Schedule-A

(See Clauses 2.1 and 8.1)

Site of the Project

1 TheSite

(i) Siteofthe[Two-Lane]ProjectHighwayshallincludetheland,buildings,structures and road works as described in Annex-I of thisSchedule-A.

(ii) Thedatesof handing over the Right ofWay to theContractorare specified in Annex-IIof thisSchedule-A.

(iii) AninventoryoftheSiteincludingtheland,buildings,structures,roadworks,trees andanyotherimmovablepropertyon,orattachedto, theSiteshallbeprepared jointlybytheAuthorityRepresentativeandtheContractor,andsuchinventoryshall form partof the memorandum referredto in Clause8.2 (i) of this Agreement.

(iv) ThealignmentplansoftheProjectHighwayarespecifiedinAnnex-III.Inthecaseof sectionswhere nomodificationintheexisting alignmentofthe ProjectHighwayis contemplated,thealignment planhasnotbeenprovided.Alignmentplanshaveonly beengivenforsectionswheretheexistingalignment isproposedtobeupgraded.The proposedprofileoftheProjectHighwaysshallbefollowedby thecontractorwith minimumFRL asindicatedinthealignmentplan.TheContractor,however, improve/upgradethe RoadProfileas indicatedinAnnex-III based onsite/design requirement.

(v) The status of the environment clearances obtainedor awaitedis givenin Annex-IV.

Annex –I

(Schedule-A)

Site

[Note: Throughsuitabledrawingsanddescriptioninwords,theland,buildings,structures, androadworkscomprisingtheSiteshallbespecifiedbrieflybutprecisely inthis Annex-I.Allthechainages/locationreferredtoinAnnex-I toSchedule-Ashallbe existingchainages.]

1. Site

The Site of the [Two-Lane] Project Highway comprises the section of NH-53 (Old NH-37)commencing from km 3+275 to km 15+945i.e. Khamnam Market to Keithelmanbi Villagein the state of Manipur.

The land, carriageway and structures comprising the Site are described below.

2. Land

TheSiteoftheProjectHighwaycomprisestheland(sumoflandalreadyin possession and land to bepossessed) as described below:

SL No.	Chainage (Km)		Existing Right of Way (m)		Total Existing Right of Way (m)	Proposed Right of Way (m)	Remarks
	From	To	LHS	RHS			
1	3.275	15.945	11.250	11.250	22.500	Not required	

3. Carriageway

ThepresentcarriagewayoftheProjectHighwayisTwo Lane from km 3+275 to km 15+945. Thetypeofthe existingpavement is [flexible].

4. MajorBridges

The Site includes the followingMajor Bridges: -

S. No.	Chainage (km)	Type of Structure			No. of Spans with span length (m)	Width (m)
		Foundation	Sub- structure	Super-structure		
Nil						

5. Roadover-bridges(ROB)/Roadunder-bridges(RUB)

The Siteincludes the following ROB (road over railway line)/RUB (road under railway line):

S. No.	Chainage (km)	TypeofStructure		No.ofSpans withspan length(m)	Width (m)	ROB/ RUB
		Foundation	Superstructure			
Nil						

6. Gradeseparators

The Site includes the followinggrade separators:

S. No.	Chainage (km)	TypeofStructure		No.ofSpanswith spanlength(m)	Width (m)
		Foundation	Superstructure		
Nil					

7. Minorbridges

The Siteincludes the following minor bridges:

Sl. No.	Survey Chainage (Km)	Type of Structure			No. of Spans with span length (m)	Width (m)
		Foundation	Sub-structure	Super- structure		
1	8.805	Open	Wall	RCC Box Bridge	6.0M X 4.0M_3 CELL	11.7
2	12.751	Open	Wall	RCC Slab Bridge	3.0M X 3.0M_3 CELL	12

8. Railwaylevelcrossings

The Site includes the followingrailway levelcrossings:

S. No.	Location(km)	Remarks
Nil		

9. Underpasses(vehicular,non-vehicular)

The Site includes the followingunderpasses:

S. No.	Chainage (km)	Type of Structure	No. of Spans with span length (m)	Width (m)
Nil				

10. Culverts

The Site has the following culverts:

Sl. No.	Chainage (km)	Type of Culvert	Span/Opening with Span Length	Width of Culvert (m)
1	3.783	Not Clearly Visible (Remarks: After Excavation It has found a Single Row HP of 0.90M Dia)	1 X 0.90	10.5
2	5.009	HP	1 X 0.90	12.5
3	5.058	HP	1 X 0.90	12.1
4	5.383	R.C.C SLAB	2X1.20	12.5
5	5.532	R.C.C SLAB (Skew)	1X1.50	12.7
6	5.976	HP	1 X 1.00	12
7	6.031	R.C.C SLAB	1X1.00	12.5
8	6.813	R.C.C SLAB	1X1.00	12.2
9	7.044	R.C.C SLAB	1X1.50	12.5
10	7.582	HP	2 X 1.00	12.6
11	8.544	HP	1 X 1.00	10.5
12	9.805	R.C.C SLAB	1X1.00	12.5

Sl. No.	Chainage (km)	Type of Culvert	Span/Opening with Span Length	Width of Culvert (m)
13	10.108	R.C.C SLAB	1X1.50	12.9
14	11.21	R.C.C SLAB	1X2.00	11.8
15	11.581	HP	2 X 1.20	11.9
16	12.407	HP	1 X 1.20	12.1
17	12.679	Not Clearly Visible (Remarks: After Excavation It has found a Single Row HP of 0.90M Dia)	1 X 0.90	13.2
18	12.847	HP (Skew)	1 X 0.90	13.5
19	12.97	R.C.C SLAB	1X1.00	12
20	13.295	HP	1 X 0.90	12.1
21	13.665	R.C.C SLAB	1X1.20	13
22	13.904	R.C.C SLAB (Skew)	1X5.00	13
23	14.023	HP	2 X 0.60	13
24	14.118	HP	2 X 0.90	12.5
25	14.438	HP	1 X 1.00	13
26	14.474	Not Clearly Visible (Remarks: After Excavation It has found a Single Row HP of 0.90M Dia)	1 X 0.90	12.1
27	14.66	HP	1 X 0.600	12.1
28	14.74	Not Clearly Visible (Remarks: After Excavation It has found a Single Row HP of 0.90M Dia)	1 X 0.90	13
29	14.948	HP	1 X 1.00	15.6
30	15.444	HP (Skew)	2 X 0.90	14
31	15.703	HP (Skew)	2 X 0.90	15.2

11. Busbays

The details of bus bays onthe Site are as follows:

S. No.	Chainage (km)	Length (m)	Left Hand Side	Right HandSide
Nil				

12. Truck Laybyes

The details of trucklay byes are as follows:

S. No.	Chainage (km)	Length (m)	Left Hand Side	Right HandSide
Nil				

13. Roadsidedrains

The details of the roadside drains are as follows:

Sl. No.	Location		Type	
	From km	To km	Masonry/cc (Pucca)	Earthen (Kutcha)
1	6.039	6.560	Pucca (Single Side)	
2	7.660	7.725	Pucca (Single Side)	
3	8.675	8.729	Pucca (Single Side)	
4	5.149	5.237	Earthen (Hill Side)	
5	5.803	5.975	Earthen (Hill Side)	
6	6.018	6.041	Earthen (Hill Side)	
7	6.559	6.575	Earthen (Hill Side)	

Sl. No.	Location		Type	
	From km	To km	Masonry/cc (Pucca)	Earthen (Kutcha)
8	6.767	6.950	Earthen (Hill Side)	
9	7.251	7.325	Earthen (Hill Side)	
10	7.565	7.654	Earthen (Hill Side)	
11	7.718	7.820	Earthen (Hill Side)	
12	8.543	8.598	Earthen (Hill Side)	
13	8.598	8.785	Earthen (Hill Side)	

14. Majorjunctions

The details ofmajor junctions are as follows:

S. No.	Location		At grade	Separated	Category of Cross Road			
	From km	to km			NH	SH	MDR	Others
Nil								

(NH: National Highway, SH: State Highway,MDR: Major District Road)

15. Minorjunctions

The details of the minor junctions are as follows:

Sl. No.	Location		Type of intersection	
	From Km	To Km	T-Junction	Cross Road
1	3.250	-	T	3-legged
2	3.270	-	T	3-legged
3	3.525	-	T	3-legged
4	3.540	-	T	3-legged
5	3.600	-	T	3-legged
6	3.650	-	T	3-legged
7	3.760	-	T	3-legged
8	3.880	-	T	3-legged
9	3.890	-	T	3-legged
10	3.950	-	T	3-legged
11	4.010	-	T	3-legged
12	4.050	-	T	3-legged
13	4.110	-	T	3-legged
14	4.250	-	Y	3-legged
15	4.350	-	T	3-legged
16	4.400	-	T	3-legged
17	4.450	-	T	3-legged
18	4.700	-	Y	3-legged
19	5.190	-	T	3-legged
20	5.210	-	Y	3-legged
21	5.330	-	T	3-legged
22	6.350	-	Y	3-legged
23	7.060	-	Y	3-legged
24	7.370	-	T	3-legged
25	7.400	-	X	4-legged
26	7.540	-	T	3-legged
27	7.650	-	Y	3-legged
28	8.150	-	X	4-legged

Sl. No.	Location		Type of intersection	
	From Km	To Km	T-Junction	Cross Road
29	9.000	-	X	4-legged
30	9.150	-	Y	3-legged
31	9.550	-	Y	3-legged
32	10.190	-	Y	3-legged
33	10.350	-	T	3-legged
34	11.950	-	X	4-legged
35	12.500	-	T	3-legged
36	12.520	-	X	4-legged
37	12.750	-	Y	3-legged
38	13.550	-	T	3-legged
39	13.950	-	T	3-legged
40	14.200	-	X	4-legged
41	14.450	-	T	3-legged

6. Bypasses

The details of the existingroad sections proposed to be bypassed are as follows:

Sl.No.	Nameofbypass (town)	Chainage(km)From kmtokm	Length (inKm)
Nil			

17. Otherstructures

[Provide details of other structures, if any.]

Annex – II

(As per Clause 8.3 (i))

(Schedule-A)

Dates for providing Right of Way of Construction Zone

ThedatesonwhichtheAuthorityshallprovideRightofWayofConstructionZonetothe Contractor ondifferent stretches ofthe Site is stated below:

The Construction of Project Highway will be implemented as per Manual, details of which are already given in Article-2 of Annexure – I of Schedule –A.

Annex-III

(Schedule-A)

Alignment Plans

TheexistingalignmentoftheProjectHighwayshallbemodifiedinthefollowingsectionsas per the alignment planindicated below:

(i) ThealignmentoftheProjectHighwayisenclosedinalignmentplan.Finishedroad levelindicatedinthealignmentplan shallbefollowed by thecontractorasminimum FRL.Inanycase,thefinishedroadleveloftheprojecthighway shallnotbelessthan those indicatedin thealignmentplan.Thecontractorshall,however, improve/upgrade the Roadprofileas indicatedinAnnex-III based onsite/design requirement.

(ii) TrafficSignageplanoftheProjectHighwayshowingnumbers&locationoftraffic signsisenclosed.Thecontractor shall,however,improve/upgradeuponthetraffic signageplanasindicatedinAnnex-IIIbasedonsite/designrequirementasperthe relevant specifications/IRC Codes/Manual.

Annex – IV

(Schedule-A)

Environment Clearances

The following environment clearances have beenobtained: [***]

The following environment clearances are awaited:[***]

Environmental Clearances are not required for the project.

Schedule - B

(See Clause 2.1)

Development of the Project Highway

1. DevelopmentoftheProjectHighway

Development of the Project Highwayshallinclude designandconstructionof theProject Highway as described in this Schedule-B and inSchedule-C.

2. [Rehabilitationandaugmentation]

[Rehabilitationandaugmentation]shallinclude[Two-LanningandStrengthening]of the Project Highway as describedin Annex-Iof thisSchedule-B andin Schedule-C.

3. SpecificationsandStandards

The ProjectHighway shallbe designed and constructedinconformity with the Specifications and Standards specified in Annex-I ofSchedule-D.

Annex – I

(Schedule-B)

Description of [Two-Lanning]

[Note: DescriptionoftheProjectHighwayshallbegiven bytheAuthorityindetailtogether with explanatory drawings (where necessary) toexplain the Authority's requirementsprecisely inordertoavoidsubsequentchangesintheScopeofthe Project. The particularsthatmust be specified inthisSchedule-B arelisted below as pertherequirementsoftheManualofSpecificationsandStandardsfor[TwoLanning ofHighways(IRC: SP: 73-2018)]referredtoastheManual.Ifanystandardsspecifications or details are not given in the Manual the minimum design/construction requirementsshallbespecifiedinthisSchedule.In additiontotheseparticularsall otheressentialprojectspecificdetailsasrequiredshouldbeprovided inorderto define the Scope of the Project clearlyand precisely.]

1. WideningoftheExisting Highway

(i) TheProjectHighway shall followthe existingalignment unless otherwise specified by theAuthority andshowninthealignmentplansspecifiedinAnnex-IIIofSchedule-A. Geometricdeficiencies,if any,intheexistinghorizontalandverticalprofilesshallbe corrected as per theprescribed standardsfor hilly terrain to the extent land isavailable.

(ii) Widthof Carriageway

(a) Two-Lanning[with]pavedshouldersshallbeundertaken.Thepaved carriageway shallbe[7(seven)m]wide.

Providedthatinthebuilt-upareas:thewidthofthecarriagewayshallbe as specifiedin the followingtable:

Sl. No.	Built-up stretch (Township)	Location		Width (m)	Typical Cross Section (Refer to Manual)	Remarks
1	Khamnam	3+750	3+950	7	As per attached TCS drawing	7 m Carriageway
2	Patsoi	5+500	5+700	7	As per attached TCS drawing	7 m Carriageway
3	Mansonbi	9+250	9+450	7	As per attached TCS drawing	7 m Carriageway
4	Luker	12+170	12+370	7	As per attached TCS drawing	7 m Carriageway
5	Khumbong	12+750	12+950	7	As per attached TCS drawing	7 m Carriageway
6	Maidanpouk	13+800	14+000	7	As per attached TCS drawing	7 m Carriageway
7	Keithelmanbi	15+940	16+140	7	As per attached TCS drawing	7 m Carriageway

(b) Except asotherwiseprovided inthis Agreementthe width ofthe pavedcarriageway andcross-sectional featuresshall conformto paragraph1.1above.

2. GeometricDesign andGeneralFeatures

(i) General

GeometricdesignandgeneralfeaturesoftheProjectHighway shallbeinaccordance with Section 2 of the Manual.

(ii) Design speed

For Plain terrain designspeedshallbetheminimumdesignspeedof 80 km/hr and for sharp curve locations and to accommodate the alignment within existing ROW, the speed reduces upto 40-50 kmph.

(iii) Improvement of the existing road geometrics

The stretches where design speed reduces below 80 kmph are summarized below:

Sl. No.	Stretch (from km to km)	Type of Deficiency	Remarks
1	3+792 to 3+919	Below Ruling Design Speed	Design Speed = 60 Kmph
2	3+985 to 4+119	Below Ruling Design Speed	Design Speed = 50 Kmph
3	4+197 to 4+369	Below Ruling Design Speed	Design Speed = 50 Kmph
4	4+452 to 4+498	Below Ruling Design Speed	Design Speed = 50 Kmph
5	4+579 to 4+610	Below Ruling Design Speed	Design Speed = 50 Kmph
6	4+937 to 4+979	Below Ruling Design Speed	Design Speed = 65 Kmph
7	5+061 to 5+264	Below Ruling Design Speed	Design Speed = 65 Kmph
8	5+416 to 5+522	Below Ruling Design Speed	Design Speed = 65 Kmph
9	5+589 to 5+642	Below Ruling Design Speed	Design Speed = 65 Kmph
10	6+542 to 6+609	Below Ruling Design Speed	Design Speed = 65 Kmph
11	8+649 to 8+709	Below Ruling Design Speed	Design Speed = 65 Kmph
12	8+743 to 8+784	Below Ruling Design Speed	Design Speed = 50 Kmph
13	8+799 to 8+833	Below Ruling Design Speed	Design Speed = 40 Kmph
14	8+924 to 8+962	Below Ruling Design Speed	Design Speed = 65 Kmph
15	9+192 to 9+279	Below Ruling Design Speed	Design Speed = 50 Kmph
16	9+328 to 9+405	Below Ruling Design Speed	Design Speed = 50 Kmph
17	9+514 to 9+557	Below Ruling Design Speed	Design Speed = 50 Kmph
18	9+630 to 9+662	Below Ruling Design Speed	Design Speed = 65 Kmph
19	9+767 to 9+777	Below Ruling Design Speed	Design Speed = 50 Kmph
20	9+991 to 10+047	Below Ruling Design Speed	Design Speed = 65 Kmph
21	10+792 to 10+999	Below Ruling Design Speed	Design Speed = 60 Kmph
22	11+105 to 11+143	Below Ruling Design Speed	Design Speed = 65 Kmph
23	12+748 to 12+837	Below Ruling Design Speed	Design Speed = 65 Kmph
24	12+920 to 13+121	Below Ruling Design Speed	Design Speed = 65 Kmph
25	13+123 to 13+243	Below Ruling Design Speed	Design Speed = 65 Kmph
26	13+318 to 13+732	Below Ruling Design Speed	Design Speed = 65 Kmph
27	13+770 to 13+930	Below Ruling Design Speed	Design Speed = 60 Kmph
28	15+826 to 15+864	Below Ruling Design Speed	Design Speed = 65 Kmph

Inthefollowingsectionswhereimprovementoftheexistingroadgeometricstothe prescribedstandardsisnotpossibletheexistingroadgeometricsshallbeimproved totheextentpossiblewithinthe existingrightofwayandproperroadsignsandsafety Measuresshall beprovided.

(iv) Right of Way

[Refertoprovision of relevant Manual].DetailsoftheRightofWayaregiveninAnnex-II of Schedule-A.

(v) Type ofshoulders
[Refer to provision of relevant Manual and specify]

(a) Inbuilt-upsections.footpaths/fullypaved shouldersshallbeprovidedinthe followingstretches:

Sl. No.	Stretch (from Km to Km)	Fully Paved shoulders/footpaths	Reference to cross section
1	3+275 to 5+700	2X2.5 m paved shoulder& 2X1.75 m footpath	TCS-1
2	7+500 to 8+400	2X2.5 m paved shoulder & 2X1.75 m footpath	TCS-1
3	9+150 to 9+400	2X2.5 m paved shoulder & 2X1.75 m footpath	TCS-1
4	11+850 to 12+375	2X2.5 m paved shoulder & 2X1.75 m footpath	TCS-1
5	12+700 to 13+175	2X2.5 m paved shoulder & 2X1.75 m footpath	TCS-1

(b) Earthen shoulders of 1.0 m width shall be provided with selected earth wherever applicable as per TCS drawing.

(c) Design and specifications of paved shoulders and granular material shall conform to the requirements specified in the relevant Manual.

(vi) Lateral and verticalclearances at underpasses

(a) Lateraland vertical clearances at underpasses and provision of guardrails/crash barriers shall be as per requirementsspecifiedinthe relevant Manual.

(b) Lateralclearance:Thewidthoftheopeningattheunderpassesshallbeas follows:

Sl.No.	Location (Chainage) (from km to km)	Span/ opening(m)	Remarks
Nil			

(vii) Lateral and verticalclearances at overpasses

(a) Lateralandverticalclearancesatoverpassesshallbeasperrequirementsspecifiedinthe relevant Manual.

(b) Lateralclearance:Thewidthoftheopeningattheoverpasses shallbeas follows:

Sl. No.	Location (Chainage) (from km to km)	Span/Opening (m)	Remarks
Nil			

(viii) Service roads

Serviceroadsshallbeconstructedatthelocationsandforthelengthsindicatedbelow: [Refer requirementsspecifiedinthe relevant Manual]

Sl. No.	Location ofservice road(fromkmtokm)	Righthandside(RHS)/Lefthand side(LHS)/orBothsides	Length(km)of service road
Nil			

(ix) Grade separatedstructures

(a) Gradeseparatedstructuresshallbeprovidedasperprovisionofthe Manual. The requisite isgivenbelow:

[Refer to requirementsspecifiedinthe relevant Manual]

Sl. No.	Location of Structure (VUP)	Length (m)	Number andlengthofspans	Approach gradient	Remarks. if any
Nil					

(b) In thecase ofgradeseparated structuresthe type ofstructure andthe level of theProjectHighwayandthecross-roads shallbeasfollows:[Referto provisionofthe Manual andspecifythetypeofvehicularunderpass/ overpassstructureandwhetherthecrossroadistobecarriedattheexisting

Level. raisedorlowered]

Sl. No.	Location	Type of structure Length(m)	Cross road at			Remarks.if any
			Existing Level	Raised Level	Lowered Level	
Nil						

(x) Cattle and pedestrian underpass /overpass

Cattle andpedestrian underpass/overpass shall be constructed as follows: [Refer to provisionofthe relevant Manualand specify the requirements of cattle and pedestrian underpass/overpass]

Sl.No.	Location	Typeofcrossing
Nil		

(xi) Typical cross-sections of the Project Highway

[Give typical cross-sections of the Project Highway by reference to the Manual]As per attached Drawings

TCS Type	Description	Length (M)
TCS- 1	Reconstruction of Two-Lane Carriageway with Paved Shoulder in Built up area with Both sides covered drain cum footpath in plain terrain	4481
TCS- 2	Reconstruction of Two-Lane Carriageway with Paved Shoulder in Rural area	7745
TCS- 3	Reconstruction of Two-Lane Carriageway with Paved Shoulder in Rural area with one side Toe Wall	270
Total Proposed Length of Project Road = 12665 m		

Chainage (m)		CD Length (m)	Net Length (m)	TCS Type
From	To			
3275	5700	16.94	2408.06	TCS-1
5700	6060	7.9	352.1	TCS-2
6060	6330		270	TCS-3
6330	7500	10.6	1159.4	TCS-2
7500	8400	7.9	892.1	TCS-1
8400	9150	26.3	723.7	TCS-2
9150	9400		250	TCS-1
9400	11850	26.32	2423.68	TCS-2
11850	12375	2.6	522.4	TCS-1
12375	12700	5.3	319.7	TCS-2
12700	13125	16.4	408.6	TCS-1
13125	15940	48.26	2766.74	TCS-2
Total =		**169**	**12496**	

3.IntersectionsandGradeSeparators

Allintersectionsandgradeseparatorsshallbe asperSection 3oftheManual.Existing intersections which are deficientshall be improvedto the prescribed standards.

[Refertoprovisionofthe relevant Manual andspecifytherequirements. Explain where necessarywith drawings/sketches/general arrangement]

Properlydesignedintersectionsshallbeprovidedatthelocationsandofthetypes and features given in the tables below:

(i) At-gradeintersections

Major Intersections

Sl. No.	Location of intersection (Km)	Type of intersection	Other features	Remarks
Nil				

Minor Intersections

Sl. No.	Location of intersection (Km)	Type of intersection	Other features
1	3+250	T-Type	3-Legged
2	3+270	T-Type	3-Legged
3	3+525	T-Type	3-Legged
4	3+540	T-Type	3-Legged
5	3+600	T-Type	3-Legged
6	3+650	T-Type	3-Legged
7	3+760	T-Type	3-Legged
8	3+880	T-Type	3-Legged
9	3+890	T-Type	3-Legged
10	3+950	T-Type	3-Legged
11	4+010	T-Type	3-Legged
12	4+050	T-Type	3-Legged
13	4+110	T-Type	3-Legged
14	4+250	Y-Type	3-Legged
15	4+350	T-Type	3-Legged
16	4+400	T-Type	3-Legged
17	4+450	T-Type	3-Legged
18	4+700	Y-Type	3-Legged
19	5+190	T-Type	3-Legged
20	5+210	Y-Type	3-Legged
21	5+330	T-Type	3-Legged
22	6+350	Y-Type	3-Legged
23	7+060	Y-Type	3-Legged
24	7+370	T-Type	3-Legged
25	7+400	X-Type	4-Legged
26	7+540	T-Type	3-Legged
27	7+650	Y-Type	3-Legged
28	8+150	X-Type	4-Legged
29	9+000	X-Type	4-Legged
30	9+150	Y-Type	3-Legged
31	9+550	Y-Type	3-Legged
32	10+190	Y-Type	3-Legged
33	10+350	T-Type	3-Legged
34	11+950	X-Type	4-Legged
35	12+500	T-Type	3-Legged
36	12+520	X-Type	4-Legged
37	12+750	Y-Type	3-Legged
38	13+550	T-Type	3-Legged
39	13+950	T-Type	3-Legged
40	14+200	X-Type	4-Legged
41	14+450	T-Type	3-Legged

(ii) Grade separatedintersection with/without ramps

Sl. No.	Location	Salient features	Minimumlengthof viaduct tobe provided	Roadtobecarried over/underthe structures
Nil				

4. RoadEmbankmentandCutSection

(i) Widening and improvement of the existing road embankment/cuttings and constructionofnewroad embankment/cuttingsshallconformtotheSpecifications andStandards giveninSection4oftheManualandthespecified cross-sectional details.Deficiencies in theplan and profile of the existing roadshall be corrected.

(ii) Raising oftheexistingroad

The existing road shall beraised in the followingsections:

Sl. No.	Section (from km to km)	Length (km)	Extent of raising [Top of finished road level]
1	3+275 to 3+300	0.025	0.208 m. (EGL = 784.123 m & FRL = 784.331 m)
2	3+300 to 3+325	0.025	0.15 m. (EGL = 784.284 m & FRL = 784.434 m)
3	3+325 to 3+350	0.025	0.185 m. (EGL = 784.353 m & FRL = 784.537 m)
4	3+350 to 3+375	0.025	0.218 m. (EGL = 784.423 m & FRL = 784.641 m)
5	3+375 to 3+400	0.025	0.303 m. (EGL = 784.44 m & FRL = 784.743 m)
6	3+400 to 3+425	0.025	0.318 m. (EGL = 784.51 m & FRL = 784.827 m)
7	3+425 to 3+450	0.025	0.248 m. (EGL = 784.639 m & FRL = 784.887 m)
8	3+450 to 3+475	0.025	0.203 m. (EGL = 784.717 m & FRL = 784.92 m)
9	3+475 to 3+500	0.025	0.226 m. (EGL = 784.703 m & FRL = 784.929 m)
10	3+500 to 3+525	0.025	0.299 m. (EGL = 784.613 m & FRL = 784.912 m)
11	3+525 to 3+550	0.025	0.446 m. (EGL = 784.425 m & FRL = 784.87 m)
12	3+550 to 3+575	0.025	0.437 m. (EGL = 784.367 m & FRL = 784.803 m)
13	3+575 to 3+600	0.025	0.225 m. (EGL = 784.5 m & FRL = 784.724 m)
14	3+600 to 3+625	0.025	0.155 m. (EGL = 784.49 m & FRL = 784.645 m)
15	3+625 to 3+650	0.025	0.163 m. (EGL = 784.405 m & FRL = 784.567 m)
16	3+650 to 3+675	0.025	0.099 m. (EGL = 784.39 m & FRL = 784.488 m)
17	3+675 to 3+700	0.025	0.089 m. (EGL = 784.32 m & FRL = 784.409 m)
18	3+700 to 3+725	0.025	0.132 m. (EGL = 784.199 m & FRL = 784.33 m)
19	3+725 to 3+750	0.025	0.285 m. (EGL = 783.966 m & FRL = 784.251 m)
20	3+750 to 3+775	0.025	0.319 m. (EGL = 783.854 m & FRL = 784.173 m)
21	3+775 to 3+800	0.025	0.4 m. (EGL = 783.711 m & FRL = 784.11 m)
22	3+800 to 3+825	0.025	0.382 m. (EGL = 783.723 m & FRL = 784.104 m)
23	3+825 to 3+850	0.025	0.205 m. (EGL = 783.951 m & FRL = 784.156 m)
24	3+850 to 3+875	0.025	0.279 m. (EGL = 783.977 m & FRL = 784.256 m)
25	3+875 to 3+900	0.025	0.263 m. (EGL = 784.099 m & FRL = 784.362 m)
26	3+900 to 3+925	0.025	0.198 m. (EGL = 784.271 m & FRL = 784.468 m)
27	3+925 to 3+950	0.025	0.053 m. (EGL = 784.521 m & FRL = 784.574 m)
28	3+950 to 3+975	0.025	0.002 m. (EGL = 784.678 m & FRL = 784.68 m)
29	3+975 to 4+000	0.025	0.08 m. (EGL = 784.708 m & FRL = 784.787 m)
30	4+000 to 4+025	0.025	0.224 m. (EGL = 784.67 m & FRL = 784.893 m)
31	4+025 to 4+050	0.025	0.352 m. (EGL = 784.647 m & FRL = 784.999 m)
32	4+050 to 4+075	0.025	0.45 m. (EGL = 784.656 m & FRL = 785.105 m)
33	4+075 to 4+100	0.025	0.491 m. (EGL = 784.721 m & FRL = 785.211 m)
34	4+100 to 4+125	0.025	0.444 m. (EGL = 784.873 m & FRL = 785.317 m)
35	4+125 to 4+150	0.025	0.324 m. (EGL = 785.099 m & FRL = 785.423 m)

Sl. No.	Section (from km to km)	Length (km)	Extent of raising [Top of finished road level]
36	4+150 to 4+175	0.025	0.153 m. (EGL = 785.377 m & FRL = 785.529 m)
37	4+175 to 4+200	0.025	0.151 m. (EGL = 785.48 m & FRL = 785.631 m)
38	4+200 to 4+225	0.025	0.181 m. (EGL = 785.517 m & FRL = 785.698 m)
39	4+225 to 4+250	0.025	0.217 m. (EGL = 785.512 m & FRL = 785.728 m)
40	4+250 to 4+275	0.025	0.202 m. (EGL = 785.519 m & FRL = 785.721 m)
41	4+275 to 4+300	0.025	0.138 m. (EGL = 785.566 m & FRL = 785.704 m)
42	4+300 to 4+325	0.025	0.161 m. (EGL = 785.527 m & FRL = 785.688 m)
43	4+325 to 4+350	0.025	0.2 m. (EGL = 785.472 m & FRL = 785.671 m)
44	4+350 to 4+375	0.025	0.223 m. (EGL = 785.431 m & FRL = 785.654 m)
45	4+375 to 4+400	0.025	0.177 m. (EGL = 785.462 m & FRL = 785.638 m)
46	4+400 to 4+425	0.025	0.235 m. (EGL = 785.387 m & FRL = 785.621 m)
47	4+425 to 4+450	0.025	0.355 m. (EGL = 785.251 m & FRL = 785.605 m)
48	4+450 to 4+475	0.025	0.534 m. (EGL = 785.054 m & FRL = 785.588 m)
49	4+475 to 4+500	0.025	0.556 m. (EGL = 785.016 m & FRL = 785.571 m)
50	4+500 to 4+525	0.025	0.57 m. (EGL = 784.985 m & FRL = 785.555 m)
51	4+525 to 4+550	0.025	0.609 m. (EGL = 784.93 m & FRL = 785.538 m)
52	4+550 to 4+575	0.025	0.57 m. (EGL = 784.953 m & FRL = 785.522 m)
53	4+575 to 4+600	0.025	0.308 m. (EGL = 785.198 m & FRL = 785.505 m)
54	4+600 to 4+625	0.025	0.049 m. (EGL = 785.44 m & FRL = 785.488 m)
55	4+625 to 4+650	0.025	0.029 m. (EGL = 785.445 m & FRL = 785.474 m)
56	4+650 to 4+675	0.025	0.109 m. (EGL = 785.363 m & FRL = 785.472 m)
57	4+675 to 4+700	0.025	0.213 m. (EGL = 785.272 m & FRL = 785.485 m)
58	4+700 to 4+725	0.025	0.332 m. (EGL = 785.179 m & FRL = 785.511 m)
59	4+725 to 4+750	0.025	0.335 m. (EGL = 785.205 m & FRL = 785.54 m)
60	4+750 to 4+775	0.025	0.299 m. (EGL = 785.27 m & FRL = 785.569 m)
61	4+775 to 4+800	0.025	0.266 m. (EGL = 785.332 m & FRL = 785.598 m)
62	4+800 to 4+825	0.025	0.199 m. (EGL = 785.428 m & FRL = 785.627 m)
63	4+825 to 4+850	0.025	0.098 m. (EGL = 785.558 m & FRL = 785.656 m)
64	4+850 to 4+875	0.025	0.092 m. (EGL = 785.593 m & FRL = 785.685 m)
65	4+875 to 4+900	0.025	0.04 m. (EGL = 785.675 m & FRL = 785.714 m)
66	4+900 to 4+925	0.025	-0.002 m. (EGL = 785.745 m & FRL = 785.743 m)
67	4+925 to 4+950	0.025	0.308 m. (EGL = 785.464 m & FRL = 785.772 m)
68	4+950 to 4+975	0.025	0.509 m. (EGL = 785.293 m & FRL = 785.801 m)
69	4+975 to 5+000	0.025	0.545 m. (EGL = 785.284 m & FRL = 785.829 m)
70	5+000 to 5+025	0.025	0.586 m. (EGL = 785.261 m & FRL = 785.846 m)
71	5+025 to 5+050	0.025	0.595 m. (EGL = 785.257 m & FRL = 785.851 m)
72	5+050 to 5+075	0.025	0.557 m. (EGL = 785.288 m & FRL = 785.844 m)
73	5+075 to 5+100	0.025	0.474 m. (EGL = 785.35 m & FRL = 785.824 m)
74	5+100 to 5+125	0.025	0.295 m. (EGL = 785.497 m & FRL = 785.791 m)
75	5+125 to 5+150	0.025	-0.005 m. (EGL = 785.751 m & FRL = 785.746 m)
76	5+150 to 5+175	0.025	0.101 m. (EGL = 785.588 m & FRL = 785.688 m)
77	5+175 to 5+200	0.025	0.262 m. (EGL = 785.357 m & FRL = 785.618 m)
78	5+200 to 5+225	0.025	0.256 m. (EGL = 785.291 m & FRL = 785.547 m)
79	5+225 to 5+250	0.025	0.222 m. (EGL = 785.254 m & FRL = 785.475 m)
80	5+250 to 5+275	0.025	0.271 m. (EGL = 785.133 m & FRL = 785.404 m)
81	5+275 to 5+300	0.025	0.267 m. (EGL = 785.07 m & FRL = 785.337 m)
82	5+300 to 5+325	0.025	0.275 m. (EGL = 785.015 m & FRL = 785.29 m)
83	5+325 to 5+350	0.025	0.272 m. (EGL = 784.99 m & FRL = 785.262 m)
84	5+350 to 5+375	0.025	0.323 m. (EGL = 784.928 m & FRL = 785.251 m)
85	5+375 to 5+400	0.025	0.393 m. (EGL = 784.849 m & FRL = 785.242 m)
86	5+400 to 5+425	0.025	0.337 m. (EGL = 784.897 m & FRL = 785.234 m)

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87	5+425 to 5+450	0.025	0.259 m. (EGL = 784.967 m & FRL = 785.225 m)
88	5+450 to 5+475	0.025	0.216 m. (EGL = 785.001 m & FRL = 785.216 m)
89	5+475 to 5+500	0.025	0.146 m. (EGL = 785.062 m & FRL = 785.208 m)
90	5+500 to 5+525	0.025	0.073 m. (EGL = 785.127 m & FRL = 785.199 m)
91	5+525 to 5+550	0.025	0.071 m. (EGL = 785.12 m & FRL = 785.19 m)
92	5+550 to 5+575	0.025	0.087 m. (EGL = 785.096 m & FRL = 785.182 m)
93	5+575 to 5+600	0.025	0.106 m. (EGL = 785.068 m & FRL = 785.173 m)
94	5+600 to 5+625	0.025	0.111 m. (EGL = 785.053 m & FRL = 785.164 m)
95	5+625 to 5+650	0.025	0.14 m. (EGL = 785.016 m & FRL = 785.155 m)
96	5+650 to 5+675	0.025	0.135 m. (EGL = 785.013 m & FRL = 785.147 m)
97	5+675 to 5+700	0.025	0.125 m. (EGL = 785.018 m & FRL = 785.143 m)
98	5+700 to 5+725	0.025	0.166 m. (EGL = 784.997 m & FRL = 785.162 m)
99	5+725 to 5+750	0.025	0.142 m. (EGL = 785.066 m & FRL = 785.208 m)
100	5+750 to 5+775	0.025	0.13 m. (EGL = 785.149 m & FRL = 785.278 m)
101	5+775 to 5+800	0.025	0.126 m. (EGL = 785.227 m & FRL = 785.353 m)
102	5+800 to 5+825	0.025	0.204 m. (EGL = 785.224 m & FRL = 785.428 m)
103	5+825 to 5+850	0.025	0.284 m. (EGL = 785.219 m & FRL = 785.503 m)
104	5+850 to 5+875	0.025	0.362 m. (EGL = 785.216 m & FRL = 785.578 m)
105	5+875 to 5+900	0.025	0.357 m. (EGL = 785.296 m & FRL = 785.653 m)
106	5+900 to 5+925	0.025	0.38 m. (EGL = 785.348 m & FRL = 785.728 m)
107	5+925 to 5+950	0.025	0.409 m. (EGL = 785.395 m & FRL = 785.803 m)
108	5+950 to 5+975	0.025	0.47 m. (EGL = 785.409 m & FRL = 785.878 m)
109	5+975 to 6+000	0.025	0.501 m. (EGL = 785.442 m & FRL = 785.943 m)
110	6+000 to 6+025	0.025	0.466 m. (EGL = 785.519 m & FRL = 785.984 m)
111	6+025 to 6+050	0.025	0.38 m. (EGL = 785.62 m & FRL = 786 m)
112	6+050 to 6+075	0.025	0.357 m. (EGL = 785.633 m & FRL = 785.99 m)
113	6+075 to 6+100	0.025	0.338 m. (EGL = 785.618 m & FRL = 785.956 m)
114	6+100 to 6+125	0.025	0.29 m. (EGL = 785.608 m & FRL = 785.897 m)
115	6+125 to 6+150	0.025	0.196 m. (EGL = 785.627 m & FRL = 785.822 m)
116	6+150 to 6+175	0.025	0.104 m. (EGL = 785.655 m & FRL = 785.758 m)
117	6+175 to 6+200	0.025	0.096 m. (EGL = 785.624 m & FRL = 785.719 m)
118	6+200 to 6+225	0.025	0.146 m. (EGL = 785.558 m & FRL = 785.704 m)
119	6+225 to 6+250	0.025	0.145 m. (EGL = 785.57 m & FRL = 785.715 m)
120	6+250 to 6+275	0.025	0.063 m. (EGL = 785.688 m & FRL = 785.751 m)
121	6+275 to 6+300	0.025	0.133 m. (EGL = 785.68 m & FRL = 785.812 m)
122	6+300 to 6+325	0.025	0.244 m. (EGL = 785.643 m & FRL = 785.887 m)
123	6+325 to 6+350	0.025	0.297 m. (EGL = 785.665 m & FRL = 785.961 m)
124	6+350 to 6+375	0.025	0.263 m. (EGL = 785.762 m & FRL = 786.024 m)
125	6+375 to 6+400	0.025	0.283 m. (EGL = 785.784 m & FRL = 786.066 m)
126	6+400 to 6+425	0.025	0.335 m. (EGL = 785.755 m & FRL = 786.089 m)
127	6+425 to 6+450	0.025	0.307 m. (EGL = 785.786 m & FRL = 786.092 m)
128	6+450 to 6+475	0.025	0.284 m. (EGL = 785.792 m & FRL = 786.076 m)
129	6+475 to 6+500	0.025	0.231 m. (EGL = 785.809 m & FRL = 786.039 m)
130	6+500 to 6+525	0.025	0.284 m. (EGL = 785.699 m & FRL = 785.983 m)
131	6+525 to 6+550	0.025	0.239 m. (EGL = 785.67 m & FRL = 785.908 m)
132	6+550 to 6+575	0.025	0.159 m. (EGL = 785.666 m & FRL = 785.825 m)
133	6+575 to 6+600	0.025	0.138 m. (EGL = 785.604 m & FRL = 785.742 m)
134	6+600 to 6+625	0.025	0.057 m. (EGL = 785.603 m & FRL = 785.659 m)
135	6+625 to 6+650	0.025	0.116 m. (EGL = 785.461 m & FRL = 785.577 m)
136	6+650 to 6+675	0.025	0.099 m. (EGL = 785.396 m & FRL = 785.494 m)
137	6+675 to 6+700	0.025	0.043 m. (EGL = 785.368 m & FRL = 785.411 m)

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138	6+700 to 6+725	0.025	0.068 m. (EGL = 785.26 m & FRL = 785.328 m)
139	6+725 to 6+750	0.025	0.129 m. (EGL = 785.131 m & FRL = 785.259 m)
140	6+750 to 6+775	0.025	0.14 m. (EGL = 785.076 m & FRL = 785.216 m)
141	6+775 to 6+800	0.025	0.173 m. (EGL = 785.028 m & FRL = 785.2 m)
142	6+800 to 6+825	0.025	0.171 m. (EGL = 785.038 m & FRL = 785.209 m)
143	6+825 to 6+850	0.025	0.187 m. (EGL = 785.06 m & FRL = 785.246 m)
144	6+850 to 6+875	0.025	0.298 m. (EGL = 785.011 m & FRL = 785.308 m)
145	6+875 to 6+900	0.025	0.296 m. (EGL = 785.088 m & FRL = 785.383 m)
146	6+900 to 6+925	0.025	0.285 m. (EGL = 785.173 m & FRL = 785.458 m)
147	6+925 to 6+950	0.025	0.241 m. (EGL = 785.293 m & FRL = 785.533 m)
148	6+950 to 6+975	0.025	0.183 m. (EGL = 785.425 m & FRL = 785.608 m)
149	6+975 to 7+000	0.025	0.047 m. (EGL = 785.637 m & FRL = 785.683 m)
150	7+000 to 7+025	0.025	0.111 m. (EGL = 785.636 m & FRL = 785.747 m)
151	7+025 to 7+050	0.025	0.23 m. (EGL = 785.556 m & FRL = 785.786 m)
152	7+050 to 7+075	0.025	0.313 m. (EGL = 785.487 m & FRL = 785.8 m)
153	7+075 to 7+100	0.025	0.349 m. (EGL = 785.44 m & FRL = 785.789 m)
154	7+100 to 7+125	0.025	0.539 m. (EGL = 785.213 m & FRL = 785.752 m)
155	7+125 to 7+150	0.025	0.691 m. (EGL = 785 m & FRL = 785.69 m)
156	7+150 to 7+175	0.025	0.729 m. (EGL = 784.886 m & FRL = 785.614 m)
157	7+175 to 7+200	0.025	0.638 m. (EGL = 784.901 m & FRL = 785.538 m)
158	7+200 to 7+225	0.025	0.573 m. (EGL = 784.889 m & FRL = 785.461 m)
159	7+225 to 7+250	0.025	0.51 m. (EGL = 784.876 m & FRL = 785.385 m)
160	7+250 to 7+275	0.025	0.329 m. (EGL = 784.98 m & FRL = 785.309 m)
161	7+275 to 7+300	0.025	0.161 m. (EGL = 785.071 m & FRL = 785.232 m)
162	7+300 to 7+325	0.025	0.058 m. (EGL = 785.092 m & FRL = 785.149 m)
163	7+325 to 7+350	0.025	0.053 m. (EGL = 785.005 m & FRL = 785.058 m)
164	7+350 to 7+375	0.025	0.073 m. (EGL = 784.888 m & FRL = 784.961 m)
165	7+375 to 7+400	0.025	0.082 m. (EGL = 784.781 m & FRL = 784.862 m)
166	7+400 to 7+425	0.025	0.055 m. (EGL = 784.707 m & FRL = 784.762 m)
167	7+425 to 7+450	0.025	0.032 m. (EGL = 784.632 m & FRL = 784.663 m)
168	7+450 to 7+475	0.025	0.044 m. (EGL = 784.52 m & FRL = 784.563 m)
169	7+475 to 7+500	0.025	0.183 m. (EGL = 784.282 m & FRL = 784.465 m)
170	7+500 to 7+525	0.025	0.303 m. (EGL = 784.093 m & FRL = 784.395 m)
171	7+525 to 7+550	0.025	0.289 m. (EGL = 784.076 m & FRL = 784.365 m)
172	7+550 to 7+575	0.025	0.25 m. (EGL = 784.127 m & FRL = 784.377 m)
173	7+575 to 7+600	0.025	0.276 m. (EGL = 784.152 m & FRL = 784.428 m)
174	7+600 to 7+625	0.025	0.371 m. (EGL = 784.122 m & FRL = 784.492 m)
175	7+625 to 7+650	0.025	0.462 m. (EGL = 784.094 m & FRL = 784.556 m)
176	7+650 to 7+675	0.025	0.519 m. (EGL = 784.102 m & FRL = 784.62 m)
177	7+675 to 7+700	0.025	0.493 m. (EGL = 784.191 m & FRL = 784.684 m)
178	7+700 to 7+725	0.025	0.465 m. (EGL = 784.284 m & FRL = 784.748 m)
179	7+725 to 7+750	0.025	0.306 m. (EGL = 784.506 m & FRL = 784.811 m)
180	7+750 to 7+775	0.025	0.034 m. (EGL = 784.842 m & FRL = 784.875 m)
181	7+775 to 7+800	0.025	0.098 m. (EGL = 784.841 m & FRL = 784.939 m)
182	7+800 to 7+825	0.025	0.202 m. (EGL = 784.802 m & FRL = 785.003 m)
183	7+825 to 7+850	0.025	0.226 m. (EGL = 784.841 m & FRL = 785.067 m)
184	7+850 to 7+875	0.025	0.205 m. (EGL = 784.924 m & FRL = 785.128 m)
185	7+875 to 7+900	0.025	0.273 m. (EGL = 784.905 m & FRL = 785.177 m)
186	7+900 to 7+925	0.025	0.486 m. (EGL = 784.725 m & FRL = 785.211 m)
187	7+925 to 7+950	0.025	0.676 m. (EGL = 784.556 m & FRL = 785.232 m)
188	7+950 to 7+975	0.025	0.597 m. (EGL = 784.654 m & FRL = 785.25 m)

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189	7+975 to 8+000	0.025	0.481 m. (EGL = 784.787 m & FRL = 785.268 m)
190	8+000 to 8+025	0.025	0.446 m. (EGL = 784.842 m & FRL = 785.287 m)
191	8+025 to 8+050	0.025	0.381 m. (EGL = 784.924 m & FRL = 785.305 m)
192	8+050 to 8+075	0.025	0.42 m. (EGL = 784.903 m & FRL = 785.323 m)
193	8+075 to 8+100	0.025	0.404 m. (EGL = 784.939 m & FRL = 785.342 m)
194	8+100 to 8+125	0.025	0.306 m. (EGL = 785.055 m & FRL = 785.36 m)
195	8+125 to 8+150	0.025	0.332 m. (EGL = 785.046 m & FRL = 785.378 m)
196	8+150 to 8+175	0.025	0.347 m. (EGL = 785.049 m & FRL = 785.396 m)
197	8+175 to 8+200	0.025	0.217 m. (EGL = 785.198 m & FRL = 785.415 m)
198	8+200 to 8+225	0.025	0.252 m. (EGL = 785.181 m & FRL = 785.433 m)
199	8+225 to 8+250	0.025	0.304 m. (EGL = 785.147 m & FRL = 785.451 m)
200	8+250 to 8+275	0.025	0.361 m. (EGL = 785.11 m & FRL = 785.47 m)
201	8+275 to 8+300	0.025	0.455 m. (EGL = 785.034 m & FRL = 785.488 m)
202	8+300 to 8+325	0.025	0.436 m. (EGL = 785.07 m & FRL = 785.506 m)
203	8+325 to 8+350	0.025	0.322 m. (EGL = 785.203 m & FRL = 785.524 m)
204	8+350 to 8+375	0.025	0.198 m. (EGL = 785.346 m & FRL = 785.543 m)
205	8+375 to 8+400	0.025	0.244 m. (EGL = 785.305 m & FRL = 785.548 m)
206	8+400 to 8+425	0.025	0.274 m. (EGL = 785.226 m & FRL = 785.499 m)
207	8+425 to 8+450	0.025	0.236 m. (EGL = 785.157 m & FRL = 785.392 m)
208	8+450 to 8+475	0.025	0.182 m. (EGL = 785.053 m & FRL = 785.234 m)
209	8+475 to 8+500	0.025	0.245 m. (EGL = 784.824 m & FRL = 785.068 m)
210	8+500 to 8+525	0.025	0.242 m. (EGL = 784.661 m & FRL = 784.902 m)
211	8+525 to 8+550	0.025	0.19 m. (EGL = 784.546 m & FRL = 784.736 m)
212	8+550 to 8+575	0.025	0.17 m. (EGL = 784.411 m & FRL = 784.58 m)
213	8+575 to 8+600	0.025	0.143 m. (EGL = 784.351 m & FRL = 784.493 m)
214	8+600 to 8+625	0.025	0.215 m. (EGL = 784.267 m & FRL = 784.482 m)
215	8+625 to 8+650	0.025	0.333 m. (EGL = 784.215 m & FRL = 784.548 m)
216	8+650 to 8+675	0.025	0.499 m. (EGL = 784.192 m & FRL = 784.69 m)
217	8+675 to 8+700	0.025	0.683 m. (EGL = 784.206 m & FRL = 784.888 m)
218	8+700 to 8+725	0.025	0.674 m. (EGL = 784.416 m & FRL = 785.089 m)
219	8+725 to 8+750	0.025	0.648 m. (EGL = 784.627 m & FRL = 785.274 m)
220	8+750 to 8+775	0.025	0.758 m. (EGL = 784.641 m & FRL = 785.398 m)
221	8+775 to 8+800	0.025	0.601 m. (EGL = 784.858 m & FRL = 785.459 m)
222	8+800 to 8+825	0.025	0.039 m. (EGL = 785.427 m & FRL = 785.466 m)
223	8+825 to 8+850	0.025	0.38 m. (EGL = 785.086 m & FRL = 785.466 m)
224	8+850 to 8+875	0.025	1.025 m. (EGL = 784.417 m & FRL = 785.442 m)
225	8+875 to 8+900	0.025	1.288 m. (EGL = 784.086 m & FRL = 785.373 m)
226	8+900 to 8+925	0.025	1.217 m. (EGL = 784.042 m & FRL = 785.259 m)
227	8+925 to 8+950	0.025	1.053 m. (EGL = 784.047 m & FRL = 785.1 m)
228	8+950 to 8+975	0.025	0.789 m. (EGL = 784.109 m & FRL = 784.897 m)
229	8+975 to 9+000	0.025	0.515 m. (EGL = 784.133 m & FRL = 784.648 m)
230	9+000 to 9+025	0.025	0.349 m. (EGL = 784.03 m & FRL = 784.378 m)
231	9+025 to 9+050	0.025	0.314 m. (EGL = 783.813 m & FRL = 784.127 m)
232	9+050 to 9+075	0.025	0.275 m. (EGL = 783.682 m & FRL = 783.957 m)
233	9+075 to 9+100	0.025	0.209 m. (EGL = 783.666 m & FRL = 783.875 m)
234	9+100 to 9+125	0.025	0.207 m. (EGL = 783.672 m & FRL = 783.879 m)
235	9+125 to 9+150	0.025	0.212 m. (EGL = 783.711 m & FRL = 783.923 m)
236	9+150 to 9+175	0.025	0.184 m. (EGL = 783.782 m & FRL = 783.966 m)
237	9+175 to 9+200	0.025	0.146 m. (EGL = 783.863 m & FRL = 784.009 m)
238	9+200 to 9+225	0.025	0.076 m. (EGL = 783.977 m & FRL = 784.052 m)
239	9+225 to 9+250	0.025	0.135 m. (EGL = 783.961 m & FRL = 784.095 m)

Sl. No.	Section (from km to km)	Length (km)	Extent of raising [Top of finished road level]
240	9+250 to 9+275	0.025	0.164 m. (EGL = 783.975 m & FRL = 784.138 m)
241	9+275 to 9+300	0.025	0.094 m. (EGL = 784.088 m & FRL = 784.181 m)
242	9+300 to 9+325	0.025	0.071 m. (EGL = 784.154 m & FRL = 784.224 m)
243	9+325 to 9+350	0.025	0.139 m. (EGL = 784.129 m & FRL = 784.267 m)
244	9+350 to 9+375	0.025	0.251 m. (EGL = 784.059 m & FRL = 784.31 m)
245	9+375 to 9+400	0.025	0.359 m. (EGL = 783.994 m & FRL = 784.353 m)
246	9+400 to 9+425	0.025	0.361 m. (EGL = 784.035 m & FRL = 784.395 m)
247	9+425 to 9+450	0.025	0.298 m. (EGL = 784.132 m & FRL = 784.429 m)
248	9+450 to 9+475	0.025	0.413 m. (EGL = 784.04 m & FRL = 784.452 m)
249	9+475 to 9+500	0.025	0.521 m. (EGL = 783.945 m & FRL = 784.466 m)
250	9+500 to 9+525	0.025	0.542 m. (EGL = 783.929 m & FRL = 784.47 m)
251	9+525 to 9+550	0.025	0.56 m. (EGL = 783.905 m & FRL = 784.464 m)
252	9+550 to 9+575	0.025	0.597 m. (EGL = 783.853 m & FRL = 784.449 m)
253	9+575 to 9+600	0.025	0.502 m. (EGL = 783.921 m & FRL = 784.423 m)
254	9+600 to 9+625	0.025	0.478 m. (EGL = 783.911 m & FRL = 784.388 m)
255	9+625 to 9+650	0.025	0.52 m. (EGL = 783.823 m & FRL = 784.343 m)
256	9+650 to 9+675	0.025	0.553 m. (EGL = 783.735 m & FRL = 784.288 m)
257	9+675 to 9+700	0.025	0.5 m. (EGL = 783.725 m & FRL = 784.224 m)
258	9+700 to 9+725	0.025	0.434 m. (EGL = 783.716 m & FRL = 784.15 m)
259	9+725 to 9+750	0.025	0.337 m. (EGL = 783.74 m & FRL = 784.076 m)
260	9+750 to 9+775	0.025	0.356 m. (EGL = 783.646 m & FRL = 784.001 m)
261	9+775 to 9+800	0.025	0.351 m. (EGL = 783.577 m & FRL = 783.927 m)
262	9+800 to 9+825	0.025	0.249 m. (EGL = 783.604 m & FRL = 783.853 m)
263	9+825 to 9+850	0.025	0.141 m. (EGL = 783.652 m & FRL = 783.793 m)
264	9+850 to 9+875	0.025	0.177 m. (EGL = 783.582 m & FRL = 783.758 m)
265	9+875 to 9+900	0.025	0.236 m. (EGL = 783.51 m & FRL = 783.745 m)
266	9+900 to 9+925	0.025	0.333 m. (EGL = 783.412 m & FRL = 783.745 m)
267	9+925 to 9+950	0.025	0.422 m. (EGL = 783.324 m & FRL = 783.745 m)
268	9+950 to 9+975	0.025	0.443 m. (EGL = 783.302 m & FRL = 783.745 m)
269	9+975 to 10+000	0.025	0.389 m. (EGL = 783.357 m & FRL = 783.745 m)
270	10+000 to 10+025	0.025	0.348 m. (EGL = 783.397 m & FRL = 783.745 m)
271	10+025 to 10+050	0.025	0.389 m. (EGL = 783.357 m & FRL = 783.745 m)
272	10+050 to 10+075	0.025	0.441 m. (EGL = 783.305 m & FRL = 783.745 m)
273	10+075 to 10+100	0.025	0.486 m. (EGL = 783.259 m & FRL = 783.745 m)
274	10+100 to 10+125	0.025	0.428 m. (EGL = 783.318 m & FRL = 783.745 m)
275	10+125 to 10+150	0.025	0.383 m. (EGL = 783.372 m & FRL = 783.754 m)
276	10+150 to 10+175	0.025	0.379 m. (EGL = 783.424 m & FRL = 783.802 m)
277	10+175 to 10+200	0.025	0.375 m. (EGL = 783.516 m & FRL = 783.891 m)
278	10+200 to 10+225	0.025	0.405 m. (EGL = 783.61 m & FRL = 784.015 m)
279	10+225 to 10+250	0.025	0.376 m. (EGL = 783.77 m & FRL = 784.146 m)
280	10+250 to 10+275	0.025	0.313 m. (EGL = 783.965 m & FRL = 784.277 m)
281	10+275 to 10+300	0.025	0.132 m. (EGL = 784.276 m & FRL = 784.407 m)
282	10+300 to 10+325	0.025	0.116 m. (EGL = 784.413 m & FRL = 784.528 m)
283	10+325 to 10+350	0.025	0.178 m. (EGL = 784.454 m & FRL = 784.632 m)
284	10+350 to 10+375	0.025	0.401 m. (EGL = 784.319 m & FRL = 784.719 m)
285	10+375 to 10+400	0.025	0.486 m. (EGL = 784.308 m & FRL = 784.794 m)
286	10+400 to 10+425	0.025	0.405 m. (EGL = 784.464 m & FRL = 784.869 m)
287	10+425 to 10+450	0.025	0.409 m. (EGL = 784.535 m & FRL = 784.944 m)
288	10+450 to 10+475	0.025	0.512 m. (EGL = 784.502 m & FRL = 785.013 m)
289	10+475 to 10+500	0.025	0.548 m. (EGL = 784.511 m & FRL = 785.058 m)
290	10+500 to 10+525	0.025	0.557 m. (EGL = 784.521 m & FRL = 785.077 m)

Sl. No.	Section (from km to km)	Length (km)	Extent of raising [Top of finished road level]
291	10+525 to 10+550	0.025	0.484 m. (EGL = 784.587 m & FRL = 785.07 m)
292	10+550 to 10+575	0.025	0.513 m. (EGL = 784.526 m & FRL = 785.038 m)
293	10+575 to 10+600	0.025	0.578 m. (EGL = 784.403 m & FRL = 784.981 m)
294	10+600 to 10+625	0.025	0.467 m. (EGL = 784.438 m & FRL = 784.904 m)
295	10+625 to 10+650	0.025	0.428 m. (EGL = 784.399 m & FRL = 784.826 m)
296	10+650 to 10+675	0.025	0.396 m. (EGL = 784.351 m & FRL = 784.747 m)
297	10+675 to 10+700	0.025	0.402 m. (EGL = 784.267 m & FRL = 784.669 m)
298	10+700 to 10+725	0.025	0.405 m. (EGL = 784.186 m & FRL = 784.591 m)
299	10+725 to 10+750	0.025	0.101 m. (EGL = 784.413 m & FRL = 784.513 m)
300	10+750 to 10+775	0.025	0.063 m. (EGL = 784.378 m & FRL = 784.441 m)
301	10+775 to 10+800	0.025	0.159 m. (EGL = 784.241 m & FRL = 784.399 m)
302	10+800 to 10+825	0.025	0.23 m. (EGL = 784.159 m & FRL = 784.388 m)
303	10+825 to 10+850	0.025	0.239 m. (EGL = 784.171 m & FRL = 784.41 m)
304	10+850 to 10+875	0.025	0.294 m. (EGL = 784.17 m & FRL = 784.463 m)
305	10+875 to 10+900	0.025	0.456 m. (EGL = 784.083 m & FRL = 784.538 m)
306	10+900 to 10+925	0.025	0.531 m. (EGL = 784.083 m & FRL = 784.613 m)
307	10+925 to 10+950	0.025	0.641 m. (EGL = 784.023 m & FRL = 784.664 m)
308	10+950 to 10+975	0.025	0.461 m. (EGL = 784.203 m & FRL = 784.663 m)
309	10+975 to 11+000	0.025	0.353 m. (EGL = 784.258 m & FRL = 784.611 m)
310	11+000 to 11+025	0.025	0.311 m. (EGL = 784.196 m & FRL = 784.507 m)
311	11+025 to 11+050	0.025	0.25 m. (EGL = 784.103 m & FRL = 784.353 m)
312	11+050 to 11+075	0.025	0.178 m. (EGL = 784.002 m & FRL = 784.18 m)
313	11+075 to 11+100	0.025	0.111 m. (EGL = 783.898 m & FRL = 784.008 m)
314	11+100 to 11+125	0.025	0.299 m. (EGL = 783.537 m & FRL = 783.835 m)
315	11+125 to 11+150	0.025	0.466 m. (EGL = 783.198 m & FRL = 783.663 m)
316	11+150 to 11+175	0.025	0.441 m. (EGL = 783.05 m & FRL = 783.49 m)
317	11+175 to 11+200	0.025	0.26 m. (EGL = 783.059 m & FRL = 783.318 m)
318	11+200 to 11+225	0.025	0.017 m. (EGL = 783.128 m & FRL = 783.145 m)
319	11+225 to 11+250	0.025	0.099 m. (EGL = 782.891 m & FRL = 782.989 m)
320	11+250 to 11+275	0.025	0.195 m. (EGL = 782.68 m & FRL = 782.874 m)
321	11+275 to 11+300	0.025	0.189 m. (EGL = 782.613 m & FRL = 782.802 m)
322	11+300 to 11+325	0.025	0.253 m. (EGL = 782.52 m & FRL = 782.772 m)
323	11+325 to 11+350	0.025	0.219 m. (EGL = 782.565 m & FRL = 782.784 m)
324	11+350 to 11+375	0.025	0.222 m. (EGL = 782.618 m & FRL = 782.839 m)
325	11+375 to 11+400	0.025	0.296 m. (EGL = 782.624 m & FRL = 782.92 m)
326	11+400 to 11+425	0.025	0.303 m. (EGL = 782.679 m & FRL = 782.982 m)
327	11+425 to 11+450	0.025	0.308 m. (EGL = 782.704 m & FRL = 783.011 m)
328	11+450 to 11+475	0.025	0.388 m. (EGL = 782.621 m & FRL = 783.008 m)
329	11+475 to 11+500	0.025	0.429 m. (EGL = 782.543 m & FRL = 782.972 m)
330	11+500 to 11+525	0.025	0.456 m. (EGL = 782.45 m & FRL = 782.906 m)
331	11+525 to 11+550	0.025	0.503 m. (EGL = 782.329 m & FRL = 782.831 m)
332	11+550 to 11+575	0.025	0.491 m. (EGL = 782.272 m & FRL = 782.763 m)
333	11+575 to 11+600	0.025	0.413 m. (EGL = 782.319 m & FRL = 782.731 m)
334	11+600 to 11+625	0.025	0.304 m. (EGL = 782.432 m & FRL = 782.736 m)
335	11+625 to 11+650	0.025	0.192 m. (EGL = 782.589 m & FRL = 782.781 m)
336	11+650 to 11+675	0.025	0.115 m. (EGL = 782.742 m & FRL = 782.856 m)
337	11+675 to 11+700	0.025	0.1 m. (EGL = 782.834 m & FRL = 782.933 m)
338	11+700 to 11+725	0.025	0.116 m. (EGL = 782.895 m & FRL = 783.011 m)
339	11+725 to 11+750	0.025	0.243 m. (EGL = 782.847 m & FRL = 783.089 m)
340	11+750 to 11+775	0.025	0.251 m. (EGL = 782.916 m & FRL = 783.167 m)
341	11+775 to 11+800	0.025	0.191 m. (EGL = 783.055 m & FRL = 783.245 m)

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342	11+800 to 11+825	0.025	0.25 m. (EGL = 783.074 m & FRL = 783.323 m)
343	11+825 to 11+850	0.025	0.234 m. (EGL = 783.164 m & FRL = 783.397 m)
344	11+850 to 11+875	0.025	0.119 m. (EGL = 783.33 m & FRL = 783.449 m)
345	11+875 to 11+900	0.025	0.156 m. (EGL = 783.319 m & FRL = 783.474 m)
346	11+900 to 11+925	0.025	0.313 m. (EGL = 783.162 m & FRL = 783.475 m)
347	11+925 to 11+950	0.025	0.33 m. (EGL = 783.141 m & FRL = 783.47 m)
348	11+950 to 11+975	0.025	0.248 m. (EGL = 783.217 m & FRL = 783.464 m)
349	11+975 to 12+000	0.025	0.127 m. (EGL = 783.332 m & FRL = 783.459 m)
350	12+000 to 12+025	0.025	0.175 m. (EGL = 783.29 m & FRL = 783.464 m)
351	12+025 to 12+050	0.025	0.287 m. (EGL = 783.22 m & FRL = 783.507 m)
352	12+050 to 12+075	0.025	0.377 m. (EGL = 783.21 m & FRL = 783.587 m)
353	12+075 to 12+100	0.025	0.46 m. (EGL = 783.241 m & FRL = 783.7 m)
354	12+100 to 12+125	0.025	0.369 m. (EGL = 783.449 m & FRL = 783.817 m)
355	12+125 to 12+150	0.025	0.245 m. (EGL = 783.689 m & FRL = 783.933 m)
356	12+150 to 12+175	0.025	0.127 m. (EGL = 783.923 m & FRL = 784.05 m)
357	12+175 to 12+200	0.025	0.153 m. (EGL = 784.008 m & FRL = 784.161 m)
358	12+200 to 12+225	0.025	0.118 m. (EGL = 784.146 m & FRL = 784.263 m)
359	12+225 to 12+250	0.025	0.145 m. (EGL = 784.213 m & FRL = 784.357 m)
360	12+250 to 12+275	0.025	0.164 m. (EGL = 784.283 m & FRL = 784.446 m)
361	12+275 to 12+300	0.025	0.273 m. (EGL = 784.262 m & FRL = 784.534 m)
362	12+300 to 12+325	0.025	0.302 m. (EGL = 784.322 m & FRL = 784.623 m)
363	12+325 to 12+350	0.025	0.448 m. (EGL = 784.256 m & FRL = 784.703 m)
364	12+350 to 12+375	0.025	0.537 m. (EGL = 784.219 m & FRL = 784.756 m)
365	12+375 to 12+400	0.025	0.586 m. (EGL = 784.195 m & FRL = 784.781 m)
366	12+400 to 12+425	0.025	0.611 m. (EGL = 784.169 m & FRL = 784.78 m)
367	12+425 to 12+450	0.025	0.549 m. (EGL = 784.203 m & FRL = 784.751 m)
368	12+450 to 12+475	0.025	0.409 m. (EGL = 784.287 m & FRL = 784.695 m)
369	12+475 to 12+500	0.025	0.342 m. (EGL = 784.279 m & FRL = 784.62 m)
370	12+500 to 12+525	0.025	0.287 m. (EGL = 784.291 m & FRL = 784.578 m)
371	12+525 to 12+550	0.025	0.25 m. (EGL = 784.336 m & FRL = 784.586 m)
372	12+550 to 12+575	0.025	0.246 m. (EGL = 784.4 m & FRL = 784.646 m)
373	12+575 to 12+600	0.025	0.301 m. (EGL = 784.455 m & FRL = 784.756 m)
374	12+600 to 12+625	0.025	0.35 m. (EGL = 784.567 m & FRL = 784.916 m)
375	12+625 to 12+650	0.025	0.425 m. (EGL = 784.662 m & FRL = 785.087 m)
376	12+650 to 12+675	0.025	0.417 m. (EGL = 784.839 m & FRL = 785.256 m)
377	12+675 to 12+700	0.025	0.346 m. (EGL = 785.041 m & FRL = 785.387 m)
378	12+700 to 12+725	0.025	0.142 m. (EGL = 785.324 m & FRL = 785.465 m)
379	12+725 to 12+750	0.025	-0.009 m. (EGL = 785.498 m & FRL = 785.49 m)
380	12+750 to 12+775	0.025	0.068 m. (EGL = 785.423 m & FRL = 785.49 m)
381	12+775 to 12+800	0.025	0.309 m. (EGL = 785.181 m & FRL = 785.49 m)
382	12+800 to 12+825	0.025	0.667 m. (EGL = 784.824 m & FRL = 785.49 m)
383	12+825 to 12+850	0.025	0.717 m. (EGL = 784.758 m & FRL = 785.475 m)
384	12+850 to 12+875	0.025	0.678 m. (EGL = 784.759 m & FRL = 785.436 m)
385	12+875 to 12+900	0.025	0.581 m. (EGL = 784.794 m & FRL = 785.374 m)
386	12+900 to 12+925	0.025	0.545 m. (EGL = 784.753 m & FRL = 785.298 m)
387	12+925 to 12+950	0.025	0.539 m. (EGL = 784.682 m & FRL = 785.221 m)
388	12+950 to 12+975	0.025	0.493 m. (EGL = 784.652 m & FRL = 785.145 m)
389	12+975 to 13+000	0.025	0.441 m. (EGL = 784.628 m & FRL = 785.069 m)
390	13+000 to 13+025	0.025	0.339 m. (EGL = 784.653 m & FRL = 784.992 m)
391	13+025 to 13+050	0.025	0.44 m. (EGL = 784.477 m & FRL = 784.916 m)
392	13+050 to 13+075	0.025	0.345 m. (EGL = 784.496 m & FRL = 784.84 m)

Sl. No.	Section (from km to km)	Length (km)	Extent of raising [Top of finished road level]
393	13+075 to 13+100	0.025	0.311 m. (EGL = 784.453 m & FRL = 784.763 m)
394	13+100 to 13+125	0.025	0.194 m. (EGL = 784.493 m & FRL = 784.687 m)
395	13+125 to 13+150	0.025	0.094 m. (EGL = 784.517 m & FRL = 784.611 m)
396	13+150 to 13+175	0.025	0.371 m. (EGL = 784.164 m & FRL = 784.534 m)
397	13+175 to 13+200	0.025	0.619 m. (EGL = 783.839 m & FRL = 784.458 m)
398	13+200 to 13+225	0.025	0.476 m. (EGL = 783.906 m & FRL = 784.382 m)
399	13+225 to 13+250	0.025	0.396 m. (EGL = 783.909 m & FRL = 784.305 m)
400	13+250 to 13+275	0.025	0.284 m. (EGL = 783.946 m & FRL = 784.229 m)
401	13+275 to 13+300	0.025	0.133 m. (EGL = 784.021 m & FRL = 784.153 m)
402	13+300 to 13+325	0.025	0.073 m. (EGL = 784.003 m & FRL = 784.076 m)
403	13+325 to 13+350	0.025	0.02 m. (EGL = 783.992 m & FRL = 784.011 m)
404	13+350 to 13+375	0.025	0.073 m. (EGL = 783.908 m & FRL = 783.98 m)
405	13+375 to 13+400	0.025	0.038 m. (EGL = 783.947 m & FRL = 783.984 m)
406	13+400 to 13+425	0.025	0.061 m. (EGL = 783.963 m & FRL = 784.023 m)
407	13+425 to 13+450	0.025	0.087 m. (EGL = 784.01 m & FRL = 784.097 m)
408	13+450 to 13+475	0.025	0.177 m. (EGL = 784.031 m & FRL = 784.207 m)
409	13+475 to 13+500	0.025	0.179 m. (EGL = 784.162 m & FRL = 784.341 m)
410	13+500 to 13+525	0.025	0.221 m. (EGL = 784.255 m & FRL = 784.475 m)
411	13+525 to 13+550	0.025	0.165 m. (EGL = 784.445 m & FRL = 784.61 m)
412	13+550 to 13+575	0.025	0.179 m. (EGL = 784.566 m & FRL = 784.745 m)
413	13+575 to 13+600	0.025	0.198 m. (EGL = 784.682 m & FRL = 784.879 m)
414	13+600 to 13+625	0.025	0.168 m. (EGL = 784.847 m & FRL = 785.014 m)
415	13+625 to 13+650	0.025	0.158 m. (EGL = 784.993 m & FRL = 785.151 m)
416	13+650 to 13+675	0.025	0.087 m. (EGL = 785.217 m & FRL = 785.303 m)
417	13+675 to 13+700	0.025	0.121 m. (EGL = 785.352 m & FRL = 785.473 m)
418	13+700 to 13+725	0.025	0.265 m. (EGL = 785.396 m & FRL = 785.661 m)
419	13+725 to 13+750	0.025	0.409 m. (EGL = 785.458 m & FRL = 785.866 m)
420	13+750 to 13+775	0.025	0.476 m. (EGL = 785.608 m & FRL = 786.083 m)
421	13+775 to 13+800	0.025	0.63 m. (EGL = 785.673 m & FRL = 786.302 m)
422	13+800 to 13+825	0.025	0.652 m. (EGL = 785.843 m & FRL = 786.494 m)
423	13+825 to 13+850	0.025	0.682 m. (EGL = 785.949 m & FRL = 786.63 m)
424	13+850 to 13+875	0.025	0.585 m. (EGL = 786.128 m & FRL = 786.713 m)
425	13+875 to 13+900	0.025	0.4 m. (EGL = 786.34 m & FRL = 786.74 m)
426	13+900 to 13+925	0.025	0.008 m. (EGL = 786.733 m & FRL = 786.74 m)
427	13+925 to 13+950	0.025	0.222 m. (EGL = 786.518 m & FRL = 786.74 m)
428	13+950 to 13+975	0.025	0.394 m. (EGL = 786.346 m & FRL = 786.739 m)
429	13+975 to 14+000	0.025	0.287 m. (EGL = 786.438 m & FRL = 786.724 m)
430	14+000 to 14+025	0.025	0.268 m. (EGL = 786.42 m & FRL = 786.687 m)
431	14+025 to 14+050	0.025	0.25 m. (EGL = 786.378 m & FRL = 786.628 m)
432	14+050 to 14+075	0.025	0.221 m. (EGL = 786.327 m & FRL = 786.547 m)
433	14+075 to 14+100	0.025	0.265 m. (EGL = 786.181 m & FRL = 786.445 m)
434	14+100 to 14+125	0.025	0.265 m. (EGL = 786.056 m & FRL = 786.321 m)
435	14+125 to 14+150	0.025	0.231 m. (EGL = 785.96 m & FRL = 786.191 m)
436	14+150 to 14+175	0.025	0.133 m. (EGL = 785.929 m & FRL = 786.061 m)
437	14+175 to 14+200	0.025	0.042 m. (EGL = 785.89 m & FRL = 785.931 m)
438	14+200 to 14+225	0.025	0.172 m. (EGL = 785.63 m & FRL = 785.801 m)
439	14+225 to 14+250	0.025	0.345 m. (EGL = 785.328 m & FRL = 785.672 m)
440	14+250 to 14+275	0.025	0.344 m. (EGL = 785.199 m & FRL = 785.542 m)
441	14+275 to 14+300	0.025	0.323 m. (EGL = 785.089 m & FRL = 785.412 m)
442	14+300 to 14+325	0.025	0.483 m. (EGL = 784.8 m & FRL = 785.282 m)
443	14+325 to 14+350	0.025	0.176 m. (EGL = 784.977 m & FRL = 785.152 m)

Sl. No.	Section (from km to km)	Length (km)	Extent of raising [Top of finished road level]
444	14+350 to 14+375	0.025	0.306 m. (EGL = 784.746 m & FRL = 785.051 m)
445	14+375 to 14+400	0.025	0.39 m. (EGL = 784.629 m & FRL = 785.019 m)
446	14+400 to 14+425	0.025	0.494 m. (EGL = 784.563 m & FRL = 785.056 m)
447	14+425 to 14+450	0.025	0.4 m. (EGL = 784.744 m & FRL = 785.143 m)
448	14+450 to 14+475	0.025	0.213 m. (EGL = 785.02 m & FRL = 785.233 m)
449	14+475 to 14+500	0.025	0.046 m. (EGL = 785.277 m & FRL = 785.323 m)
450	14+500 to 14+525	0.025	0.152 m. (EGL = 785.262 m & FRL = 785.413 m)
451	14+525 to 14+550	0.025	0.169 m. (EGL = 785.335 m & FRL = 785.503 m)
452	14+550 to 14+575	0.025	0.221 m. (EGL = 785.372 m & FRL = 785.592 m)
453	14+575 to 14+600	0.025	0.332 m. (EGL = 785.35 m & FRL = 785.682 m)
454	14+600 to 14+625	0.025	0.415 m. (EGL = 785.345 m & FRL = 785.76 m)
455	14+625 to 14+650	0.025	0.38 m. (EGL = 785.437 m & FRL = 785.817 m)
456	14+650 to 14+675	0.025	0.311 m. (EGL = 785.542 m & FRL = 785.853 m)
457	14+675 to 14+700	0.025	0.236 m. (EGL = 785.633 m & FRL = 785.869 m)
458	14+700 to 14+725	0.025	0.294 m. (EGL = 785.572 m & FRL = 785.865 m)
459	14+725 to 14+750	0.025	0.273 m. (EGL = 785.568 m & FRL = 785.84 m)
460	14+750 to 14+775	0.025	0.279 m. (EGL = 785.516 m & FRL = 785.795 m)
461	14+775 to 14+800	0.025	0.249 m. (EGL = 785.481 m & FRL = 785.729 m)
462	14+800 to 14+825	0.025	0.233 m. (EGL = 785.422 m & FRL = 785.655 m)
463	14+825 to 14+850	0.025	0.157 m. (EGL = 785.425 m & FRL = 785.581 m)
464	14+850 to 14+875	0.025	0.139 m. (EGL = 785.368 m & FRL = 785.507 m)
465	14+875 to 14+900	0.025	0.077 m. (EGL = 785.356 m & FRL = 785.433 m)
466	14+900 to 14+925	0.025	0.079 m. (EGL = 785.287 m & FRL = 785.366 m)
467	14+925 to 14+950	0.025	0.128 m. (EGL = 785.204 m & FRL = 785.331 m)
468	14+950 to 14+975	0.025	0.133 m. (EGL = 785.199 m & FRL = 785.331 m)
469	14+975 to 15+000	0.025	0.152 m. (EGL = 785.213 m & FRL = 785.364 m)
470	15+000 to 15+025	0.025	0.164 m. (EGL = 785.268 m & FRL = 785.431 m)
471	15+025 to 15+050	0.025	0.102 m. (EGL = 785.429 m & FRL = 785.531 m)
472	15+050 to 15+075	0.025	0.115 m. (EGL = 785.545 m & FRL = 785.659 m)
473	15+075 to 15+100	0.025	0.143 m. (EGL = 785.646 m & FRL = 785.788 m)
474	15+100 to 15+125	0.025	0.206 m. (EGL = 785.712 m & FRL = 785.917 m)
475	15+125 to 15+150	0.025	0.235 m. (EGL = 785.812 m & FRL = 786.046 m)
476	15+150 to 15+175	0.025	0.11 m. (EGL = 786.065 m & FRL = 786.175 m)
477	15+175 to 15+200	0.025	0.087 m. (EGL = 786.218 m & FRL = 786.304 m)
478	15+200 to 15+225	0.025	0.202 m. (EGL = 786.231 m & FRL = 786.433 m)
479	15+225 to 15+250	0.025	0.303 m. (EGL = 786.26 m & FRL = 786.562 m)
480	15+250 to 15+275	0.025	0.422 m. (EGL = 786.272 m & FRL = 786.694 m)
481	15+275 to 15+300	0.025	0.434 m. (EGL = 786.399 m & FRL = 786.833 m)
482	15+300 to 15+325	0.025	0.368 m. (EGL = 786.609 m & FRL = 786.977 m)
483	15+325 to 15+350	0.025	0.296 m. (EGL = 786.833 m & FRL = 787.128 m)
484	15+350 to 15+375	0.025	0.283 m. (EGL = 787.002 m & FRL = 787.284 m)
485	15+375 to 15+400	0.025	0.366 m. (EGL = 787.082 m & FRL = 787.447 m)
486	15+400 to 15+425	0.025	0.233 m. (EGL = 787.383 m & FRL = 787.616 m)
487	15+425 to 15+450	0.025	0.194 m. (EGL = 787.598 m & FRL = 787.791 m)
488	15+450 to 15+475	0.025	0.204 m. (EGL = 787.768 m & FRL = 787.972 m)
489	15+475 to 15+500	0.025	0.024 m. (EGL = 788.137 m & FRL = 788.16 m)
490	15+500 to 15+525	0.025	-0.034 m. (EGL = 788.386 m & FRL = 788.353 m)
491	15+525 to 15+550	0.025	-0.116 m. (EGL = 788.669 m & FRL = 788.553 m)
492	15+550 to 15+575	0.025	-0.217 m. (EGL = 788.975 m & FRL = 788.758 m)
493	15+575 to 15+600	0.025	-0.02 m. (EGL = 788.99 m & FRL = 788.97 m)
494	15+600 to 15+625	0.025	0.161 m. (EGL = 789.027 m & FRL = 789.188 m)

Sl. No.	Section (from km to km)	Length (km)	Extent of raising [Top of finished road level]
495	15+625 to 15+650	0.025	0.148 m. (EGL = 789.265 m & FRL = 789.412 m)
496	15+650 to 15+675	0.025	0.279 m. (EGL = 789.365 m & FRL = 789.643 m)
497	15+675 to 15+700	0.025	0.511 m. (EGL = 789.368 m & FRL = 789.879 m)
498	15+700 to 15+725	0.025	0.676 m. (EGL = 789.446 m & FRL = 790.122 m)
499	15+725 to 15+750	0.025	0.693 m. (EGL = 789.677 m & FRL = 790.37 m)
500	15+750 to 15+775	0.025	0.543 m. (EGL = 790.083 m & FRL = 790.625 m)
501	15+775 to 15+800	0.025	0.476 m. (EGL = 790.411 m & FRL = 790.886 m)
502	15+800 to 15+825	0.025	0.553 m. (EGL = 790.601 m & FRL = 791.153 m)
503	15+825 to 15+850	0.025	0.608 m. (EGL = 790.819 m & FRL = 791.426 m)
504	15+850 to 15+875	0.025	0.738 m. (EGL = 790.964 m & FRL = 791.702 m)
504	15+875 to 15+900	0.025	0.944 m. (EGL = 791.036 m & FRL = 791.979 m)
504	15+900 to 15+925	0.025	0.963 m. (EGL = 791.292 m & FRL = 792.255 m)

5. PavementDesign

(i) Pavement design shall becarried outin accordance with provision of the relevant manual.

(ii) Type of pavement

Flexible Pavement

(iii) Design requirements

[Refertoprovisionofthe relevant Manual andspecifydesignrequirements and strategy]

(a) Design Period andstrategy

Flexiblepavementfornewpavement orfor wideningandstrengtheningof the existing pavement shallbe designed for a minimum design period of20 years. Stage construction shall not bepermitted.

(b) Design Traffic

Notwithstandinganythingtothecontrarycontained in this Agreement or the Manual.The Contractor shall design the pavement for design traffic of 33msa.

(iv) Reconstruction of stretches

[Refer toprovisionofthe relevant Manual and specifythestretchesifany tobe reconstructed.]

Thefollowingstretchesoftheexistingroadshallbereconstructed.Theseshall bedesignedas newpavement.

SL NO.	Stretch from Km to Km	Remarks	TCS Type
1	3+275 to 5+700	Reconstruction	TCS-1
2	5+700 to 6+060	Reconstruction	TCS-2
3	6+060 to 6+330	Reconstruction	TCS-3
4	6+330 to 7+500	Reconstruction	TCS-2
5	7+500 to 8+400	Reconstruction	TCS-1
6	8+400 to 9+150	Reconstruction	TCS-2
7	9+150 to 9+400	Reconstruction	TCS-1
8	9+400 to 11+850	Reconstruction	TCS-2

SL NO.	Stretch from Km to Km	Remarks	TCS Type
9	11+850 to 12+375	Reconstruction	TCS-1
10	12+375 to 12+700	Reconstruction	TCS-2
11	12+700 to 13+125	Reconstruction	TCS-1
12	13+125 to 15+940	Reconstruction	TCS-2

6. RoadsideDrainage

DrainagesystemincludingsurfaceandsubsurfacedrainsfortheProjectHighway has been provided in the table given below:

RCC Covered Drain

Chainage (m)		Length of CD	Net Length (m)	TCS No.	Side
From	To				
3275	5700	16.94	4816.1	TCS-1	Both
7500	8400	7.9	1784.2	TCS-1	Both
9150	9400		500.0	TCS-1	Both
11850	12375	2.6	1044.8	TCS-1	Both
12700	13125	16.4	817.2	TCS-1	Both
Total =			**8962**		

7. Design ofStructures

(i)General

(a) All bridges culvertsand structures shall bedesigned andconstructed in accordancewithprovisionofthe relevant Manual and shallconformtothecross- sectional features andother detailsspecifiedtherein.

(b) Width of the carriagewayof new bridges and structures shall be asfollows:

[Referto provisionofthe relevant Manual andspecifythe width ofcarriageway ofnewbridgesandstructuresofmorethan60(sixty)metrelength. ifthe carriagewaywidthisdifferentfrom7.5(sevenpointfive)metres in the table below.]

Sl. No.	Bridge/Structure at km	Width of carriageway and cross-sectional features
2 Nos. bridge will be retained with repairing.		

(c) The following structuresshall be providedwith footpaths:

[Refer to provisionofthe relevant Manual and provide details of new Structures with footpath]

Sl. No.	Bridge/Structure at km	Width of carriageway and cross-sectional features
Nil		

(d) All bridgesshall be high-level bridges.

[Refer to provisionofthe relevant Manual and stateif there is anyexception]

(e) Thefollowingstructuresshallbedesigned tocarryutility servicesspecifiedin Table below:

[Refer to provisionofthe relevant Manualand provide details]

Sl.No.	Bridgeat km	Utilityservice to be carried	Remarks
Nil			

(f) Cross-sectionofthenewculvertsandbridgesatdecklevelfortheproject Highwayshall conformtothetypicalcross-sectionsgiveninprovisionofthe relevant Manual.

(ii) Culverts

(a) Overall widthofallculverts shall beequal tothe roadway width of the approaches.

(b) Reconstruction of existingculverts:

Theexistingculvertsatthefollowinglocationsshallbere-constructedasnew culverts:

Sl. No.	Culvert Location	Span /Opening (m)	Remarks*
1	3.781	2.0 X 2.0	Single Span
2	5.007	2.0 X 2.0	Single Span
3	5.056	2.0 X 2.0	Single Span
4	5.382	3.0 X 3.0	Single Span
5	5.531	2.0 X 3.0	Single Span
6	5.975	2.0 X 3.0	Single Span
7	6.04	2.0 X 2.0	Single Span
8	6.811	2.0 X 3.0	Single Span
9	7.043	2.0 X 3.0	Single Span
10	7.58	2.0 X 3.0	Single Span
11	8.542	2.0 X 3.0	Single Span
12	9.803	2.0 X 3.0	Single Span
13	10.106	2.0 X 2.0	Single Span
14	11.206	3.0 X 4.0	Single Span
15	11.577	3.0 X 4.0	Single Span
16	12.402	2.0 X 3.0	Single Span
17	12.678	2.0 X 2.0	Single Span
18	12.843	2.0 X 3.0	Single Span
19	12.964	2.0 X 3.0	Single Span
20	13.29	2.0 X 3.0	Single Span
21	13.66	3.0 X 4.0	Single Span
22	13.899	5.0 X 3.0	Single Span
23	14.017	3.0 X 3.0	Single Span
24	14.123	2.0 X 3.0	Single Span
25	14.433	2.0 X 3.0	Single Span
26	14.468	2.0 X 2.0	Single Span
27	14.654	2.0 X 2.0	Single Span
28	14.734	2.0 X 2.0	Single Span
29	14.942	2.0 X 3.0	Single Span
30	15.438	3.0 X 4.0	Single Span
31	15.697	3.0 X 4.0	Single Span

*[Specify modifications,ifany,required in the road level,etc.]

(c)Wideningof existingculverts:

Allexistingculvertswhicharenottobereconstructedshallbewidenedtotheroadway width of the Project Highway as per the typical cross section given in provisionofthe relevant Manual. Repairs and strengthening of existing structures where required shall be carried out.

Sl. No.	Culvert location	Type,span,height,and widthofexistingculvert(m)	Repairstobe carriedout [specify]

Nil

(d) Additionalnewculvertsshallbeconstructedasperparticularsgiveninthe table below:

Sl. No.	Culvert Location	Span /Opening (m)	Remarks*
1	4.531	2.0 X 2.0	Single Span
2	5.702	2.0 X 2.0	Single Span
3	6.400	2.0 X 2.0	Single Span
4	7.234	2.0 X 2.0	Single Span
5	7.920	2.0 X 2.0	Single Span
6	8.142	2.0 X 2.0	Single Span
7	9.130	2.0 X 2.0	Single Span
8	9.525	2.0 X 2.0	Single Span
9	9.950	2.0 X 2.0	Single Span
10	10.369	2.0 X 2.0	Single Span
11	10.690	2.0 X 2.0	Single Span
12	11.114	2.0 X 3.0	Single Span
13	12.078	2.0 X 2.0	Single Span
14	13.450	2.0 X 2.0	Single Span
15	14.329	2.0 X 2.0	Single Span
16	15.250	2.0 X 2.0	Single Span

(e) Repairs/replacementsofrailing/parapets,flooringandprotectionworksof the existingculvertsshall be undertaken as follows:

[Refer provisionofthe relevant Manualand provide details]

Sl.No.	Location atkm	Typeofrepair required
Nil		

(f) FloorprotectionworksshallbeasspecifiedintherelevantIRCCodesandSpecifications.

(iii) Bridges

(a) Existing bridges to be re-constructed/widened

[(i) Theexistingbridgesatthefollowinglocationsshallbere-constructed as newStructures]

[Refer provisionofthe relevant Manualand provide details]

Sl. No.	Bridge location	Salient details of existing bridge		Adequacy or otherwise of the existing waterway, vertical clearance etc.*	Remarks
	(km)	Type of Structures	Span Arrangement and Total Vent way (No. x Length) (m)		
Nil					

(ii) The following narrow bridges shall bewidened:

Sl. No.	Location (km)	Existing width(m)	Extent of widening(m)	Cross-sectionatdeck levelforwidening@
Nil				

(b) Additional new bridges

[Specify additional newbridgesif required.And attach GAD]

New bridgesat the following locations on theProject Highwayshallbe constructed.GADs for the new bridges are attachedin the drawings folder.

Sl. No.	Location (km)	Total Length (m)	Remarks.If any
Nil			

(c) The railingsof existingbridgesshall bereplacedby crash barriersat the followinglocations:

[Refer provisionofthe relevant Manualand provide details:]

Sl.No.	Location atkm	Remarks
Nil		

(d) Repairs/replacements ofrailing/parapets oftheexistingbridgesshallbe undertaken as follows:

[Refer to provisionofthe relevant Manualand providedetails]

Sl. No.	Location of bridge (km)	Nature and extent of repairs /strengthening to be carried out
Nil		

(e) Drainagesystem forbridge decks

Aneffectivedrainagesystemforbridgedecks shall beprovidedas specified in provisionofthe relevant Manual

(f) Structures in marine environment

[Refertoprovisionofthe relevant Manual andspecify thenecessarymeasures/ treatments for protecting structuresin marineenvironment.Where applicable]

(v) Rail-roadbridges

(a) DesignconstructionanddetailingofROB/RUBshallbeasspecifiedinprovisionofthe relevant Manual [Refer toprovisionofthe relevant Manual andspecify modification, if any]

(b) Road over-bridges

Roadover-bridges(roadoverrail)shall beprovidedatthefollowinglevel crossings.As per GAD drawings attached:

Sl. No.	Location ofLevelcrossing(Chainagekm)	Lengthofbridge (m)
Nil		

(c)Road under-bridges

Road under-bridges (road under railwayline) shall beprovided at the following level crossings as per GAD drawings attached:

Sl. No.	Location ofLevelcrossing (Chainage km)	Number andlengthof span(m)
1 No. RUB has been proposed at 10+057 Km by **North-East Frontier Railways** as a part of proposed Jiribam-Tupul-Imphal railway line corridor.		

(v) Grade separatedstructures

[Refer provisionofthe relevant Manual]

Thegradeseparatedstructuresshallbeprovidedatthelocationsandofthetypeand length specified in paragraphs 2(ix) and3 of this Annex-I.

(vi) Repairs andstrengthening of bridges andstructures

[Refer to provisionofthe relevant Manual and provide details]

Theexistingbridgesandstructurestoberepaired/strengthenedandthenatureand extent of repairs /strengtheningrequired are given below:

(a) Bridges

Sl. No.	Location of bridge (km)	Nature and extent of repairs /strengthening to be carried out
1	8.804	Grouting using Concrete, Removal of existing wearing coat, laying of wearing Course (Bituminous Concrete), Laying of wearing Course (Mastic Asphalt), Laying of wearing Course (Tack Coat), Repairing of kerb below railing, Repairing of railing, Reinforcement HYSD, Slope pitching, Filter blanket, Toe wall, Painting on concrete surface
2	12.747	Grouting using Concrete, Removal of existing wearing coat, laying of wearing Course (Bituminous Concrete), Laying of wearing Course (Mastic Asphalt), Laying of wearing Course (Tack Coat), Repairing of kerb below railing, Repairing of railing, Reinforcement HYSD, Slope pitching, Filter blanket, Toe wall, Painting on concrete surface

(b)ROB / RUB

Sl. No.	Location of ROB/RUB (km)	Natureandextent ofrepairs/strengtheningtobe carriedout
Nil		

(c) Overpasses/Underpasses and otherstructures

Sl. No.	Location of Structure(km)	Natureandextent ofrepairs/strengtheningtobe carriedout
Nil		

(vii) List of Major Bridges andStructures

The following is the list ofthe Major Bridges and Structures:

Sl. No.	Location (Km)
Nil	

8. Traffic ControlDevicesandRoadSafetyWorks

(i) Trafficcontroldevicesandroadsafetyworksshallbeprovidedinaccordancewith provisionsof relevantManual.

Sl. No	Traffic Signages, Road Marking and other appurtenances	unit	Quantity
1	Total No of Street Light=	Nos	212
2	Kilometer stones=	Nos	9
3	5th Kilometer stones=	Nos	3
4	Boundary Stones=	Nos	131
5	Delineators (100 cm long and circular shaped)+Hazard marker =	Nos	542
6	Road Stud=	Nos	1869
7	900 mm Triangular	Nos	288
8	800 mm x 600 mm rectangular	Nos	6
9	Rumble Strip=	sqm	1160

(ii) Specifications of the reflective sheeting. [Refer to provision of relevant Manual and specify]

9. RoadsideFurniture

(i) Roadsidefurnitureshallbeprovidedinaccordancewith article 8(i) of this schedule.

(ii) Overhead trafficsigns: location andsize

Sl. No.	Location (Km)	Size
1	3+275	16.0 m X 1.2 m

10. Compulsory Afforestation

[Refertoprovision of relevantManualandspecifythenumberoftreeswhichare required to be plantedby the concerned departmentas compensatoryafforestation.]

11. Hazardous Locations

The safetybarriers shall also be provided at thefollowinghazardous locations:

a) Toe Wall

Chainage (m)		Length of CD	Net Length (m)	TCS No.	Side
From	To				
6060	6330		270	TCS-3	One
Total =			**270**		

b) Railings

Chainage (m)		Length of CD	Net Length (m)	TCS No.	Side
From	To				
3275	5700	16.94	4816.1	TCS-1	Both
7500	8400	7.9	1784.2	TCS-1	Both
9150	9400		500.0	TCS-1	Both
11850	12375	2.6	1044.8	TCS-1	Both
12700	13125	16.4	817.2	TCS-1	Both
Total =			**8962**		

Also, a total of **200 m** Metal Beam Crash Barrier has been proposed in bridge approach locations.

12. Special RequirementforHillRoads

[Refertothe provision of relevantManualandprovidedetailswhererelevant and required.]

13. ChangeofScope

ThelengthofStructuresandbridgesspecifiedhereinaboveshallbetreated asan approximateassessment. Theactuallengthsasrequiredbased ondetailed investigationsshallbedeterminedby theContractorinaccordance withthe SpecificationsandStandards.AnyvariationsinthelengthsspecifiedinthisSchedule-BshallnotconstituteaChangeofScopesaveand exceptanyvariationsinthelength arisingoutofaChange ofScopeexpresslyundertakeninaccordancewiththe provisions of Article 13.

(Schedule-B1)

1. The shifting ofutilities and felling of trees shall be carried out by the concerned department. The cost of the same shall be borne by the concerned department.

Schedule - C

(See Clause 2.1)

Project Facilities

1. ProjectFacilities

TheContractorshallconstructtheProjectFacilitiesinaccordancewiththeprovisions of this Agreement. Such Project Facilities shallinclude:

(a) Toll plaza[s]

(b) Roadsidefurniture;

(c) Pedestrianfacilities;

(d) Truck Lay byes;

(e) Bus-bays and passenger shelters;

(f) Rest areas; and

(g) Others to bespecified

2. DescriptionofProject Facilities

Each of theProject Facilities is described below:

a) TollPlaza: -

Sl. No.	Design Chainage(km)	Name of the Place
Nil		

b) Roadsidefurniture: -

Sl. No.	Description	Location	Design Standard
1	Traffic sign & pavement marking	Entire Length (As per Schedule B)	As per Manual
2	Km Stone, 5th kilometre stone	Entire Length	As per Manual
3	Boundary Stone	Entire Length	As per Manual
4	Roadside Delineator, marker & Road Stud	As per Schedule B	As per Manual
5	Metal beam crash barrier	As per Schedule B	As per Manual

C) Pedestrian Facility:-

Pedestrian facilities in the form of foot path shall be provided in the built up area (refer typical cross – section drawing). Pedestrian facilities shall be provided at the locations of urban sections in order to ensure safety of pedestrians while crossing in consultation with NHIDCL.

d) Truck Lay bye:-

Sl. No.	Truck lay bye Chainage(Both Side)	Name of the Place
Nil		

e) Bus Bay &Passenger shelter: -

Sl. No.	Project Facility	Location (km)	Design Requirements	Other Essential Details
1	Bus Bay & Passenger shelter	5+750 (Both side)	Bus Bays & Passenger shelter have been placed on both side of proposed roadway	Dimension of Bus Bay (L X B = 215.0 m X 5.5 m) Dimension of Passenger Shelter (L X B = 5.5 m X 2.5 m) (Refer Passenger Shelter Drawing)
2	Bus Bay & Passenger shelter	10+600 (Both side)		
3	Bus Bay & Passenger shelter	12+600 (Both side)		

f) Rest Areas

Sl. No.	Rest Area Chainage	Name of the Place
Nil		

g) Others to be specified

Street Lighting:
Total 212 Nos. Street lighting shall be provided in built-up and passenger shelters locations.

Note:Provideadequate detailsof eachProjectFacility toensuretheirdesignand completioninaccordancewiththeproject-specificrequirementsandtheprovisions of the Manual.

Schedule - D

(See Clause 2.1)

Specifications and Standards

1. Construction

The Contractor shall comply with the Specifications and Standards set forth in Annex- I of this Schedule-D for construction of the Project Highway.

2. Design Standards

The Project Highway including Project Facilities shall conform to design requirements set out in the following documents:

[Manual of Specifications and Standards for Two Lanning of Highways (IRC: SP: 73-2018), referred to herein as the Manual]

[Note: Specify the relevant Manual, Specifications and Standards]

Annex – I

(Schedule-D)

Specifications and Standards for Construction

1. Specifications and Standards

All Materials, works and construction operations shall conform to the Manual of Specifications and Standards for [Two-Lanning of Highways (IRC:SP:73-2018)], referred to as the Manual, and MORTH Specifications for Road and Bridge Works. Where the specification for a work is not given, Good Industry Practice shall be adopted to the satisfaction of the Authority's Engineer.

2. Deviations from the Specifications and Standards

(i) The terms "Concessionaire", "Independent Engineer" and "Concession Agreement" used in the Manual shall be deemed to be substituted by the terms "Contractor", "Authority's Engineer" and "Agreement" respectively.

(ii) [Notwithstanding anything to the contrary contained in Paragraph 1 above, the following Specifications and Standards shall apply to the Project Highway, and for purposes of this Agreement, the aforesaid Specifications and Standards shall be deemed to be amended to the extent set forth below:]

<table>
<tr><th>Item</th><th>Manual Clause Reference</th><th>Provision as per Manual</th><th>Modified Provision</th></tr>
<tr><td rowspan="6">Shoulder</td><td rowspan="6">2.6</td><td><u>Plain & Rolling Terrain</u>
<table>
<tr><th rowspan="2">Type of Section</th><th colspan="3">Width of Shoulder (m)</th></tr>
<tr><th>Paved</th><th>Earthen</th><th>Total</th></tr>
<tr><td>Open Country with Isolated Built-up Area</td><td>2.5</td><td>1.5</td><td>4.0</td></tr>
<tr><td>Built-up Area (2 Lane Section)</td><td>2.5</td><td>-</td><td>2.5</td></tr>
<tr><td>Built-up Area (4 Lane Section)</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Approaches to grade separated structures</td><td>2.5</td><td>-</td><td>2.5</td></tr>
<tr><td>Approaches to bridges</td><td>2.5</td><td>1.5</td><td>4.0</td></tr>
</table></td><td><u>Plain & Rolling Terrain</u>
<table>
<tr><th rowspan="2">Type of Section</th><th colspan="3">Width of Shoulder (m)</th></tr>
<tr><th>Paved</th><th>Earthen</th><th>Total</th></tr>
<tr><td>Open Country with Isolated Built-up Area</td><td>1.5</td><td>1.0</td><td>2.5</td></tr>
<tr><td>Built-up Area (2 Lane Section)</td><td>2.5</td><td>-</td><td>2.5</td></tr>
<tr><td>Built-up Area (4 Lane Section)</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Approaches to grade separated structures</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Approaches to bridges</td><td>-</td><td>-</td><td>-</td></tr>
</table></td></tr>
<tr><td>Design Speed</td><td>2.2</td><td><u>Plain Terrain:</u>

Ruling: 100 Kmph

Minimum: 40 Kmph</td><td><u>Plain Terrain:</u>
Design Speed followed 80 kmph in general. However, design speed has been reduced to 40 kmph to accommodate the proposal within EROW.
(Refer Horizontal Alignment Drawing and Table 1.1 below)</td></tr>
<tr><td>Radii Of Horizontal Curve</td><td>2.9.4</td><td><u>Plain & Rolling Terrain:</u>
Desirable Minimum Radius: 400 m
Absolute Minimum Radius: 150 m</td><td>Radius below 400 m has been provided in the location listed in table 1.2 to accommodate the improvement proposal within EROW.</td></tr>
<tr><td>Design Traffic</td><td>5.4.1 (ii)</td><td>Flexible Pavement shall be designed for a minimum design period of 15 years subject to the condition that design traffic shall not be less than 20 msa.</td><td>Flexible Pavement has been designed for a design period of 20 years. Pavement has been designed for 33 msa traffic.</td></tr>
<tr><td>Minor Junction</td><td>3.2.4</td><td>Fig 3.1</td><td>Minor Junction has been developed within available ROW.</td></tr>
</table>

Table 1.1: Locations where Design Speed is less than80 kmph

Sl. No.	Stretch (from km to km)	Type of Deficiency	Remarks
1	3+792 to 3+919	Below Ruling Design Speed	Design Speed = 60 Kmph
2	3+985 to 4+119	Below Ruling Design Speed	Design Speed = 50 Kmph
3	4+197 to 4+369	Below Ruling Design Speed	Design Speed = 50 Kmph
4	4+452 to 4+498	Below Ruling Design Speed	Design Speed = 50 Kmph
5	4+579 to 4+610	Below Ruling Design Speed	Design Speed = 50 Kmph
6	4+937 to 4+979	Below Ruling Design Speed	Design Speed = 65 Kmph
7	5+061 to 5+264	Below Ruling Design Speed	Design Speed = 65 Kmph
8	5+416 to 5+522	Below Ruling Design Speed	Design Speed = 65 Kmph
9	5+589 to 5+642	Below Ruling Design Speed	Design Speed = 65 Kmph
10	6+542 to 6+609	Below Ruling Design Speed	Design Speed = 65 Kmph
11	8+649 to 8+709	Below Ruling Design Speed	Design Speed = 65 Kmph
12	8+743 to 8+784	Below Ruling Design Speed	Design Speed = 50 Kmph
13	8+799 to 8+833	Below Ruling Design Speed	Design Speed = 40 Kmph
14	8+924 to 8+962	Below Ruling Design Speed	Design Speed = 65 Kmph
15	9+192 to 9+279	Below Ruling Design Speed	Design Speed = 50 Kmph
16	9+328 to 9+405	Below Ruling Design Speed	Design Speed = 50 Kmph
17	9+514 to 9+557	Below Ruling Design Speed	Design Speed = 50 Kmph
18	9+630 to 9+662	Below Ruling Design Speed	Design Speed = 65 Kmph
19	9+767 to 9+777	Below Ruling Design Speed	Design Speed = 50 Kmph
20	9+991 to 10+047	Below Ruling Design Speed	Design Speed = 65 Kmph
21	10+792 to 10+999	Below Ruling Design Speed	Design Speed = 60 Kmph
22	11+105 to 11+143	Below Ruling Design Speed	Design Speed = 65 Kmph
23	12+748 to 12+837	Below Ruling Design Speed	Design Speed = 65 Kmph
24	12+920 to 13+121	Below Ruling Design Speed	Design Speed = 65 Kmph
25	13+123 to 13+243	Below Ruling Design Speed	Design Speed = 65 Kmph
26	13+318 to 13+732	Below Ruling Design Speed	Design Speed = 65 Kmph
27	13+770 to 13+930	Below Ruling Design Speed	Design Speed = 60 Kmph
28	15+826 to 15+864	Below Ruling Design Speed	Design Speed = 65 Kmph

Table 1.2: Locations where Radii of Horizontal Curve is less than 400 m

Sl. No.	HIP NO.	CHAINAGE (KM)		RADIUS
		From	To	
1	2	3.792	3.919	220
2	5	4.452	4.498	220
3	6	4.579	4.610	220
4	8	4.937	4.979	240
5	9	5.061	5.264	370
6	10	5.416	5.522	360
7	16	6.542	6.609	200
8	23	8.799	8.833	300
9	26	9.328	9.405	200
10	27	9.514	9.557	240
11	28	9.630	9.662	300
12	29	9.767	9.777	150
13	33	10.325	10.415	240
14	35	11.105	11.143	240
15	38	11.649	11.659	300
16	41	12.252	12.293	300
17	43	12.748	12.837	240
18	52	15.273	15.333	250
19	53	15.826	15.864	250

(iii) [Note1: Deviations fromtheaforesaidSpecificationsand Standards shallbe listedout here.

Suchdeviations shall bespecified only ifthey are considered essential in viewof project-specific requirements.]

Schedule - H

(See Clauses 10.1 (iv) and 19.3)

Contract Price Weightages

1.1 The Contract Price for this Agreement is Rs. ****

1.2 Proportions of the Contract Price for different stages of Construction of the Project Highway shall be as specified below:

Item	Weightage in % of CP	Stage for Payment	Percentage
1	2	3	4
Road Works including Culverts, widening and repair of culverts	72.65 %	**A- Widening and strengthening of existing road**	
		(1) Earthwork up to top of the sub- grade	[Nil]
		(2) Sub-base Course	[Nil]
		(3) Non bituminous Base course	[Nil]
		(4) Bituminous Basecourse	[Nil]
		(5) Wearing Coat	[Nil]
		(6) Widening and repair of culverts	[Nil]
		B.1-Reconstruction/New 2-Lane Realignment /Bypass (Flexible Pavement)	
		(1) Earthwork up to top of the sub- grade	3.5%
		(2) Sub-base Course	9.6%
		(3) Non bituminous Base course	21.53%
		(4) Bituminous Basecourse	25.19%
		(5) Wearing Coat	10.52%
		B.2-Reconstruction/New 8-Lane Realignment/ Bypass (Rigid Pavement)	
		(1) Earthwork up to top of the sub- grade	[Nil]
		(2) Sub-base Course	[Nil]
		(3) Dry Lean Concrete (DLC) Course	[Nil]
		(4) Pavement Quality Control (PQC) Course	[Nil]
		C.1-Reconstruction/ New Service Road (Flexible Pavement)	
		(1) Earthwork up to top of the sub- grade	[Nil]
		(2) Sub-base Course	[Nil]
		(3) Non bituminous Base course	[Nil]
		(4) Bituminous Basecourse	[Nil]
		(5) Wearing Coat	[Nil]
		C.2- Reconstruction/New Service road (Rigid Pavement)	
		(1) Earthwork up to top of the sub- grade	[Nil]
		(2) Sub-base Course	[Nil]
		(3) Dry Lean Concrete (DLC) Course	[Nil]
		(4) Pavement Quality Control (PQC) Course	[Nil]
		D- Reconstruction & New Culverts on existing road, realignments, bypasses Culverts (length <6m)	29.66%
Minor bridge/ Underpasses/	2.26%	**A.1-widening and repairing of Minor Bridges (length >6 m&<60m)**	

Item	Weightage in % of CP	Stage for Payment	Percentage
Overpasses		Minor Bridges	100%
		A.2- New Minor bridges (length >6 mand<60m)	
		(1) Foundation + Sub-Structure: On completion of the foundation work including foundations for wing and return walls, abutments, piers up to the abutment/pier cap.	[Nil]
		(2) Super-structure: On completion of the super-structure in all respects including wearing coat, bearings, expansion joints, hand rails, crash barriers, road, signs & markings, tests on completion etc. complete in all respect.	[Nil]
		(3) Approaches: On completion of approaches including Retaining walls, stone pitching, protection works complete in all and fit for use	[Nil]
		(4) Guide Bunds and River Training Works: On completion of Guide Bunds and river training works complete in all respects	[Nil]
		B.1- Widening and repairs of underpasses/overpasses	
		Underpasses/ Overpasses	[Nil]
		B.2-NewUnderpasses/Overpasses	
		(1)Foundation + Sub-Structure: On completion of the foundation work including foundations for wing and return walls, abutments, piers upto the abutment/pier cap.	[Nil]
		(2)Super-structure: On completion of the super-structure in all respects including wearing coat, bearings, expansion joints, hand rails, crash barriers, road signs & markings, tests on completion etc. complete in all respect. Wearing Coat (a) in case of Overpass-wearing coat including expansion joints complete in all respects as specified and (b) in case of underpass- rigid pavement including drainage facility complete in all respects as specified.	[Nil]
		(3) Approaches: On completion of approaches including Retaining walls/ Reinforced Earth walls, stone pitching, protection works complete in all respect and fit for use.	[Nil]
Major bridge(length>60 m) works and ROB/RUB/elevated sections/flyovers including viaducts, if any	0.000 %	**A.1- Widening and repairs of Major Bridges**	
		(1)Foundation	[Nil]
		(2)Sub-structure	[Nil]
		(3)Super-structure(including bearings)	[Nil]
		(4)Wearing Coat including expansion joints	[Nil]
		(5) Miscellaneous Items like handrails, crash barrier, road markings etc.	[Nil]
		(6) Wing walls/return walls	[Nil]
		(7)Guide Bunds,River Training works etc.	[Nil]
		(8)Approaches(including Retaining walls, stone	[Nil]

Item	Weightage in % of CP	Stage for Payment	Percentage
		pitching and protection works)	
		A.2-NewMajorBridges	
		(1)Foundation	[Nil]
		(2)Sub-structure	[Nil]
		(3)Super-structure(including bearings)	[Nil]
		(4)Wearing Coat including expansion joints	[Nil]
		(5) Miscellaneous Items like handrails, crash barrier, road markings etc.	[Nil]
		(6) Wing walls/return walls	[Nil]
		(7)Guide Bunds, River Training works etc.	[Nil]
		(8)Approaches(including Retaining walls, stone pitching and protection works)	[Nil]
		B.1-Wideningandrepairsof (a) ROB (b) RUB	
		(1) Foundations	[Nil]
		(2) Sub-Structure	[Nil]
		(3) Super-Structure (Including bearings)	[Nil]
		(4)Wearing Coat(a)in case of ROB- wearing coat including expansion joints complete in all respects as specified and (b) In case of RUB-rigid pavement under RUB including drainage facility complete in all respects as specified	[Nil]
		(5) Miscellaneous Items like handrails, crash barrier, road markings etc.	[Nil]
		(6) Wing walls/Return walls	[Nil]
		(7) Approaches (Including Retaining walls, Stone Pitching and protection works)	[Nil]
		B.2-NewROB/RUB	
		(1) Foundations	[Nil]
		(2) Sub-Structure	[Nil]
		(3) Super-Structure (Including bearings)	[Nil]
		(4) Wearing Coat (a) in case of ROB- wearing coat including expansion joints complete in all respects as specified and (b) in case of RUB-rigid pavement under RUB including drainage facility complete in all respects as specified	[Nil]
		(5) Miscellaneous Items like handrails, crash barrier, road markings etc.	[Nil]
		(6) Wing walls/Return walls	[Nil]
		(7)Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	[Nil]
		C.1- Widening and repair of Elevated Section/Flyovers/Grade Separators	
		(1) Foundations	[Nil]
		(2) Sub-Structure	[Nil]
		(3)Super-Structure(Including bearings)	[Nil]
		(4)Wearing Coat including expansion joints	[Nil]
		(5) Miscellaneous Items like handrails, crash barrier, road markings etc.	[Nil]
		(6) Wing walls/Return walls	[Nil]
		(7)Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	[Nil]

Item	Weightage in % of CP	Stage for Payment	Percentage
		C.2- New Elevated Section/Flyovers/Grade Separators	
		(1) Foundations	[Nil]
		(2) Sub-Structure	[Nil]
		(3)Super-Structure(Including bearings)	[Nil]
		(4)Wearing Coat including expansion joints	[Nil]
		(5) Miscellaneous Items like handrails, crash barrier, road markings etc.	[Nil]
		(6) Wing walls/Return walls	[Nil]
		(7)Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	[Nil]
Other Works	25.09 %	(i) Toll Plaza	[Nil]
		(ii) Road side drains	53.7%
		(iii) Road signs, markings, km stones, safety devices etc	21.31%
		(iv) Project facilities	
		a) Bus Bays	17.73%
		b) Truck Lay-byes	[Nil]
		c) Passenger Shelter	0.46%
		d) Rest Area	[Nil]
		(v) Road side Plantation	[Nil]
		(vi) Repair of Protection Works other than approaches to the bridges, elevated sections/flyover/grade separators and ROBs/ RUBs	[Nil]
		(vii) Safety &Traffic Management during const.	[Nil]
		(viii) Breast Wall	[Nil]
		(ix) Toe Wall	0.99%
		(x) Retaining Wall	[Nil]
		(xi) Crash Barrier	0.26%
		(xi) Boundary wall	[Nil]
		(xii) Site Clearance & Dismantling	5.55%
		(xiii) Protection Works	[Nil]

1.3 Procedure of estimating the value of work done

1.3.1 Road works

Procedure for estimating the value of road work done shall be as follows:

Table 1.3.1

Stage of Payment	Percentage weightage	Payment Procedure
A- Widening & Strengthening of road		Unit of measurement is linear length. Payment of each stage shall be made on pro-rata basis on completion of a stage in a length of not less than 5(five)percent of the total length.
(1)Earthwork up to top of the sub-grade	[Nil]	
(2) Sub-base Course	[Nil]	
(3) Non bituminous Base course	[Nil]	
(4) Bituminous Base course	[Nil]	
(5) Wearing Coat	[Nil]	
(6) Widening and repair of culverts	[Nil]	Cost of ten completed culverts shall be determined on pro-rata basis with respect to the total number of culverts.
B.1- Reconstruction/New2-Lane Realignment/Bypass(Flexible Pavement)		Unit of measurement is linear length. Payment of each stage shall be made on pro-rata basis on completion of a stage in full length or 0.5(half) km length, whichever is less.
(1)Earthwork up to top of the sub-grade	3.5%	
(2) Sub-base Course	9.6%	
(3) Non bituminous Base course	21.53%	
(4) Bituminous Base course	25.19%	
(5) Wearing Coat	10.52%	
B.2- Reconstruction/New 8-Lane Realignment/Bypass (Rigid Pavement)		Unit of measurement is linear length. Payment of each stage shall be made on pro-rata basis on completion of a stage in full length or 5(five) km length, whichever is less.
(1)Earthwork up to top of the sub-grade	[Nil]	
(2) Sub-base Course	[Nil]	
(3) Dry Lean Concrete (DLC) Course	[Nil]	
(4) Pavement Quality Control (PQC) Course	[Nil]	
C.1- Reconstruction/New Service Road/ Slip Road (Flexible Pavement)		Unit of measurement is linear length. Payment of each stage shall be made on pro-rata basis on completion of a stage in full length or 5(five) km length, whichever is less.
(1)Earthwork up to top of the sub-grade	[Nil]	
(2) Sub-base Course	[Nil]	
(3) Non bituminous Base course	[Nil]	
(4) Bituminous Basecourse	[Nil]	
(5) Wearing Coat	[Nil]	
C.2- Reconstruction/New Service road (Rigid Pavement)		Unit of measurement is linear length. Payment of each stage shall be made on pro-rata basis on completion of a stage in full length or 5(five) km length, whichever is less.
(1)Earthwork up to top of the sub-grade	[Nil]	
(2) Sub-base Course	[Nil]	
(3) Dry Lean Concrete (DLC)Course	[Nil]	
(4) Pavement Quality Control (PQC) Course	[Nil]	
D-Reconstruction & New Culverts on existing road, realignments, bypasses		Cost of each culverts shall be determined on pro-rata basis with respect to the total number of culverts. Payment shall be made on the completion of at least one culverts
Culverts (length <6m)	29.66%	

@ For example, if the total length of bituminous work to be done is 100 km, the cost per km of

bituminous work shall be determined as follows:

Cost per km = P x weightage for road work x weightage for bituminous work x (1/L)

Where,

P = Contract Price

L = Total length in km

Similarly, the rates per km for other stages shall be worked out accordingly.

Note: The length affected due to law and order problems or litigation during execution due to which the Contractor is unable to execute the work, may be deducted from the total project length for payment purposes. The total length calculated here is only for payment purposes and will not affect and referred in other clauses of the Contract Agreement.

1.3.2 Minor Bridges and Underpasses/Overpasses.

Procedure for estimating the value of Minor bridge and Underpasses/Overpasses shall be as stated in table 1.3.2:

Table 1.3.2

Stage of Payment	Weightage	Payment Procedure
1	2	3
A.1-Widening and repairs of Minor Bridges(length>6m&<60m)	100%	Cost of each minor bridge shall be determined on pro-rata basis with respect to the total linear length of the minor bridges. Payment shall be made on the completion of widening & repair works of a minor bridge
A.2- New Minor Bridges (length > 6m & < 60m)		
(1)Foundation + Sub-Structure: On completion of the foundation work including foundations for wing and return walls, abutments, piers up to the abutment/pier cap.	NIL	Foundation: Cost of each minor bridge shall be determined on pro-rata basis with respect to the total linear length (m) of the minor bridges. Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. Not less than 25% of the scope of foundation of each bridge. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(2)Super-structure: On completion of the super-structure in all respects including wearing coat, bearings, expansion joints, hand rails, crash barriers, road,signs & markings, tests on completion etc. complete in all respect.	NIL	Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super structure of at least one span in all respects as specified in the column of "Stage of Payment" in this sub-clause. In case of structures where pre-cast girders have been proposed by the Contractor, 50% of the stage payment shall be due and payable on casting of girders for each span and balance 50% of the stage payment shall be made on completion of stage specified as above
(3)Approaches :On completion of approaches including Retaining walls, stone pitching, protection works complete in all and fit for use	[Nil]	Approaches: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches in all respect as specified in the column of "Stage of Payment" in this sub-clause.

Stage of Payment	Weightage	Payment Procedure
(4) Guide Bunds and River Training Works: On completion of Guide Bunds and river training works complete in all respects	[Nil]	Guide Bunds and River Training Works: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of Guide Bund sand River training Works in all respects as specified
B.1- Widening and repairs of underpasses/overpasses	[Nil]	Cost of each underpass/overpass shall be determined on pro-rata basis with respect to the total linear length of the underpasses/ overpasses. Payment shall be made on the completion of widening & repair works of a underpass/overpass.
B.2- New Underpasses/Overpasses		
(1)Foundation + Sub-Structure: On completion of the foundation work including foundations for wing and return walls, abutments, piers up to the abutment/pier cap.	[Nil]	Foundation: Cost of each Underpass/ Overpass shall be determined on pro- rata basis with respect to the total linear length (m) of the Underpasses/Overpasses. Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. Not less than 25% of the scope of foundation of each Underpasses/ Overpasses. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(2)Super-structure: On completion of the super-structure in all respects including wearing coat, bearings, expansion joints, hand rails, crash barriers, road signs & markings, tests on completion etc. complete in all respect. Wearing Coat (a) in case of Overpass-wearing coat including expansion joints complete in all respects as specified and (b) in case of underpass- rigid pavement including drainage facility complete in all respects as specified.	[Nil]	Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super- structure of at least one span in all respects as specified in the column of "Stage of Payment" in this sub-clause. In case of structures where pre-cast girders have been proposed by the Contractor,50% of the stage payment shall be due and payable on casting of girders for each span and balance 50% of the stage payment shall be made on completion of stage specified as above
(3) Approaches: On completion of approaches including Retaining walls/ Reinforced Earth walls, stone pitching, protection works complete in all respect and fit for use.	[Nil]	Payment shall be made on pro-rata basis on completion of a stage in all respects as specified

1.3.3 Major Bridge works, ROB/RUB and Structures.

Procedure for estimating the value of Major Bridge works, ROB/RUB and Structures shall be as stated in table 1.3.3:

Table 1.3.3

Stage of Payment	Weightage	Payment Procedure
A.1- Widening and repairs of Major Bridges		
(1) Foundation	[Nil]	Foundation: Cost of each Major Bridge shall be determined on pro-rata basis with respect to the total linear length (m) of the Major Bridge. Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of foundation of the major Bridge. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(2) Sub-structure	[Nil]	Sub-structure: Payment against sub- structure shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of sub- structure of major bridge.
(3)Super-structure(including bearings)	[Nil]	Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super- structure including bearings of at least one span in all respects as specified. In case of structures where pre-cast girders have been proposed by the Contractor,50% of the stage payment shall be due and payable on casting of girders for each span and balance 50% of the stage payment shall be made on completion of stage specified as above
(4)Wearing Coat including expansion joints	[Nil]	Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified.
(5) Miscellaneous Items like handrails, crash barrier, road markings etc.	[Nil]	Miscellaneous: Payments shall be made on completion of all miscellaneous works like handrails, crash barriers, road markings etc. complete in all respects as specified.
(6) Wing walls/return walls	[Nil]	Wingwalls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified.
(7)Guide Bunds, River Training works etc.	[Nil]	Guide Bunds, River Training works: Payments shall be made on completion of all guide bunds/river training works etc. complete in all respects as specified.
(8)Approaches(including Retaining walls, stone pitching and protection works)	[Nil]	Approaches: Payments shall be made on pro-rata basis on completion of 10% of the scope of each stage.
A.2-NewMajorBridges		
(1)Foundation	[Nil]	Foundation: Cost of each Major Bridge shall be determined on pro-rata basis with respect to the total linear length (m) of the Major Bridge. Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of foundation of the major Bridge. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(2)Sub-structure	[Nil]	Sub-structure: Payment against sub- structure shall be made on pro-rata basis on completion of a stage i.e. not

Stage of Payment	Weightage	Payment Procedure
		lessthan25% of the scope of sub- structure of major bridge.
(3)Super-structure(including bearings)	[Nil]	Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super- structure including bearings of at least one span in all respects as specified. In case of structures where pre-cast girders have been proposed by the Contractor, 50% of the stage payment shall be due and payable on casting of girders for each span and balance 50% of the stage payment shall be made on completion of stage specified as above
(4)Wearing Coat including expansion joints	[Nil]	Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified.
(5) Miscellaneous Items like handrails, crash barrier, road markings etc.	[Nil]	Miscellaneous: Payments shall be made on completion of all miscellaneous works like handrails, crash barriers, road markings. complete in all respects as specified.
(6) Wing walls/return walls	[Nil]	Wingwalls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified.
(7)Guide bunds, River Training works etc.	[Nil]	Guide Bunds, River Training works: Payments shall be made on completion of all guide bunds/river training works etc. complete in all respects as specified.
(8)Approaches(including Retaining walls, stone pitching and protection works)	[Nil]	Approaches: Payments shall be made on pro-rata basis on completion of 10% of the scope of each stage.
B.1- Widening and repairs of (a)ROB (b)RUB		
(1) Foundations	[Nil]	Foundation: Cost of each ROB/RUB shall be determined on pro-rata basis with respect to the total linear length (m)of the ROB/RUB. Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of foundation of the ROB/RUB. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(2) Sub-Structure	[Nil]	Sub-structure: Payment against sub- structure shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of sub- structure of ROB/RUB.
(3) Super-Structure (Including bearings)	[Nil]	Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super- structure including bearings of at least one span in all respects as specified. In case of structures where pre-cast girders have been proposed by the Contractor,50%ofthe stage payment shall be due and payable on casting of girders for each span and balance 50% of the stage payment shall be made on completion of stage specified as above
(4) Wearing Coat(a)in case of ROB-wearing coat including expansion joints complete in all respects as specified and (b) in case of RUB-rigid pavement under RUB including drainage facility complete in all respects as specified	[Nil]	Wearing Coat: Payment shall be made on completion (a) in case of ROB-wearing coat including expansion joints complete in all respects as specified and (b) in case of RUB-rigid pavement under RUB including

Stage of Payment	Weightage	Payment Procedure
		drainage facility complete in all respects as specified.
(5) Miscellaneous Items like handrails, crash barrier, road markings etc.	[Nil]	Miscellaneous: Payments shall be made on completion of all miscellaneous works like handrails, crash barriers, road markings etc. complete in all respects as specified.
(6) Wing walls/Return walls	[Nil]	Wingwalls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified.
(7) Approaches (Including Retaining walls, Stone Pitching and protection works)	[Nil]	Payments shall be made on pro-rata basis on completion of 20% of the total area.
B.2-NewROB/RUB		
(1) Foundation	[Nil]	Foundation: Cost of each ROB/RUB shall be determined on pro-rata basis with respect to the total linear length (m)of the ROB/RUB. Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of foundation of the ROB/RUB.
(2) Sub-structure	[Nil]	Sub-structure: Payment against sub- structure shall be made on pro-rata basis on completion of a stage i.e. Not less than 25% of the scope of sub- structure of ROB/RUB.
(3) Super-structure (including bearing)	[Nil]	Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super- structure including bearings of at least one span in all respects as specified. In case of structures where pre-cast girders have been proposed by the Contractor,50% of the stage payment shall be due and payable on casting of girders for each span and balance 50% of the stage payment shall be made on completion of stage specified as above
(4)Wearing Coat (a) in case of ROB- wearing coat including expansion joints complete in all respects as specified and (b) in case of RUB-rigid pavement under RUB including drainage facility complete in all respects as specified	[Nil]	Wearing Coat: Payment shall be made on completion (a) in case of ROB-wearing coat including expansion joints complete in all respects as specified and (b) In case of RUB-rigid pavement under RUB including drainage facility complete in all respects as specified.
(5) Miscellaneous Items like handrails, crash barrier, road markings etc.	[Nil]	Miscellaneous: Payments shall be made on completion of all miscellaneous works like handrails, crash barriers, road markings etc. Complete in all respects as specified.
(6) Wing walls/Return walls	[Nil]	Wingwalls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified.
(7)Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	[Nil]	Payment shall be made on pro-rata basis on completion of a stage in all respects as specified
C.1-Wideningandrepairs of Elevated Section/ Flyovers/Grade Separators		
(1) Foundations	[Nil]	Foundation: Cost of each structure shall be determined on pro-rata basis with respect to the total linear length (m)of the structure. Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of foundation of the structure.

Stage of Payment	Weightage	Payment Procedure
		In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(2) Sub-Structure	[Nil]	Sub-structure: Payment against sub- structure shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of sub- structure of structure.
(3) Super-Structure(Including bearings)	[Nil]	Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super- structure including bearings of at least one span in all respects as specified. In case of structures where pre-cast girders have been proposed by the Contractor,50% of the stage payment shall be due and payable on casting of girders for each span and balance 50% of the stage payment shall be made on completion of stage specified as above
(4) Wearing Coat including expansion joints	[Nil]	Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified.
(5) Miscellaneous Items like handrails, crash barrier, road markings etc.	[Nil]	Miscellaneous: Payments shall be made on completion of all miscellaneous works like handrails, crash barriers, road markings etc. Complete in all respects as specified.
(6) Wing walls/Return walls	[Nil]	Wingwalls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified.
(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	[Nil]	Payment shall be made on pro-rata basis on completion of a stage in all respects as specified
C.2- New Elevated Section/ Flyovers/Grade Separators		
(1) Foundations	[Nil]	Foundation: Cost of each structure shall be determined on pro-rata basis with respect to the total linear length (m)of the structure. Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of foundation of the structure. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(2) Sub-Structure	[Nil]	Sub-structure: Payment against sub- structure shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of sub- structure of structure.
(3)Super-Structure(Including bearings)	[Nil]	Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super- structure including bearings of at least one span in all respects as specified. In case of structures where pre-cast girders have been proposed by the Contractor,50% of the stage payment shall be due and payable on casting of girders foreach span and balance 50% of the stage payment shall be made on completion of stage specified as above
(4)Wearing Coat including expansion joints	[Nil]	Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified.
(5) Miscellaneous Items like handrails, crash barrier, road	[Nil]	Miscellaneous: Payments shall be made on completion of all miscellaneous works like handrails, crash barriers, road

Stage of Payment	Weightage	Payment Procedure
markings etc.		markings etc. complete in all respects as specified.
(6) Wing walls/Return walls	[Nil]	Wingwalls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified.
(7)Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	[Nil]	Payments shall be made on pro-rata basis on completion of 20% of the total area.

Note: (1) In case of innovate Major Bridge projects like cable suspension/cable stayed/ Extra Dozed and exceptionally long span bridges, the schedule may be modified as per site requirements before bidding with due approval of Competent Authority.

(2) The Schedule for exclusive tunnel projects may be prepared as per site requirements before bidding with due approval of Competent Authority.

1.3.4 Other works.

Procedure for estimating the value of other works done shall be as stated in table 1.3.4.

Table 1.3.4

Stage of Payment	Weightage	Payment Procedure
1	2	3
(1) Toll Plaza	[Nil]	Unit of measurement is each completed toll plaza. Payment of each toll plaza shall be made on pro-rata basis with respect to the total of all toll plaza.
(2) Roadside drains	53.7%	Unit of measurement is linear length. Payment shall be made on pro-rata basis on completion of a stage in a length of not less than 5% (five percent)of the total length.
(3) Road signs, markings, km stones, safety devices etc.	21.31%	
(4) Project Facilities		Payment shall be made on pro-rata basis for completed facilities.
a) Bus Bays	17.73%	
b) Truck Lay-byes	[Nil]	
c) Passenger Shelter	0.46%	
d) Rest Area	[Nil]	
(5) Road side Plantation including Horticulture in Wayside Amenities	[Nil]	Unit of measurement is linear length
(6) Repair of Protection Works other than approaches to the bridges, elevated sections/flyover/grade separators and ROBs/ RUBs	[Nil]	Unit of measurement is linear length. Payment shall be made on pro-rata basis on completion of a stage in a length of not less than 5% (five percent)of the total length.
(7) Safety and traffic management during construction	[Nil]	Payment shall be made on prorate basis every six months.
(8) Protection Works		Unit of measurement is linear length. Payment

Stage of Payment	Weightage	Payment Procedure
(a) Breast Wall	[Nil]	shall be made on pro-rata basis on completion of a stage in a length of not less than 5% (five percent)of the total length.
(b) Toe Wall	0.99%	
(c)Retaining Wall	[Nil]	
(c) Crash Barrier	0.26%	
(9) Site Clearance & Dismantling	5.55%	Unit of measurement is linear length. Payment shall be made on pro-rata basis on completion of a stage in a length of not less than 5% (five percent)of the total length.
(10) Protection Works	[Nil]	Unit of measurement is linear length. Payment shall be made on pro-rata basis on completion of a stage in a length of not less than 5% (five percent)of the total length.

2. Procedure for payment for Maintenance

2.1 The cost for maintenance shall be as stated in Clause 14.1.1.

2.2 Payment for Maintenance shall be made in quarterly instalments in accordance with the provisions of Clause 19.7.