

Widening/Improvement to 4 (Four) Lane with Paved Shoulder from Ch. 52.470km to Ch.71.500 km (DesignCh.48.655km to Ch.67.556km) of Tulungia- Jogighopa Bridge Approach Section (Package-5) of Bilasipura- Guwahati road (NH 17) in the state of Assam on EPC mode

Revised/ Amended Provision

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 percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
Road Works including Culverts, widening and repair of culverts	35.61 %	A- Widening and strengthening of existing road	
		(1) Earthwork up to top of the sub-grade	3.72%
		(2) Sub-base Course	10.7%
		(3) Non bituminous Base course	5.13%
		(4) Bituminous Base course	8.17%
		(5) Wearing Coat	5.36%
		(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	18.96%
		(2) Sub-base Course	10.02%
		(3) Non bituminous Base course	5.51%
		(4) Bituminous Base course	5.89%
		(5) Wearing Coat	4.1%
		B.2-Reconstruction/New 8-Lane Realignment/ Bypass(Rigid Pavement)	
		(1) Earthwork up to top of the sub-grade	[Nil]

Widening/Improvement to 4 (Four) Lane with Paved Shoulder from Ch. 52.470km to Ch.71.500 km (DesignCh.48.655km to Ch.67.556km) of Tulungia- Jogighopa Bridge Approach Section (Package-5) of Bilasipura- Guwahati road (NH 17) in the state of Assam on EPC mode

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		(2) Sub-base Course	[Nil]
		(3) DryLean 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	0.3%
		(2) Sub-base Course	1.2%
		(3) Non bituminous Base course	0.93%
		(4) Bituminous Base course	0.6%
		(5) Wearing Coat	0.68%
		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)	18.73%
		Minor bridge/ Underpasses/ Overpasses	15.67 %
Minor Bridges	0.03%		
A.2- New Minor bridges (length >6 m and<60m)			
(1) Foundation : On completion of the	41.94%		

Widening/Improvement to 4 (Four) Lane with Paved Shoulder from Ch. 52.470km to Ch.71.500 km (DesignCh.48.655km to Ch.67.556km) of Tulungia- Jogighopa Bridge Approach Section (Package-5) of Bilaspura- Guwahati road (NH 17) in the state of Assam on EPC mode

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		foundation work .	
		(2)Sub-Structure: On completion of the Sub structure work	17.13%
		(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 etc. complete in all respect.	20.45%
		(4)Approaches: On completion of approaches including Retaining walls, stone pitching, protection works complete in all and fit for use	2.17%
		(5) 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-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.	11.98%

Widening/Improvement to 4 (Four) Lane with Paved Shoulder from Ch. 52.470km to Ch.71.500 km (DesignCh.48.655km to Ch.67.556km) of Tulungia- Jogighopa Bridge Approach Section (Package-5) of Bilaspura- Guwahati road (NH 17) in the state of Assam on EPC mode

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		(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.	6.3%
		(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)worksand ROB/RUB/elevatedsections/flyovers including viaducts,ifany	29.35 %	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 pitching and protection works)	[Nil]		

Widening/Improvement to 4 (Four) Lane with Paved Shoulder from Ch. 52.470km to Ch.71.500 km (DesignCh.48.655km to Ch.67.556km) of Tulungia- Jogighopa Bridge Approach Section (Package-5) of Bilaspura- Guwahati road (NH 17) in the state of Assam on EPC mode

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		A.2-New Major Bridges	
		(1)Foundation	5.02%
		(2)Sub-structure	1.8%
		(3)Super-structure(including bearings)	2.85%
		(4)Wearing Coat including expansion joints	[Nil]
		(5) Miscellaneous Items like handrails, crash barrier, road markings etc.	0.01%
		(6) Wing walls/return walls	[Nil]
		(7)Guide bunds, River Training works etc.	[Nil]
		(8)Approaches(including Retaining walls, stone pitching and protection works)	0.24%
		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) incase 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]

Widening/Improvement to 4 (Four) Lane with Paved Shoulder from Ch. 52.470km to Ch.71.500 km (DesignCh.48.655km to Ch.67.556km) of Tulungia- Jogighopa Bridge Approach Section (Package-5) of Bilaspura- Guwahati road (NH 17) in the state of Assam on EPC mode

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		B.2-New ROB/RUB	
		(1)Foundations	32.34%
		(2) Sub-Structure	14.57%
		(3) Super-Structure (Including bearings)	40.97%
		(4)Wearing Coat (a) in case of ROB-wearing coat including expansion joints complete in all respects as specified and (b) incase 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.	2.2%
		(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]
		C.2- New Elevated Section/Flyovers/Grade Separators	

Widening/Improvement to 4 (Four) Lane with Paved Shoulder from Ch. 52.470km to Ch.71.500 km (DesignCh.48.655km to Ch.67.556km) of Tulungia- Jogighopa Bridge Approach Section (Package-5) of Bilaspura- Guwahati road (NH 17) in the state of Assam on EPC mode

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		(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	19.37 %	(i) Toll Plaza	[Nil]
		(ii) Road side drains	5.57%
		(iii) Road signs, markings, km stones, safety devices etc	7.65%
		(iv) Project facilities	
		a) Bus Bays	1.5%
		b) Truck Lay-byes	[Nil]
		c) Passenger Shelter	0.1%
		d) Rest Area	[Nil]
		e) Road Side Amenities	[Nil]
		f) Street Light	0.62%
		g) Utility Duct	5.54%
		(v) Road side Plantation	[Nil]
(vi)Repair of Protection Works other than approaches to the bridges, elevated sections/flyover/grade separators and ROB/ RUBs	[Nil]		
(vii) Safety &Traffic Management	[Nil]		

Widening/Improvement to 4 (Four) Lane with Paved Shoulder from Ch. 52.470km to Ch.71.500 km (DesignCh.48.655km to Ch.67.556km) of Tulungia- Jogighopa Bridge Approach Section (Package-5) of Bilaspura- Guwahati road (NH 17) in the state of Assam on EPC mode

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		during const.	
		(ix) Toe Wall	3.14%
		(x) Retaining Wall	6.8%
		(xi) Boundary wall	[Nil]
		(xii) Site Clearance & Dismantling	1.31%
		(xiii) Reinforced Earth Wall	51.8%
		(xiv) Junction	1.6%
		(xv) Seeding & Mulching	1.87%
		(xvi) Chute Drain	0.3%
		(xvii) Ground Improvement Works (Sand Pile)	8.49%
		(xviii) Protection Work (Stone Pitching)	2.31%
		(xviv) Diversion Road & Approach Road	1.4%

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:

Table1.3.1

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	3.72%	
(2) Sub-base Course	10.7%	
(3) Non bituminous Base course	5.13%	
(4) Bituminous Base course	8.17%	
(5) Wearing Coat	5.36%	

Widening/Improvement to 4 (Four) Lane with Paved Shoulder from Ch. 52.470km to Ch.71.500 km (DesignCh.48.655km to Ch.67.556km) of Tulungia- Jogighopa Bridge Approach Section (Package-5) of Bilasipura- Guwahati road (NH 17) in the state of Assam on EPC mode

Stage of Payment	Percentage weightage	Payment Procedure
(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/New 2-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 5(five) km length, whichever is less.
(1) Earthwork up to top of the sub-grade	18.96%	
(2) Sub-base Course	10.02%	
(3) Non bituminous Base course	5.51%	
(4) Bituminous Base course	5.89%	
(5) Wearing Coat	4.1%	
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 upto 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 1(one) km length, whichever is less.
(1)Earthwork up to top of the sub-grade	0.3%	
(2) Sub-base Course	1.2%	
(3) Non bituminous Base course	0.93%	
(4) Bituminous Base course	0.6%	
(5) Wearing Coat	0.68%	
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 1(one) km length, whichever is less.
(1)Earthwork upto top of the sub-	[Nil]	

Widening/Improvement to 4 (Four) Lane with Paved Shoulder from Ch. 52.470km to Ch.71.500 km (DesignCh.48.655km to Ch.67.556km) of Tulungia- Jogighopa Bridge Approach Section (Package-5) of Bilaspura- Guwahati road (NH 17) in the state of Assam on EPC mode

Stage of Payment	Percentage weightage	Payment Procedure
grade		
(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 culvert.
Culverts (length <6m)	18.73%	

@ 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)	0.02%	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 : On completion of the foundation work .	41.94%	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. Incase where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(2)Sub-Structure: On completion of the Sub structure work	17.13%	Sub-structure: 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 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 each bridge.
(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.	20.45%	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. Incase 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	2.17%	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.

Widening/Improvement to 4 (Four) Lane with Paved Shoulder from Ch. 52.470km to Ch.71.500 km (DesignCh.48.655km to Ch.67.556km) of Tulungia- Jogighopa Bridge Approach Section (Package-5) of Bilaspura- Guwahati road (NH 17) in the state of Assam on EPC mode

Stage of Payment	Weightage	Payment Procedure
1	2	3
(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 and 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.	11.98%	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.	6.3%	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	[Nil]	Payment shall be made on pro-rata basis on completion of a stage in all respects as specified

Widening/Improvement to 4 (Four) Lane with Paved Shoulder from Ch. 52.470km to Ch.71.500 km
(DesignCh.48.655km to Ch.67.556km) of Tulungia- Jogighopa Bridge Approach Section (Package-5) of
Bilasipura- Guwahati road (NH 17) in the state of Assam on EPC mode

Stage of Payment	Weightage	Payment Procedure
1	2	3
use.		

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 hand rails, crash barriers, road markings etc. complete in all respects as specified.
(6) Wing walls/return walls	[Nil]	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.	[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	[Nil]	Approaches: Payments shall be made on pro rata basis on completion of 10% of the scope of each stage.

14/21

h

Stage of Payment	Weightage	Payment Procedure
works)		
A.2-New Major Bridges		
(1)Foundation	5.02%	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. Incase where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(2)Sub-structure	1.8%	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)	2.85%	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.	0.01%	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]	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, Rive 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)	0.24%	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		

Stage of Payment	Weightage	Payment Procedure
(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% 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]	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)	[Nil]	Payments shall be made on pro rata basis on completion of 20% of the total area.
B.2-New ROB/RUB		

Stage of Payment	Weightage	Payment Procedure
(1) Foundation	32.34%	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	14.57%	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)	40.97%	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) incase 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) incase 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.	2.2%	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]	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/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-Widening and repairs of Elevated Section/ Flyovers/Grade Separators		

Stage of Payment	Weightage	Payment Procedure
(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. Incase 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]	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/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. Incase where load testing is required for foundation, the

Stage of Payment	Weightage	Payment Procedure
		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]	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/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.

Table1.3.4

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) Road side drains	5.57%	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 percent) of the total length.
(3) Road signs, markings, km stones ,safety devices etc	7.65%	
(4) Project Facilities		Payment shall be made on pro rata basis for completed facilities.
a) Bus Bays	1.5%	
b) Truck Lay-byes	[Nil]	
c) Passenger Shelter	0.1%	
d) Rest Area	[Nil]	
e) Road Side Amenities	[Nil]	
f) Street Light	0.62%	
g) Utility Duct	5.54%	
(5) Retaining Wall	6.8%	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.
(6) Road side Plantation including Horticulture in Wayside Amenities	[Nil]	
(7) Repair of Protection Works other than approaches to the bridges, elevated sections/flyover/grade separators and ROB/ RUBs	[Nil]	
(8) Boundary wall	[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
(9) Safety and traffic management during construction	[Nil]	Payment shall be made on prorata basis every six months.
(10) Breast Wall	[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.
(11) Toe Wall	3.14%	
(12) Site Clearance & Dismantling	1.31%	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

20/21 

Stage of Payment	Weightage	Payment Procedure
1	2	3
		the total length.
(13) Reinforced Earth Wall	51.8%	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.
(14) Junction	1.6%	Cost of each Junction shall be determined on pro rata basis with respect to the total number of junctions. Payment shall be made on the completion of at least five junctions.
(15) Seeding & Mulching	1.87%	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.
(16) Ground Improvement Works (Sand Pile)	8.49%	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.
(17) Chute Drain	0.3%	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 percent) of the total length.
(18) Protection Work (Stone Pitching)	2.31%	
(19) Diversion Road & Approach Road	1.4%	

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 installments in accordance with the provisions of Clause 19.7.



(K. C. Bhatt)
Dy. General Manager (T)