

**Consultancy Services for Preparation of Detailed Project Report of Selected Stretches/Corridors of
National Highways for Upgradation to Two/Four Lane With Paved Shoulder From Keonchi –
Ratanpur (On NH-45 Ex.) From Km 237.860 To Km 322.035 in the State of Chattishgarh.**

Summary of Structures in Proposed Forest Land

Sr. No.	Type of Structure	Nos.
1	ROB	1
2	Major Bridge	2
3	Minor Bridge	8
4	Box Culvert	4
5	Hume Pipe	22

List of Proposed ROB in Forest Land

Sr. No.	Design Chainage (km.)	Proposed Span Arrangement (m)	Total Length (m)	Overall Proposed Width (m)	Proposed Structure Type	Remarks
1	256+282	1 x 32.00 + 1 x 31.20 + 7 x 32.00	287.20	24.00	Composite Girder (RCC Deck with Steel Girder)	New Proposal

List of Proposed Major Bridges in Forest Land

Sr. No.	Design Chainage (km.)	Proposed Span Arrangement (m)	Total Length (m)	Overall Proposed Width (m)	Proposed Structure Type	Remarks
1	258+291	4 x 20.00	80.00	16.00	RCC Girder with Well Foundation	New Proposal
2	281+795	12 x 8.00	105.30	16.00	RCC Box Type Bridge	New Proposal

List of Proposed Minor Bridges in Forest Land

Sr. No.	Design Chainage (km.)	Proposed Span Arrangement (m)	Total Length (m)	Overall Proposed Width (m)	Proposed Structure Type	Remarks
1	241+542	1 x 10.00	10.00	16.00	RCC Solid Slab	Reconstruction
2	242+073	1 x 10.00	10.00	16.00	RCC Solid Slab	New Proposal
3	243+490	1 x 12.00	12.00	16.00	RCC Solid Slab	Reconstruction

4	245+153	1 x 15.00	15.00	16.00	RCC Solid Slab	Reconstruction
5	245+707	1 x 10.00	10.00	16.00	RCC Solid Slab	Reconstruction
6	268+815	2 x 25.00	50.00	16.00	RCC Girder	Reconstruction
7	291+695	12 x 3.00	40.80	16.00	RCC Box Type	New Proposal
8	298+854	4 x 5.00	22.35	16.00	RCC Box Type	Reconstruction

List of Proposed Culverts in Forest Land

Sr. No.	Design Chainage (km.)	Proposed Span Arrangement (m)	Overall Proposed Width (m)	Proposed Structure Type	Remarks
1	241+870	1 x 3.00	12.00	Box Culvert	Reconstruction
2	258+036	1 x 1.20	12.00	HPC	New Proposal
3	260+666	1 x 1.20	12.00	HPC	New Proposal
4	275+429	1 x 1.20	12.00	HPC	Reconstruction
5	275+537	1 x 1.20	12.00	HPC	Reconstruction
6	275+682	1 x 1.20	12.00	HPC	Reconstruction
7	276+312	1 x 1.20	12.00	HPC	Reconstruction
8	276+545	1 x 1.20	12.00	HPC	New Proposal
9	279+413	1 x 1.20	12.00	HPC	Reconstruction
10	280+045	1 x 3.00	12.00	Box Culvert	New Proposal
11	280+403	1 x 1.20	12.00	HPC	New Proposal
12	281+948	1 x 1.20	12.00	HPC	New Proposal
13	282+212	1 x 1.20	12.00	HPC	New Proposal
14	284+557	1 x 1.20	12.00	HPC	New Proposal
15	287+432	1 x 3.00	12.00	Box Culvert	New Proposal
16	291+511	1 x 1.20	12.00	HPC	New Proposal
17	297+078	1 x 1.20	12.00	HPC	Reconstruction
18	304+915	1 x 1.20	12.00	HPC	New Proposal
19	314+576	1 x 1.20	12.00	HPC	New Proposal
20	314+943	1 x 5.00	12.00	Box Culvert	New Proposal
21	315+484	2 x 1.20	12.00	HPC	New Proposal
22	317+982	1 x 1.20	12.00	HPC	New Proposal
23	318+297	1 x 1.20	12.00	HPC	New Proposal
24	318+498	1 x 1.20	12.00	HPC	New Proposal
25	319+000	1 x 1.20	45.00	HPC	New Proposal
26	320+475	2 x 1.20	12.00	HPC	New Proposal


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