

Project Name: Up-gradation to Two lane with Paved shoulder from Km. 12+850 to Km.20+300 of 7.450 Km. length on Goha-Khellenai section and a link road to Goha Village of 2.016 Km on NH-244 in Union Territory of Jammu & Kashmir on EPC mode. (Pkg-I).

Contract Package No.: NHIDCL/JnK/NH-244/ Goha-Khellani (Pkg.-I)/2020-21

Tender Id: 2020_NHIDC_557655_1

Amendment No.04

S. N o.	Reference section/clause no.	Existing Provision					Modified Provision (To be read as)				
		Sr. No.	Detail	TCS	Length in		Sr. No.	Detail	TCS	Length in	
					(m)	Kms				(m)	Kms
1	Annex – I (Schedule-B) Para 2 (xi)	1	TWO LANE CARRIAGEWAY WITH PAVED SHOULDER IN MOUNTAINOUS TERRAIN WITH BOTH SIDE FILL WITH LEFT SIDE RETAINING/TOE WALL	TCS-1	321	0.321	1	TWO LANE CARRIAGEWAY WITH PAVED SHOULDER IN MOUNTAINOUS TERRAIN WITH BOTH SIDE FILL WITH LEFT SIDE RETAINING/TOE WALL	TCS-1	306	0.306
		2	TWO LANE CARRIAGEWAY WITH PAVED SHOULDER IN MOUNTAINOUS TERRAIN WITH BOTH SIDE FILL WITH LEFT SIDE GABION WALL	TCS-2	96	0.096	2	TWO LANE CARRIAGEWAY WITH PAVED SHOULDER IN MOUNTAINOUS TERRAIN WITH BOTH SIDE FILL WITH LEFT SIDE GABION WALL	TCS-2	96	0.096
		3	TWO LANE CARRIAGEWAY WITH PAVED SHOULDER IN MOUNTANEOUS TERRAIN WITH LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT-SIDE	TCS-3	3523	3.523	3	TWO LANE CARRIAGEWAY WITH PAVED SHOULDER IN MOUNTANEOUS TERRAIN WITH LEFT SIDE FILL WITH RETAINING/TOE WALL &	TCS-3	3508	3.508

[illegible]

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		8	MAJOR BRIDGE		-	150	0.150			9	MINOR BRIDGE		-	150	0.150
		9	MINOR BRIDGE		-	110	0.110			TOTAL DESIGN LENGTH			7450	7.450	
		TOTAL DESIGN LENGTH				7450	7.450								
2	Annex – I (Schedule-B) Para 8 (iii)b	S. No	Design Chainage	Type of Superstructure	Total Length (m)	Proposed Span Arrangement (no. x length)	Proposed Overall Deck Width (m)	S. No	Design Chainage	Type of Superstructure	Total Length (m)	Proposed Span Arrangement (no. x length)	Proposed Overall Deck Width (m)		
1		13+025	Precast RCC Girder with cast in situ deck slab	40	2X20	12.5	1	13+025	Precast RCC Girder with cast in situ deck slab	40	2X20	12.5			
2		13+225	Box Type	20	1X20	12.5	2	13+225	Precast RCC Girder with cast in situ deck slab	20	1X20	12.5			
3		14+400	Box Type	20	1X20	12.5	3	14+400	Precast RCC Girder with cast in situ deck slab	20	1X20	12.5			
4		17+785	Precast RCC Girder with cast in situ deck slab	40	2X20	12.5	4	17+785	Precast RCC Girder with cast in situ deck slab	40	2X20	12.5			
5		18+016	Precast RCC Girder with cast in situ deck slab	20	1X20	12.5	5	18+016	Precast RCC Girder with cast in situ deck slab	20	1X20	12.5			
6		19+194	Box Type	10	1X10	12.5	6	19+194	RCC solid slab	10	1X10	12.5			
3		Annex – I (Schedule-B) Para 6	Road Side drainage						Table of Catch water drain is inserted as Annexure-a in para 6 (Annex-I (Schedule-B))						

4.	Annex – I (Schedule- B) Para 16	Chainage wise indicative widening scheme with applicable typical cross section	Modified Table is attached as Annexure- b
5.	Annex	Data of link road of Bid(1) (Plan/ I-section) is missing.	Attached as Annexure-c

B.Shivprasad
General Manager(T)

Annexure-a

6. Roadside Drainage

Drainage system including surface and subsurface drains for the Project Highway shall be provided as per the provision of relevant Manual.

Roadside PCC Drainage List from km 12.850 to km 20.300 on Goha - Khellani Main Road				
Design Chainage		Design Length (m)	Side	Roadside Drain Length (m)
From	To			
12+920	13+005	85	Right	85
13+045	13+080	35	Right	35
13+080	13+120	40	Left & Right	80
13+120	13+170	50	Right	50
13+170	13+190	20	Left & Right	40
13+190	13+220	30	Right	30
13+250	13+330	80	Right	80
13+450	13+470	20	Right	20
13+470	13+650	180	Left & Right	360
13+650	13+690	40	Right	40
13+690	13+750	60	Left & Right	120
13+750	13+800	50	Left & Right	100
13+800	13+830	30	Right	30
13+830	14+000	170	Left & Right	340
14+000	14+030	30	Right	30
14+030	14+200	170	Left & Right	340
14+200	14+230	30	Right	30
14+230	14+320	90	Left & Right	180
14+320	14+360	40	Right	40
14+360	14+395	35	Left & Right	70
14+405	14+490	85	Left & Right	170
14+490	14+590	100	Right	100
14+590	14+920	330	Left & Right	660
14+920	15+050	130	Right	130
15+050	15+130	80	Left & Right	160
15+130	15+150	20	Right	20

Roadside PCC Drainage List from km 12.850 to km 20.300 on Goha - Khellani Main Road				
Design Chainage		Design Length (m)	Side	Roadside Drain Length (m)
From	To			
15+150	15+430	280	Right	280
15+430	15+680	250	Left & Right	500
15+680	15+850	170	Right	170
15+930	16+150	220	Right	220
16+150	16+260	110	Left & Right	220
16+260	16+388	128	Right	128
16+600	17+120	520	Right	520
17+120	17+750	630	Left & Right	1260
17+750	17+775	25	Right	25
17+810	17+870	60	Right	60
17+870	17+920	50	Left & Right	100
17+920	17+980	60	Right	60
18+050	18+170	120	Right	120
18+170	18+370	200	Left & Right	400
18+370	18+420	50	Right	50
18+420	18+500	80	Right	80
18+500	18+530	30	Left & Right	60
18+530	18+820	290	Right	290
18+820	18+900	80	Left & Right	160
18+900	19+189	289	Right	289
19+199	19+450	251	Right	251
19+450	19+660	210	Left & Right	420
19+660	19+690	30	Right	30
19+690	19+720	30	Right	30
19+720	19+760	40	Right	40
19+760	19+830	70	Left & Right	140
19+830	19+920	90	Right	90
19+920	19+950	30	Left & Right	60
19+950	19+970	20	Right	20
19+970	20+170	200	Right	200
20+170	20+200	30	Left & Right	60

Roadside PCC Drainage List from km 12.850 to km 20.300 on Goha - Khellani Main Road				
Design Chainage		Design Length (m)	Side	Roadside Drain Length (m)
From	To			
20+200	20+280	80	Right	80
20+280	20+300	20	Left & Right	40
Total Roadside PCC Drainage Length				9793

Roadside PCC Drainage List (link Road-I)				
Design Chainage		Design Length (m)	Side	Roadside Drain Length (m)
From	To			
00+000	00+180	180	Left & Right	360
00+180	00+220	40	Right	40
00+220	00+260	40	Left & Right	80
00+460	00+480	20	Left & Right	40
00+480	00+560	80	Left & Right	160
00+680	00+710	30	Left & Right	60
00+710	00+800	90	Left & Right	180
00+850	00+870	20	Left & Right	40
00+870	00+890	20	Right	20
00+890	00+920	30	Left & Right	60
00+920	00+980	60	Left & Right	120
00+980	01+000	20	Left & Right	40
01+030	01+050	20	Left & Right	40
01+050	01+100	50	Left & Right	100
01+100	01+130	30	Left & Right	60
01+130	01+170	40	Left & Right	80
01+170	01+470	300	Left & Right	600
01+470	01+490	20	Left & Right	40
01+490	01+510	20	Left & Right	40
01+510	01+550	40	Left & Right	80
01+550	01+730	180	Left & Right	360
01+730	01+750	20	Left & Right	40
01+750	01+770	20	Left & Right	40

Roadside PCC Drainage List (link Road-I)				
<i>Design Chainage</i>		<i>Design Length (m)</i>	<i>Side</i>	<i>Roadside Drain Length (m)</i>
<i>From</i>	<i>To</i>			
01+820	01+840	20	Left & Right	40
01+840	02+016	176	Left & Right	352
Total Roadside PCC Drainage Length				3072

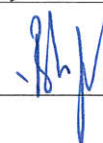
Catch drain			
Sl. No.	TCS	Length in m	Catch Drain Length in m
1	TCS-3	3508	7016
2	TCS-4	190	380
3	TCS-5	2770	8310
4	TCS-6	240	960
5	TCS-7	40	80
Total length in m			16746



Annexure-b

16. Chainages wise indicative widening scheme with applicable typical Cross section

Proposed cross sections for Goha - Khellani Road					
Sr. No.	Design Chainage		Design Length in m	TCS No	TCS Details
	From	To			
1	12+850	12+920	70	TCS-2	BOTH SIDE FILL WITH LEFT SIDE GABION WALL
2	12+920	13+005	85	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
3	13+005	13+045	40	MINOR BRIDGE	
4	13+045	13+080	35	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT-SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
5	13+080	13+120	40	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <25m)
6	13+120	13+170	50	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHTSIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
7	13+170	13+190	20	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <25m)
8	13+190	13+215	25	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <16m)
9	13+215	13+235	20	MINOR BRIDGE	
10	13+235	13+250	15	TCS-1	BOTH SIDE FILL WITH LEFT RETAINING/TOE WALL
11	13+250	13+330	80	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
12	13+330	13+450	120	TCS-1	BOTH SIDE FILL WITH LEFT RETAINING/TOE WALL
13	13+450	13+470	20	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)



Proposed cross sections for Goha – Khellani Road					
Sr. No.	Design Chainage		Design Length in m	TCS No	TCS Details
	From	To			
14	13+470	13+650	180	TCS-6	BOTH SIDE CUT (HEIGHT OF CUT ON RIGHT SIDE > 25m)
15	13+650	13+690	40	TCS-7	LEFT SIDE FILL WITH RETAINING/TOE WALL (HEIGHT OF CUT ON RIGHT SIDE > 25m)
16	13+690	13+750	60	TCS-6	BOTH SIDE CUT (HEIGHT OF CUT > 25m)
17	13+750	13+800	50	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
18	13+800	13+830	30	TCS-4	LEFT SIDE FILL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
19	13+830	14+000	170	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <25m)
20	14+000	14+030	30	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
21	14+030	14+200	170	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT < 6m)
22	14+200	14+230	30	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
23	14+230	14+320	90	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <25m)
24	14+320	14+360	40	TCS-3	LEFT SIDE FILL WITH RETAINING/TOEWALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
25	14+360	14+390	30	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <25m)
26	14+390	14+410	20	MINOR BRIDGE	
27	14+410	14+490	80	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <25m)
28	14+490	14+590	100	TCS-3	LEFT SIDE FILL WITH RETAINING/TOEWALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
29	14+590	14+920	330	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <25m)

Proposed cross sections for Goha – Khellani Road					
Sr. No.	Design Chainage		Design Length in m	TCS No	TCS Details
	From	To			
30	14+920	15+050	130	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
31	15+050	15+130	80	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <25m)
32	15+130	15+150	20	TCS-4	LEFT SIDE FILL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
33	15+150	15+430	280	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
34	15+430	15+680	250	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <25m)
35	15+680	15+850	170	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
36	15+850	15+930	80	TCS-1	BOTH SIDE FILL WITH LEFT RETAINING/TOE WALL
37	15+930	16+150	220	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
38	16+150	16+260	110	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <25m)
39	16+260	16+388	128	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
40	16+388	16+538	150	MAJOR BRIDGE	
41	16+538	16+600	62	TCS-1	BOTH SIDE FILL WITH LEFT RETAINING/TOE WALL
42	16+600	17+120	520	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
43	17+120	17+750	630	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT < 6m)
44	17+750	17+765	15	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)

Proposed cross sections for Goha – Khellani Road					
Sr. No.	Design Chainage		Design Length in m	TCS No	TCS Details
	From	To			
45	17+765	17+805	40	MINOR BRIDGE	
46	17+805	17+810	5	TCS-1	BOTH SIDE FILL WITH LEFT RETAINING/TOE WALL
47	17+810	17+870	60	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
48	17+870	17+920	50	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <25m)
49	17+920	17+980	60	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
50	17+980	18+006	26	TCS-2	BOTH SIDE FILL WITH LEFT SIDE GABION WALL
51	18+006	18+026	20	MINOR BRIDGE	
52	18+026	18+050	24	TCS-1	BOTH SIDE FILL WITH LEFT RETAINING/TOE WALL
53	18+050	18+170	120	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
54	18+170	18+370	200	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT < 6m)
55	18+370	18+420	50	TCS-4	LEFT SIDE FILL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
56	18+420	18+500	80	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
57	18+500	18+530	30	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <25m)
58	18+530	18+820	290	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
59	18+820	18+900	80	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <25m)
60	18+900	19+189	289	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)

Proposed cross sections for Goha – Khellani Road					
Sr. No.	Design Chainage		Design Length in m	TCS No	TCS Details
	From	To			
61	19+189	19+199	10		MINOR BRIDGE
62	19+199	19+450	251	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
63	19+450	19+660	210	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <25m)
64	19+660	19+690	30	TCS-4	LEFT SIDE FILL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
65	19+690	19+720	30	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
66	19+720	19+760	40	TCS-4	LEFT SIDE FILL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
67	19+760	19+830	70	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <25m)
68	19+830	19+920	90	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
69	19+920	19+950	30	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <25m)
70	19+950	19+970	20	TCS-4	LEFT SIDE FILL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
71	19+970	20+170	200	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
72	20+170	20+200	30	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <25m)
73	20+200	20+280	80	TCS-3	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <15m)
74	20+280	20+300	20	TCS-5	BOTH SIDE REVETMENT WALL/BREAST WALL. (HEIGHT OF CUT <25m)
Total Length m			7450		

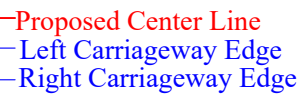
Proposed cross sections for Link Road to Goha

Sr. No.	Design Chainage		Design Length (m)	TCS No	TCS Detail
	From (km)	To (km)			
1	00+000	00+180	180	TCS-9	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT-SIDE REVETMENT WALL/BREAST WALL (HEIGHT OF CUT <10 m)
2	00+180	00+220	40	TCS-11	LEFT SIDE FILL & RIGHT SIDE REVETMENT WALL/BREAST WALL (HEIGHT OF CUT <10 m)
3	00+220	00+260	40	TCS-10	LEFT SIDE FILL WITH RETAINING/TOE WALL RIGHT SIDE CUT (HEIGHT OF CUT <25 m)
4	00+260	00+460	200	TCS-8	BOTH SIDE FILL WITH RIGHT SIDE GABION WALL
5	00+460	00+480	20	TCS-10	LEFT SIDE FILL WITH RETAINING/TOE WALL RIGHT SIDE CUT (HEIGHT OF CUT <25 m)
6	00+480	00+560	80	TCS-9	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL (HEIGHT OF CUT <10 m)
7	00+560	00+680	120	TCS-8	BOTH SIDE FILL WITH RIGHT SIDE GABION WALL
8	00+680	00+710	30	TCS-10	LEFT SIDE FILL WITH RETAINING/TOE WALL RIGHT SIDE CUT (HEIGHT OF CUT <25 m)
9	00+710	00+800	90	TCS-9	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL (HEIGHT OF CUT <10 m)
10	00+800	00+850	50	TCS-8	BOTH SIDE FILL WITH RIGHT SIDE GABION WALL
11	00+850	00+870	20	TCS-10	LEFT SIDE FILL WITH RETAINING/TOE WALL RIGHT SIDE CUT (HEIGHT OF CUT <25 m)
12	00+870	00+890	20	TCS-11	LEFT SIDE FILL & RIGHT SIDE REVETMENT WALL/BREAST WALL (HEIGHT OF CUT <10 m)
13	00+890	00+920	30	TCS-10	LEFT SIDE FILL WITH RETAINING/TOE WALL RIGHT SIDE CUT (HEIGHT OF CUT <25 m)
14	00+920	00+980	60	TCS-9	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL (HEIGHT OF CUT <10 m)
15	00+980	01+000	20	TCS-10	LEFT SIDE FILL WITH RETAINING/TOE WALL RIGHT SIDE CUT (HEIGHT OF CUT <25 m)
16	01+000	01+030	30	TCS-8	BOTH SIDE FILL WITH RIGHT SIDE GABION WALL
17	01+030	01+050	20	TCS-10	LEFT SIDE FILL WITH RETAINING/TOE WALL RIGHT SIDE CUT (HEIGHT OF CUT <25 m)
18	01+050	01+100	50	TCS-9	LEFT SIDE FILL WITH RETAINING/TOE WALL & RIGHT SIDE REVETMENT WALL/BREAST WALL (HEIGHT OF CUT <10 m)

Proposed cross sections for Link Road to Goha					
Sr. No.	Design Chainage		Design Length (m)	TCS No	TCS Detail
	From (km)	To (km)			
19	01+100	01+130	30	TCS-10	LEFT SIDE FILL WITH RETAINING/TOE WALL RIGHT SIDE CUT (HEIGHT OF CUT <25 m)
20	01+130	01+170	40	TCS-9	LEFT SIDE FILL WITH RETAINING/TOE WALL &RIGHT SIDE REVETMENT WALL/BREAST WALL (HEIGHT OF CUT <10 m)
21	01+170	01+470	300	TCS-10	LEFT SIDE FILL WITH RETAINING/TOE WALL RIGHT SIDE CUT (HEIGHT OF CUT <25 m)
22	01+470	01+490	20	TCS-9	LEFT SIDE FILL WITH RETAINING/TOE WALL &RIGHT SIDE REVETMENT WALL/BREAST WALL (HEIGHT OF CUT <10 m)
23	01+490	01+510	20	TCS-10	LEFT SIDE FILL WITH RETAINING/TOE WALL RIGHT SIDE CUT (HEIGHT OF CUT <25 m)
24	01+510	01+550	40	TCS-9	LEFT SIDE FILL WITH RETAINING/TOE WALL &RIGHT SIDE REVETMENT WALL/BREAST WALL (HEIGHT OF CUT <10 m)
25	01+550	01+730	180	TCS-10	LEFT SIDE FILL WITH RETAINING/TOE WALL RIGHT SIDE CUT (HEIGHT OF CUT <25 m)
26	01+730	01+750	20	TCS-9	LEFT SIDE FILL WITH RETAINING/TOE WALL &RIGHT SIDE REVETMENT WALL/BREAST WALL (HEIGHT OF CUT <10 m)
27	01+750	01+770	20	TCS-10	LEFT SIDE FILL WITH RETAINING/TOE WALL RIGHT SIDE CUT (HEIGHT OF CUT <25 m)
28	01+770	01+820	50	TCS-8	BOTH SIDE FILL WITH RIGHT SIDE GABION WALL
29	01+820	01+850	30	TCS-10	LEFT SIDE FILL WITH RETAINING/TOE WALL RIGHT SIDE CUT (HEIGHT OF CUT <25 m)
30	01+850	02+016	166	TCS-12	LEFT SIDE REVETMENT WALL/BREAST WALL (HEIGHT OF CUT < 10 m.)
TOTAL DESIGN LENGTH (km)			2016		

← GUHA

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PLAN

- R - Radius of Curve
- Dc - Degree of Curvature
- Lc - Length of Circular Curve
- Ts - Tangent Length
- Es - Apex Distance
- LS - Length of Spiral Curve
- S - Shift

▲ - Definition Angle

- v - Design Speed Km/Hr
- e - Superelevation
- PC - Point of Curvature
- PT - Point of Tangent
- HIP - Horizontal Intersection Point

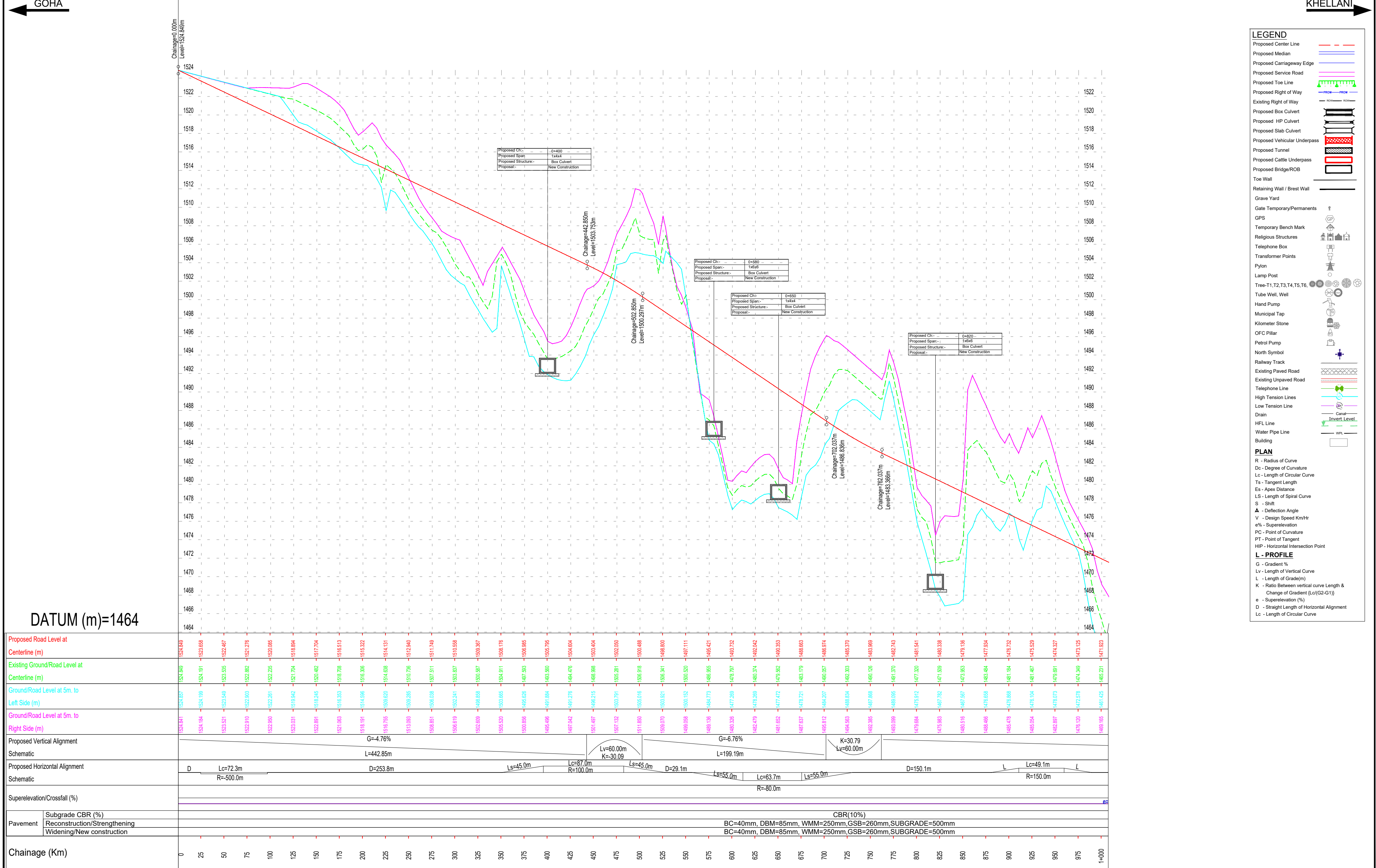
L - PROFILE

- G - Gradient %
- Lv - Length of Vertical Curve
- L - Length of Grade(m)
- K - Ratio Between vertical curve Length & Change of Gradient ($L_c/(G2-G1)$)
- e - Superelevation (%)
- D - Straight Length of Horizontal Alignment
- Lc - Length of Circular Curve

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:  TPF Getinsa Eurostudios S.L. In Association with RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) 	FINAL DETAILED PROJECT REPORT PACKAGE-I (GOHA LINK ROAD-1)			Project	Consultancy Services for Preparation of Detailed Project Report and providing Pre-Construction activities in respect of the following stretches on NH-244 (old NH-1B) in the State of Jammu & Kashmir. (i) Sudhmahadev - Dranga Tunnel of approx. length 4.5 Km and its approach roads on Chenani - Sudhmahadev - Gohra road portion. (ii) Vailoo Tunnel of approx length 10.00 Km under Sinthan Pass and its approach roads on Gohra - Khellani - Khanabal road portion & the extended road section from Gohra side approach road of Sudhmahadev Dargra tunnel upto Khellani town.
R1	MAY-2019							Designed: Drawn: Checked: Approved:	Scale :- H=1:2500 V=1:250
R2	APR-2020				Drawing No.	RCPL-TPF-3-BHC-19-R1			

← GOHA

KHELLANI



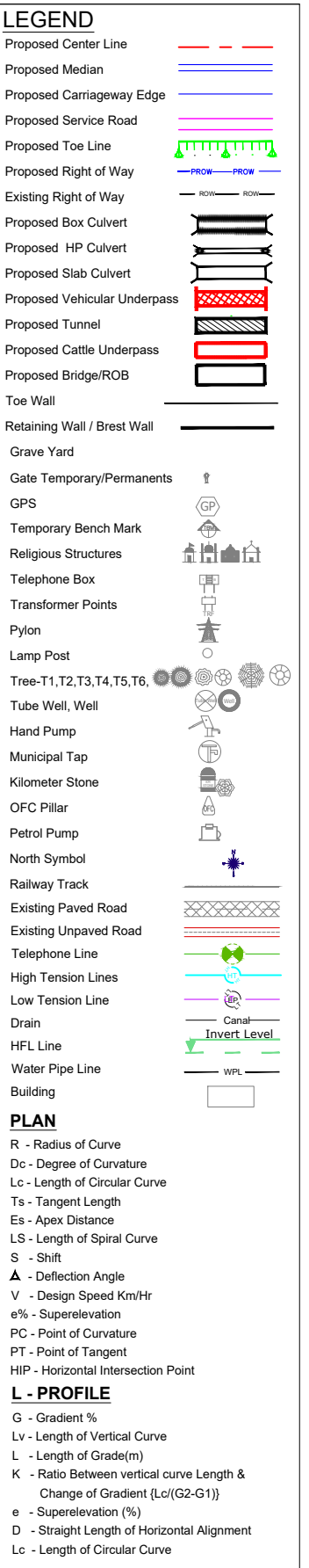
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R1	MAY-2019		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	 TPF Getinsa Eurostudios S.L. In Association with RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) 	FINAL DETAILED PROJECT REPORT PACKAGE-I (GOHA LINK ROAD-1)									
R2	APR-2020				<table><tr><td>Designed:</td><td></td></tr><tr><td>Drawn:</td><td></td></tr><tr><td>Checked:</td><td></td></tr><tr><td>Approved:</td><td></td></tr></table>	Designed:		Drawn:		Checked:		Approved:		Scale :- H=1:2500 V=1:250
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R2	APR-2020				Designed:	Scale :- H=1:2500 V=1:250
					Drawn:	
					Checked:	
					Approved:	
					Drawing Title	PLAN & PROFILE (GOHA LINK ROAD-1) (Km. 1+000 to Km. 1+974)
					Drawing No.	RCPL-TPF-3-BHC-20-R1

GOHA

KHELLANI



DATUM (m)=1414

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ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT PACKAGE-I (GOHA LINK ROAD-1)	Project
R1	MAY-2019		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	 TPF Getinsa Eurostudios S.L. In Association with RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) 	Scale :- H=1:2500 V=1:250	Consultancy Services for Preparation of Detailed Project Report and providing Pre-Construction activities in respect of the following stretches on NH-244 (old NH-1B) in the State of Jammu & Kashmir. (i) Sudhmahadev - Dranga Tunnel of approx. length 4.5 Km and its approach roads on Chenani - Sudhmahadev - Gohra road portion. (ii) Vailoo Tunnel of approx length 10.00 Km under Sinthan Pass and its approach roads on Goha - Khellani - Khanabal road portion & the extended road section from Goha side approach road of Sudhmahadev Dargra tunnel upto Khellani town.
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						Drawing No. RCPL-TPF-3-BHC-20-A-R1