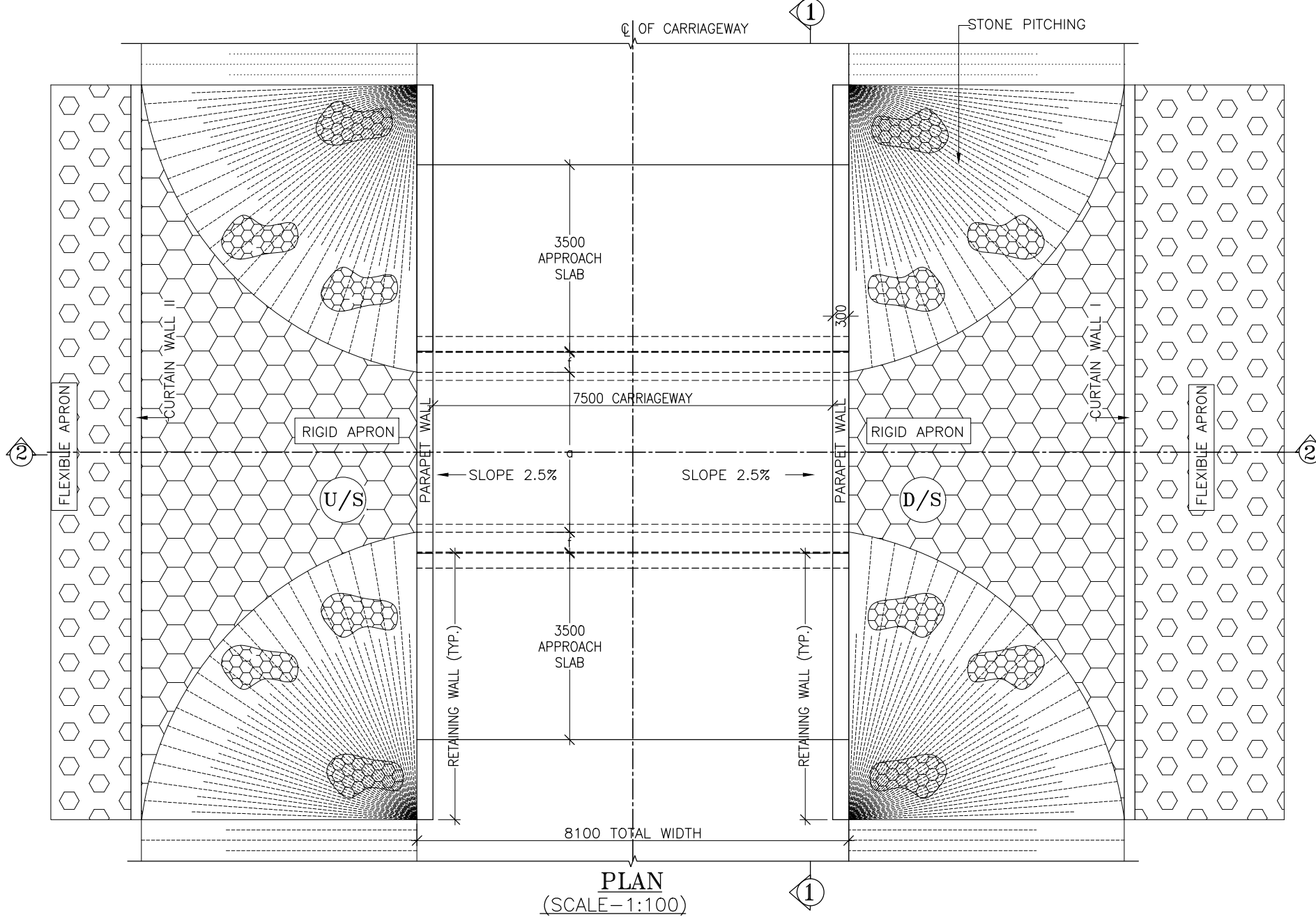
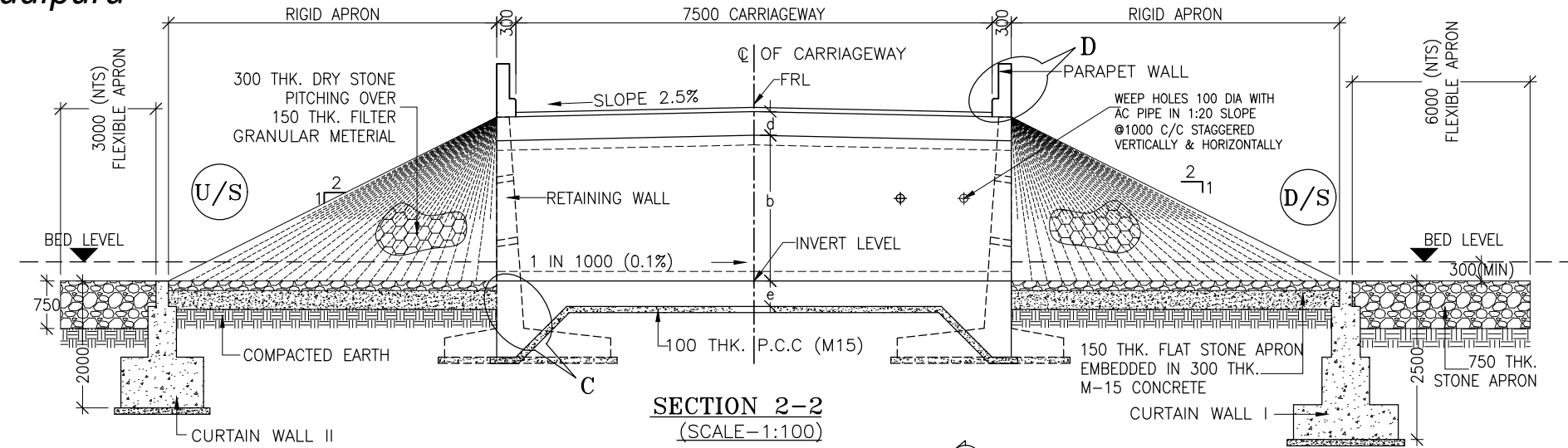


TABLE SHOWING SILENT DIMENSIONS

BOX CELL DESIGNATION	a (mm)	b (mm)	d (mm)	e (mm)	f (mm)
1/22/0	2000	2000	350	380	350

NOTES:-

- ALL DIMENSIONS ARE IN MILLIMETRES, LEVELS ARE IN METRES AND CHAINAGES ARE IN KILOMETRES, UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT ROAD PLAN AND PROFILE DRAWING.
- THE STRUCTURE IS DESIGNED FOR LIVE LOAD COMBINATION OF 3 LANE CLASS A OR 1-LANE OF 70 R+1-LANE OF CLASS A, WHICHEVER PRODUCES SEVERE.
- GRADE OF CONCRETE FOR VARIES ELEMENTS SHALL BE AS FOLLOWS:  
a) RCC BOX.....M25  
b) RCC RETAINING WALL.....M25  
c) PCC LEVELLING COURSE.....M15  
d) PCC CURTAIN WALL.....M20  
e) PARAPET WALL.....M35
- GRADE OF STEEL SHALL BE Fe-500 (H.Y.S.D. REBAR CONFORMING TO IS-1786)
- BACK FILLING BEHIND THE STRUCTURE SHALL CONSIST OF SELECTED EARTH CONFORMING TO APPENDIX 6 OF IRC:78-2014 HAVING PROPERTIES  $\phi < 30^\circ$ ,  $C=0$ ,  $\gamma = 2.0T/M^3$
- COMPRESSIBLE FILLER BOARD SHALL BE PROVIDED IN ALL EXPANSION GAPS AND SEALED WITH POLY-SULPHIDE SEALANT.
- FOUNDATION OF BOX SHALL BE PLACED OVER A FIRM STRATA HAVING BEARING CAPACITY EQUAL TO  $12T/M^2$  IN GENERAL. IF THE MATERIAL ENCOUNTERED IS SOFT, SPONZY OR OTHER UNSUITABLE SOIL, SUCH UNSUITABLE MATERIAL SHALL BE TOTALLY REMOVED TO SUCH DEPTH, WIDTH & LENGTH, AS DIRECTED BY THE ENGINEER. THE EXCAVATED AREA SHALL BE BACKFILLED WITH APPROVED GRANULAR MATERIAL & THOROUGHLY COMPACTED UP TO THE SPECIFIED LEVEL.
- 600MM THICK FILTER MEDIA SHALL BE PROVIDED BEHIND SIDE WALLS AND WING WALLS AS PER IR:78-2014.
- ALL THE LEVELS AND CAMBERS TO BE VERIFIED WITH RESPECT TO PLAN & PROFILE DRAWINGS BEFORE EXCAVATION. ANY DISCREPANCY NOTED SHOULD BE REPORTED TO THE DESIGN ENGINEER IMMEDIATELY.
- BACK FILLING BEHIND WALLS SHALL BE DONE SIMULTANEOUSLY ON EITHER SIDE OF THE STRUCTURE WITH HEIGHT DIFFERENCE NOT MORE THAN 1.0M. BACK FILLING SHALL BE DONE ONLY AFTER THE TOP SLAB IS CONCRETED AND CURED FOR 14 DAYS.
- SPRADING & COMPACTED OF SAND WILL BE DONE IN ACCORDANCE WITH CLAUSE 401.3.2 OF SPECIFICATION FOR ROAD & BRIDGE WORKS BY MINISTRY OF ROAD TRANSPORT & HIGHWAY

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 Roadworks in Jammu and Kashmir  
(Shadipura-Khanpeth-Sumbal Road in Bandipora District)

DESIGN CONSULTANT:



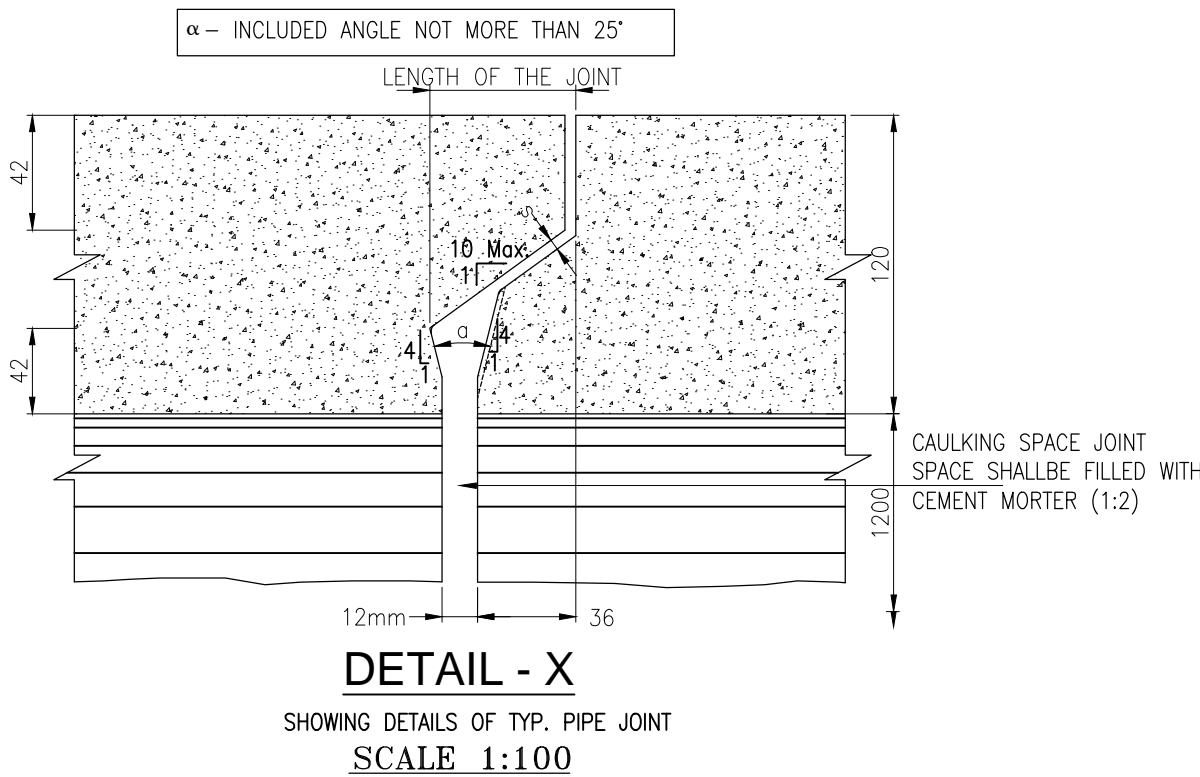
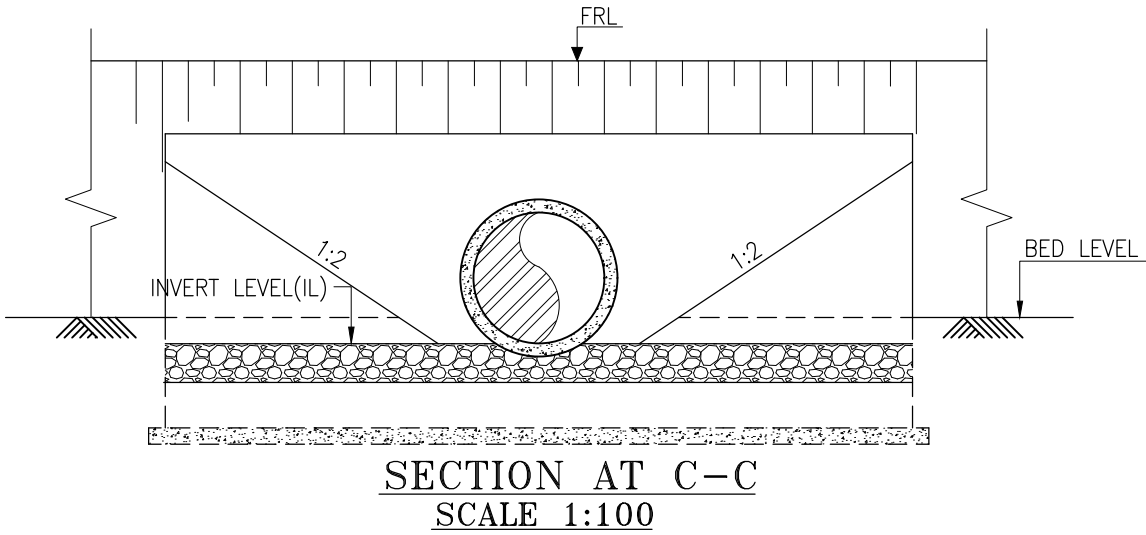
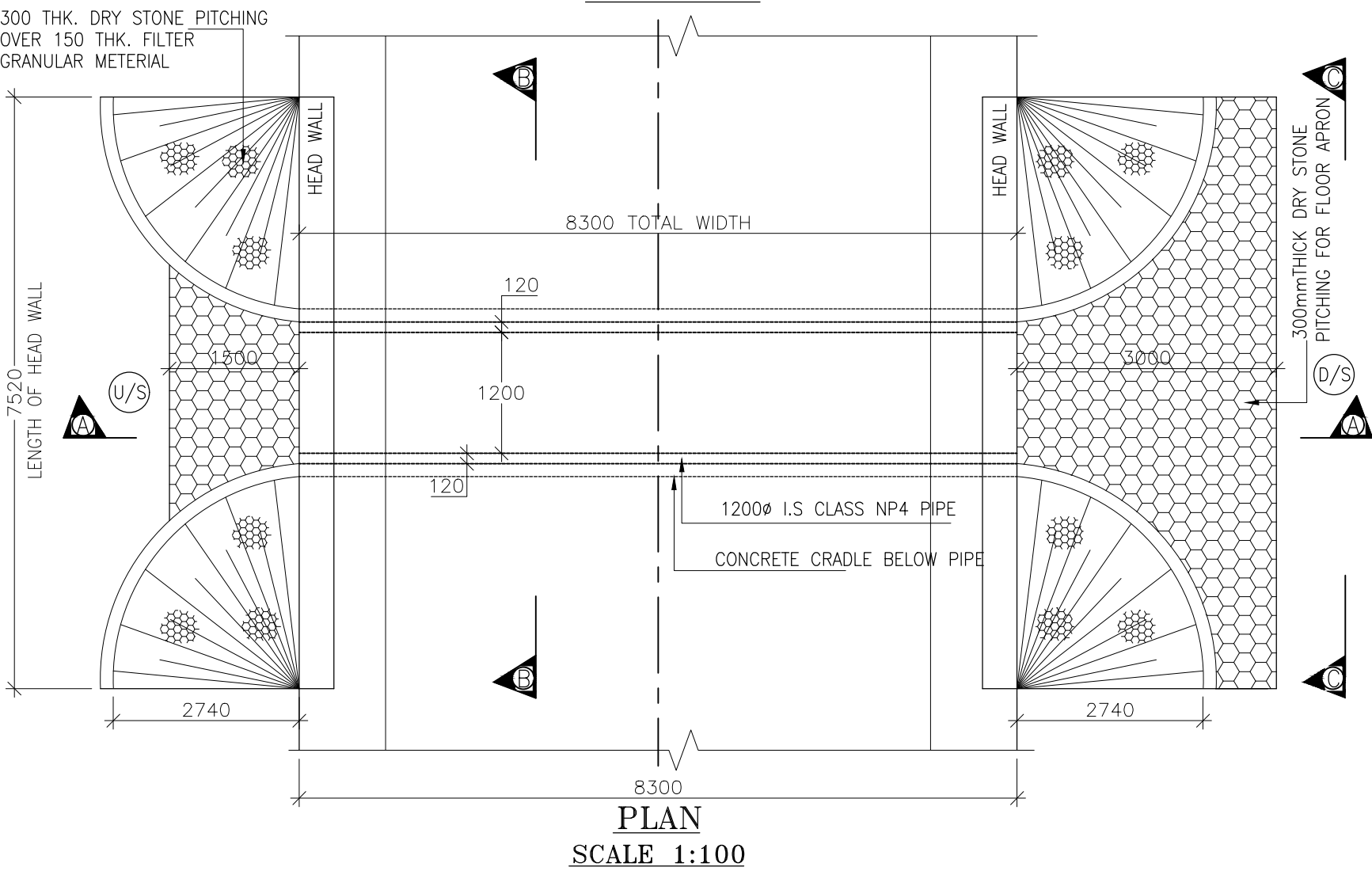
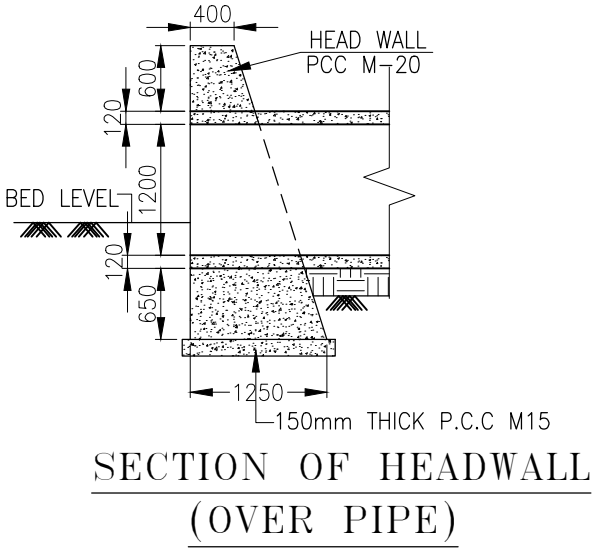
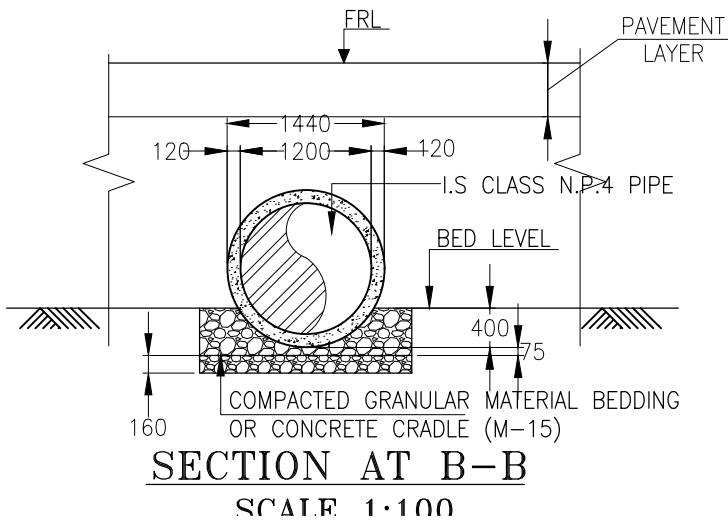
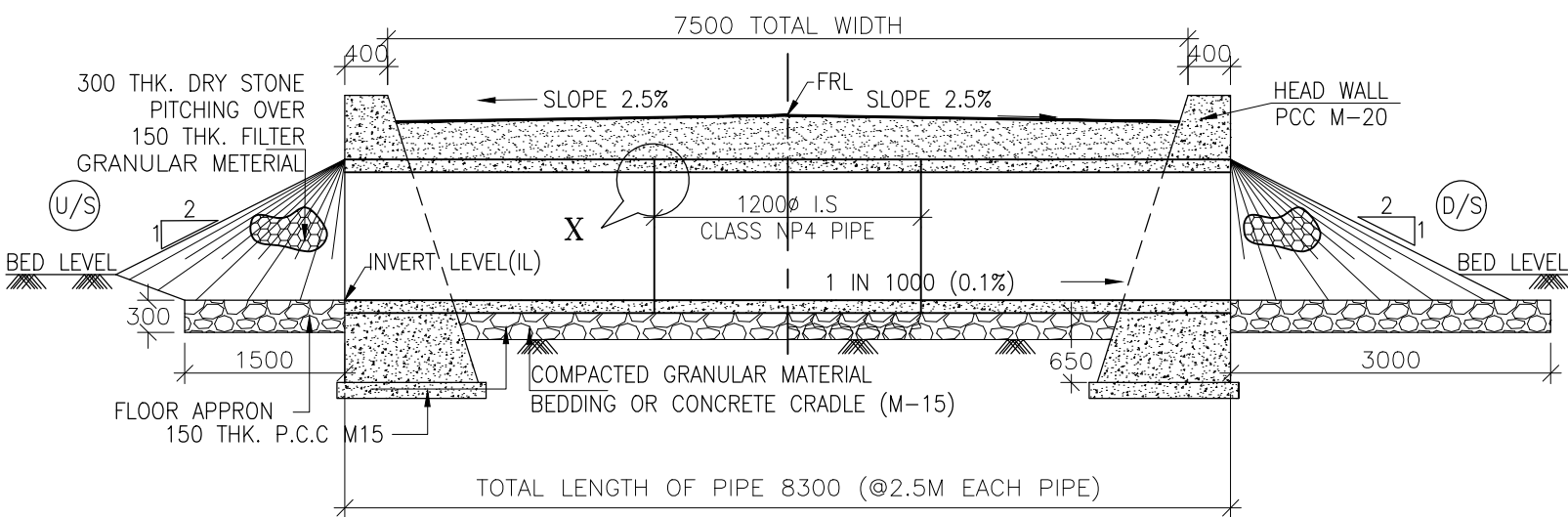
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Unit 1203, 12th Floor, Tower 1, PS Srijan  
Corporate Park, Plot No. 2, Block EP & GP,  
Sector v, Salt Lake Kolkata - 700091,  
West Bengal  
Ph: 033-40347200  
www.eptisa.com

REV.	DATE	DESCRIPTION

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

TITLE :	TYPICAL GENERAL ARRANGEMENT DRAWING FOR SINGLE BOX CULVERT
DRG. NO. :	EPTISA/JTRFP/DPR/J&K/BOX/GAD/01
REVISION : R-1	September 2019





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  
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DESIGN CONSULTANT:



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Sector v, Salt Lake Kolkata - 700091,  
West Bengal  
Ph: 033-40347200  
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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/JTFRP/DPR/J&K/PIPE/GAD/01
REVISION : R-1	September 2019