

Schedule-H

(See Clauses 10.1 (iv) and 19.3)

Contract Price Weightages

1. The Contract Price for this Agreement is Rs. _____ Crore rupees.

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 weightage
1	2	3	4
Road Works including Culverts, widening and repair of culverts	33.57	A- Widening and strengthening of existing road	
		(1) Earthwork up to top of the sub- grade	-
		(2) Sub-base Course	-
		(3) Non bituminous Base course	-
		(4) Bituminous Base course	-
		(5) Wearing Coat	-
		(6) Widening and repair of culverts	-
		B.1- Reconstruction/New 2-Lane Realignment / Bypass (Flexible Pavement)	-
		(1) Earthwork up to top of the sub- grade	29.69
		(2) Sub-base Course	14.90
		(3) Non bituminous Base course	16.52
		(4) Bituminous Base course	15.53
		(5) Wearing Coat	9.80
		B.2- Reconstruction/New 2-Lane Realignment / Bypass (Rigid Pavement)	-
		(1) Earthwork up to top of the sub- grade	-
		(2) Sub-base Course	-
		(3) Dry Lean Concrete (DLC) Course	

Item	Weightage in % of CP	Stage for Payment	Percentage weightage
			-
		(4) Pavement Quality Control (PQC) Course	-
		C.1- Reconstruction/ New Service Road/ Slip Road (Flexible Pavement)	-
		(1) Earthwork up to top of the sub- grade	-
		(2) Sub-base Course	-
		(3) Non bituminous Base course	-
		(4) Bituminous Base course	-
		(5) Wearing Coat	-
		C.2- Reconstruction/New Service road (Rigid Pavement)	-
		(1) Earthwork up to top of the sub- grade	-
		(2) Sub-base Course	-
		(3) Dry Lean Concrete (DLC) Course	-
		(4) Pavement Quality Control (PQC) Course	-
		D- Reconstruction & New Culverts on on existing road, realignments, bypasses Culverts (length <6m)`	13.56
Minor bridge/ Underpasses/ Overpasses	0.00	A.1- Widening and repairs of Minor Bridges (length>6m & <60m)	
		Minor Bridges	-
		A.2- New Minor bridges (length >6 m and < 60 m)	
		(1) Foundation + Sub-structure: On completion of the foundation work including foundations for wing and return walls, abutments, piers upto the abutment/ pier cap	-

Item	Weightage in % of CP	Stage for Payment	Percentage weightage
		(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.	-
		(3) Approaches: On completion of approaches including Retaining walls, stone pitching, protection works complete in all respect, tests on completion in all respect and fit for use	-
		(4) Guide Bunds and River Training Works: On completion of Guide Bunds and river training works complete in all respects	-
		B.1- Widening and repairs of underpasses/overpasses	
		Underpasses/ Overpasses	-
		B.2- New Underpasses/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	-
		(3) 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 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	-
		(3) Approaches : On completion of approaches including Retaining walls / Reinforced earth walls, stone pitching, protection works complete in all respect and fit for use	-

Item	Weightage in % of CP	Stage for Payment	Percentage weightage
Major bridge(length>60 m) works and ROB/RUB/elevated sections/flyovers including viaducts, if any	10.72	A.1- Widening and repairs of Major Bridges	
		(1) Foundation:	-
		(2) Sub-structure:	-
		(3) Super-structure: including bearings.	-
		(4) Wearing Coat including expansion joints	-
		(5) Miscellaneous Items like hand rails, crash barrier, road markings etc.	-
		(6) Wing walls/return walls upto top	-
		(7) Guide bunds, River Training works etc.	-
		(8) Approaches (including Retaining walls, stone pitching and protection works)	-
		A.2- New Major Bridges	
		(1) Foundation:	11.72
		(2) Sub-structure:	9.89
		(3) Super-structure: including bearings.	50.93
		(4) Wearing Coat including expansion joints	0.63
		(5) Miscellaneous Items like hand rails, crash barrier, road markings etc.	0.52
		(6) Wing walls/return walls upto top	2.46
		(7) Guide bunds, River Training works etc.	6.87
		(8) Approaches (including Retaining walls, stone pitching and protection works)	16.98
		B.1- Widening and repairs of (a) ROB (b) RUB	
		(1) Foundations	-
		(2) Sub-Structure	-
		(3) Super-Structure (Including bearings)	-

Item	Weightage in % of CP	Stage for Payment	Percentage weightage
		(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	-
		(5) Miscellaneous Items like hand rails, crash barrier, road markings etc.	-
		(6) Wing walls/Return walls	-
		(7) Approaches (including Retaining walls, stone pitching, protection works etc.)	-
		B.2- New ROB/RUB	
		(1) Foundations	-
		(2) Sub-Structure	-
		(3) Super-Structure (Including bearings)	-
		(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	-
		(5) Miscellaneous Items like hand rails, crash barrier, road markings etc.	-
		(6) Wing walls/Return walls	-
		(7) Approaches (including Retaining/ Reinforced earth walls, stone pitching, protection works etc.)	-
		C.1- Widening and repair of Elevated Section/Flyovers/Grade Separators	
		(1) Foundations	-
		(2) Sub-Structure	-

Item	Weightage in % of CP	Stage for Payment	Percentage weightage
		(3) Super-Structure (Including bearings)	-
		(4) Wearing Coat including expansion joints	-
		(5) Miscellaneous Items like hand rails, crash barrier, road markings etc.	-
		(6) Wing walls/Return walls	-
		(7) Approaches (including Retaining/ Reinforced earth walls, stone pitching, protection works etc.)	-
		C.2- New Elevated	
		Section/Flyovers/Grade Separators	
		(1) Foundation	-
		(2) Sub-structure	-
		(3) Super-structure: including bearings.	-
		(4) Wearing Coat including expansion joints	-
		(5) Miscellaneous Items like hand rails, crash barrier, road markings etc.	-
		(6) Wing walls/Return walls	-
		(7) Approaches (including Retaining/ Reinforced earth walls, stone pitching, protection works etc.)	-
Other Works	55.71	(i) Toll Plaza	-
		(ii) Road side drains	-
		Lined Drain	3.79
		Unlined Drain	-
		(iii) Road signs markings, Km stones, safety Devices etc.	1.34
		(iv) Project facilities	-
		a) Bus Bays	0.16
		b) Truck lay byes	-

Item	Weightage in % of CP	Stage for Payment	Percentage weightage
		c) Rest areas	-
		d) Others (to be specified)	0.58
		(v) Road side plantation	0.21
		(vi) Repair of Protection Works other than approaches to the bridges, elevated sections/ flyover/ grade separators and ROBs/ RUBs	-
		W-Beam Crash Barrier	0.93
		Seeding and Mulching	1.94
		Breast Wall	13.47
		Retaining Wall	13.50
		(ix) Safety & Traffic Management during const.	-
		(x) Tunnel	-
		Investigation & Detail Design	1.60
		Portal	-
		(a)Northern	4.69
		(b)Southern	4.70
		Main Tunnel	52.49
		Site Facility Costs	0.26
		Electro and Mechanical Equipment	0.35

Procedure of estimating the value of work done.

(i) Roadworks

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

Table 1.3.1

Stage for Payment	Percentage weightage	Payment Procedure
A- Widening and strengthening of existing road		
(1) Earthwork up to top of the sub- grade	-	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.
(2) Sub-base Course	-	
(3) Non bituminous Base course	-	
(4) Bituminous Base course	-	
(5) Wearing Coat	-	
(6) Widening and repair of culverts	-	Cost of ten completed 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 five culverts.
B.1- Reconstruction/New 2-Lane Realignment / Bypass (Flexible Pavement)	-	
(1) Earthwork up to top of the sub- grade	29.69	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.
(2) Sub-base Course	14.90	
(3) Non bituminous Base course	16.52	
(4) Bituminous Base course	15.53	
(5) Wearing Coat	9.80	
B.2- Reconstruction/New 2-Lane Realignment / Bypass (Rigid Pavement)	-	
(1) Earthwork up to top of the sub- grade	-	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.
(2) Sub-base Course	-	
(3) Dry Lean Concrete (DLC) Course	-	
(4) Pavement Quality Control (PQC) Course	-	
C.1- Reconstruction/ New Service Road/ Slip Road (Flexible Pavement)	-	
(1) Earthwork up to top of the sub- grade	-	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
(2) Sub-base Course	-	
(3) Non bituminous Base course	-	

Stage for Payment	Percentage weightage	Payment Procedure
(4) Bituminous Base course	-	the total length.
(5) Wearing Coat	-	
C.2- Reconstruction/New Service road (Rigid Pavement)	-	
(1) Earthwork up to top of the sub- grade	-	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.
(2) Sub-base Course	-	
(3) Dry Lean Concrete (DLC) Course	-	
(4) Pavement Quality Control (PQC) Course	-	
D- Reconstruction & New Culverts on on existing road, realignments, bypasses Culverts (length <6m)	13.56	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 three culverts

@ For calculation of payment stage for main-carriageway the project length shall be converted into equivalent 2 lane length. For example, if the total length of 4 lane main carriageway is 100 km, then the equivalent length for calculation of payment stage will be 2 x 100 km. Now, 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 equivalent 2-Lane length in km as defined above

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 including the length not handed over to the Contractor under clause 8.3 of this Contract Agreement 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

(ii) 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 for Payment	Percentage weightage	Payment Procedure
A.1- Widening and repairs of Minor Bridges (length>6m & <60m)		
Minor Bridges	0	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 >6 m and < 60 m)		
(1) Foundation + Sub-structure: On completion of the foundation work including foundations for wing and return walls, abutments, piers upto the abutment/ pier cap	0	Foundation + substructure: 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 + sub-structure shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of foundation + sub structure of each bridge subject to completion of at least two foundations along with sub-structure upto abutment / pier cap level 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.	0	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.

Stage for Payment	Percentage weightage	Payment Procedure
(3) Approaches: On completion of approaches including Retaining walls, stone pitching, protection works complete in all respect, tests on completion in all respect and fit for use	0	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.
(4) Guide Bunds and River Training Works: On completion of Guide Bunds and river training works complete in all respects	0	Guide Bunds and River Training works- Payment shall be made on pro-rata basis on completion of a stage i.e. completion of Guide Bunds and River training Works in all respects as specified
B.1- Widening and repairs of underpasses/overpasses		
Underpasses/ Overpasses	0	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 upto the abutment/ pier cap	0	<p>Foundation + substructure: Cost of Underpass/Overpass shall be determined on pro- rata basis with respect to the total linear length (m) of the Underpass/Overpass. Payment against foundation + sub-structure shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of foundation + sub structure of each Underpass/Overpass subject to completion of at least two foundations along with sub-structure upto abutment / pier cap level of each Underpass/Overpass</p> <p>In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.</p>

Stage for Payment	Percentage weightage	Payment Procedure
<p>(3) 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 in all respect.</p> <p>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</p>	0	<p>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.</p>
<p>(3) Approaches : On completion of approaches including Retaining walls / Reinforced earth walls, stone pitching, protection works complete in all respect and fit for use</p>	0	<p>Approaches: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches in all respect as specified</p>

(iii) Major Bridgeworks, ROB/RUB and Structures

Procedure for estimating the value of Major Bridge works, ROB/RUB and Structures
Work 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:	-	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 subject to completion of atleast two foundations 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:	-	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 subject to completion of atleast two sub structures of abutment/pier cap level of the major bridge
(3) Super-structure: including bearings	-	Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super-structure including bearings of atleast one span in all respects as specified.
(4) Wearing Coat including expansion joints	-	Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified.
(5) Miscellaneous Items like hand rails, crash barrier, road markings etc.	-	Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified.

Stage of Payment	Weightage	Payment Procedure
(6) Wing walls/return walls upto top	-	Wing walls/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.	-	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)	-	Approaches: Payments shall be made on completion of both approaches including stone pitching and protection works etc complete in all respects as specified
A.2- New Major Bridges		
(1) Foundation:	11.72	<p>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 subject to completion of atleast two foundations of the major bridge</p> <p>In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.</p>
(2) Sub-structure:	9.89	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 subject to completion of atleast two sub structures of abutment/pier cap level of the major bridge
(3) Super-structure: including bearings	50.93	Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super structure of atleast 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 erection of girders for each span and balance 50% of the stage payment shall be made on completion of the span in all respect. For bridges of steel superstructure, 50% payment shall be made on fabricated material reaching the site and balance 50% of the stage payment shall be made on either completion of the

Stage of Payment	Weightage	Payment Procedure
		span or 50 m length, whichever is minimum.
(4) Wearing Coat including expansion joints	0.63	Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified.
(5) Miscellaneous Items like hand rails, crash barrier, road markings etc.	0.52	Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified.
(6) Wing walls/return walls	2.46	Wing walls/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.	6.87	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)	16.98	Approaches: Payments shall be made on pro rata basis on completion of one approach including Stone pitching and protection works etc complete in all respects as specified
B.1- Widening and repairs of		
(a) ROB (b) RUB		
(1) Foundation	-	<p>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 subject to completion of atleast two foundations of the ROB/RUB</p> <p>In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.</p>

Stage of Payment	Weightage	Payment Procedure
(2) Sub-structure	-	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 subject to completion of at least two sub structures of abutment/pier cap level of the ROB/RUB
(3) Super-structure (including bearing)	-	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.
(4) Wearing Coat including expansion joints in case of ROB. In case of RUB-rigid pavement under RUB including drainage facility as specified	-	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 hand rails, crash barrier, road markings etc.	-	Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified.
(6) Wing walls/return walls	-	Wing walls/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)	-	Approaches: Payments shall be made on completion of both approaches including stone pitching and protection works etc complete in all respects as specified
B.2- New ROB/ RUB		
(1) Foundation	-	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 subject to completion of at least two foundations 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.

Stage of Payment	Weightage	Payment Procedure
(2) Sub-structure	-	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 subject to completion of at least two sub structures of abutment/pier cap level of the ROB/RUB
(3) Super-structure (including bearing)	-	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.
(4) Wearing Coat including expansion joints in case of ROB. In case of RUB-rigid pavement under RUB including drainage facility as specified	-	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 hand rails, crash barrier, road markings etc.	-	Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified.
(6) Wing walls/return walls	-	Wing walls/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)	-	Approaches: Payments shall be made on completion of both approaches including stone pitching and protection works etc complete in all respects as specified
C.1- Widening and repairs of Elevated Section/ Flyovers/ Grade Separators		

Stage of Payment	Weightage	Payment Procedure
(1) Foundation	-	<p>Foundation: Cost of each Major Bridge 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 major Bridge subject to completion of atleast two foundations of the structure.</p> <p>In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.</p>
(2) Sub-structure	-	<p>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 subject to completion of atleast two sub structures of abutment/pier cap level of the structure.</p>
(3) Super-structure (including bearing)	-	<p>Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super-structure including bearings of atleast one span in all respects as specified.</p>
(4) Wearing Coat including expansion joints	-	<p>Wearing Coat: Payment shall be made on completion</p> <p>(a) in case of ROB- wearing coat including expansion joints complete in all respects as specified and</p> <p>(b) in case of RUB-rigid pavement under RUB including drainage facility complete in all respects as specified.</p>
(5) Miscellaneous Items like hand rails, crash barrier, road markings etc.	-	<p>Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified.</p>
(6) Wing walls/return walls	-	<p>Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified.</p>
(7) Approaches (including Retaining walls, stone pitching and protection works)	-	<p>Approaches: Payments shall be made on completion of both approaches including stone pitching and protection works etc complete in all respects as specified</p>

Stage of Payment	Weightage	Payment Procedure
C.2- New Elevated Section/ Flyovers/ Grade Separators		
(1) Foundation	-	<p>Foundation: Cost of each Major Bridge 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 major Bridge subject to completion of atleast two foundations of the structure.</p> <p>In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.</p>
(2) Sub-structure	-	<p>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 subject to completion of atleast two sub structures of abutment/pier cap level of the structure.</p>
(3) Super-structure (including bearing)	-	<p>Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super- structure including bearings of atleast one span in all respects as specified.</p>
(4) Wearing Coat including expansion joints	-	<p>Wearing Coat: Payment shall be made on completion</p> <p>(a) in case of ROB- wearing coat including expansion joints complete in all respects as specified and</p> <p>(b) in case of RUB-rigid pavement under RUB including drainage facility complete in all respects as specified.</p>
(5) Miscellaneous Items like hand rails, crash barrier, road markings etc.	-	<p>Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified.</p>
(6) Wing walls/return walls	-	<p>Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified.</p>

Stage of Payment	Weightage	Payment Procedure
(7) Approaches (including Retaining walls, stone pitching and protection works)	-	Approaches: Payments shall be made on completion of both approaches including stone pitching and protection works etc complete in all respects as specified

Note: (1) In case of innovative 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 DG(RD)&SS, MoRT&H.

(2) The Schedule for exclusive tunnel projects may be prepared as per site requirements before bidding with due approval of DG(RD)&SS, MoRT&H.

(iv) 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 for Payment	Percentage weightage	Payment Procedure
(i) Toll Plaza	-	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.
(ii) Road side drains	-	Unit of measurement is linear length in km. Payment shall be made on pro rata basis on completion of a stage in a length of not less than 5% (five per cent) of the total length.
Lined Drain	3.79	
Unlined Drain	-	
(iii) Road signs markings, Km stones, safety Devices etc.	1.34	
(iv) Project facilities	-	Payment shall be made on pro rata basis for two completed facilities.
a) Bus Bays	0.16	
b) Truck lay byes	-	
c) Rest areas	-	
d) Others (to be specified)	0.58	
(v) Road side plantation	0.21	Unit of measurement is minimum 100 trees
(vi) Repair of Protection Works other than approaches to the bridges, elevated sections/ flyover/ grade separators and ROBs/ RUBs	-	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 per cent) of the total length or 10% of the area for seeding and mulching.
W-Beam Crash Barrier	0.93	
Seeding and Mulching	1.94	

Breast Wall	13.47	
Retaining Wall	13.50	
(ix) Safety & Traffic Management during const.	-	Payment shall be made on prorate basis every six months.
(x) Tunnel	64.09	Refer Table 1.3.4 (B)

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

Table 1.3.4(A)

Table 1.3.4(A)					
S.No	Item		Weightage in Percentage to the Contract Price of the tunnel portion	Stage for Payment	Percentage weightage to Particular Item(Col.2)
1	2		3	4	5
A-1: Investigation &detail Design			2.50%		
1	Portal	Northern	7.32%	A1- Temporary Dewatering Arrangement	2.36
				A2- Open Excavation and Earthwork (Loose excavation, rock excavation, rip rap layer on embankment, Gabion etc.)	16.76
				A3- Primary support measures (Bolts & Anchors, Shotcrete & Wire Mesh)	69.12
				A4- Permanent Dewatering (PVC pipes, perforated PVC pipes, precast concrete slots channel elements, dimpled sheets between permanent lines of C&C tunnel length and backfill material, water-proofing membrane etc.)	2.5
				A5-Concrete Works (PVC water stop serrated with Central bulb, etc.)	9.26

S.No	Item		Weightage in Percentage to the Contract Price of the tunnel portion	Stage for Payment	Percentage weightage to Particular Item(Col.2)
				A6- Pavement	
				A7-Construction of buildings	
		Southern	7.34%	B1- Temporary Dewatering Arrangement	2.3
				B2- Open Excavation and Earthwork (Loose excavation, rock excavation, rip rap layer on embankment, Gabion etc.)	17
				B3- Primary support measures (Bolts & Anchors, Shotcrete & Wire Mesh)	65.9
				B4- Permanent Dewatering (PVC pipes, perforated PVC pipes, precast concrete slots channel elements, dimpled sheets between permanent lines of C&C tunnel length and backfill material, water-proofing membrane etc.)	2.56
				B5-Concrete Works (PVC water stop serrated with Central bulb, etc.)	12.24
				B6- Pavement	
				B7-Construction of buildings	

S.No	Item		Weightage in Percentage to the Contract Price of the tunnel portion	Stage for Payment	Percentage weightage to Particular Item(Col.2)
2	Main Tunnel		81.90%	A1- Temporary Dewatering Arrangement	0.42%
				A2- Underground Excavation for tunnel in Support Category dominating the Face Area including Drilling and Grouting	47.78%
				A3- Permanent Dewatering Arrangement	2.10%
				A4- Primary Support Measures (Bolts & Anchors, SFRS, Steel Ribs, Lattice girders, precast lagging)	25.15%
				A5-Concrete Works (Permanent concrete lining and Reinforcement)	20.25%
				A6- Instrumentation and Monitoring	0.25%
				A7-Pavement (PQC, DLC & GSB)	4.05%
3	Site Facility		0.40%	S&T: A- Site Facility	100%

S.No	Item	Weightage in Percentage to the Contract Price of the tunnel portion	Stage for Payment	Percentage weightage to Particular Item(Col.2)
4	Electro Mechanical Equipment and	0.54%	Delivery of equipment at site	20.00%
			Installation of equipment at site	40.00%
			Commissioning of equipment at site	40.00%

Procedure for estimating the value of tunnel works done shall be as follows:

Table 1.3.4(B)

Stage for Payment	Percentage weightage	Payment Procedure
A-Investigation and Design	2.50%	Unit of measurement in submission of Detailed Design and Investigation report complete payment shall be made on the completion and approval of the same.
(a) Investigation & Detail Design		
B-Portal	7.32%	Unit of measurement is completion of portal. The payment shall be made on the completion of portals.
(a)Northern		
(b)Southern		
C-Main Tunnel	81.90%	Unit of measurement is linear length-meter. Payment of each stage shall be made on pro rata basis of completion of a stage in a continuous length of 10 meter.
D-Site Facility Costs	0.40%	Site Facility cost 30% of the cost shall be paid on the commencement of mined tunnel excavation provided the Contractor has completed the components of works to the extent mentioned in the Milestone-I of Schedule-J of this Agreement. The balance amount shall be paid in quarterly

S.No	Item	Weightage in Percentage to the Contract Price of the tunnel portion	Stage for Payment	Percentage weightage to Particular Item(Col.2)
		installments in each year over the remaining construction period.		
E-Electro and Mechanical Equipment	0.54%	On delivery, installation and commissioning of E&M equipment in the ratio of 40:30:30.		

2. Procedure for payment for Maintenance

- (a) The cost for maintenance shall be as stated in Clause14.1 (v).
- (b) Payment for Maintenance shall be made in accordance with the provisions of Article 14 and Article 19.